

# Viability of the Health Protection Account in Hong Kong

*To the Editor*—Law and Yip's<sup>1</sup> attempt to model the sustainability of the proposed Health Protection Account (HPA) is a useful first step in debating Hong Kong's health financing options, given the relatively muted evidence-based discussion of the topic thus far. However, we have found several methodological inconsistencies and queries that should be further addressed.

First, there appears to be some confusion over the economic concepts of quantity and price in Table 1. The growth projection of the notional unit costs of hospitalisation (HK\$3622) and specialist consultation (HK\$549) should not be based on the aggregate, unadjusted medical expenditure annual growth rate. More importantly, the 5% annual expenditure growth rate was derived from the period 1993 to 2000, during which the Hospital Authority underwent accelerated structural expansion in its first decade of operation. Many of these costs were non-recurrent and should not have been included in the growth projection exercise. In addition, the nominal medical expenditure reported in Table 1 had not been adjusted for population changes and utilisation patterns. For instance, the shifting market share from private to public facilities during that period would have artificially accentuated the apparent growth in overall health services utilisation for the population.

Second, wage growth for an individual aged 40 to 64 years should be distinguished from real growth in national income. Therefore, adopting 3% as the real gross domestic product growth rate to project salary growth may be problematic.

Third, the management of HPA funds will likely follow the practice adopted by the Mandatory Provident Fund that is invested in managed portfolios. The long-term investment rate of return will likely be more generous than that derived from the average inflation-adjusted bank savings rate of 2.5%.

Fourth, the discussion section seems to have missed the critical point that the potential benefits of changing the means of financing health care are not limited to increasing the funding sources, but also changing behaviour. It is naive to see this scheme as an alternative to raising fees, but instead, it can be viewed as a complementary system that may also help to develop more appropriate care-seeking behaviour.

Lastly, analysing average health care costs is misleading and does not allow for a key question to be asked, namely, instead of asking what percentage of the total health bill is covered, a more relevant question would be whether it can cover a significant percentage of the individual bills for a significant number of people. This is essential, given that this scheme is person-based, not social insurance-based. For example, if expenses follow the 90/10 rule (10% of the population incurring 90% of the expenses, which is possible), the scheme might achieve 30% coverage for many people. A more sophisticated analysis, using longitudinal data, is therefore needed before concluding that the scheme will not work.

J Bacon-Shone, PhD  
Medical and Health Research Network and Social Science Research Centre  
WS Chan, PhD  
Medical and Health Research Network and Department of Statistics and Actuarial Science  
GM Leung, MD, MFPHM  
R Yeung, PhD  
Medical and Health Research Network and Department of Community Medicine  
The University of Hong Kong  
Pokfulam, Hong Kong

## Reference

1. Law CK, Yip PS. Viability of the Health Protection Account in Hong Kong. *Hong Kong Med J* 2002;8:262-8.

## Authors' reply

*To the Editor*—We would like to respond to the comments by Bacon-Shone et al on our paper entitled 'Viability of the Health Protection Account in Hong Kong'.<sup>1</sup> We welcome any suggestions and criticisms that can help progress the debate and discussions on this topic. Our corresponding replies to the queries raised are noted below.

First, the alleged confusion over the economic concepts of quantity and price in Table 1—a 5% average growth rate

is estimated based on past data after adjusting for inflation. A smaller or larger value is still very much an unknown. The increase in medical treatment, medicine, cost of acquiring the latest medical equipment, and the increase in hospital patient days would possibly offset any reduction in the non-recurrent expenses.

Second, alleged problems with the adopted growth rate—we adopted the assumption of 3% of gross domestic

product (GDP) growth from the Harvard report.<sup>2</sup> In 2001, salary growth was less than the GDP growth, and the financial status of the Health Protection Account (HPA) would be worse if the 2001 situation prevailed.

Third, suggestion that the rate of return “will likely” be more generous—unfortunately, the Mandatory Provident Fund is invested in a number of managed portfolios that have reported negative returns since its inception. We cannot be too optimistic with a poor economy and high unemployment rate. Furthermore, Fig 1 provides a whole range of return rates for the readers’ consideration.<sup>1</sup> The savings rate of 2.5% is just one of the many possible scenarios.

Fourth, alleged potential benefit of the HPA—whether the introduction of the HPA can change patients’ care-seeking behaviour is speculative. We would expect the behaviour of patients to depend on their health status and not the availability of the HPA. However, it may well be a complementary system that may encourage or help to develop more appropriate care-seeking behaviour in Hong Kong.

Fifth, alleged misleading analyses—the HPA is not a social insurance; it is a personal savings plan to cover medical expenditure after the age of 65 years. As a consequence, the cost of providing medical treatment to this needy age-group cannot be shared with the other accounts. The financial and instrumental burden upon the government to provide medical treatment and services will not subsequently be reduced. Ten percent of the population will still have to rely on the government, but the HPA of the remaining 90% cannot be used to alleviate the government burden.

Certainly, we agree that longitudinal data can provide further information. To the best of our knowledge, we are

not aware of the existence of such data or, if they do exist, the relevant authority has not made them available. If such data do not exist, it may be time to conduct a large-scale longitudinal study to advance the medical and public health research development in Hong Kong. The standard of medical and health services in Hong Kong is excellent. The Government and the Hospital Authority should be proud of what they have already achieved. They have enhanced productivity and are now to consider revamping the fees and charges, which, in turn, would reduce the deficit. If the money from any mandatory medical savings scheme can be used to purchase services from private health insurance, it might affect the medical seeking behaviour of the community. Subsequently, the private sector would play a more significant role in health care delivery. For the time being, the choice to the government to reduce its health care deficit is limited, apart from the gradual increase of fees and charges. It is encouraging to note that the government is to investigate the issue further. Let us emphasise that any form of mandatory medical savings scheme should be able to demonstrate its usefulness, relevance, and viability.

PSF Yip, PhD  
CK Law, BFin  
Department of Statistics and Actuarial Science, Medical and Health Research Network, Centre of Asian Studies  
The University of Hong Kong  
Pokfulam  
Hong Kong

## References

1. Law CK, Yip PS. Viability of the Health Protection Account in Hong Kong. *Hong Kong Med J* 2002;8:262-8.
2. The Harvard Team. Improving Hong Kong’s health care system: why and for whom? Hong Kong: Health and Welfare Bureau; 1999.

---

# Liver transplantation in Hong Kong

*To the Editor*—I read with interest the Editorial “Liver transplantation in Hong Kong” written by Chui.<sup>1</sup>

The information about liver transplantation mentioned in the article is valid except for the part of adult-to-adult right-lobe live donor liver transplantation. To place the historical aspect into the correct perspective, I wish to point out that the adult-to-adult right-lobe live donor liver transplantation was actually initiated by us at the University of Hong Kong Medical Centre, Queen Mary Hospital, in 1996.<sup>2</sup> The operation was subsequently adopted by numerous liver transplant centres throughout the world. Our publication of the first seven cases<sup>2</sup> has been cited 105 times in literature on right-lobe live donor liver transplantation. The innovation of right-lobe live donor liver transplantation is a

major contribution to the recent development of liver transplantation from Hong Kong.

ST Fan, MD, FHKAM (Surgery)  
Department of Surgery  
Queen Mary Hospital  
102 Pokfulam Road  
Hong Kong

## References

1. Chui AK. Liver transplantation in Hong Kong. *Hong Kong Med J* 2002;8:232-3.
2. Lo CM, Fan ST, Liu CL, et al. Adult-to-adult living donor liver transplantation using extended right lobe grafts. *Ann Surg* 1997;226: 261-70.