

## Club Goods in the Health and Wellness Sector

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**Abstract:** This study applies club theory to privately-provided and publicly-funded services within the health and wellness sector. Specifically, it examines the theoretical and practical premises and dilemmas of club provision, production, distribution and regulation using illustrations derived from cross-cultural settings. Because health and wellness contain public or merit good aspects and the quality of services in this sector is difficult to systematically evaluate even from a regulatory standpoint, tensions inevitably and constantly arise between efficiency and equity objectives. These tensions often have broader and longer-term policy implications, for excludability is both the cardinal virtue and vice of health and wellness clubs offering vital social resources rather than durable or non-durable goods and their complimentary goods. Although many of the club issues we explore in health care present opportunities for public policy intervention, the study sounds a cautious note. It proposes a set of efficiency and accountability criteria to establish, or at least gauge, the necessity, extent and consequences of such intervention. To the famous idiom, “if it ain’t broke, don’t fix it,” we therefore hasten to add “and, if it’s broke, think more than twice before you even try to fix it.”

**Key words:** Club, distributional efficiency, economies of scale/scope, equity, excludability, externalities, optimality, policy intervention, production, provision, rivalry, transaction costs

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### INTRODUCTION

This study critically examines the theory of club goods by applying it to the health and wellness sector. By this sector or industry, we refer to both privately-provided (whether for-profit or non-profit) and publicly-funded health care and wellness services and facilities. Specifically, we seek to investigate why and how health and wellness club goods operate and the problems, issues and policy implications that arise therefrom. Several questions of a theoretical and practical nature remain unsettled in club theory ever since Buchanan (1965) formally introduced it into the economic literature. This study revisits many of them in the context of health and wellness provision, production, distribution and regulation, which also correspond to the four key sections of this study.

We chose to study the health and wellness sector because it does not typically consist of durable and non-durable goods and their complimentary goods, that usually come to mind in club analysis. Rather, health and wellness services may be treated as essential social resources of individuals and society alike. They involve the utilization of services offered by others, whether or not the latter may rely on durable, non-durable and complimentary goods to produce these services. Club goods in the health and wellness sector also facilitate the use of cross-cultural illustrations from the available literature to underscore the universal and particular applications of club theory. However, because organizational arrangements and cultural or environmental

context may vary, this study makes no *a priori* assumptions as to whether or not any form of health care or service is more efficiently offered as a club good.

### CLUB ORGANIZATION

**Organizational impetus:** In contrast to a private good (Table 1), a club good is entirely, largely or somewhat *non-rivalrous* or jointly consumed by a voluntary association of individuals as club members. Because fractional shares of that good cannot be priced or assigned individually, club members assume collective decision-making costs. Yet, club goods also share the *excludability* characteristic of private goods depicted in Table 1. Clubs impose voluntary but universal obligations (such as membership dues, fees and rates) that distinguish their members from non-members. Membership in medical societies and academies exemplify these obligations. There are also clubs that operate in the underground economy (“club bads”), such as the highly-integrated networks of brokers, live donor scouts and local informants with their respective functions, obligations and resources in human organ trading (Mendoza, 2010). If agreement on these obligations cannot be obtained, either the club good will not be produced or those who are unable to comply are excluded from membership. Hence, some degree of market failure exists in the absence of well-delineated property rights and because clubs have no coercive power to force their members to contribute or remain in the club. But neither can clubs be coerced to

Table 1: Goods and services by degree of rivalry and excludability

Degree of excludability	Degree of rivalry in consumption	
	High	Low
High	Private goods (efficient markets)  houses, cars, computers	Club goods (low level of market failure) theatres, private parks, swim clubs
Low	Common pool resources (high level of market failure) forests, fish stock, bodies of water	Public goods (high level of market failure) courts, national defense, lighthouses

accept members who do not find the terms of membership acceptable.

The question regarding why clubs organize has received considerable treatment from pioneering scholars of club theory. Schelling (1969, 1971) and McGuire (1974) found associational homogeneity as a key basis for club formation. This refers to the commonality of club members' interests, preferences and/or endowments. Others extend homogeneity to income levels and geographic proximity (Kennedy, 1990; Galor, 1996; Sandler and Tschirhart, 1997). However, the optimality or efficiency of mixed clubs remains a controversial issue both in theory and practice. Buchanan (1965), on the other hand, justified club formation in terms of increased economies of scale: additional club members would bring down the average cost per unit of club goods. Membership growth could trigger crowding and, eventually, rivalry in consuming what originally was supposed to be an indivisible good for its members. This has led others like Olson (1971) to examine the issue of congestion by distinguishing between exclusive clubs that impose membership restrictions and those that do not.

**Economies of scale and scope:** Physician and other health care provider offices--whether organized as general or specialty practices--are some of the most commonly known clubs in the health sector. User exclusion derives from insurance coverage and premiums, copays and other fees that are charged patients by the clinical practice they have selected. Patients, in turn, share the same provider/s, support staff, clinical equipment and services. Buchanan's economies of scale exist because additional patients reduce the average unit cost of health care offered by a provider. A competitive physician market, for example, will provide health care efficiently even if there are increasing returns to scale in its provision. As Berglas (1976) has further demonstrated, declining costs of club provision will be offset by growth in club membership. This, however, increases the costs of overcrowding. *Internal* scale economies could make it cheaper to expand the size of an existing physician's facility (e.g., through purchases, mergers and acquisitions of other physicians' offices) than to have several of these facilities within the same geographic area if we apply this proposition

(Berglas, 1976; Scotchmer, 1985). But *external* economies of scale could also arise when the cost of each physician's facility decreases as more of them are established in relatively close proximity to each other.

Notwithstanding the prevailing debate concerning mixed clubs, there is evidence in the literature that economies of scope can significantly qualify the presumed efficiency of membership homogeneity. Economies of scope bring corresponding reductions in average cost per unit in the production of two or more (club) goods. Greater cost savings, for example, will accrue to a health and fitness club that offers differentiated membership policies and fees for members who wish to only use its swimming pool facilities and those who are interested in treadmills, instead of a club that offers only one or the other facility (Konishi, 2009). On the other hand, if health clubs charge different fees for different levels of service, their members will be differentiated according to income levels (i.e., how much they can afford or are willing to spend) (Himmelweit *et al.*, 2001).

In instances where economies of scope do not obtain, mixed clubs can still be efficient if consumers are not "divisible" (i.e., a continuum of consumers in each club cannot simply be assumed). This occurs, for instance, when consumers care about facilities and membership profiles (i.e., who they will share the club facilities with), but not the level or intensity of the use of such facilities (Konishi, 2009). In this respect, a regression study finds that access to heterogeneous clubs which share health and wellness information and encourage physical activity or exercise, among school-age children helps reduce obesity and related diseases, regardless of the intensity of information and facility usage (Li and Hooker, 2007).

The underlying objectives of club organization appear to suggest why relative scarcities exist in public provision of club goods in the health and wellness sector, despite the presence of economies of scale and scope and the cost-efficiencies of joint supply. Excludability can constitute a political liability to welfare goals under government *provision* (i.e., deciding whether a good should be offered, its funding source/s and legal basis). Barriers to club entry of a large, or at least politically significant, segment of the population could serve to undermine the public or merit good<sup>1</sup> aspects of government intervention (Mendoza, 2008). They are likely to be politically risky, especially when access to certain types of health care is considered by many citizens as a matter of right rather than a market choice.

In the Philippines, for one, government endorsement of wellness and fitness facilities as a covered modality under its 1997 alternative and complementary medicine law, as well as its "medical tourism" program, was criticized for subsidizing privileged free riders. These facilities generally cater to the higher-income classes in the Philippines. Charges of health care "commodification" arose as politically well-connected operators of massage

parlors, spas and health clinics were perceived by many as taking advantage of government incentives. The law's intent appeared to have been overstretched by these operators to extract rents (Mendoza, 2009). While government-legislated incentives could potentially stimulate market competition and reduce the average membership rates for wellness and fitness facilities, excludability could impose a much higher, or at least indefensible, social cost. It has restrained government provision of health clinics, except in a few cases where they are offered in Philippine government offices at no cost to their employees (Mendoza, 2009).

**Internal groups:** The notion of identical tastes and endowments underlying club formation would not be complete without considering the internal group (or "association by alliance") phenomenon (McNutt, 1996). This refers to a decisive, relatively homogenous club that may form within the larger population for whom a good is initially supplied. The internal group could successfully oppose the supply of a good for its negative externalities to this subset, although the rest of the population may not be affected at all. Conflicting (heterogeneous) preferences could thus exist within the same club.

Utilization rates for Kenya's public, out-patient clinics for sexually-transmitted diseases suddenly dropped by more than 40% after user charges were introduced in 1989. These were strongly opposed by a vocal and cohesive subset of targeted males (Moses *et al.*, 1992; Mbugua *et al.*, 1995). Similar internal group opposition has resulted in reduced utilization rates and/or state funding following the imposition of user fees for family planning services in Jamaica (Bailey *et al.*, 1994), basic child immunizations in Swaziland (Yoder, 1989) and curative services in Bangladesh (Stanton and Clemens, 1989). In contrast, Uganda's experience with some local dispensaries and health centers demonstrates why cost-sharing or cost-recovery schemes tend to work when they are community-based ("bottom-up approach"), although these, in effect, transform non-rivalrous and non-excludable public goods into club goods (Kipp *et al.*, 2001). Association by alliance could be preempted, or at least considerably weakened, when opposition from within the club is immediately, openly and directly addressed.

The internal group cases drawn from Jamaica, Swaziland, Bangladesh and Kenya illustrate why popular expectations of certain types of health care as primary services, from which people should not generally be excluded, create tensions between the efficient resolution of free-riding and social values associated with equitable provision. These tensions become more pronounced in many underdeveloped countries in view of the sharp disparities in health care access and competitive prowess of their citizens.

**PROVISION DECISIONS**

**Optimal scale of provision and membership:** Once a club has organized, it is faced with two basic provision questions that form its exclusion policy/ies. The first concerns the most efficient level of provision. The second concerns optimal membership size. Both are interdependent allocation decisions (Sandler and Tschirhart, 1980, 1997). The tendency of the market to under supply public goods due to free riders, coupled with the possibility of achieving and evaluating Pareto-efficient general equilibrium in providing joint goods through market-like systems, underpin many of the choices relative to these questions.

Preference revelation in the consumption of non-rival goods at an exclusion cost is initially achieved by forming or joining clubs. Further like markets, members can "vote with their feet" (i.e., self-selection or sorting) by leaving or forming/joining other clubs should their choices change in a way that a club cannot accommodate (Tiebout, 1956). However, a club is also subject to overcrowding because the larger its membership, the greater is the level of collective consumption and, consequently, the lower the availability of a club good to its members. As shown in Fig. 1, tolls can cover the marginal cost of crowding that occurs with excess demand for a good in fixed supply. The Pareto-optimal supply level ( $T_0$ ) is the level of club good supply for which the marginal cost (cost curve slope) equals the marginal value for club members in Fig. 1.

Figure 2 locates the equilibrium level of provision, C and membership size, M, at the point of intersection between optimal provision for different membership sizes, C (M) and optimal membership size for different scales of provision, M (C). The collective value of a club good obtains from this equilibrium (Olson, 1971). Hence, the cost function for the problem of provision is such that cost will increase with a larger membership because of higher maintenance costs, but cost also increases with the level of club good provision. Members with a stronger preference for a club good will tend to use it more often and pay more (in fees and tolls) to the point where they are not driven out by the additional cost. In turn, these

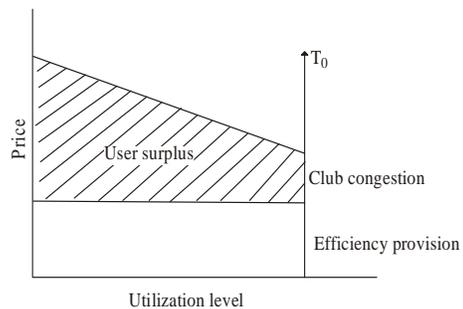


Fig. 1: Congestion (toll) pricing for club goods

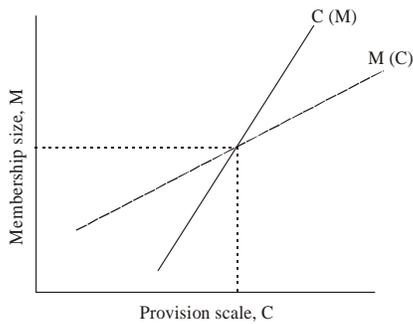


Fig 2: Optimal provision and membership

would determine the optimal level of provision. The ability of clubs to pay for efficient provision therefore depends on the crowding function, the production function of the club good, as well as externalities and transaction costs (Sandler and Tschirhart, 1980, 1997), which we further examine in another section of this study. After all, club goods are voluntarily and optimally produced only if high decision-making costs do not prevent them (Benson, 2002).

**Accessibility:** Club goods retain their non-rival character at least up to the point where crowding occurs. However, like competitive markets, optimal membership size could exacerbate existing health disparities or encourage new ones, along with potentially negative spillover effects or externalities to club members themselves. Optimal club size could thus pose challenges to governments when societal inclusion at a lesser (or no) exclusion cost is desired and enforced as a matter of public policy

Transnational clubs, such as the Mayo Clinic and the M.D. Anderson Cancer Center, charge fees based on the treatments received by more privileged patients from the United States and around the world who come for their internationally-renowned expertise and comparative technological advantage. Fee-per-use medical consultation networks that operate through the Internet represent a similar form of information good to which public access is restricted (Sandler, 2004). Increased membership in any of these clubs will result in congestion. Bureaucratic red tape, slower communication, longer wait periods and reduced staff responsiveness offer market signals of congestion.

While countervailing exclusion devices (e.g., tolls) could be imposed to restore efficient membership size and provision levels, these also tend to worsen existing health disparities on a global basis given that the spread of disease, for example, has no known borders. Sick people in underdeveloped countries who seriously need Mayo's anderson's or a medical consultation network's expertise and advanced technology are automatically denied access because of unaffordable rates and fees. Meanwhile, diseases like SARS could easily gain their foothold and

spread globally from these countries, with the weakest health infrastructures, to the more affluent ones. Optimal allocation of transnational health goods cannot afford to neglect measures needed to bring others, particularly low-income countries and population groups/classes, to acceptable health standards (Sandler, 2004). To do otherwise could eventually induce overcrowding, tolls and additional fees charged to club members as they become the unwilling recipients of negative externalities, such as those associated with SARS in 2003 and other transnational infectious diseases.

**Externalities:** Restricted accessibility of health club goods could further impose negative externalities, with high costs, when clubs seek to restore optimal membership size in response to congestion and profitability issues. Membership trends in Health Management Organizations (HMOs) in the United States and several other countries underline this point. From an organizational standpoint, HMOs pool risks and avail of economies of scale by designating gatekeepers (often primary physicians) to direct access to medical care, by contracting and sharing medical personnel and equipment within a network and by instituting periodic utilization reviews. From the subscribers' standpoint, commonality of interest in HMOs derives from the prohibitive costs of traditional indemnity or major medical insurance and access to a mutual package of health services. HMO premiums, per-visit charges (e.g., copays) and other fees safeguard against free-riders.

The popularity of HMOs before the arrival of the present century is indicated by the dramatic rise in the average number of enrollees from about 34,000 in 1976 to over 90,000 by the mid-1990s mainly because of corporate mergers and acquisitions in the United States (Wholey *et al.*, 1996). Membership growth remained unabated, as HMOs became the most common form of managed care in the United States until about 2002 or so. However, HMO profits had also disappeared by this time, replicating the pattern of seemingly uncontrollable health care costs in the private sector and Medicare. There was also no evidence that showed how mergers and acquisitions enabled HMOs to realize greater economies of scale or improve efficiency by shifting the cost function (Engberg *et al.*, 2004). As a result, high-risk populations, like the elderly and chronically disabled, were increasingly excluded from HMO enrollees (Ho, 2009). High-risk populations often require carve-out programs that cater to their particular needs and corresponding coverage costs. Absent any form of carve-out support, the government may be faced with the burden of assuming the responsibility for protecting them, often through merits goods (Mendoza, 2008).

## PRODUCTION ISSUES

**Producers:** The *production* stage involves the operational and managerial aspects of club goods, their pricing and delivery to club members. Club goods are more often produced privately (i.e., by profit-seeking firms) where excludability can be sustained. Private clubs are nonetheless typically subject to some form of regulatory oversight. They may also be produced publicly (e.g., co-production arrangements with private and non-profit organizations). Government participation in the production process may result from economies of scale, limited or lack of market competition, legal mandate and presumed or actual social benefits of the club goods in question.

Complementarity of production creates economies of scope. Such complementarity encourages the growth of multi-product clubs (e.g., HMOs) with either homogenous or heterogeneous memberships. Two common production strategies of multi-product clubs are bundling and tying, which have also acquired some degree of controversy in club theory. As Stigler (1968) noted, at the very least both allow clubs to extract more user surplus from their members who assume different valuations of the individual components of product bundles and ties.

**Bundled goods and services:** Bundling involves the production and purchase at a single price of multiple goods and services with some common characteristics. More and more family practice (and some specialty) physicians, for example, offer packages of skin care and other cosmetic treatments to their patients in response to heterogeneous needs. These include Botox, photo facials, laser hair removal, sun spot removal and leg vein therapy, as well as cosmetic products. Discounted rates are offered for bundles of these treatments and products, compared to what they would actually cost if the physician's office had to sell the components separately. Group Purchasing Organizations (GPOs) and Integrated Delivery Networks (IDNs)--from which hospitals purchase their endo-surgical products, sutures and trocars--offer another illustration. Hospitals receive club pricing discounts from GPOs and IDNs usually based on a percentage of their endo-surgery equipment purchases. At the same time, these GPOs typically enter into yearly or multi-year club contracts with other endo-equipment producers, like Johnson and Johnson, to avail of their own discounts (Hausfeld *et al.*, 2007) under this multi-layer club arrangement. When bundling increases consumer surplus, it does so because the gains to club members who want two or more components of the bundle exceed the costs to those who would typically purchase a single component and yet are forced to buy the bundle instead (Evans and Salinger, 2005). In short, bundling can be employed to do away with estimating the level of demand for multiple externalities.

Bundling is also employed as a method or system of paying health care providers a fixed amount per month, quarter or year based on expected costs for clinically-defined and covered episodes of health care. Bundling, in this sense, represents a middle ground between fee-for-service reimbursement and capitation (in which providers, like those in HMOs, are paid a lump sum per patient regardless of how many services a patient receives). The Pennsylvania-based Geisinger Health System, for example, initiated the *ProvenCare* model for coronary artery bypass surgery between 2006 and 2007. It consisted of best practices, patient engagement and pre-operative, in-patient and post-operative health care (e.g., re-hospitalizations), which were packaged into a single, fixed price (Casale *et al.*, 2007). *ProvenCare* has reportedly resulted in lower hospital charges, shorter hospital stays and lower readmission rates (Casale *et al.*, 2007; Lee, 2007).

**Tied goods and services:** Tying, on the other hand, makes the consumption of one club good or service dependent or conditional on the purchase of a distinctive but naturally-related good or service. It reduces the price for one good (the tied good) to ensure continual purchases of another (the tying good). Patient-Centered Medical Homes (PCMHs) are illustrative of one form of tying. Geisinger Health System also has one of the most mature PCMH programs in the private health sector, while the Community Care of North Carolina is considered as one of its most successful counterparts in the public or non-profit sector. PCMHs evolved as a provider (supply-side) response to fragmented health care services, coupled with the high cost and low quality of many health-related services (Fendrick *et al.*, 2010). The services offered in these homes are coordinated by other club-like facilities, such as registries, information technology and health information exchange so that "patients get the indicated care when and where they need and want it in a culturally and linguistically appropriate manner" (National Committee for Quality Assurance, 2011). Several nursing homes and homes for children with special needs have gradually moved in the direction of the PCMH tying model.

The PCMH model of tying, on the other hand, offers incentives to physicians and other health care providers in the form of so-called "performance-bonuses" if they provide coordinated care focused on early intervention and prevention. It additionally offers them reimbursements and direct incentive payments if they adopt integrated systems to track and deliver evidence-based care (Fendrick *et al.*, 2010). These financial incentives sharply contrast with the more common reimbursement system that rewards volume of care and specialty care services and offers physicians no capital for information technology investments. Meanwhile, patients are offered lower copays and waivers if they avail of

PCMH-referred specialists, ambulatory services and medical home visits.

Anti-trust laws in the United States and many other countries prohibit tying in uncompetitive markets and of unrelated goods. As illustrated above, tying under competition enables clubs to reduce overall costs by restricting product selection to a combined purchase of tying and tied goods. Herein lies the problem: product-specific scale economies are needed to understand tying (and bundling), but these scale economies might be hard to detect even when they are present. This muddies the distinction between pro-competitive and anti-competitive tying (or bundling) which, one study found, has led to a high rate of false convictions in anti-trust and other cases adjudicated by American courts (Evans and Salinger, 2005).

**Discrimination:** Another critical question raised by bundling and tying is whether multi-product clubs could be used to discriminate against certain consumers, whether or not they possess the ability to pay for exclusion costs. We find for the affirmative, albeit oftentimes covertly or unintentionally.

One form of discrimination is purposive. To maximize preferences for certain types of club members, or minimize repulsion over those considered undesirable, exclusionary amenities may be offered by certain clubs. A study has found that tying or bundling a golf course to membership dues in a health and fitness facility or residential community tends to discourage racial minorities, particularly African-Americans, from joining. This is because certain activities, like golf, are traditionally associated with Caucasians (Strahilevitz, 2006). Some amenities could then be selected by club members not primarily on the basis of their inherent utility, but in terms of how they can effectively stimulate self-sorting by desirable and undesirable members alike. These amenities can be more efficient, than overt discrimination, in achieving favorable selection (or “cream skimming”) because they circumvent legal prohibitions without getting into confrontational or politically controversial situations (Strahilevitz, 2006). Equally important, exclusionary amenities considerably lower the search and information costs on the part of clubs in attracting homogenous members by way of indirect membership restrictions.

Another form of discrimination may be the unintended but nonetheless direct consequence of bundling or tying. For one, the profit-motive has been shown to encourage health care providers to avoid certain patients from whom they may derive insufficient bundled reimbursements, or to offer them only the very minimum level of service possible, or to delay diagnosis of treatment complications and post-hospital care until after the bundled payment date is over (Satin and Miles, 2009). Hospitals, on their part, could opt to limit or reduce access

to medical specialists during an in-patient stay because of payments and other financial incentives that are tied to certain physician “performance” indicators (Galewitz, 2009). In these instances of “benefit-hoarding,” the discriminatory effects of management decisions (i.e., by owners of hospitals, health care offices, etc.) arises from the need to reduce heavy production as well as transaction costs associated with compliance and enforcement, rather than in direct pursuit of “cream skimming.”

**Multi-club pricing:** Besides the covert discriminatory practices and unintended consequences of multi-product clubs, there are serious concerns that they do not necessarily make consumers better off from a health outcomes standpoint. There exist studies to show that many clubs do not necessarily offer lower consumer prices and improved quality of care when there is limited market competition within the health industry (Woolhandler and Himmelstein, 2004; Hausfeld *et al.*, 2007; Satin and Miles, 2009). Complementarity of production could simply increase the profit margin of private firms. Managed care in the United States serves to underscore the point. The sharp decline in popularity and number of HMOs just a few years into this century has been attributed to consumer backlash over service quality, intensified regulatory pressures from government agencies, provider disenchantment with risk and the unsustainable pricing practices of insurance plans seeking to buy entry into new or emerging markets. The same factors conspired to stimulate a massive migration into PPOs (Preferred Provider Organizations) after 2002 (Draper *et al.*, 2002; Hurley *et al.*, 2004).

## DISTRIBUTIONAL EFFICIENCY

Having examined club provision and production, the conditions under which clubs can achieve economy-wide distributional efficiency are among the overriding interests of the literature and constitute the next stage of our analysis. The questions that bear on distributional efficiency include whether club members as well as others, including society in general, should bear the primary cost burden, the resulting trade-offs between incentives for long-term innovation and investment and rent-seeking behavior among clubs due to their market power or domination. These issues again draw attention to transaction costs and free-riding as well as the appropriate mix of public and private options in managing and delivering club goods in the health and wellness industry.

**Cost burden:** Whether the burden of funding a club good should be left entirely to members or involve the broader population (i.e., taxpayers) depends in large part on how exclusive or restrictive club membership is and whether the club good in question contains externalities, either

positive or negative. Take for instance a specialty medical or dental practice. Its institutional location and/or arrangements matter significantly for financing purposes. A private practice would charge user fees and/or require insurance coverage to admit patients. A public general hospital, on the other hand, would be typically subsidized by taxpayers' money, but it may also require user fees as a cost-sharing device or for a patient to be seen by a specialist there. Whether or not and how much, the government would charge in user fees (the private good aspect of state provision) would depend on the feasibility of collecting these fees (i.e., the costs of bargaining and enforcement). They would also depend on the sufficiency of tax revenues and grants for the purpose of subsidization. In several European welfare states, governments elect to subsidize, or cover entirely, the costs of certain medical services offered at private, for-profit health facilities.

User fees, if assessed by government facilities, tend on average to be lower than their private, for-profit counterparts. But on average the queues and wait times for the former also tend to be much longer (Le Grand *et al.*, 1992; Foreman and Kubushkin, 2009). The challenges to financing therefore include the transaction costs of arriving at and enforcing, these collective decisions, while also seeking to contain free-riding in publicly-offered club facilities. Moreover, the distribution of benefits within a public health facility can be skewed due to differentiated degrees of bargaining power among consumers. Patients may jump queues to reduce wait times if they are politically well-connected or can offer bribes at a cost lower than the hospital charges (if any). In short, skewness in government-allocated club goods could still differentiate club members by income level and, in many situations, in terms of the quantity and quality of service available to them.

**Innovation vis-a-vis investment:** Trade-offs between innovation and investment in club goods pose theoretical and practical challenges to the management and delivery of health care. The Canadian Electronic Medical Records (EMR) project suggests why sub-optimal production and allocation of a club good may arise even after efficient provision decisions have been made. Canada--a welfare state which guarantees universal health care to its citizens--established the Canada Health Infoway to convert mostly handwritten patient records nationwide into provider-accessible EMR by 2016. Its anticipated benefits include speedy informational flow, reduced wait times, elimination of unnecessary and duplicate testing, reduced medication errors, improved disease management and increased provider productivity. Yet, the transition from paper to EMR has been quite costly from all aspects of the Canadian health system. The required hardware and software for the transition stage already cost

approximately \$30,000.00, plus an additional annual maintenance cost of \$3,000.00 per office (Hobbs *et al.*, 2009).

EMR compliance costs are equally heavy, resulting in underinvestment by many physicians' offices. There has been uneven enforcement among the Canadian provinces, depending on which ones offer incentives or financial assistance to encourage physicians to automate their practices (Hobbs *et al.*, 2009). The province of Alberta has developed a public-private mix of incentives by granting, jointly with Alberta NetCare, the Alberta Medical Association and Alberta Health Services, a 70% reimbursement for hardware and software expenses, if physicians comply with stipulated deadlines. While Alberta has been a relatively successful case, less than 10% of Manitoba and Newfoundland physicians have set up EMR in the absence of financial assistance. Various non-financial conversion issues have further arisen, including confidentiality of patient records, security provisions and software compatibility (Hobbs *et al.*, 2009). They highlight the no less burdensome search and networking costs of innovation when the information expected or required (e.g., for paperless conversion) is uncertain.

**Monopolist rent-seeking:** The emergence of natural monopolies in club theory raises questions about the appropriate role of public policy or government intervention in promoting equity and the implementing capabilities of government. A natural monopoly in the health and wellness industry arises when one facility can meet consumer demand and still achieve lower average cost per unit of care or service. In this situation, economies of scale become so significant relative to consumer number that in their efficient allocation the entire target population of consumers is practically included in one club. The downward sloping average cost curve (Fig. 3) represents the rise of a natural monopoly in health care that offers its lowest average cost. Per unit price of the same health care declines in average cost, from  $P_1$  to  $P_2$  and marginal cost, from  $P_2$  to  $P_3$ , as indicated in Fig. 3.

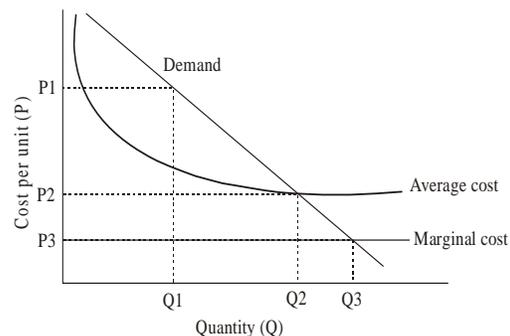


Fig 3: Natural monopoly by a club

An uncontested monopolist therefore has incentives to exclude some individuals from the club if marginal congestion costs are sufficiently high when the entire consumer population is counted in. If we assume that consumers are profit-maximizing, then the facility size chosen can also be considered efficient (Kennedy, 1990). The relative scarcity of cardiac and trauma centers in rural or less developed parts of the United States and many other countries illuminate the vast market power of natural monopolies to set higher exclusion standards among patients, unlike general hospitals which receive the bulk of indigent (or charity ward) and emergency patients. But there are also instances where an ambulance service for a small or medium-sized city will be most efficiently run through a centralized dispatch system, with that city's needs met by only one general hospital that offers the full range of health care specializations (Himmelweit *et al.*, 2001).

As noted earlier, club goods in the health and wellness sector can be publicly or privately provided and produced. But whatever may be the institutional arrangement, monopolist rent-seeking can be easily and immediately stimulated by raising prices or restricting quantities of health care. Hence, rent-seeking becomes the logical outgrowth of free market dominance. Governments, in turn, could address *rentier* power through public provision (e.g., public general hospitals), enforcement of safety and quality standards for accreditation and licensing and/or price and rate of return regulation. On the other hand, because external economies of scale will arise when the cost of each health facility is reduced as more facilities form, a competitive market tends to provide fewer clubs resulting in oligopolistic control. Such a situation could open up an opportunity for government involvement and participation, whether direct or indirect, in the club arena. But the costs, benefits and unintended consequences of the government's role and its extent, should be carefully addressed. It is also well to consider that a monopolist will provide an efficient allocation, under these conditions, because it can internalize or absorb the cost externality (Kennedy, 1990).

### CONCLUSION: THE CHALLENGE OF POLICY INTERVENTION

In examining different types of clubs in the health and wellness sector in the United States and elsewhere, it is evident that excludability is any club's cardinal virtue as well as its cardinal vice. Because clubs form and function to offer joint goods to its members at a given and voluntarily assumed cost, equilibrium levels of provision and membership size are generally determinable through market-like signals. Congestion and profitability issues in production are likewise generally containable through

market-like signals and responses. By admitting a limited degree of market failure without necessarily admitting free riders into a club, non-rivalrous goods can be allocated and delivered at competitive prices at least up to the point of congestion. However, excludability in health sector clubs can easily give rise to provision, production and distributional problems--whether intentional or not--that do not simply promote associational homogeneity and economies of scale and scope. We find that these problems can overtly and covertly entrench serious health care disparities and discriminatory practices against the disadvantaged and high-risk segments of the population.

**Public and merit good aspects:** Our application of club theory to health and wellness services and facilities is particularly insightful for two key reasons. On the one hand, health care--whether privately or publicly provided--contains public or merit good aspects because of its assumed and actual positive externalities to society. The constant tension between club exclusivity and equity in the health and wellness industry is therefore inevitable, particularly when citizens and governments find that the social costs and benefits of a club good exceed those of the individual's, regardless of the objectivity of their judgment. We illustrate this tension in Fig. 4. Controlling for other factors, the greater the degree of excludability, the less social equity can be obtained from a health club good, as the amount of such good that consumers can or are willing to purchase also decreases. In addition, as excludability increases, so does the opportunity cost of purchasing the club good.

**Valuation of health and wellness:** On the other hand, the exact output of health care is fairly difficult to systematically evaluate, even from a regulatory standpoint. Some scholars ascribe this difficulty to the creation by physicians and hospitals of data (e.g., benchmarks, quality standards) used to monitor and regulate them, the virtual monopolies exercised by many health facilities, the favorable selection ("cream skimming") of lucrative patients and services, the

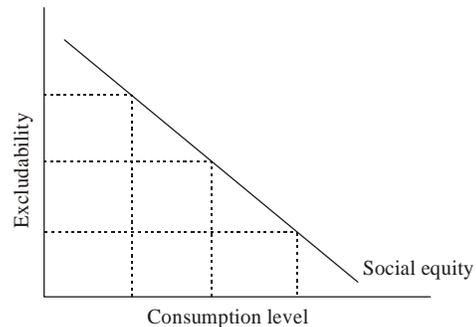


Fig. 4: Club excludability and consumption

asymmetric information available to key consumers of health care (i.e., the elderly, seriously ill, frail and low-income patients) and the amount of search and valuation required of any consumer to fairly gauge and compare the quality and efficiency of similar or related health services (Woolhandler and Himmelstein, 2004). “Quality shaving” could further occur when corporate purchasers and health care providers allow quality of service to slip in order to reduce bargaining costs and come to an agreement, for instance, over an HMO contract (Himmelweit *et al.*, 2001). These problems are magnified in less than competitive markets. Any form of health care is therefore bound to impose heavy search and information costs on its consumers, many of whom are readily vulnerable to confusing information and deception. Bargaining and enforcement costs increase significantly when health care is structured and offered as a club good because supply is shared, whereas users and beneficiaries are delimited or restricted.

**Role and extent of public policy:** This brings us to the question of whether government intervention is appropriate or necessary in instances where the externalities of excludability will negatively affect or have drastic repercussions on social values and public policy. We reply in the relative. In exploring various forms of health care provision in this study, we find that many publicly-provided goods are not necessarily public goods in the Samuelsonian tradition of non-rivalry and non-excludability. Conversely, the preponderance of private goods and club goods in the health sector can still have far-ranging spillover effects on others and society as a whole. Yet, there are sufficient theoretical and empirical grounds to assert that externality-bearing private goods and club goods are not necessarily more efficiently provided either as public or merit goods (Bator, 1958; Zerbe and McCurdy, 1999). Fiscal constraints, political factors, bureaucratic red tape, institutional backlogs and interest group advocacy in the public sector could make the club alternative attractive, especially if the benefit of private exclusion is greater than that of public provision for the same good or service.

How well the club alternative can provide certain socially desirable goods and their corresponding institutional arrangements could depend in part on government efficiency in constraining property rights to protect and promote disadvantaged and high-risk interests (e.g., low-income, elderly, sick and disabled, etc.). These constraints may come in the form of public provision, co-production, regulation and tax subsidization, as our examples have demonstrated. However, it should be noted that “includability” of these special interests through public provision (e.g., health care rationing) may not altogether address natural and artificial scarcities in health care. Institutional accountability is equally important in public policy intervention.

There will be instances when clubs will choose to offer goods and services not on the basis of revealed membership preferences, but for the purpose of excluding potential members from joining and assimilating. Utility of a good to club members may be of secondary importance to the indivisible benefit of membership homogeneity that is gained from erecting barriers to entry of individuals or groups who may be willing to pay excludability costs with or without government subsidization. Situations like this could further marginalize certain individuals and groups, thus worsening health and wellness disparities between the affluent and less privileged. Where mixed club membership is opposed not on the basis of economic efficiency but due to its integrative implications and public policy is undermined, corrective intervention by the state may be necessary through merit good provision, regulation and monitoring, unbundling and anti-discrimination measures, among others.

From the dual perspective of addressing social inequity and discrimination arises the critical question of how efficiently may the government provide, produce, (re) distribute and regulate certain club goods in health care. Clearly, there are costs that the government would have to bear whenever it provides for club goods, or seek to contain negative externalities and disparities related to clubs, to protect and promote the health and wellness of its citizenry. These costs include the determination and enforcement of property rights, the determination, collection and enforcement of club fees and the absence of market signals of efficiency that accounts for a high level of organizational slack. In sum, transaction costs, information asymmetries and institutional capabilities and accountability are key issues for the state to consider and balance against the expected social benefits of intervention in otherwise privately-provided club goods. Without a conscious cost calculus, under-provision of certain goods by the market relative to a Pareto-optimal level will not necessarily be corrected through government involvement.

**Delineating criteria for policy intervention:** In view of the foregoing considerations, some efficiency and accountability criteria may be in order to determine the necessity and permissible extent of government intervention. We hereunto propose a set of criteria designed to address the absence of ideal market conditions (competition, perfect information and absence of externalities) and theoretical and practical reservations concerning the subordination of economic efficiency to social welfare goals in directing resource allocation.

If the purpose of policy intervention is to encourage a higher or socially optimal level of consumption, then the positive externalities associated with health goods or services and their public health aspects should be readily determinable, not simply assumed. If valuation of service

quality is hampered and/or “benefit hoarding” by clubs is encouraged, by heavy transaction costs, the longer-term benefit of health consumption should demonstrably be greater than their shorter-term benefits and health implications. Their unintended consequences should also be containable by capable government institutions. If government provision should rest on grounds of equitable and democratic distribution, in contrast to an individual’s ability-to-pay for club goods, the benefits should flow directly into underprivileged and high-risk consumers (as intended beneficiaries), rather than create rents that powerful interests will eventually capture. And if mechanisms for the articulation and aggregation of citizens’ values cannot operate effectively, the government should be able to establish alternatives for generating feedback on and evaluation of, policy intervention.

The problems and issues associated with the excludability of clubs will often present opportunities for governments to improve upon market outcomes. But these cannot and should not be individually or collectively construed as the *raison d’être* of government intervention. To the famous idiom, “if it ain’t broke, don’t fix it,” we hasten to add “and, if it’s broke, think more than twice before you even try to fix it.”

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#### END NOTE

- 1 Merit goods are undersupplied private goods that the government may choose to provide, or fund through taxpayer subsidy and/or user charges, in view of their positive externalities to society as a whole.