

Containing costs, enhancing quality, and improving access

A summary of the proposal for reforming Hong Kong's healthcare system by the Healthcare Policy Forum

Reform objectives

- The Healthcare Policy Forum is of the view that policy or social reform should be guided by clear reform objectives.
- We see the most important objectives for reforming Hong Kong's healthcare system as:
 - containing the costs of care
 - enhancing the quality of care
 - improving access to care
- Our vision is to build a healthcare system that provides equal access to healthcare and which possesses a built-in mechanism for containing cost and ensuring quality of care.

Right medicine for the right ailment

- A healthcare system is a complex system involving at least three broad dimensions:
 - delivery (how and what healthcare is provided)
 - allocation (how money is allocated to healthcare providers)
 - financing (how healthcare is paid for and distributed)
- Each of the dimensions has different bearings on a healthcare system's accessibility, quality and cost. It is therefore important to recognize and delineate the impacts of changes along individual dimensions, for instance:
 - reform changes in the financing dimension will affect the system's cost and accessibility but will have little direct impact on its quality
 - reform changes in the allocation and delivery dimensions will affect the system's cost and quality but will have no impact on its accessibility

Diagnosing the genuine ailments

- We believe that problems relating to the delivery and allocation of Hong Kong's healthcare system are more pressing than those relating to its financing.
 - In delivery, the system is beset by:
 - compartmentalization between different levels of care and between sectors (private and public), adversely affecting the quality of care and inducing cost increases
 - the absence of an organized primary care network, resulting in suboptimal quality of care and a cost-ineffective healthcare system
 - supplier-domination and waning professionalism, jeopardizing the quality of care and patients' interests
 - under-regulation of the private sector, resulting in highly varied fees and quality of care as well as insufficient protection of patients' interests
 - In allocation, the system is beset by:
 - perverse incentives in the public sector as good performance is neither rewarded nor does it bring in more resources; in brief, the system does not possess the right incentive structure to enhance quality and efficiency of care
 - In financing, the system is beset by:
 - unequal access to primary care, inducing not only unnecessary cost increases but also poorer health outcomes

Dispelling the myth of a financial crisis

- We have reservations about two views, namely, 1) that reforming the current financing mechanism of Hong Kong's healthcare system should be the top priority because healthcare spending is projected to accelerate, and 2) that individual citizens should bear a greater share of their own healthcare spending through some form of private funding, such as saving accounts

- or private insurance.
- Our reservations are based on the following grounds:
 - the purported cost drivers usually cited for advocating financing reform, namely, ageing, technological advancement, rising expectations and early occurrence of chronic illnesses are a lot less pressing or real than commonly believed and are far from being unmanageable
 - private funding already constitutes a very high portion of total healthcare spending in Hong Kong (about 43%)
 - public healthcare spending is substantially lower in Hong Kong compared to that in other advanced societies (about 3.1% of GDP in Hong Kong vs 5.7% of GDP in other countries)
 - any shift from public to private financing, by whatever means, will necessarily transfer costs from those with higher to those with lower incomes, and from the healthy to the ill
 - a shift from public to private financing will result in less equal access to care and may weaken the healthcare system's ability to contain costs
 - expanding private financing may not contribute to enhancing the quality of care
- Based on the above and the soundness of the government's financial position, it is our opinion that its financial resources are more than adequate to make the necessary investment in the public healthcare system during the medium term without recourse to additional streams of revenue to the existing tax-based financing. Furthermore we would argue that the current tax-based system is not only viable but that it compares favourably with private financing in being a fairer system. Given the healthy prospects for the Hong Kong economy and the substantive reserves that have been accumulated, we take the view that the government could and should increase public spending on healthcare so that access and quality can be further enhanced, for example, through expanding primary healthcare and reducing the workloads of healthcare providers.

Our reform initiatives

- Given our reform objectives, we propose six reform initiatives:
- In delivery
 1. Introducing a territory-wide electronic medical records system (EMRS)
 - At present, the Hospital Authority possesses a very sophisticated inter-operable web-based electronic clinical management and patient record system, which allows real time online remote access through standard internet connection
 - We propose to make the HA system truly "territory-wide" by rendering it accessible to healthcare practitioners in the private sector
 - When the system becomes truly "territory-wide", with patients' authorization or other legitimate authorization, all healthcare providers will have access to their patients' medical records at the point where care is provided
 - The record system will help alleviate the compartmentalization problem and related negative impacts on quality of care and healthcare expenditures; the record system does so by facilitating the transfer of patients' comprehensive medical records across different levels of care as well as between different sectors of the system
 - In addition, the record system will constitute a mechanism to enhance professionalism in protecting patients' interests
 2. Instituting a primary care system with primary care practitioners acting as gatekeepers
 - With a proper primary care system, we expect unnecessary or improper use of specialist/ hospital care to reduce, which will in turn help contain healthcare costs in the long run.

- The primary care system can further contain costs and improve health outcomes through its emphasis on early detection and preventive care and its role in coordinating and monitoring care at different levels
 - Under the system, patients are required to register with a primary care practitioner of their own choice. Primary care practitioners play the role of gate-keeping for care at higher levels, i.e. without their referral, patients' access to specialist care is not allowed
 - To ensure quality of care, physicians wishing to practise as primary care practitioners are required to register with related health authorities and to satisfy certain registration requirements, such as academic qualifications or practicing experiences
 - To further protect patients' interests, a reference fee schedule will be negotiated
 - To avoid self-referral, once registered, primary care practitioners will not be allowed to practise as specialists at the same time, even if they possess specialist qualifications
 - With the above requirements, a primary care system may also function as a means to regulate the private healthcare sector
3. Establishing a research institute for clinical excellence
- As a continuous effort to enhance quality and contain costs of healthcare, we propose establishing a research institute to develop and disseminate best clinical practices
 - In the medium-term, the research agenda of the Institute can be expanded along the lines proposed in the 1999 Harvard Report; in addition to the "medical" dimension of healthcare, the Institute will also conduct research on the social and economic dimensions of healthcare. The Institute could also serve as a base to train health economists and policy analysts. To better capture the Institute's expanded research agenda, it may be renamed as the "Institute for Health Research"
 - While the Institute would focus its work on the public health system, it could also undertake consultancy work for the private health system
4. Instituting a new healthcare organizational structure
- In order that reforms can be implemented on a sustained basis, that better care will be provided in the long run, we believe it is of great importance to put in place a new management structure. As a first step, we propose a new two-level organization structure:
 - Level 1 is responsible for "steering" the whole healthcare system (including the public and private sectors); the agency at this level may be called a Health Commission
 - Level 2 is responsible for "rowing", i.e. the day-to-day operations of healthcare provision; the agency at this level may be called a Healthcare Services Authority. We intend to assemble all public healthcare provision facilities under one structure so that better operational coordination can be achieved. The delivery of private healthcare services would also be a part of the Level 2 structure
 - To ensure the new organization's legitimacy and accountability, it will be supervised and managed by a broadly representative governing board with budgetary powers and chaired by the relevant Bureau Secretary
 - To accommodate this new two-level organizational structure, we propose that the existing healthcare provision facilities of the Department of Health be transferred to the new Healthcare Services Authority

- The Healthcare Services Authority will be responsible for managing all public healthcare provision facilities as well as maintaining a territory-wide electronic medical records system
- We propose that the Hospital Authority be expanded and renamed to assume the role of the Healthcare Services Authority
- As a result of this restructuring, the Department of Health would be downsized and function as the operational arm of the Health Commission
- In allocation
 5. Adopting the “money follows patient” principle and the prospective payment mechanism for funding hospital and specialist care
 - This is our suggestion for addressing the perverse incentives in the public sector’s allocation mechanism and to improve the system’s performance in terms of its quality, cost and accountability. It is also a means for arresting compartmentalization and regulating the private sector
 - At the initial stage of this initiative, the bulk (80%-85%) of the expenditure of public sector providers would continue to be funded through block grants with the remaining portions funded through the “money follows patient” principle. Depending on the experience with this new format, the block grant portion could be reduced progressively until an appropriate balance between “block grant” and “payment for services provided” is achieved
 - Hospital and specialist care providers in the private sector will be required to register with a related authority if they are to provide care to publicly-funded patients. They have to satisfy certain entry requirements and will be brought under the purview and coordination of the health authority
 - Healthcare providers receiving publicly-funded patients will not be allowed to reject patients – this is to preempt their incentive to select low-cost patients and avoid high-cost patients
 - Healthcare providers receiving publicly-funded patients will also not be allowed to extra-charge patients, i.e. charging extra payment, so as to prevent differential treatment of patients and discourage provision of unnecessary care
- In financing
 6. Subsidizing low income groups’ primary care visits in the private sector
 - In view of unequal access to primary care and the limited capacity of the public sector’s general outpatient clinics, we propose subsidizing low income groups’ primary care visits in the private sector
 - As an initial step, subsidies may be limited to the poorest 20% of the population as they utilize about 37% of public inpatients and specialist/A&E services
 - If the subsidies succeed in reducing the rates of hospitalization and specialist care/A&E use of the lower income groups (this should be the primary objective of instituting a primary care-oriented system), the potential savings in healthcare costs would be substantial
 - In other words, the subsidies should also be considered as an initiative to contain healthcare costs in the long run
- We propose that reform initiatives 1, 2, 5, 6 expounded above should have priority as they can be readily accommodated within the structure of the existing healthcare system.

Containing costs, enhancing quality, and improving access

A proposal for reforming Hong Kong's healthcare system by the Healthcare Policy Forum

Defining our agenda

- The purpose of this paper is to explain and substantiate our proposal for reforming Hong Kong's healthcare system.
- The *raison d'être* of a formal healthcare system should be to improve and sustain the health of the community.¹
- While the ultimate aim of reforming Hong Kong's healthcare system is to maximize health gain for the population of Hong Kong, it is important, at the outset, to recognize the limitation of healthcare on health gain.
 - Healthcare is only one of many determinants of health.
 - It is well established that income inequality has a major if not determining effect on health.²
 - Likewise, clean air, safe foods, and affordable decent housing are all important determinants of health.³
 - In other words, social policies outside the healthcare system are also of critical importance for maintaining and improving the general health of Hong Kong's population.
 - Policies in other social domains may negatively or positively mediate the impacts of healthcare on health. For instance, the absence or presence of environmental laws regulating the quality of air will increase or decrease the demand for and hence total spending on medical care of respiratory diseases.
 - To achieve health effectively and at lower costs, thus, a healthcare policy must be supplemented or complemented by appropriate policies in other social domains.
- For the healthcare system, to maximize health gain for the population of Hong Kong, it must have the capacity to provide care of good quality and to guarantee access to care.
- In addition, given the omnipresence of resource scarcity, the healthcare system must also possess a built-in mechanism for spending control.
- Based on the above understanding of a healthcare system, we set the following reform objectives:
 - containing the costs of care
 - enhancing the quality of care
 - improving access to care
- These three objectives are also goals (or reform goals) of healthcare systems in many countries.⁴
- Instead of starting with an ideal system, we consider it more productive to adopt a *step-by-step, problem-solving approach* to formulating our reform proposals – that is, we will first identify specific problems in the current system that affect its quality and costs of care and health outcomes, then derive corresponding remedies, and finally propose a time-table for implementing reform initiatives.
- This is because since the “Harvard” paper in 1999 there has been much discussion on reforming our healthcare system but no concrete actions. In our view, we should not maintain this hiatus of inactivity any longer and rather than wait till consensus in the community on the “perfect” system is reached we should adopt a step-by-step approach. The wholesale reform of our healthcare system in a “big bang” approach would put severe stress on the system, if not cause it to breakdown completely. A more prudent strategy would be to move forward by implementing some practical measures to improve our system that can be put in place within a reasonable time-frame, yet still leave the flexibility for further reform developments in the light of experience with these first initiatives.

- In the following, we will
 1. briefly describe the major dimensions of healthcare systems and their bearings on the systems' quality, costs and accessibility; this description will serve as a conceptual tool for designing our reform proposal
 2. diagnose the problems that negatively affect the quality, costs of care and accessibility of Hong Kong's healthcare system
 3. propose our reform initiatives for addressing the problems
 4. provide arguments and evidence to substantiate our reform proposals

Dimensions of healthcare systems

- Healthcare systems are commonly divided into three dimensions:⁵
 - financing (or demand)
 - delivery (or supply)
 - allocation
- The *financing* dimension of the system determines how healthcare is paid for, which in turn determines how healthcare is distributed.
 - A healthcare system can be financed by general tax revenue. In this system, healthcare is paid for according to the ability to pay and is distributed according to the need for care. A tax-financed system can provide equal access to healthcare for the population.
 - A healthcare system can also be financed mainly by private funding, such as out-of-pocket payments. In this system, healthcare is distributed on the ground of ability to pay and access to care is unequal.
 - How a healthcare system is financed therefore determines the accessibility of care.
 - In addition, how the system is financed also determines its capability to contain costs.
- The *delivery* dimension of a healthcare system determines how healthcare funds are spent or what and how healthcare is produced. This dimension may involve the following questions:
 - How will different sectors within the system be coordinated?
 - How much authority rests with physicians?⁶
 - What service-mix will be produced?
 - All these questions have important bearings on the system's quality of care and cost-containing capability.
- The *allocation* dimension of the healthcare system determines how healthcare funds are allocated to healthcare providers, i.e. how healthcare providers are rewarded for delivering services.
 - This dimension determines the incentive structure influencing the behaviour of care providers and care recipients
 - It has been suggested that different allocation approaches can be placed on a continuum. At one end, "patients follow money" as funders allocate global budgets to providers. At the other end, "money follows patients" as providers are dependent upon attracting clients.⁷
 - As this dimension determines the incentive structure of the system, it will affect the system's quality of care and cost-containing capability.
- Based on the above, we may construct a matrix to indicate the dimensions at which reform initiatives can be targeted to achieve our reform objectives.

	Healthcare System Dimensions		
	Financing	Allocation	Delivery
Contain costs	√	√	√
Enhance quality		√	√

Improve access	√		
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Note: “√” indicates possible reform interventions

- To improve access to care, we can only act on the financing dimension.
- To enhance quality of care, we may act on the allocation and/or delivery dimensions.
- To contain costs, we can act on the financing, allocation, and delivery dimensions.

Diagnosing our healthcare system

In terms of its quality, costs and accessibility, we believe that the existing healthcare system in Hong Kong is beset by the following problems:

On the delivery dimension

- *Compartmentalization of service delivery between different levels of care (primary, secondary, and tertiary) and between different sectors (private sector and public sector)*⁸
 - While the communication and information exchange between different levels of care within the public sector have been improved in recent years, little has been done within the private sector and between the private and public sectors.
 - Compartmentalization results in duplicated/unnecessary care, repeated tests and discontinuity of care. All of these will eventually adversely affect the health of patients and cause an increase in healthcare expenditures.
 - The adverse impacts of compartmentalization between the public and private sectors on health and healthcare costs are particularly pressing because currently the private sector provides about 70% of outpatient care (no. of episodes) while the public sector is responsible for most of the inpatient care (about 90%-95% of bed-days).⁹
- *Absence of an organized primary care network or a “genuine” referral system*¹⁰
 - Under the current system, while patients cannot seek specialist care in the public sector without referral, they can do so in the private sector.
 - In the absence of an organized primary care network, patients, after receiving care at the levels of specialist or hospital care, are usually not properly “referred back” to the level of primary care for follow-up treatment.
 - The system thus encourages unnecessary or improper use of specialist/hospital care and the behaviour of “doctor shopping”.
 - The absence of an organized primary care network also means that the important role of “family doctors” in providing continuous, comprehensive, and preventive care has been overlooked.
 - Consequently, the system is not as cost-effective as it could be.
- *Supplier-domination and waning professionalism*¹¹
 - Hong Kong’s healthcare system is supplier-dominated. Providers usually perform the dual roles of providing healthcare as well as monitoring the quality of care that they provide. Such dual roles raise serious questions about providers’ accountability to patients.
 - At present, patients tend to rely on providers’ professionalism – i.e. adherence to professional ethics and self-regulation – to ensure quality and appropriate care. This seems to be unavoidable given the nature of medical knowledge and hence the inevitable agency role of healthcare providers.¹²
 - However, there is evidence of considerable sub-standard treatments and medical negligence. Moreover, the existing patient complaint process remains non-transparent

and ineffective.

- A mechanism supplementing/enhancing professionalism in ensuring quality of care and protecting patients' interests is needed.

- *Under-regulation of the private sector*¹³

- It has been criticized that the government adopts a *laissez-faire* policy towards the private sector.
- Both consultation fees and quality of care are highly varied.
- Patients' interests are not duly protected.

On the financing dimension

- *Unequal access to primary care*

- Hong Kong has a two-tier healthcare system. Healthcare is provided by the public and the private sectors in parallel.
- According to the latest set of Domestic Health Accounts¹⁴, in 2001/02, total healthcare spending was HK\$68,620 million, representing 5.4% of GDP. The public sector and the private sector share respectively of total healthcare spending were:
 - 57% (public share of total healthcare spending, 3.1% of GDP)
 - 43% (private share of total healthcare spending, 2.3% of GDP)
- In terms of funding sources, the distribution in the public sector and the private sectors is:¹⁵

Public sector funding sources

- General revenue: 95%
- User charges and fees: 5%

Private sector funding sources

- Out-of-pocket payments: 69%
- Private insurance: 9%
- Employment-related benefits: 19%
- Others: 4%

- In terms of healthcare delivery, the share between the public sector and the private sector is:¹⁶

Inpatient care (day-beds)

- Public sector: 90-95%
- Private sector: 5-10%

Outpatient care (no. of episodes)

- Public sector: 30%
- Private sector: 70%

- From the above, it can be seen that while the public sector provides 90%-95% of inpatient care, thus ensuring equal access to this level of care for the majority of Hong Kong citizens, its capacity to provide outpatient care is limited. Most people seek primary care in the private sector and pay for such care mainly by out-of-pocket payments.
- According to the latest statistics, the median consultation fee per consultation with a private general practitioner is \$150.¹⁷ While affordable to most people, the fee constitutes a barrier to the lower income groups' access to primary care. Statistics show that primary care utilization is slightly positively correlated with income.¹⁸
- The statistics also show that the lower income groups (in terms of household income) tend to utilize disproportionately more inpatient and specialist care:
 - the poorest 20% of the population use about 37% of public inpatient, specialist/A&E, and non-hospital services.¹⁹

- the hospitalization rate of the lowest income group is almost twice the rates of higher income groups²⁰
- the rate of specialist care utilization of the lowest income group is about three times the rates of higher income groups²¹
- It is suspected that the low income groups may be spared more severe illnesses if they have better access to primary care facilities.
- In other words, unequal access to primary care not only leads to poorer health outcomes but also causes an unnecessary increase in healthcare expenditure.

On the allocation dimension

- *Perverse incentives in the allocation mechanism of the public sector*
 - At present, in the public sector, funding is allocated to healthcare providers through block grants (i.e. a “patients follow money” allocation mechanism).
 - The positive side of such a mechanism is that it can prevent supply-side moral hazards, i.e. providers have no incentives to perform unnecessary procedures.
 - The negative side is that it does not encourage good performance as good performance will not be rewarded nor bring in more resources.
 - In other words, the system does not possess the right incentive structure to enhance quality and efficiency of care.²²

Proposing our reform initiatives

Given our reform objectives and based on our understanding of the problems impacting Hong Kong’s healthcare system, we propose six reform initiatives:

- On the delivery dimension
 1. Introducing a territory-wide electronic medical records system (EMRS)
 2. Instituting a primary care system with primary care practitioners acting as gatekeepers
 3. Instituting a new healthcare organizational structure
 4. Establishing a research institute for clinical excellence
- On the allocation dimension
 5. Adopting the “money follows patient” principle and the prospective payment mechanism for funding hospital and specialist care
- On the financing dimension
 6. Subsidizing low income groups’ primary care visits in the private sector

We propose that reform initiatives 1, 2, 5, 6 expounded above should have priority as they can be readily accommodated within the structure of the existing healthcare system. We will explain the reform initiatives in greater details below.

- *Introducing a territory-wide electronic medical records system (EMRS)*
 - At present, the Hospital Authority possesses a very sophisticated inter-operable web-based electronic clinical management and patient record system, which allows real time online remote access through standard internet connection.
 - All 162 HA facilities (43 hospitals, 45 specialist clinics, 74 general clinics) can have real time access to the system.
 - Technically, the HA Clinical Management System is already a territory-wide electronic medical record system.

- However, the system is not yet accessible to healthcare practitioners in the private sector.
 - We propose to make the HA system truly “territory-wide” by rendering it accessible to healthcare practitioners in the private sector.²³
 - We also urge the Government to provide the necessary resources for expanding/upgrading the capacity of the HA system and to encourage the private sector to utilize the system.
 - When the system becomes truly “territory-wide”, with patients’ authorization or other forms of legitimate authorization, all healthcare providers will have access to their patients’ medical records at the point where care is provided.
 - The record system will help alleviate the compartmentalization problem and its negative impacts on quality of care and healthcare expenditures; it does so by facilitating the transfer of patients’ comprehensive medical records across different levels of care as well as between different sectors of the system.
 - In addition, the record system will constitute a mechanism supplementing/enhancing professionalism in protecting patients’ interests.
- *Instituting a primary care system with primary care practitioners acting as gatekeepers*
 - With a primary care system properly in place, we expect that unnecessary or improper use of specialist/hospital care will be reduced, which will in turn help contain healthcare costs in the long run.
 - The primary care system can further help contain costs and improve health outcomes through its
 - ♦ emphasis on early detection and preventive care
 - ♦ role in coordinating and monitoring care at different levels
 - Under the system, patients are required to register with a primary care practitioner of their own choice. Primary care practitioners play the role of gate-keeping for care at higher levels, i.e. without their referral, patients’ access to specialist care is not allowed.
 - To ensure quality of care, physicians wishing to practise as primary care practitioners are required to register with related health authorities and to satisfy certain registration requirements, such as academic qualifications or practicing experiences.
 - To protect patients’ interests further, a reference fee schedule will be negotiated.
 - To avoid self-referral, once registered, primary care practitioners will not be allowed to practise as specialists at the same time, even if they possess specialist qualifications.
 - With the above requirements, a primary care system may also be considered as a means to regulate the private healthcare sector.
- *Adopting the “money follows patient” principle and the prospective payment mechanism for funding hospital and specialist care*
 - This is our suggestion for addressing the perverse incentives in the allocation mechanism of the public sector and to improve the performance of the system, in terms of its quality, cost, and accountability. It is also a means for further arresting compartmentalization and regulating the private sector.
 - The “money follows patient” principle entails that patients’ healthcare costs will be reimbursed regardless of the providers chosen, whether these be private or public sector practitioners.
 - The prospective payment mechanism is a payment scheme that lays out “prospectively” fixed payment rates for different illnesses and treatments.
 - Thus, under this arrangement, patients get to choose hospital and specialist care

- providers of their own preference in both the public and private sectors. Healthcare providers will be reimbursed the standard payment rates as fixed in the payment scheme for treating patients regardless of the actual costs of treatment. Healthcare providers' revenues may totally or partially depend on the number of patients treated.
- For the initial stage of this initiative the majority (80%-85%) of the expenditure of public sector providers would continue to be funded through block grants with the remaining portions funded through the "money follows patient" principle. Depending on the experience with the operation of this limited "money follows patient" format, the block grant portion could be reduced in a step by step progression until the appropriate balance between "block grant" and "payment for services provided" was achieved. In the UK it is estimated that the proportion there will settle at 10% "block grant" and 90% "payment for services provided".
 - Hospital and specialist care providers in the private sector will be required to register with a related authority if they are to provide care to publicly-funded patients. They have to satisfy certain entry requirements and will be brought under the purview and coordination of the health authority.
 - Healthcare providers receiving publicly-funded patients will not be allowed to reject patients – this is to preempt their incentive to select low-cost patients and avoid high-cost patients.
 - Healthcare providers receiving publicly-funded patients will also not be allowed to extra-charge patients, i.e. charging extra payment, so as to prevent differential treatment of patients and discourage providers from providing unnecessary care.
- *Subsidizing low income groups' primary care visits in the private sector*
 - To address the issues of unequal access to primary care and the limited capacity of the general outpatient clinics of the public sector, we propose subsidizing low income groups' primary care visits in the private sector.
 - We propose that the subsidy be \$150 per visit and capped at 10 visits per year. These figures are derived from the statistics that:
 - the average no. of GP visits per year per capita is about 6.99²⁴
 - median consultation fee per consultation with a private GP is about \$150
 - As an initial step, subsidies may be limited to the poorest 20% of the population as they utilize about 37% of public inpatients and specialist/A&E services.
 - If the subsidies succeed in reducing the rates of hospitalization and specialist care/A&E use of the lower income groups (this should be the primary objective of instituting a primary care-oriented system), the potential savings in healthcare costs would be substantial.
 - In other words, the subsidies should also be considered as an initiative to contain healthcare costs in the long run.
 - *Instituting a new healthcare organizational structure*
 - In order that the reform will sustain and that better care will be provided in the long run, we believe it is of great importance to put in place a new management structure. As a first step, we propose a new two-level organization structure:
 - the 1st level is responsible for "steering" the whole healthcare system (including the public and private sectors); the agency at this level may be called a Health Commission.
 - the 2nd level is responsible for "rowing", i.e. day-to-day operation of healthcare provision; the agency at this level for providing public healthcare services may be

called a Healthcare Services Authority. We intend to put all public healthcare provision facilities under one structure so that better operational coordination can be achieved. The delivery of private healthcare services would also be part of 2nd level structure.

- Specifically, apart from implementing the proposed reform initiatives, the “steering” functions of the Health Commission may include:
 - macro-level planning and coordination
 - advising the Health, Welfare and Food Bureau on issues relating to healthcare
 - allocating public funding to providers
 - setting and monitoring standards
 - negotiating fee schedules with providers
 - maintaining a registry of primary care practitioners and other healthcare providers
 - To ensure the new organization’s legitimacy and accountability, it will be supervised and managed by a broadly representative governing board with budgetary powers, which comprises government officials, representatives of the medical and associated professions and patients’ groups, and legislators. From an accountability point of view it would be chaired by either the Secretary for Health, Welfare and Food or the relevant Bureau Permanent Secretary.
 - To accommodate this new two level organizational structure, we propose that the Department of Health’s existing healthcare provision facilities transferred to the new Healthcare Services Authority. Such healthcare provision facilities include:
 - elderly health
 - health education
 - HIV/AIDS service
 - maternal and child health
 - port health
 - student health
 - tobacco control
 - tuberculosis service
 - Centre for Health Protection
 - Regarding the Healthcare Services Authority, it will be responsible for managing all public healthcare provision facilities in the territory, including public hospitals, out-patient clinics, as well as all healthcare provision facilities previously under the remit of the Department of Health. It will also responsible for maintaining a territory-wide electronic medical records system.
 - We propose that the Hospital Authority be renamed and expanded to take up the role of the Healthcare Services Authority.
 - As a result of this restructuring the Department of Health would be downsized as many of its functions would have been assumed by the Hospital Services Authority and the relevant staff would be absorbed into this body and it would then function as the operational arm of the Health Commission.
- *Establishing a research institute for clinical excellence*
 - As a continuous effort to enhance quality and contain costs of healthcare, we propose establishing a research institute responsible for developing and disseminating best clinical practices.
 - In the medium-term, we suggest that the research agenda of the Institute be expanded along the lines proposed by the 1999 Harvard Report. In addition to the “medical” dimension of healthcare, the Institute will also conduct research on the social and

economic dimensions of healthcare. The Institute could also serve as a base to train health economists and policy analysts. To better capture the Institute's expanded research agenda, it may be renamed as "Institute for Health Research"

- While the main focus of the work of the Institute would be for the public health system, it could also carry out consultancy work for the private health system.

Steps forward

- While we believe that the reform initiatives explained above when fully implemented should bring improvement to Hong Kong's healthcare system, they are the first steps only.
- To consolidate and extract further benefits from the proposed initiatives, further reforms are necessary. Indeed, reform should be conceptualized as a continuous process of improvement rather than a "one-off" change.
- Future reform directions may aim:
 - to enhance the transparency in healthcare provision in order to improve accountability, facilitate choice of healthcare providers, as well as facilitate the working of the "money follows patients" concept. This can be achieved by deriving and publishing performance indicators.
 - to further ensure the quality of care. An independent quality audit agency should be instituted in the long run.
 - to enhance the overall capacity of the primary care system. The present "solo-based" organization structure for the delivery of primary care in the private sector should be reformed.
 - to enhance the role of primary care in achieving better health outcomes. The concept of family medicine should be promoted.
 - to better protect patients' interests. An independent ombudsman office for handling and investigating patient complaint should be set up.
 - to continue to deliberate on the financing of the healthcare system since many issues involved either require further examination or remain unexamined. As a step forward, we urge that a more structured, open, and comprehensive review process at the societal level be initiated. (See the first question in the section below for the issues involved)

Substantiating our reform initiatives: arguments and evidence

In the following section we substantiate our proposals through a process of posing and answering hypothetical objections and queries.

Healthcare financing

- *It is commonly believed that reforming the current financing mechanism of Hong Kong's healthcare system should be the top policy priority. Specifically, it is proposed that more private funding should be involved. However, healthcare financing reform is not one of the reform initiatives in the proposal explained above. Is not healthcare financing reform a pressing policy issue in Hong Kong?*
 - We believe healthcare financing reform is an important policy issue, and precisely for its importance, great prudence is in order. This is because many issues involved either require further examination or remain unexamined. Let us review some of these issues.
 - One major argument for financing reform points to cost pressures on the healthcare system resulting from population ageing, technological advancement, raising public expectations and the early occurrence of chronic illnesses. On closer examination, however, it appears that these cost drivers are a lot less pressing or "real" than some argue and are far from being "unmanageable".
 - On ageing, both the reports published by the Organisation for Economic

Co-operation and Development (2006) and the European Commission (2001) point out that ageing was not a significant factor for the increase in healthcare spending in the past several decades. Projecting into the future, the two reports estimate that demographic effects will only increase average public healthcare and long term care spending by 0.6% or 0.7% each year.²⁵ Growth rates of similar magnitudes in healthcare spending owing to the ageing effect have also been projected for Australia²⁶, Canada²⁷, and the USA²⁸ by other research studies. The impact of ageing on healthcare spending is thus far from constituting a crisis.²⁹ Moreover, it is noted that many healthcare needs of an ageing population can effectively be met by a primary care system.

- On technological advancement, one scholar argues that “new technologies may be inherently either cost-enhancing or cost-reducing ... but it is the way in which they are taken up and applied that determines their impact on costs.”³⁰ In other words, the cost pressure of technology is controllable. The issue is whether we have the will to control it.
- On rising expectations, it is not really clear what is meant by these and how rising costs can be attributed accordingly. It is also not clear why rising expectations cannot be circumscribed.
- As for the early occurrence of chronic illnesses, similar to the issue of an ageing population, it is plausible that it can be arrested by an effective primary care-oriented system.

- The above observations therefore call for a re-examination of the urgency of reforming the current health system’s financing mechanism.

- Another argument for urgent healthcare financing reform by introducing more private funding relates to concerns about substantial increases in public spending on healthcare over the past years. However, it has to be pointed out that such increases should be put into perspective.

- Firstly, as mentioned before, in Hong Kong, the public sector and the private sector share respectively of total healthcare spending in 2001 were:

- 57% (public share of total healthcare spending)

- 43% (private share of total healthcare spending)

Whereas, in OECD countries, the corresponding share in average was about:

- 70% (public share of total healthcare spending)

- 30% (private share of total healthcare spending)

The figures above indicate that in both absolute and relative terms, private funding in Hong Kong has already contributed a substantial share to total healthcare spending. On the contrary, Hong Kong public healthcare spending is substantially lower than that of other advanced societies.

- Secondly, although public spending on healthcare had increased substantially from 1.6% of GDP in 1989/90 to 3.1% of GDP in 2001/02, a two-fold increase, the increase should be seen as making up for under-investment in healthcare in the past.
- Thirdly, compared to OECD countries, Hong Kong’s public healthcare spending is also low as a percentage of GDP. The OECD average was about 5.7% of GDP in 2000.

- The figures and comparisons above suggest that when deciding on healthcare financing reform, Hong Kong needs to debate:

- whether its public healthcare spending is lagging behind that of other advanced societies

- the appropriate level of public spending vis-à-vis private spending on healthcare
- whether Hong Kong cannot afford to increase its public spending on healthcare
- All these policy questions, in our view, have not been sufficiently deliberated in the society.
- Another area that has not received sufficient debate is the possible consequences of introducing more private funding in healthcare financing. Several are particularly pertinent to the policy decision:
 - Any shift from public to private financing, by whatever means, will necessarily transfer costs from those with higher to those with lower incomes, and from the healthy to the ill.³¹
 - Private financing selectively discourages healthcare utilization by those with lower incomes and improves access to care for those with higher incomes.³²
 - A shift from a tax financing system to a mix financing system may weaken the system's ability to contain healthcare costs. "There is a consensus among most health economists, although the evidence base is incomplete, that single pipeline funding enables effective cost control. Thus, those countries which are single-pipeline financed by taxation can, by control of public expenditure limit cost inflation better than countries where funding is fragmented (for example, the USA). Once funding is fragmented, direct control of one pipeline tends to be compensated by inflation in funding via another."³³
 - Expanding private financing may not contribute to enhancing the quality of care either.³⁴
- Many of the above policy issues have also not been sufficiently examined.
- Given all the contentious issues involved, therefore, more deliberation is needed.
- Indeed, based on the above and the soundness of the government's financial position, it is our opinion that its financial resources are more than adequate to make the necessary investment in the public healthcare system during the medium term without recourse to additional streams of revenue to the existing tax-based financing. Furthermore we would argue that the current tax-based system is not only viable but that it compares favourably with private financing in being a fairer system. Given the healthy prospects for the Hong Kong economy and the substantive reserves that have been accumulated, we take the view that the government could and should increase public spending on healthcare so that access and quality can be further enhanced, for example, through expanding primary healthcare and reducing the workloads of healthcare providers.
- Lastly, we would like to emphasize that reforming the allocation and delivery dimensions of the system are no less important. One may even argue that getting the structure right in providing quality care at the lowest possible costs should always be the policy priority over any initiatives for increasing spending (private or public). As one economist pointedly writes: "why pour good money after bad?"³⁵
- *Many believe that introducing voluntary private health insurance is a promising healthcare financing reform direction. If the relatively well-off can be encouraged by incentives, such as tax credits, to purchase private insurance and to seek care in the private market, this will not only reduce public spending but also allow focusing public money mainly on the needy. Does voluntary private health insurance not promise a "win-win" situation?*
 - More needs to be done to demonstrate the attainability of the "win-win" situation.
 - Firstly, commercial insurers have strong incentives to limit the amount of claims paid in order to earn profit and stay in business. To ensure profits, one strategy is to enroll only the healthy and avoid or offer limited coverage to the less healthy. The upshot will be a public system burdened with a larger proportion of less healthy and more costly

- individuals. Therefore, private health insurance may not necessarily help remove cost pressures on the public system.
- Secondly, given the often better pay packages in the private sector, expanding private health insurance may draw doctors and nurses out of the public sector and create a shortage of both therein. To compete with the private sector for human resources, the public sector may have to raise its effective wage levels. Two results are likely, either less public healthcare is provided at a given budget level or more money has to be spent on the public system to maintain the same level of healthcare. In other words, not only is there no guarantee that private insurance will help reduce public spending, but it may in fact induce budget growth in the public system!³⁶
 - Thirdly, there is a fundamental flaw in the underlying economic logic. To quote a scholar on this: “Why would individuals pay for care if they could receive timely, high quality care ‘for free’? As such, privately-financed health care requires that the publicly-funded system be inadequate, or at least, perceived to be inadequate. Rather than strengthening the public system, [mixed funding] models require that it remains weak. Particularly when the same providers offer care [for both publicly-funded and privately-funded patients], they have a strong incentive to ensure that the publicly-funded care remains sufficiently uncomfortable, inconvenient, or inaccessible to maintain a market for their more lucrative privately-funded services.”³⁷ According to a report published by OECD in 2004, there is evidence that “incentives created by higher payment levels in [private health insurance] markets have [...] encouraged providers to maintain long queues in the public system or refer patients to owned private facilities in order to sustain their private practice”.³⁸
 - As a general remark, the same report points out that the “ability of [private health insurance] to reduce demand pressures on the public system has nonetheless proved to be constrained.”³⁹
 - Fourthly, the high administration costs incurred by insurers cast a lot of doubts about the efficiency of private insurance as a means of financing healthcare. To do business, insurers have to undertake a host of administrative tasks, including assessing the risk status of the insured, determining premiums, underwriting appropriate policies, billing and claims administration, and marketing. While not contributing to anybody’s health, all these activities have to be paid for nonetheless. What is more, private insurance also imposes significant amounts of administrative work on healthcare providers, such as negotiating contracts with insurers and handling fee reimbursement. Similarly, such non-healthcare administrative work has to be paid for. In a tax-financed healthcare system, most of the above administration costs do not exist. The conclusion is that given the same amount of funding, other things being equal, more healthcare will be provided by a public system.⁴⁰
 - Indeed, it has been well documented that healthcare systems financed by private insurance are generally more expensive. According to 2006 OECD data, among OECD countries, the United States and Switzerland, the two countries relying most heavily on private insurance to finance healthcare, had in 2004 the most and second most expensive healthcare systems, absorbing 15.3% and 11.6% respectively of their GDP (the OECD average was 8.9%).
 - Another research published in 2003 estimated that in comparison with Canada’s tax-financed healthcare, the excess administration costs in the United States were about \$209 billion US dollars, equivalent to 17.1% of total American healthcare expenditure. It has been surmised that such money is probably enough to provide full healthcare coverage for all Americans who do not have healthcare coverage.⁴¹

- Finally, let us not forget that tax credits are also public money! Offering tax credits to encourage the relatively well-off to purchase health insurance means using public money to subsidize them to purchase insurance! It begs the question of why those already well-off should be subsidized for them to receive even better services while the less well-off are consigned to a public system which, by the logic of a mixed-funding model as explained above, has to remain inadequate. As yet, we have not touched on the nature of such tax credits which some observers point out are hugely regressive.⁴²
- *Does private health insurance have no role at all in healthcare systems?*
 - This is not our position. We believe that depending on context, private health insurance plays at least three roles in healthcare systems:
 - Substitutive role: It provides healthcare coverage for those who are not eligible for, or allowed to opt out of, the public system
 - Complementary role: It provides coverage for services that are excluded or not fully/ sufficiently covered by the public system, e.g. dental care or pharmaceuticals. It may also cover the user charges of public systems.
 - Supplementary role: It provides coverage for services that are also provided by the public system. “Its main purpose is to increase the choices of provider (for example, private providers or private facilities in public institutions) and level of inpatient hotel amenities (for example, a single room). By increasing the choices of provider it may also provide faster access to health care”⁴³
 - In Hong Kong, given the substantial private share of total healthcare spending (about 43%) and the universal coverage of the public system, we expect that private insurance can perform the complementary and supplementary roles.
 - We are of the view that the importance of private insurance in protecting people from unpredictable and potentially catastrophic healthcare costs should be emphasized as about 70% of private healthcare spending is out-of-pocket payments.
 - Encouraging those who *currently* use private healthcare and pay mainly through out-of-pocket payments to purchase private insurance may help reduce their reliance on the public system if and when they fall victim to illnesses incurring catastrophic financial costs.
 - What we have concerns about is using private health insurance as a *policy tool*, such as offering tax incentives to encourage the uptake of private insurance, for addressing challenges in the public healthcare system explained in the last question. It is important that if incentives are offered to encourage the uptake of private health insurance, the cost of those incentives are more than offset by a commensurate reduction to the public purse in the use of the public healthcare system. If this indeed would be the outcome, then the case for offering incentives to take up private health insurance becomes more compelling.
- *Is not one’s health, and therefore also one’s healthcare costs his or her own responsibility? Why should citizens’ access to healthcare be assured and subsidized? Why should taxpayers or those who have greater ability to pay contribute towards payment for those who have lesser ability to pay?*⁴⁴
 - Holding people responsible for their health and hence their own healthcare costs must be premised on the condition that people’s health is totally within their own control or is of their own making. Moral intuition suggests that unless we are free to make our own choice, we should not be held solely responsible for what befalls us.
 - So, the issue becomes: how far is our health within our control?
 - To tackle the issue, we need to distinguish two categories of responsibility:
 - responsibility for our choice, e.g. choice of life plan and life style, choice of a

- certain course of action
 - responsibility for subsequent life experiences, e.g. ill health.
- The above distinction suggests that while we may be held responsible for our choice, which may be within our control to make, we may not be held totally responsible for happenings subsequent to our choice as we certainly do not have full control over events that impact on us. To hold people solely responsible for life experiences that befall them is to hold them responsible for too much.
- To apply the distinction to the issue of health means that even though we are free to choose a healthy life style, e.g. avoiding tobacco and alcohol, whether such a choice actually results in good health is by no means certain. There are a lot of other factors beyond our control that affect our health. Holding a non-smoking, healthy-living lung cancer patient responsible for his/her ill health thus looks morally objectionable.
- To the extent that the choice of life style may have consequences on health, we can only hold people responsible for those results consequent of their choice and the possible related healthcare costs. This can be achieved by levying health taxes on tobacco and alcohol, for example. But we should not hold people responsible for their actual health status, which may be largely beyond their control.
- Who then should bear the healthcare costs of those who fall ill? Why should the relatively well-off contribute towards the healthcare costs of the less well-off?
- To these questions, we offer the following arguments:
 - society has a responsibility to assure all its members of equality of life opportunity or a level playing-field
 - since:
 1. ill health restricts individuals' range of life opportunities
 2. healthcare contributes to the protection of equality of opportunity
 3. it is arguable that the relatively well-off fully merit the wealth they own and the advantageous social position they enjoy
 4. it is arguable that the relatively less well-off fully deserve the disadvantageous social position they are in
 - therefore, it is not morally unacceptable for the society to require the well-off to contribute towards the healthcare costs of the less well-off.
- Finally, we believe that it is in everyone's enlightened self-interest to partake in collective endeavors to improve the general health of a society, enlightened in the ability to see that one's self-interest/personal well-being is embedded in a broader collective interest/well-being and to feel a sense of "shared citizenship" within a society. A comfortable life amidst a world of misfortune and misery is not likely to render much happiness.

Electronic medical records system (EMRS)

- *How exactly does the electronic medical records system achieve the functions of enhancing the quality of care, containing healthcare cost, supporting professionalism, and improving accountability?*

Enhancing quality of care

- An electronic medical system helps to improve the quality of care because it facilitates clinical decisions. With patient records almost instantly accessible at the point of consultation, medical practitioners will be in a much better position to understand the history of a patient's illness and the treatments that have been previously prescribed.

This will not only facilitate diagnosis of the patient's current condition but will also alert the doctor to the necessity or otherwise of particular procedures and the appropriateness of particular drugs.

- Studies have shown that physicians usually get to ask only about 30% of the necessary clinical questions while seeing their patients. EMRS makes up for the missing information to enable optimal clinical decisions.
- In another study of in-patients, it was found that computerization of medical prescription records improved safety to the degree of reducing medical errors by more than 80%. Electronic reminders are also useful tools in the effective care of chronic conditions like diabetes.

Containing healthcare cost

- EMRS helps contain healthcare costs in different ways. Firstly, with fuller sets of medical records readily available, physicians will be able to avoid duplication of laboratory tests or other medical procedures. Studies have found reduced use of laboratory tests by 10-15% subsequent to the introduction of EMRS.
- Secondly, as EMRS makes possible the selection of the least expensive prescription within a class of drugs, it has been found to reduce drug costs by 18%.⁴⁵

Supporting professionalism

- EMRS may help promote professionalism among physicians through two diverse paths. On the one hand, EMRS facilitates the dissemination of best practices. This is conducive to raising professional standards.
- On the other hand, EMRS may also reveal substandard or inappropriate diagnosis and treatment when medical records become accessible to physicians treating the same patient. In this latter path, EMRS is in part a conduit for peer review. The feasibility of peer review adds weight to the insistence on the autonomy and self-regulation of the profession in place of external watchdogs or the use of potentially distracting devices such as elaborate performance measurements.

Improving accountability

- Under EMRS, patients rightly become the owners of their own medical records. Patients are free to give access to their records by different doctors treating their conditions.
- Physicians will be conscious that the treatment and drugs they dispense in particular episodes may in time be seen by other physicians.
- The result will be a continuous, systemic entrenchment of accountability because the transparency deriving from such a system is likely to gradually cultivate prudence in the exercise of medical judgements and selection of prescriptions.

Primary care and gatekeeping

- *In what ways does the primary care system help contain healthcare costs and improve health outcomes?*⁴⁶
 - Let us start with an estimation: in any year, between 75% and 85% of people in a general population require only primary care services; about 10-20% require referral to secondary care for short-term consultation, and the last 5-10% to a tertiary care specialist for unusual problems.
 - The implications of this estimation are:
 - a large proportion of care provided by a hospital/specialist care oriented system may be unnecessary
 - since all medical treatments have a finite risk of iatrogenic complications, a hospital/specialist care oriented system may have greater adverse effects on the health status of a population

- Thus, a primary care oriented system, with primary care practitioners playing the role of a gatekeeper, can contain healthcare costs by reducing unnecessary hospital/specialist care and improve health status by ensuring appropriate hospital/specialist care.
- Primary care can further help contain costs and improve health outcomes through its
 - emphasis on early detection and preventive care
 - role in coordinating and monitoring care at different levels
- The importance of primary care is indeed well documented:
 - An analysis of 50 US states and DC in the 1990s showed a consistent relation between the availability of primary care physicians and health levels – as assessed by age-adjusted and standardized overall mortality, mortality associated with cancer and heart disease, neonatal mortality, and life expectancy – even after controlling for the effect of urban-rural differences, poverty rates, education, and lifestyle factors.
 - Other findings show that the ratio of primary-care physicians to population is the only consistent predictor of age-specific mortality rates, even when considering such other characteristics as rurality, percent of female-headed households, education levels, minority status, and poverty rates.
 - A 12% increase in primary care physicians (1 per 10,000) improves health outcomes on average by 4% (range 1.3%-10.8% depending on particular outcome and geographic unit of analysis).
 - A study demonstrated that expenditures for care among the elderly in the US were lower in areas of the country with higher ratios of primary-care physicians to population.
 - A nationally representative survey in the US showed that adult respondents who reported a primary care physician rather than a specialist as their regular source of care had lower annual healthcare costs, after controlling for initial differences in health status, demographic characteristics, health insurance status, health perceptions, reported diagnoses, and smoking status.
 - In 1998, European countries with gatekeeping systems spent less on healthcare as a percentage of their gross national product than those that allowed direct access to specialists (7.8% v 8.6%).

Institute for clinical excellence

- *In what ways does the institute play an important role in enhancing quality and containing cost of healthcare?*

- Research shows that there is considerable unwarranted variation in clinical practice – variation not explained by illness or patient preference.⁴⁷ This means that some practitioners provide more care than others, and that such difference has no impact on health outcomes. In other words, there is considerable “waste” in clinical practice. For example:
 - “After adjustment for age, sex, and race, per capita Medicare spending in 2000 was \$10,550 in Manhattan, New York, for example, but only \$4,823 in Portland, Oregon. The differences in spending are largely unrelated to differences in illness or price. Rather, they are due to differences in patterns of practice ...”⁴⁸
 - In US, patients with similar chronic illnesses who live in high-cost regions do not have better health care outcomes than those living in low-cost regions.⁴⁹
 - In US, “among the chronically ill, the frequency of physician visits, diagnostic testing, and hospitalisation and the chances of being admitted to an intensive care unit (ICU) depend largely on where patients live and the health care system they

- routinely use, independent of the illness they have or its severity.”⁵⁰
- Scholars have also found that many medical interventions are not evidence-based and are of uncertain effectiveness.
 - One study conducted in 2005 reviewing 2404 medical treatments found that
 - only 15% were rated as beneficial
 - 22% were likely to be beneficial
 - 7% were rated as trade off between benefits and harms
 - 5% were unlikely to be beneficial
 - 4% were likely to be ineffective or harmful
 - 47% were of uncertain effectiveness.⁵¹
 - The implication of the above research findings is that quality of care can be greatly improved and costs of care greatly reduced if best clinical practice can be encouraged.

“Money follows patient” principle and prospective payment mechanism

- *How do the “money follows patient” principle and the prospective payment mechanism help improve quality of care and contain costs?*
 - Under this funding allocation arrangement, providers’ revenues depend on the number of patients treated. In other words, to guarantee income, providers have to compete for patients.
 - To compete for patients, providers may lower price and/or improve quality.
 - Since payment rates are fixed prospectively, providers can only compete on quality, i.e. unless good quality of care can be ensured, providers may lose patients and hence income.
 - In addition to inducing providers to compete on quality alone, the prospective payment mechanism also encourages providers to adopt the most cost effective procedures for treating patients and to avoid clinical complications. This is because providers will be reimbursed a single prospectively set payment rate regardless of the actual costs of treatment.
 - There is evidence showing that competition between providers and the prospective payment mechanism can improve quality and reduce costs.⁵²
 - For example, one study in the US shows that after the introduction of the prospective payment mechanism, the average length of stay in hospital dropped immediately.
 - Notwithstanding, it has to be pointed out that the institutional design is critical for competition to be effective.
 - The literature also suggests that the payment rates must carefully be set and accurately reflect the actual costs of treatments. If the rates are set too low, it will cause providers to compromise on quality.
 - Empirical evidence shows that falls in payment rates are associated with poorer quality.
- *Are patients able to judge the quality of care and distinguish good providers from poor providers? If patients are not able to make informed choices of providers, how can competition between providers improve quality? Will providers only compete on the quality of that which is easily evaluated or observed, such as hotel services or courtesy?*
 - It is true that patients may be unable to judge the performance of healthcare providers, before or even after treatments.
 - The truism of this explains the inevitable agency role of healthcare providers. We cannot rely on patients making choices on their own. We have to rely on providers making clinical decisions on our behalf and in our best interests.
 - The gatekeeping function of primary care doctors and the electronic medical records in

- our proposed system play an important role in this regard.
 - In our proposal, patients' access to hospital care or specialist care is not allowed without referral of a primary care practitioner. The system thus encourages and strengthens the agency role of primary care practitioners in recommending informed choices to patients. Allowing real time access to patients' medical records, the electronic records system enhances primary care practitioners' agency role in assessing the treatments provided by practitioners at other levels of care.
 - In short, in our proposal, we rely on primary care practitioners to recommend informed choices to patients.
- *Who would help patients make informed choices of their primary care doctors? How does the system ensure that primary care doctors will perform their agency role faithfully?*
 - For the former question, we have to admit that patients can only rely on the "reputation" of individual practitioners and the information/recommendations provided by relatives, friends or neighbours in making their choice.
 - For the latter question, the possibility of patients exercising choice in switching practitioners and the incentive of practitioners to maintain good reputation are two possible mechanisms although they are not perfect.
 - Ultimately, one has to count on practitioners' *professionalism* (practitioners at all levels, not only primary care practitioners) in protecting patients' interests.
 - We anticipate that the electronic medical records system can constitute a peer-review process among practitioners and help to enhance their professionalism. (We shall elaborate on this point below in the section on electronic medical records system.)
 - *Related literature suggests that the prospective payment mechanism gives providers incentives to avoid or under-treat severely ill patients with expected costs greater than the fixed payment rate (dumping or skimping patients) and to attract only the less ill patients with expected costs lower than the fixed payment rate (creaming patients). How can such perverse incentives be reduced?*
 - It should be noted that such incentives occur mainly in hospital care and specialist care. Primary care doctors normally do not face this incentive structure as they can always refer relatively ill patients to specialist care or hospital care.
 - One way to solve the "dumping patients" problem is to make it impossible. As suggested in our proposed system, providers are not allowed to reject patients.
 - To solve the "skimping" problem, we suggest relying on patients' primary care doctors and the electronic medical records system. With real time access to patients' medical records, primary care doctors can help monitor the treatments given by healthcare providers at other levels.

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Endnotes:

- ¹ Regarding the goals and functions of health systems, in *The World Health Report 2000*, the World Health Organization states that “Better health is of course the *raison d’être* of a health system, and unquestionably its primary or defining goal: if health systems did nothing to protect or improve health there would be no reason for them.” We endorse this view and take it as self-evident. See World Health Organization. 2000. *The World Health Report 2000*. Geneva: World Health Organization, p. 23.
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- ⁷ The above is paraphrased and quoted from R. B. Deber 2002. *op cit.* p. 2 and R. B. Deber. 2003. *ibid.* p. 21.
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- ¹⁰ The Harvard Team 1999. *op cit.*; G. M. Leung *et al.* 2005. *ibid.*
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- ¹² For a general discussion on the agency role of healthcare providers, see A. Maynard and K. Bloor. 2003. Trust and performance management in the medical marketplace. *Journal of Royal Society of Medicine* 96:532–539.
- ¹³ The discussion is partly drawn from The Harvard Team 1999. *op cit.* and W. Yip and W. Hsiao. 2004. *op cit.*
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Accounts.

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- ²⁰ G. M. Leung *et al.* 2005. *op cit.*
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- ²³ The above description of HA's medical record system is based on N. T. Cheung. 2006. *Realizing the benefits of eHealth in Hong Kong*. PowerPoint Presentation at the First eHealth Forum organized by the eHealth Consortium, Hong Kong Academy of Medicine, September 2006 and W. N. Wong. 2006. *HA Electronic Patient Record: Sharing with Private Sectors*. PowerPoint Presentation at the First eHealth Forum organized by the eHealth Consortium, Hong Kong Academy of Medicine, September 2006.
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