

CHAPTER 3

Food and Health Bureau

<p>Hospital Authority: Public-private partnership (PPP) programmes</p>

**Audit Commission
Hong Kong
28 March 2012**

This audit review was carried out under a set of guidelines tabled in the Provisional Legislative Council by the Chairman of the Public Accounts Committee on 11 February 1998. The guidelines were agreed between the Public Accounts Committee and the Director of Audit and accepted by the Government of the Hong Kong Special Administrative Region.

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Audit Commission
26th floor, Immigration Tower
7 Gloucester Road
Wan Chai
Hong Kong

Tel : (852) 2829 4210
Fax : (852) 2824 2087
E-mail : enquiry@aud.gov.hk

HOSPITAL AUTHORITY: PUBLIC-PRIVATE PARTNERSHIP (PPP) PROGRAMMES

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PART 1: INTRODUCTION

1.1 This PART describes the background to the audit and outlines the audit objectives and scope.

Background

1.2 Hospital care in Hong Kong is provided predominantly by the public sector. Public hospitals are managed by the **Hospital Authority (HA)**, a statutory body established under the Hospital Authority Ordinance (Cap. 113 — Note 1). As at December 2011, the HA managed 41 public hospitals and institutions, 74 general out-patient clinics and 49 specialist out-patient clinics. Every year, they provide some 7 million patient-days for in-patients, and some 12 million attendances for out-patients. The high demand for public healthcare services has led to long waiting time in HA hospitals, institutions and clinics.

1.3 To identify ways to address challenges to the Hong Kong healthcare system (e.g. sustainability of services), the Government has launched a two-stage public consultation on healthcare reform (Note 2). One of the Government's reform proposals is to promote **public-private partnership (PPP)** in healthcare (Note 3). Results of the consultation conducted in 2008 indicated that the public recognised, among other things, the need to enhance primary care and promote PPP in healthcare. In his 2008-09 Policy Address, the Chief Executive of the Hong Kong Special Administrative Region announced that a series of pilot measures would be implemented to promote PPP in healthcare.

Note 1: *The HA was established on 1 December 1990. Its functions include:*

- (a) managing and controlling public hospitals;*
- (b) advising the Government of the needs of the public for hospital services and of the resources required to meet those needs;*
- (c) managing and developing the public hospital system; and*
- (d) recommending to the Government appropriate policies on fees for the use of hospital services by the public.*

Note 2: *In March 2008, the Government launched the first-stage consultation through a consultative document "Your Health, Your Life". In October 2010, the Government initiated the second-stage consultation and published another consultative document "My Health, My Choice".*

Note 3: *The Government considers that the PPP mode of operation can encourage healthy competition and collaboration between the public and private sectors, thereby providing more cost-effective healthcare services, as well as more choices of services for patients.*

PPP initiatives of the HA

1.4 Since the early 2000s, the HA has planned to improve the interface between the public and private health sectors as a means of reducing people's over-reliance on public healthcare services. Notable initiatives of the HA include:

- (a) ***Sharing patient records.*** In 2006, the HA launched an electronic platform, the Public-Private Interface — Electronic Patient Record Sharing Pilot Project (PPI-ePR), for patient record sharing. The PPI-ePR allows authorised users in the private sector (e.g. private hospitals, medical practitioners and residential care homes for the elderly) to view patients' medical records kept at the HA upon the patients' consent; and
- (b) ***PPP programmes.*** In support of the Government's promotion of PPP in healthcare, the HA has piloted several clinical PPP programmes. The HA invited healthcare providers in the private sector (including non-governmental organisations — NGOs) and target patients to join the programmes on a voluntary basis. As at December 2011, five pilot programmes had been launched, namely:
 - (i) ***Cataract Surgeries Programme.*** It provides additional cataract surgeries to meet growing service demand;
 - (ii) ***General Out-patient Clinic PPP Programme.*** It helps expand general out-patient clinic services in districts with increasing demand, and promote the family-doctor concept in the community;
 - (iii) ***Shared Care Programme.*** It enhances support for chronic disease patients with a view to reducing complications and the need for hospitalisation;
 - (iv) ***Haemodialysis PPP Programme.*** It enhances haemodialysis service and meets growing service demand; and
 - (v) ***Patient Empowerment Programme.*** It helps improve chronic disease patients' knowledge on the disease and their self-management skills.

1.5 Two programmes ((i) and (ii) above) were launched in 2008, and three ((iii) to (v) above) in 2010. Apart from piloting the PPP mode of operation, each programme has its own service objectives. Appendix A shows details of these PPP programmes. Figures 1 to 3 show the promotional materials of three of the PPP programmes ((i) to (iii) above). Photographs 1 and 2 show the services provided by two other PPP programmes ((iv) and (v) above).

Figures 1 to 3
Posters for PPP programmes

Figure 1

耀眼行動
Cataract Surgeries Programme
白內障手術計劃

公私營合作·病人多選擇
Public-Private Partnership · More Patients's Choice

縮短病人手術等候時間
Shorter waiting time

一次過定額資助5,000港元予每宗由私家醫生進行的白內障手術
A one-off, maximum subsidy of \$5,000 to patients for cataract surgery provided by private ophthalmologists.

<p>獲邀參加病人 Invited Target</p> <p>現正對醫院管理局白內障手術，而又被診斷為適合接受局部麻醉手術的非急症白內障病人。</p> <p>Patients who are currently on Hospital Authority Hospital's routine waiting lists for cataract surgery for the longest period and only require local anaesthesia cataract surgery.</p>	<p>邀請過程 Invitation Process</p> <p>醫院管理局分層發信件邀請等候最長時間的病人參加。注意：病人毋需自行申請。</p> <p>HA shall issue invitation letters to invite patients in batches, according to their waiting time. Note: There is no need for patients to apply on themselves.</p>
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查詢熱線: 23006600 | 計劃網址: www.ha.org.hk/ppp/csp | 電郵地址: cataract@ha.org.hk

Cataract Surgeries Programme

Figure 2

醫院管理局
「天水圍基層醫療合作計劃」
Hospital Authority "Tin Shui Wai Primary Care Partnership Project"

公私營合作 病人多選擇
Public-Private Partnership More Choice for Patients

公私營合作安排
The Public-Private Partnership Arrangement

查詢熱線: 2616 4856 | 網址: www.ha.org.hk/tmh

General Out-patient Clinic
PPP Programme

Figure 3

灣仔·港島東區
糖尿病 患者喜訊

政府最高資助額 1,400元
每年港幣

自行選擇 私家醫生
靈活 安排覆診
持續醫生 病人關係

查詢: 灣仔及港島東區 - 東區尤德夫人那打素醫院 2505 3511
www.ha.org.hk/ppp/scp

Shared Care Programme —
Hong Kong East Cluster

Source: HA records

Photograph 1

Sessions under the Haemodialysis PPP Programme



Source: HA records

Photograph 2

Provision of training under the Patient Empowerment Programme



Source: HA records

1.6 In December 2011, the HA announced another clinical PPP programme to enhance radiological investigation services for patients. The new programme would be launched on a pilot basis in the first quarter of 2012. HA patients who are newly diagnosed of having specific cancers will be invited to participate in the programme on a voluntary basis. Participating patients will be fully subsidised to receive cancer radiological examination services from private healthcare providers.

Operation of PPP initiatives

1.7 The **Food and Health Bureau (FHB)** is responsible for formulating, coordinating and implementing medical and health policies. The HA is required to advise the Government on the needs of the public for hospital services and on the resources for meeting those needs. The FHB provides funding for the HA's PPP initiatives (including the PPI-ePR and the PPP programmes).

1.8 The PPP initiatives are implemented through the HA's Head Office and its seven hospital clusters (Note 4). The HA monitors these initiatives through its Medical Services Development Committee and Information Technology Services Governing Committee (Note 5). The HA has also established different project committees, working groups and task forces to help implement and monitor individual PPP programmes. Appendix B shows the organisation structure for the operation of the HA's PPP programmes (including the PPI-ePR). From time to time, the HA conducts evaluation studies of these programmes, and reports to the FHB on their implementation.

1.9 In 2011-12, the budgets for the HA's five clinical PPP programmes (see para. 1.4(b)) and the PPI-ePR were \$75 million and \$16.3 million respectively. The HA intended to serve some 19,400 patients through the PPP programmes in the year. For the PPI-ePR, medical records of some 196,000 patients were accessible through the HA's electronic platform as at December 2011. According to the results of the HA's evaluation studies, performance of its PPP programmes (e.g. in terms of patient satisfaction, quality of care and programme outcomes) was generally satisfactory.

Note 4: *Operationally, public hospitals and institutions managed by the HA are organised into hospital clusters on a geographical basis. According to the HA, this can ensure that patients receive a continuum of high-quality care within the same geographical setting and throughout their episode of illness.*

Note 5: *To help perform its roles and exercise its powers, the HA's governing body (the HA Board) has established 11 functional committees. The Medical Services Development Committee examines, reviews and makes recommendations on matters relating to clinical services provided by public hospitals and institutions. The Information Technology Services Governing Committee approves and monitors the overall progress of the implementation of plans for information technology/information systems.*

Audit review

1.10 The Audit Commission (Audit) has recently conducted a review to examine the HA's management of its PPP programmes. The audit focused on the following areas:

- (a) planning and evaluation of PPP programmes (PART 2);
- (b) implementation of PPP programmes (PART 3);
- (c) administering partnership between HA and private sector (PART 4);
- (d) electronic platform for patient record sharing (PART 5); and
- (e) performance management (PART 6).

Audit has found room for improvement in the above areas and has made a number of recommendations to address the issues.

General audit observations and recommendation

1.11 The HA has been operating various pilot PPP programmes since 2008. Some have been extended beyond their original pilot periods (see para. 2.8). It is timely for the HA to conduct an overall review to take stock of the position. In this connection, the observations and recommendations in this audit will provide useful input to the HA for conducting such a review. **Audit has recommended that the Chief Executive, HA should conduct, in consultation with the Secretary for Food and Health, an overall review of the pilot implementation of its PPP programmes, with a view to consolidating both the good practices identified and the lessons learnt, and mapping out the way forward for the further development of PPP in healthcare (paras. 2.22 to 2.25 are relevant).**

General response from the Hospital Authority

1.12 The **Chief Executive, HA** has said that the HA welcomes this Report and the audit recommendations. He has also said that:

- (a) this Report contains constructive recommendations on the HA's PPP programmes. The HA greatly appreciates the dedicated effort of the audit team in conducting a wide-ranging and detailed study on the PPP programmes;

- (b) the PPP programmes, which tested different PPP models for different healthcare services, were often novel upon launching, both for healthcare providers and patients. The HA had therefore taken cautious steps in the planning and implementation of these projects. The audit observations and recommendations will provide the HA with useful insights into its continuing efforts in enhancing the provision of public healthcare services. The HA will study carefully the detailed observations and recommendations with a view to implementation, where appropriate, for future planning of PPP projects;
- (c) given their pilot nature, all PPP programmes are subject to evaluation on their effectiveness and reviews on their way forward. Having regard to the review outcomes of the Haemodialysis PPP Programme and the Patient Empowerment Programme, the HA will implement these two programmes on an ongoing basis starting from 2012-13; and
- (d) the HA will build on the initial experiences gained from the individual pilot programmes, and carefully consider the experiences gained through regular reviews of the individual programmes as well as any overall review of its PPP programmes, together with the valuable recommendations in this Report, so as to shed light on the future development of PPP in the provision of healthcare services.

General response from the Administration

1.13 The **Secretary for Food and Health** welcomes and appreciates the effort of Audit in conducting a thorough review on this subject. He has also said that:

- (a) the HA seeks to promote PPP in the delivery of healthcare services. The pilot PPP programmes are designed to help it explore and test out various forms of collaboration with the private sector, including different eligibility criteria, levels of subsidy and co-payment by patients, as well as patients' receptiveness to the initiative; and
- (b) the audit recommendations provide useful reference for the HA in its future efforts to enhance the provision of public healthcare services through PPP.

Acknowledgement

1.14 Audit would like to acknowledge with gratitude the full cooperation of the staff of the HA and the FHB during the course of the audit review.

PART 2: PLANNING AND EVALUATION OF PPP PROGRAMMES

2.1 This PART examines the following issues relating to the HA's planning and evaluation of PPP programmes:

- (a) planning the implementation of PPP programmes (paras. 2.4 to 2.15);
- (b) evaluating individual PPP programmes (paras. 2.16 to 2.21); and
- (c) assessing overall development of PPP (paras. 2.22 to 2.25).

Promoting PPP in healthcare

2.2 In 1997, the Government commissioned a study on the healthcare system in Hong Kong (Note 6). In response to the study, the HA considered that the healthcare system needed to be more flexible in delivering public and private healthcare services. In particular, integrated service packages with joint participation from public and private providers, and with mixed public and private funding could be developed in the long run.

2.3 Since then, the HA has explored different ways to enhance collaboration between the public and private health sectors (see para. 1.4). In January 2011, in its response to the public consultation on healthcare reform launched by the Government (see para. 1.3), the HA stated that it would continue to promote PPP in healthcare.

Planning the implementation of PPP programmes

HA's service planning framework

2.4 The HA has a planning framework to address its key challenges. Prior to 2009-10, the HA adopted an annual planning system. In 2009, the HA enhanced its service planning with the development of its first three-year Strategic Service Plan 2009-2012, entitled "Helping People Stay Healthy". Since then, the HA's planning framework has comprised two major components:

Note 6: *The study team included economists, physicians, epidemiologists, and public health specialists. Results of the study were published in the report "Improving Hong Kong's Health Care System: Why and For Whom?".*

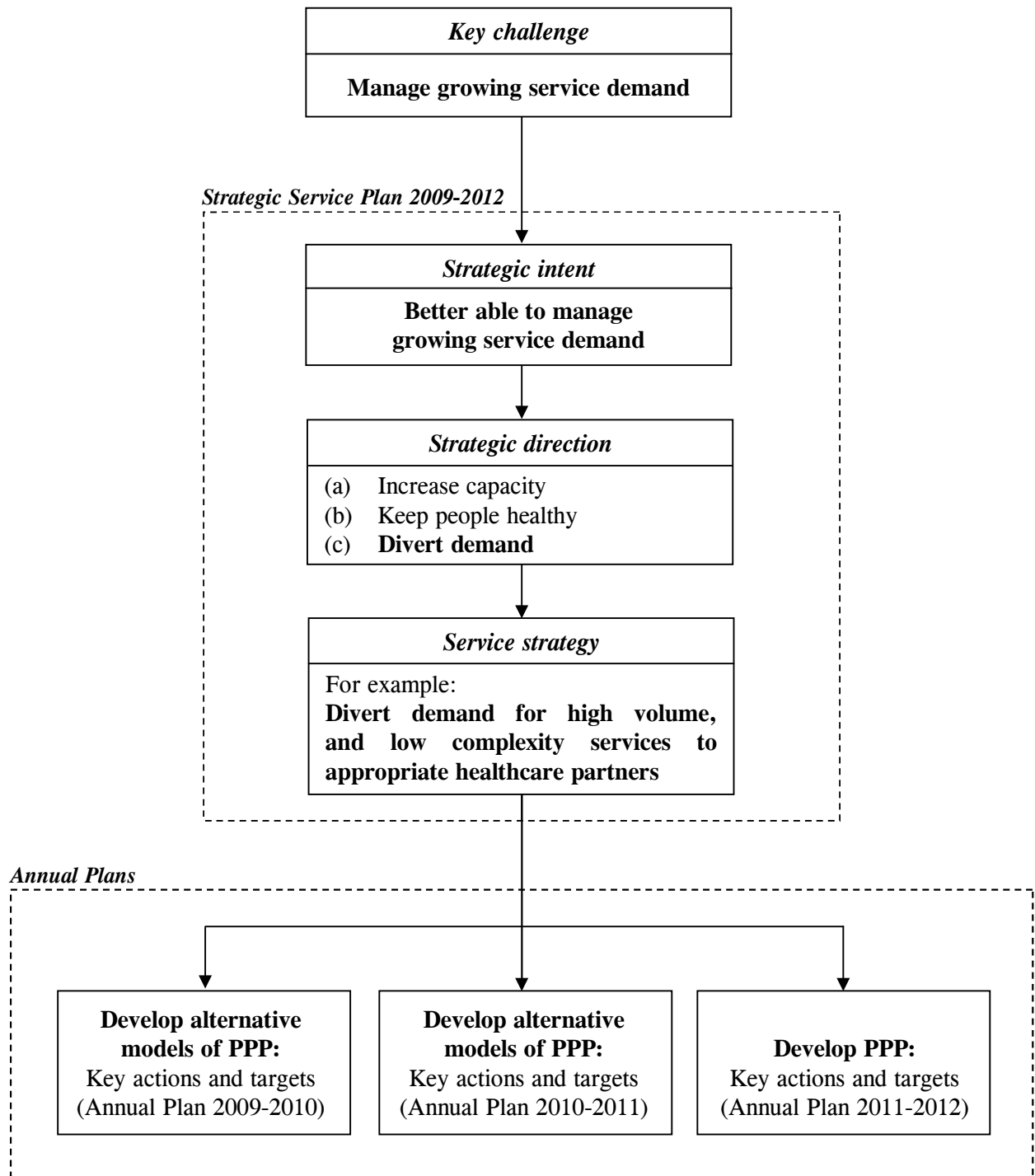
- (a) ***Three-year Strategic Service Plan.*** This is the overarching document for service planning throughout the HA. It is developed through a broadly participative process (e.g. with input from frontline staff, as well as senior executives, HA Board members, and members of the HA's committees). It sets out the service directions and strategies that the HA will pursue to address the key challenges, and guides the development of its Annual Plans (see (b) below) for the three years concerned; and

- (b) ***Annual Plan.*** This document outlines the specific actions for the implementation of the HA's Strategic Service Plan. It is an operational plan that describes what the HA wants to achieve over the next financial year. Outlined in the plan are the HA's major goals and programme targets, and a concise description of the work plans of the head office and individual hospital clusters.

2.5 Figure 4 summarises the relationship between the Strategic Service Plan and the Annual Plans, showing how the HA's planning framework addressed the key challenge of managing growing service demand, which was the main reason for the HA's promotion of PPP in healthcare (see also paras. 1.2 and 1.3). In the Annual Plans for 2009-10 to 2011-12, the service strategy of diverting demand (see Figure 4) was translated into a service priority to develop PPP, under which key actions and targets were set out for the development of various PPP programmes.

Figure 4

HA's planning framework for managing growing service demand



Source: Audit analysis of HA records

Audit observations and recommendations

2.6 The HA has established a structured approach to service planning. Audit reviewed the HA's Strategic Service Plan 2009-2012 and its three corresponding Annual Plans for 2009-10 to 2011-12, and noted that, in general, the HA's development of PPP programmes had the following common features:

- (a) a PPP project was normally initiated by the identification of a service gap (e.g. growing demand and long waiting time for cataract surgeries);
- (b) a PPP programme was designed to meet a specific service objective (e.g. to provide additional cataract surgeries to meet growing service demand — see Appendix A);
- (c) all current PPP programmes were launched **on a pilot basis** for two to three years (Note 7). A common objective of these pilot programmes was to test the market and public acceptance of different models of PPP (e.g. different levels of government subsidy and patients' co-payment); and
- (d) PPP initiatives identified by the HA are subject to the FHB's approval of funding. For the period 2007-08 (Note 8) to 2011-12, the FHB allocated \$408.1 million in total to the HA's PPP programmes (see Table 1). Funding was earmarked for individual PPP programmes.

Note 7: *Upon launching, the Cataract Surgeries Programme was intended to be piloted for two years. For the other four PPP programmes, the pilot period was three years.*

Note 8: *The first PPP programme (Cataract Surgeries Programme) was launched in February 2008 (2007-08).*

Table 1
Funding allocated to HA's PPP programmes
(2007-08 to 2011-12)

Programme	Funding allocated (\$ million)
Cataract Surgeries	71.4
General Out-patient Clinic PPP	246.3
Shared Care	(Note)
Haemodialysis PPP	56.9
Patient Empowerment	33.5
Total	408.1

Source: HA records

Note: Of the \$246.3 million allocated by the FHB, the HA budgeted \$69.5 million for the General Out-patient Clinic PPP Programme and \$176.8 million for the Shared Care Programme.

2.7 The HA's strategic planning framework for the development of PPP programmes seeks to ensure that individual PPP programmes contribute to meeting the strategic objective of managing growing service demand. However, as far as the promotion and long-term development of PPP in healthcare is concerned, there are areas where the HA could further enhance its planning of PPP programmes, including:

- (a) programme sustainability (paras. 2.8 to 2.10);
- (b) testing market sensitivity (paras. 2.11 and 2.12); and
- (c) development of exit plans (para. 2.13).

Sharpening focus on programme sustainability

2.8 As noted in paragraph 2.6(c), all the HA's PPP programmes were launched as pilot projects for a period of two to three years. Over the years, the HA had made arrangements with the FHB to extend the operation of the Cataract Surgeries Programme and the General Out-patient Clinic PPP Programme beyond their original pilot periods. As at December 2011, the two programmes were entering the fourth year of operation. The HA did not have any plan for rolling them out as ongoing services. Audit noted that the HA commissioned two new cataract centres in December 2009 and May 2011, and that a new clinic was opened in Tin Shui Wai North in February 2012. The service gaps originally identified in the provision of cataract surgeries, and public general out-patient services in Tin Shui Wai were therefore much reduced. Upon enquiry, the HA informed Audit in February 2012 that:

- (a) ***Cataract Surgeries Programme.*** The Programme had achieved its initial target number of surgeries. Additional funding of \$72 million had been approved for conducting 12,000 more surgeries from 2011-12. The HA would closely monitor the Programme's development and target deliverables; and
- (b) ***General Out-patient Clinic PPP Programme.*** The existing arrangement was for the Programme to operate up to 2012-13. The HA was planning to extend the Programme for three years from 2013-14 to 2015-16. The further extension of the Programme outside Tin Shui Wai had been put on hold, pending the review of the overall provision of primary care services in Tin Shui Wai (see Example 1). Should the Programme be terminated, the newly-opened Tin Shui Wai North Clinic could provide services to all patients of the Programme.

Example 1

Extending services to patients in other districts (General Out-patient Clinic PPP Programme)

1. The Programme aimed to expand general out-patient clinic services in districts with increasing demand. Under the Programme, patients received consultations from participating medical practitioners in the private sector at the same fees charged at HA clinics.
2. In June 2008, the HA launched the Programme in Tin Shui Wai North. In August 2010, the Programme was extended to the rest of Tin Shui Wai.
3. In December 2009, at a meeting of the task force overseeing the Programme, it was noted that further extension of the Programme outside Tin Shui Wai should be put on hold. The extension would be reviewed after another PPP programme (i.e. the Shared Care Programme) was implemented.
4. In March 2010, the Shared Care Programme was launched.
5. **As at December 2011, 21 months after March 2010, the review of extending the Programme outside Tin Shui Wai was not yet conducted. Upon enquiry, the HA informed Audit in February 2012 that further extension of the Programme was put on hold, pending the review of the overall provision of primary care services in Tin Shui Wai.**

Audit comments

6. **There is a need for the HA to examine in a timely manner the feasibility of benefiting more patients by extending the Programme outside Tin Shui Wai.**

Source: Audit analysis of HA records

2.9 It can be seen from paragraph 2.8 that the two pilot PPP programmes have been used as stop-gap measures to address service gaps identified. According to the HA, such measures have short-term usefulness and objectives that will benefit many patients. Audit considers that while the measures have contributed to the strategic objective of managing growing service demand, they may not be conducive to the long-term development of PPP in healthcare. This is because with the termination of the pilot PPP programmes:

- (a) the experience and momentum of collaboration between the HA and its healthcare partners may not be maintained; and

- (b) it is difficult for the key stakeholders (including both patients and healthcare providers) to gain confidence in and commitment to PPP in healthcare through participation in PPP programmes which are not sustainable.

2.10 In response to the public consultation on healthcare reform, the HA has committed to giving its full support to the Government to continue to promote PPP in healthcare. In order to take forward this initiative, the HA needs to sharpen its focus on programme sustainability in planning its PPP programmes, with a view to identifying potential services which have a good prospect of operating in the PPP mode on a long-term basis, subject to a pilot period for feasibility testing. **The development of sustainable clinical PPP programmes will help showcase to all stakeholders (e.g. the Government, patients and private healthcare providers) the success stories of PPP in healthcare.**

Better testing market sensitivity

2.11 As noted in paragraph 2.6(c), an objective of launching the pilot PPP programmes was to test the market and public acceptance. This could help the HA design better PPP programmes in the future. So far, the HA has varied the eligibility criteria for some of its PPP programmes, but it has not changed other key parameters (e.g. levels of government subsidy and patients' co-payment) of its PPP programmes since they were launched. Upon enquiry, the HA informed Audit in February 2012 that too rapid variations could affect patient understanding and acceptability, and individual healthcare choices might be affected.

2.12 **Audit considers that the HA might make better use of opportunities to vary the key programme parameters of its pilot PPP programmes, in order to test the market sensitivity to changes in the key parameters.** Example 2 shows that the HA did not increase the level of government subsidy (as requested by the Legislative Council Panel on Health Services) when rolling out another stage of the Cataract Surgeries Programme. Another example is the Shared Care Programme which had a very low patient take-up rate (see Table 3 in para. 3.3). To boost the take-up rate, the HA had varied an eligibility criterion of the Programme (Note 9). However, the HA had not made changes to other key parameters of the Programme in order to better test the acceptance of patients and to further boost their take-up rate. As at December 2011, an evaluation study on the Programme was still in progress and not yet completed (see Table 2 in para. 2.18).

Note 9: *When the Shared Care Programme was launched in March 2010, as one of its eligibility criteria, patient needed to be currently receiving care at HA specialist out-patient clinics. In early 2011, the HA relaxed this eligibility criterion to include other patients who, while no longer receiving care at HA specialist out-patient clinics, had attended HA specialist out-patient clinics in the past.*

Example 2

Rolling out another stage of a programme (Cataract Surgeries Programme)

1. The Programme aimed to provide additional cataract surgeries to meet the growing service demand.
2. The Programme also aimed to test the co-payment concept (see para. 4 below) under the PPP mode of operation.
3. Patients participating in the Programme were provided with a subsidy of \$5,000 per person for receiving cataract surgeries from participating healthcare providers (ophthalmologists) in the private sector.
4. Participating ophthalmologists could charge each patient a fee not exceeding \$13,000. The co-payment from the patient would not be more than \$8,000 (\$13,000 minus \$5,000 subsidy).
5. In February 2008, the Programme was launched.
6. In February 2010, the Government allocated additional funding in the 2010-11 Annual Estimates for providing additional cataract surgeries under the Programme.
7. In June 2010, when the Legislative Council Panel on Health Services was informed of the details of the extension of the Programme, Members expressed the views, among others, that:
 - (a) the subsidy of \$5,000 should be increased; and
 - (b) the \$8,000 cap on co-payment should be removed.
8. In the event, the extended Programme continued to be run in exactly the same way as before.
9. Upon enquiry, the HA informed Audit in February 2012 that it had reviewed the \$13,000 package with stakeholders of the private sector. The HA decided that it was better to operate the Programme in the same way. This would also avoid confusing the participating patients.

Audit comments

10. When rolling out another stage of the Programme, the HA could consider changing the level of subsidy, and hence the level of the patient's co-payment. **This would allow the HA to more thoroughly test the impact of different levels of co-payment on the PPP mode of operation.**

Source: *Audit analysis of HA records*

Developing exit plans for programme termination

2.13 Audit noted that the HA had not explicitly laid down any exit plans for its pilot PPP programmes. Upon enquiry, the HA informed Audit in February 2012 that, while not laid down, its exit planning was based on the HA's fundamental responsibility of providing healthcare for all Hong Kong residents. According to such exit planning, should a PPP programme be terminated, the HA was ready to take back all affected patients. Audit considers that, when a PPP programme is to be terminated in the future, the HA will need to better address the following concerns in a well-thought-out exit plan:

- (a) ***Maintaining service quality.*** The pilot PPP programmes were serving a large number of patients (e.g. the General Out-patient Clinic PPP Programme had 1,480 patients in Tin Shui Wai as at December 2011). Reverting these patients to the public healthcare system would increase the patient caseload of the HA in the areas concerned;
- (b) ***Managing stakeholders' expectations.*** It is important for the HA to manage the expectations of different stakeholders upon termination of the pilot programmes. For the participating patients, the pilot PPP programmes have provided them with greater choices of healthcare services in the private sector and therefore measures should be in place to address possible adverse public reaction to the termination of these programmes. Besides, follow-up actions need to be taken to help the participating patients adapt to the change on reverting to the public healthcare system. For the participating healthcare providers, it is also necessary for the HA to carefully manage their expectations in order not to jeopardise future collaboration with them in the provision of healthcare services;
- (c) ***Sustaining programme outcomes.*** The pilot PPP programmes might have brought about favourable outcomes (e.g. collaboration between the HA and private healthcare partners, and relationship between participating patients and healthcare providers) which would be lost upon termination of the programmes. Measures need to be taken to consolidate the experience and sustain the programme outcomes as far as possible; and
- (d) ***Use of unspent funding.*** Except for the Cataract Surgeries Programme, the PPP programmes had significant unspent funding balances, particularly those with low patient take-up rates (Note 10). The HA needs to consult the FHB in good time on the possible use of the unspent funding upon expiry of the pilot period.

Note 10: *As at September 2011, the percentage of funding unspent for the other four PPP programmes (except for the Cataract Surgeries Programme) ranged from 69% to 94%. In particular, of the \$176.8 million budgeted for the Shared Care Programme, \$166.6 million (94%) remained unspent.*

Audit recommendations

2.14 **Audit has recommended that the Chief Executive, HA should, in planning the implementation of PPP programmes:**

- (a) **sharpen focus on programme sustainability, with a view to identifying more potential services which have a good prospect of operating in the PPP mode on an ongoing basis subject to a pilot period for feasibility testing;**
- (b) **explore opportunities for testing thoroughly the market sensitivity to key programme parameters (e.g. levels of government subsidy and patients' co-payment) during the pilot period, with a view to developing the most suitable PPP mode; and**
- (c) **give due consideration to the adequacy of exit arrangements upon the termination of pilot programmes, taking into account, among other things, the need to maintain service quality, manage stakeholders' expectations, sustain programme outcomes, and put unspent funding to gainful use.**

Response from the Hospital Authority

2.15 **The Chief Executive, HA has said that the HA accepts the audit recommendations. He has also said that:**

- (a) **the audit recommendations on market sensitivity testing and exit planning would help the HA further enhance its PPP programmes for HA patients;**
- (b) **the HA will continue to review the current mechanisms regularly for quality assurance and outcome monitoring. Having regard to the review outcomes, the HA will implement the Haemodialysis PPP Programme and Patient Empowerment Programme on an ongoing basis starting from 2012-13 (see para. 1.12(c)). The HA has also been considering options on the use of the unspent funding; and**
- (c) **if an individual PPP programme is terminated, patients are always reassured that the HA will take them back and continue their care, if they choose to return to the HA.**

Evaluating individual PPP programmes

2.16 To ensure proper monitoring of the implementation of PPP programmes, the FHB has required the HA to make arrangements for independent assessment of individual programmes (Note 11). The independent assessors could be academic institutions or other appropriate third parties. As at December 2011, six independent evaluation studies had been completed.

2.17 Apart from independent evaluation studies, the HA has also conducted internal evaluation and reviews of individual PPP programmes from time to time.

Audit observations and recommendation

Need to conduct independent evaluation in a timely manner

2.18 The FHB had not stipulated the detailed arrangements (e.g. timing and frequency) for conducting independent evaluation. Table 2 shows that the time of completion of the first independent evaluation study varied among the HA's PPP programmes. In particular, as at December 2011, after the Shared Care Programme had been launched for 21 months, its first independent evaluation study was still in progress and not yet completed. Moreover, the independent evaluation study for the Cataract Surgeries Programme (completed in February 2009) was conducted nearly three years ago, and might need updating.

Note 11: *Conducting independent assessment is a condition of funding for four PPP programmes, namely the Shared Care Programme, the General Out-patient Clinic PPP Programme, the Haemodialysis PPP Programme, and the Patient Empowerment Programme. For the Cataract Surgeries Programme, although the requirement of conducting independent assessment has not been laid down, the FHB expects the HA to follow the same practice.*

Table 2
Evaluation of PPP programmes
(December 2011)

Programme	Commencement of programme	Completion of the first evaluation study (Time elapsed after programme commencement)	Total number of studies completed
Cataract Surgeries	February 2008	12 months	1
General Out-patient Clinic PPP	June 2008	8 months	2
Haemodialysis PPP	March 2010	15 months	2
Patient Empowerment	March 2010	15 months	1
Shared Care	March 2010	N.A. (Note)	0

Source: HA records

Note: As at February 2012, the first evaluation study was in progress.

2.19 Upon enquiry, the HA informed Audit in February 2012 that the evaluation of the Shared Care Programme could only be performed in a robust manner with an accumulation of adequate study subjects (patients), which had been largely delayed by the low take-up rate of the Programme. Audit considers that conducting independent evaluation on PPP programmes could help the HA identify, in an objective manner, areas which warrant attention. **To ensure that necessary remedial actions can be promptly taken, it is important for the independent evaluation to be conducted in good time.**

Audit recommendation

2.20 **Audit has recommended that the Chief Executive, HA, should ensure that independent evaluations, and interim reviews where appropriate (e.g. for the Shared Care Programme), are conducted for individual PPP programmes in a timely manner.**

Response from the Hospital Authority

2.21 The **Chief Executive, HA** has said that the HA agrees in principle with the audit recommendation. The HA also agrees that, in addition to full independent evaluations, interim reviews can be useful where appropriate. The HA has already initiated an interim review of the Shared Care Programme.

Assessing overall development of PPP

2.22 Audit notes that the existing framework for the development of HA's PPP programmes is primarily geared to the planning and evaluation of individual PPP programmes, with reference to the strategic objective of managing growing service demand (see Figure 4 in para. 2.5). At present, a systematic mechanism is not in place for the HA to assess the overall development of PPP in its provision of healthcare services.

Audit observations and recommendation

2.23 Four years have elapsed since the HA launched its first PPP programme (i.e. Cataract Surgeries Programme) in February 2008. Audit considers it timely for the HA to devise such a mechanism to take stock of the overall development of PPP, consolidate the experience (including good practices identified and lessons learnt) and map out the future strategy for the further development of PPP in healthcare.

Audit recommendation

2.24 **Audit has recommended that the Chief Executive, HA, should consider devising a mechanism for assessing the overall development of PPP in support of the delivery of healthcare services in the HA.**

Response from the Hospital Authority

2.25 The **Chief Executive, HA** has said that the HA agrees in principle with the audit recommendation. The HA will build on the initial experiences gained from the individual pilot programmes, and assess how they can together impact on the future overall development of PPP in support of providing more choices for patients and in enhancing overall delivery of healthcare services for Hong Kong.

PART 3: IMPLEMENTATION OF PPP PROGRAMMES

3.1 This PART examines the HA's implementation of PPP programmes, focusing on the following areas:

- (a) patient base for PPP programmes (paras. 3.2 to 3.9);
- (b) providing patients with choices (paras. 3.10 to 3.15);
- (c) arrangements for patients with limited economic means (paras. 3.16 to 3.21);
and
- (d) fees and costs of services (paras. 3.22 to 3.29).

Patient base for PPP programmes

3.2 Participation in the HA's PPP programmes is on a voluntary basis. According to the HA, it had a target of serving 38,100 patients through its PPP programmes by March 2012. The HA set eligibility criteria, and invited eligible patients to participate in the PPP programmes.

Audit observations and recommendations

Monitoring patient take-up rate

3.3 Table 3 shows the take-up rates of the HA's PPP programmes as at December 2011.

Table 3
Take-up rates of the HA's PPP programmes
(December 2011)

Programme	Target no. of places (Note) (a)	No. of patients invited (b)	No. of patients who accepted invitation (c)	Take-up rate of target places $(d) = \frac{(c)}{(a)} \times 100\%$	Take-up rate of invited patients $(e) = \frac{(c)}{(b)} \times 100\%$
Patient Empowerment	22,700	40,389	21,490	95 %	53%
General Out-patient Clinic PPP	1,500	5,292	1,618	108 %	31 %
Cataract Surgeries	13,000	56,406	16,458	127 %	29 %
Haemodialysis PPP	100	508	107	107 %	21 %
Shared Care	800	5,154	297	37%	6%

Source: HA records

Note: This was the number of patients the HA had planned to serve by March 2012 through individual PPP programmes.

As can be seen from Table 3, while the target places for the HA's PPP programmes had been generally filled (see column (d) — except the one with 37%), many patients had not accepted the HA's invitation to the PPP programmes (see column (e) — patient take-up rates ranging from 6% to 53%). Monitoring the patient take-up rates (and hence programme popularity) would help the HA identify room for improvement. Upon enquiry, the HA informed Audit in March 2012 that the HA had been monitoring the take-up rates regularly and adjusting the necessary parameters and administrative arrangement to improve the take-up rates of the PPP programmes. However, Audit noted that:

- (a) some PPP programme were actually intended for a capacity above the target number of places (e.g. the General Out-patient Clinic PPP Programme — Note 12). Further improving programme popularity could make it practicable for the HA to increase programmes' target places and benefit more patients; and
- (b) the low take-up rate of target places (37%) of the Shared Care Programme would have undermined the economies of scale of its operation (see also para. 3.26). For this Programme, the HA's plan was to provide healthcare services to 800 patients by March 2012. However, due to the unsatisfactory take-up by patients, up to December 2011, the Programme had only provided services to 297 patients.

3.4 In this connection, Audit also noted that the HA had conducted evaluation studies and surveys on individual PPP programmes to identify reasons for patients not participating in the PPP programmes. For example, at its meeting in October 2011, the working group overseeing the Shared Care Programme was informed of three major reasons for patients not participating in the Programme, namely:

- (a) not being able to afford payments under the Programme;
- (b) worrying about extra charges from participating private medical practitioners; and
- (c) holding the view that charges of participating private medical practitioners were too high.

It is imperative for the HA to take follow-up actions to address these patients' concerns.

Broadening the patient base of PPP programmes

3.5 Broadening the patient base of the PPP programmes could help the HA test more thoroughly the PPP mode of operation. It could also benefit more patients. Audit noted that the HA had taken efforts to broaden the patient base of individual PPP programmes. However there were cases in which the efforts could be stepped up. Example 1 in paragraph 2.8(b) and Example 3 below show that the HA needs to expedite the rolling out of the General Out-patient Clinic PPP Programme to districts outside Tin Shui Wai, as well as the patient invitation process for the Shared Care Programme.

Note 12: *The funding allocated by the FHB for the General Out-patient Clinic PPP Programme was for providing healthcare services to 10,000 patients. The 1,500 target places set by the HA only represented a small percentage of the intended capacity.*

Example 3

Inviting more eligible patients to participate (Shared Care Programme)

1. The Programme aimed to enhance support for chronic disease patients. Under the Programme, patients could select a participating medical practitioner in the private sector to follow up their health conditions.
2. In March 2010, the Programme was launched in the HA's New Territories East Cluster. In September 2010, the HA extended the Programme to its Hong Kong East Cluster.
3. The HA identified 21,513 potential participants for the Programme in the Hong Kong East Cluster, and invited them by phases to attend briefing sessions about the Programme. Interested patients who met the clinical eligibility criteria would be invited to participate in the Programme.
4. As at December 2011, the HA had extended invitations to about 60% of the potential participants. **The other 40% (8,710) had not yet been invited.**

Audit comments

5. The expected pilot period for this Programme was three years. Up to December 2011, considerable time (15 months) had elapsed since the extension of the Programme to Hong Kong East Cluster (see para. 2 above) in September 2010. **The patient invitation process was slow.**
6. The slow process was undesirable, particularly when the Programme had only a small number of participating patients (297 — see Table 3 in para. 3.3) and a very low take-up rate. **The HA should promptly approach the large number of potential participants (8,710) with a view to extending its patient base.**

Source: HA records

Monitoring the drop-out situation

3.6 The HA recorded and monitored the number of patients quitting its PPP programmes (i.e. drop-outs) and analysed their reasons for dropping out. Table 4 shows that, up to December 2011, the HA had recorded a total of 4,803 drop-outs.

Table 4
Patient drop-out of PPP programmes
(December 2011)

Programme	Number of drop-outs (Note 1)
Cataract Surgeries	3,326 (Note 2)
Patient Empowerment	1,344
General Out-patient Clinic PPP	105
Shared Care	21
Haemodialysis PPP	7 (Note 3)
Total	4,803

Source: HA records

Note 1: The figures do not include participating patients who passed away and dropped out of the programmes.

Note 2: Patients participating in this Programme were expected to use the HA subsidy (\$5,000 per patient) to complete cataract surgeries within six months. A total of 3,326 patients did not complete their surgeries within the six-month period.

Note 3: Of the 7 patients, 3 had received renal transplants and 4 had unstable medical conditions.

3.7 Audit noted that there was scope for improvement in the HA's monitoring of the patient drop-out situation, as follows:

- (a) **Cataract Surgeries Programme.** Some patients simply allowed their subsidy entitlements under the Programme to lapse without informing the HA of the fact and the reasons. For such cases, the HA had ascertained from the patients and analysed their reasons for drop-out (Note 13). **However, the reasons for 1,276 drop-out cases could not be ascertained;** and

Note 13: The reasons for drop-out included financial and health problems.

- (b) ***Patient Empowerment Programme.*** Training courses were delivered by healthcare providers (NGOs) to patients participating in the Programme. The HA's drop-out figure of 1,344 (see Table 4) only included participants who had informed the HA of their withdrawal from the training courses. A participant who had not completed his training course without informing the HA of his withdrawal would not be counted as a drop-out. Unlike the practice for the Cataract Surgeries Programme (see (a) above), the HA had not ascertained from such participants their reasons for not completing their training courses. Based on an audit sample of 8,856 participants in the Programme, there were 4,610 (52%) drop-outs (Note 14). Apparently, the actual number of drop-outs for the Programme should have been much larger than the HA's recorded figure of 1,344. **For better monitoring of the actual drop-out situation of the Programme, the HA needs to collect relevant information about patient drop-out.**

Audit recommendations

- 3.8 **Audit has recommended that the Chief Executive, HA, should:**
- (a) **in order to benefit more patients through the HA's PPP programmes, take measures to:**
- (i) **continue to monitor the patient take-up rates of PPP programmes and improve programme popularity;**
 - (ii) **expedite action in inviting patients to participate in the Shared Care Programme; and**
 - (iii) **examine the feasibility of rolling out the General Out-patient Clinic PPP Programme to districts outside Tin Shui Wai; and**
- (b) **monitor closely the drop-out situation of individual PPP programmes. Such measures may include:**
- (i) **collecting relevant information from participating healthcare providers and patients (e.g. reasons for drop-out, covering also those patients who quit the programmes without informing the HA);**

Note 14: *Upon enrolment in a training course, a participant needed to undergo a pre-programme assessment. After such assessment, the participant needed to complete, within six months, the training course which consisted of training sessions (empowerment sessions) and a post-programme assessment. Audit reviewed a sample of 8,856 participants who completed their enrolment procedures during 2010-11 and found that 4,610 (52%) did not complete their training courses.*

- (ii) **analysing regularly the reasons for patients dropping out of the programmes; and**
- (iii) **taking necessary improvement measures to reduce drop-out cases.**

Response from the Hospital Authority

3.9 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that:

- (a) the HA will continue to monitor the take-up rates of individual PPP programmes. The almost full take-up of all available target places in most PPP programmes is very encouraging, as is the patient take-up rate of 20% to 50% for programmes where patients join on a voluntary basis (see column (e) in Table 3 in para. 3.3);
- (b) with regard to the invitation of patients for the Shared Care Programme, it should be noted that all eligible patients for this programme have to first undergo an initial risk assessment screening, and the arrangement of briefings for these detailed steps requires significant frontline resources. Such invitations therefore have to be arranged in batches by the concerned cluster over a period of time;
- (c) the HA will review the way forward for the Shared Care Programme and the General Out-patient PPP Programme having regard to the experience gained during the implementation of the pilot projects; and
- (d) the HA will enhance the mechanisms at both frontline clinician and corporate levels to monitor the drop-out status. The information collected will be analysed and reviewed to enhance programme effectiveness.

Providing patients with choices

3.10 The PPP model offers greater choices of services to patients. This will encourage healthy competition and collaboration between the public and private sectors, thereby providing more cost-effective healthcare services. The HA identifies suitable private medical practitioners and invites them to participate in its PPP programmes (Note 15). For other healthcare providers (i.e. NGOs and community medical organisations), they are recruited through a tendering process. As at December 2011, the HA had recruited 183 healthcare providers (see Table 5) providing choices of services to patients participating in the PPP programmes.

Note 15: *Private medical practitioners interested in the HA's PPP programmes may also apply to the HA, of their own volition, for participating in the programmes.*

Table 5
Healthcare providers of PPP programmes
(December 2011)

Programme	Healthcare provider	Number of participating healthcare providers
Cataract Surgeries	} Private medical practitioners	101
Shared Care		63
General Out-patient Clinic PPP		10
Haemodialysis PPP	Community medical organisations	5
Patient Empowerment	NGOs	4
Total		183

Source: HA records

Audit observations and recommendations

Improving healthcare providers' take-up of PPP programmes

3.11 Healthcare providers' response to the HA's invitations to its PPP programmes was sometimes less than enthusiastic. Audit reviewed the take-up rates of three invitation exercises which the HA conducted in 2009 and 2010. The review found that the proportions of healthcare providers taking up the HA's invitations were 11%, 15% and 29% in the three exercises (Note 16). **Low take-up rates of healthcare providers were not conducive to enriching patients' choices of services.** Example 4 shows that, to some healthcare providers, the PPP programme appeared to be unattractive.

Note 16: *The three invitation exercises were related to the Patient Empowerment Programme, the Shared Care Programme and the Haemodialysis PPP Programme respectively.*

Example 4

Invitation to tender (Patient Empowerment Programme)

1. The Programme aimed to, through the provision of training courses, improve chronic disease patients' knowledge on the disease and their self-management skills.
2. In November 2010, the HA identified 35 potential healthcare providers (NGOs) to provide training courses under the Programme. The HA invited them to tender for the programme services.
3. Of the 35 NGOs invited, only 4 (11%) submitted tenders.
4. Of the remaining 31 NGOs, some of them informed the HA of the reasons for not submitting tenders, such as:
 - (a) resource constraints;
 - (b) engaging in other new projects; and
 - (c) patient recruitment procedures being uncontrollable.

Audit comments

5. Audit considers that the project did not appear to be attractive to some NGOs. As a result, they accorded it with a lower priority.

Source: HA records

Stepping up efforts in providing patients with more service choices

3.12 The Shared Care Programme was launched in the HA's New Territories East Cluster in March 2010. In September 2010, the Programme was rolled out to the HA's Hong Kong East Cluster. Example 5 shows that the HA might not have kept itself up-to-date with information about private medical practitioners operating in the relevant districts. As a result, some private medical practitioners were not invited. The HA needs to step up its efforts in recruiting private medical practitioners, with a view to providing patients with more service choices.

Example 5

Inviting private medical practitioners (Shared Care Programme)

1. The Programme aimed to enhance support for chronic disease patients. Under the Programme, patients could select a participating medical practitioner in the private sector to follow up his health conditions.
2. To be eligible for participating in the Programme, private medical practitioners should be practising in the relevant districts. As at December 2011:
 - (a) the HA's New Territories East Cluster had extended invitations to 253 private medical practitioners in its cluster catchment area, covering Sha Tin and Tai Po; and
 - (b) the HA's Hong Kong East Cluster had extended invitations to 455 private medical practitioners in its cluster catchment area, covering Wan Chai and the Eastern District.
3. In December 2011, Audit selected a sample of 30 private medical practitioners from the relevant districts, based on the directory of private medical practitioners on the Hong Kong Medical Association website. Audit found that the Clusters had not extended invitations to 13 (43%) of the private medical practitioners and referred the list to the HA for reference.

Audit comments

4. **The lists of private medical practitioners used by the Clusters for invitation might not be up-to-date.** There is a need for the HA to collect up-to-date information about private medical practitioners operating in the relevant districts when inviting them to participate in PPP programmes.

Source: HA records

3.13 In this connection, the HA publicised on its website the list of private medical practitioners participating in the Shared Care Programme. However, Audit noted that the HA had not publicised the list of participating medical practitioners for the General Out-patient Clinic PPP Programme. Audit considers that publishing such a list would improve transparency and better inform patients of the service choices available.

Audit recommendations

- 3.14 **Audit has recommended that the Chief Executive, HA, should:**
- (a) **take effective measures to improve healthcare providers' take-up of PPP programmes. In particular, more thorough consultations with healthcare providers should be conducted to address their concerns and to explore ways to enhance the attractiveness of the programmes to them;**
 - (b) **ensure that up-to-date information (e.g. list of healthcare providers operating in the districts concerned) is used when inviting healthcare providers to participate in PPP programmes; and**
 - (c) **publish on the HA website the list of participating healthcare providers for all PPP programmes in order to enhance transparency and patients' choices.**

Response from the Hospital Authority

- 3.15 The **Chief Executive, HA** has said that the HA welcomes the audit recommendations. He has also said that the HA will:
- (a) take necessary measures to improve healthcare providers' take-up of PPP programmes. The audit recommendations will certainly assist in enhancing the programmes' attractiveness in this regard and will be carefully considered; and
 - (b) adopt effective ways of publicising individual PPP programmes to potential patients, and publish the list of participating healthcare providers on the HA website, as appropriate.

Arrangements for patients with limited economic means

3.16 The Cataract Surgeries Programme provides additional cataract surgeries to meet the growing service demand from an ageing population. Patients participating in the Programme are provided with a subsidy of \$5,000 per patient for receiving cataract surgeries from participating private medical practitioners (ophthalmologists). Participating ophthalmologists can charge each patient a fee not exceeding \$13,000. The co-payment from the patient will therefore be no more than \$8,000 (i.e. \$13,000 minus \$5,000 subsidy).

3.17 The Cataract Surgeries Programme has special arrangements (the charitable arrangements) for participating patients with limited economic means (fee-waiver patients — Note 17) as follows:

- (a) they can have their surgeries conducted by participating ophthalmologists who have undertaken to conduct surgeries for fee-waiver patients on a charitable basis at \$5,000 (met by subsidy), without any co-payment; or
- (b) they can elect to have their surgeries conducted at public hospitals, free of charge, through special sessions scheduled after normal clinic hours.

In both cases, these patients do not need to pay any fees.

Audit observations and recommendations

Making better use of the charitable arrangements

3.18 Audit noted that, of the 3,589 fee-waiver patients invited to participate in the Cataract Surgeries Programme in 2010-11, only 1,043 (29%) elected to have their cataract surgeries conducted by participating ophthalmologists under charitable arrangements (Note 18). **Many patients might still prefer to have their cataract surgeries conducted by the HA**, either through its routine cataract surgery waiting lists (1,222 patients or 34% — see also Note 18(c)) or through the charitable arrangements (219 patients or 6% — see also Note 18(b)). In the Cataract Surgeries Programme Final Evaluation Report of November 2010, the HA noted the following major reasons for the fee-waiver patients' reluctance to accept the charitable arrangements offered by participating ophthalmologists:

Note 17: *Fee-waiver patients are either recipients of Comprehensive Social Security Assistance or patients whose medical fees have been waived by Medical Social Workers of the Social Welfare Department. People who are not recipients of Comprehensive Social Security Assistance can apply to the Social Welfare Department for a medical fee waiver if they could not afford medical expenses in the public sector.*

Note 18: *Of the 3,589 fee-waiver patients:*

- (a) *1,043 (29%) elected to have their cataract surgeries conducted by participating ophthalmologists under charitable arrangements;*
- (b) *219 (6%) elected to have the surgeries conducted by the HA at public hospitals under charitable arrangements;*
- (c) *1,222 (34%) elected to have the surgeries conducted by the HA through its routine cataract surgery waiting lists; and*
- (d) *1,105 (31%) could not join the Programme due to various reasons (e.g. surgeries had already been conducted through their own arrangements, or patients had passed away).*

- (a) deteriorated health condition;
- (b) afraid to seek treatment in the private sector; and
- (c) living alone without escort for visiting ophthalmologists in the private sector.

The HA needs to take measures to further promote the charitable arrangements offered by participating ophthalmologists, and to help fee-waiver patients overcome their difficulties, with a view to making better use of the arrangements to benefit more patients.

Implementing similar charitable arrangements for other PPP programmes

3.19 Audit welcomes the HA's initiative of piloting the charitable arrangements which cater for the needs of patients with limited economic means. Notwithstanding the areas for improvement noted in paragraph 3.18, the implementation of the charitable arrangements for the Cataract Surgeries Programme was generally satisfactory, with 35% (29% + 6%) of the invited patients having made use of the arrangements (see Note 18(a) and (b) to para. 3.18). The take-up rate of 35% was higher than the overall patient take-up rate of the Cataract Surgeries Programme (29% — see Table 3 of para. 3.3). There is a need for the HA to examine the desirability of implementing similar charitable arrangements for other PPP programmes that involve patients' co-payments. In particular, the HA may consider implementing some form of charitable arrangements for the Shared Care Programme which involve patients' payment of market fees (see Appendix A). For example, participating private medical practitioners may be encouraged to charge discounted fees for fee-waiver patients. As can be seen from Table 3 in paragraph 3.3, this Programme had a patient take-up rate of only 6%. Implementing charitable arrangements could enhance the Programme's attractiveness and help boost the patient take-up rate.

Audit recommendations

- 3.20 **Audit has recommended that the Chief Executive, HA, should:**
- (a) **step up efforts in promoting the charitable arrangements offered by participating ophthalmologists of the Cataract Surgeries Programme;**
 - (b) **in launching other PPP programmes that involve patients' co-payments in future, examine the desirability of implementing similar charitable arrangements; and**
 - (c) **consider implementing some form of charitable arrangements for the Shared Care Programme (e.g. charging discounted fees for fee-waiver patients).**

Response from the Hospital Authority

3.21 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that the HA:

- (a) has always actively approached the fee-waiver patients eligible to join the Cataract Surgeries Programme and explained to them the programme details. The HA will enhance and offer more support to facilitate eligible patients in choosing their private ophthalmologists and receiving their operations; and
- (b) will consider exploring the feasibility of introducing similar charitable arrangements in planning PPP programmes, depending on the nature of individual programmes.

Fees and costs of services

3.22 Costs for implementing the HA's PPP programmes include the amounts spent on procuring services from healthcare providers (e.g. acquiring haemodialysis services for patients participating in the Haemodialysis PPP Programme), as well as providing direct subsidies to participating patients (e.g. the subsidy of \$5,000 per patient under the Cataract Surgeries Programme). Patients participating in the HA's PPP programmes are required to pay a fee (patient fee) to the healthcare providers for using their services under the programmes. The patient fees can take the form of co-payments, consultations fees, etc. For some of the PPP programmes (e.g. the Shared Care Programme), healthcare providers are allowed to set the patient fees at the market level.

3.23 According to the HA, its PPP programmes are not aimed at cost saving (Note 19). The HA has not clearly laid down a framework for setting patient fees for the PPP programmes.

Note 19: *In March 2010, the FHB informed the Panel on Health Services of the Legislative Council that the objective of the Shared Care Programme was not to save costs. Nor would the Programme help to save costs, as demand for services at public clinics would remain high despite the fact that some chronic disease patients would choose to participate in the Programme.*

Audit observations and recommendations

Need for a clearer fee policy

3.24 Patient fees for the HA's individual PPP programmes were determined by the relevant project committees and task forces after consultations with stakeholders (see para. 1.8). Table 6 shows the methods of setting patient fees.

Table 6
Methods of setting patient fees for PPP programmes
(December 2011)

Programme	Method of setting patient fees		
	Market fees	Same as HA fees	Nominal fees
Cataract Surgeries	✓ (Note 1)	—	—
Shared Care	✓	—	—
General Out-patient Clinic PPP	—	✓	—
Haemodialysis PPP	—	✓	—
Patient Empowerment	—	—	✓ (Note 2)

Source: HA records

Note 1: Fees charged (co-payments) are subject to a ceiling of \$8,000 per patient (see para. 3.16).

Note 2: For example, patients pay a nominal fee of \$10 per empowerment session to the NGO directly.

It was noted that the Shared Care Programme, which had the patient fees set at the market level without a ceiling, had a very low (6%) patient take-up rate (see para. 3.3). There were also concerns about the affordability of the market fees charged by private medical practitioners under the Programme (see para. 3.4).

3.25 Upon enquiry, the HA informed Audit in February 2012 that its fee-setting framework had taken into consideration different factors such as patients' choices, patients' acceptance, private medical practitioners' acceptance, programme nature and cost of the service as rendered in the public sector. The objective of having different fee options was to test different models for market acceptance. However, as at February 2012, such framework had not been laid down. Audit considers that there is merit in laying down clearly a fee-setting framework to help the HA make consistent and sound decisions on patient fees for its PPP programmes.

Need to better monitor the costs of implementing PPP programmes

3.26 In November 2010, the HA reviewed the costs of the Cataract Surgeries Programme (Note 20). In December of the same year, the HA reviewed the cost of the Shared Care Programme (Note 21). In these reviews, the HA also analysed the cost elements of the two Programmes. The analysis indicated that the Shared Care Programme had high administrative cost (74% — see Table 7).

Table 7
Costs of two PPP Programmes
(2010)

Cost element	Cost per patient			
	Cataract Surgeries Programme		Shared Care Programme (Annual cost)	
	(\$)	(%)	(\$)	(%)
Direct subsidy	5,000 (Note 1)	91	2,000 (Note 2)	26
Administrative cost	524	9	5,736	74
Total	5,524	100	7,736	100

Source: HA records

Note 1: The amount was for the patient to receive cataract surgery for one eye.

Note 2: The amount also included other direct costs (e.g. costs of laboratory tests for the patient).

Note 20: The Cataract Surgeries Programme Final Evaluation Report of November 2010 indicated that it was more cost-effective to conduct surgeries for patients through the Cataract Surgeries Programme at a unit cost of \$5,524 than through public hospitals.

Note 21: The review indicated that, at the target deliverables of 850 patients a year, the unit cost per patient under the Programme was \$7,736, which was higher than the HA's unit cost of \$5,648 in providing similar services.

The high administrative cost of the Shared Care Programme could be due to the lack of economies of scale given the small number of participating patients. In the HA's review of December 2010, it was assumed that 850 patients would participate in the Programme (see also Note 21). As at December 2011, the Programme had provided services to only 297 patients (see para. 3.3), which was far below the assumed figure of 850. **Therefore, the cost-effectiveness of the Programme should have been even lower than what the HA's review had indicated.**

3.27 Audit noted that, while it was the HA's practice to conduct regular cost reviews for PPP programmes (Note 22), analyses of the programmes' cost elements were not regularly compiled. **Audit considers that compiling regular cost information (including analyses of cost elements) on the PPP programmes would help the HA monitor the cost-effectiveness of the programmes.**

Audit recommendations

3.28 **Audit has recommended that the Chief Executive, HA, should:**

- (a) **consider laying down a fee-setting framework for the HA's PPP programmes, taking into account the need to encourage patients' participation in the PPP programmes, and the need to pilot the PPP programmes at different patient fee levels;**
- (b) **compile, on a regular basis, management information (including analyses of cost elements) on the costs of services provided under the PPP programmes; and**
- (c) **take measures, where necessary, to improve the cost-effectiveness of PPP programmes.**

Response from the Hospital Authority

3.29 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that:

Note 22: *The HA conducted annual review of the overall costs for four PPP programmes, namely, the General Out-patient Clinic PPP Programme, the Shared Care Programme, the Haemodialysis PPP Programme, and the Patient Empowerment Programme.*

- (a) a fee-setting framework is available and the HA will document the details of this framework for future planning of PPP projects;
- (b) management information on the costs of services with key cost elements (e.g. manpower, information system set-up, maintenance, facilities and programme expenditure) for most programmes has been compiled and reviewed annually. The HA has reviewed and agreed that these are helpful information for enhancing the value for money of the PPP programmes; and
- (c) fixed set-up cost (e.g. information technology infrastructure and facilities) was incurred during initial project implementation stage. The high percentage of administrative cost of the Shared Care Programme was mainly due to such set-up cost and a lower than expected take-up rate during initial project implementation.

PART 4: ADMINISTERING PARTNERSHIP BETWEEN HOSPITAL AUTHORITY AND PRIVATE SECTOR

4.1 This PART examines the administration of partnership arrangements between the HA and healthcare providers in the private sector. Audit has found room for improvement in the following areas:

- (a) risk of material damage claims (paras. 4.2 to 4.8);
- (b) risk of service disruption (paras. 4.9 to 4.13);
- (c) performance-based payments (paras. 4.14 to 4.18); and
- (d) service protocols (paras. 4.19 to 4.23).

Risk of material damage claims

4.2 Appropriate allocation of risks between the public and private sectors is a key to success for PPP arrangements. According to the public sector's good practice guide on PPP (hereinafter referred to as the Good Practice Guide — Note 23), exposing the private-sector partners to certain risks will encourage them to supply cost-effective and high-quality services. Value for money is most likely to be achieved by allocating risks to the party best able to manage them.

4.3 According to the terms and conditions of the HA's PPP programmes, its private-sector partners (i.e. the healthcare providers) are independent contractors rather than agents or employees of the HA. The healthcare providers shall be solely responsible for the care of patients participating in the programmes, and shall take out adequate and appropriate insurance cover for delivering services under the programmes. The HA considers that it shall have no liability in relation thereto whatsoever.

Note 23: *The Good Practice Guide “An Introductory Guide to Public Private Partnerships (PPPs)”, was issued in March 2008 by the Efficiency Unit. The Unit reports directly to the Chief Secretary for Administration, and works in partnership with other bureaux and departments to identify opportunities for performance enhancement. The Guide aims to help users develop innovative and practical ways to use PPPs to deliver public services.*

Audit observations and recommendations

Need to ensure adequate risk cover for the HA

4.4 Notwithstanding the HA's stance of no liability, Audit noted that the HA actually had direct involvement in providing treatments to patients of its PPP programmes, for example:

- (a) **General Out-patient Clinic PPP Programme.** The HA provided healthcare providers (private medical practitioners) with medicines for onward dispensing to participating patients;
- (b) **Shared Care Programme.** Once a year, participating patients attended a clinical assessment at HA clinics. The assessment included physical examinations and investigations relating to the patient's chronic disease; and
- (c) **Haemodialysis PPP Programme.** The HA provided follow-up consultations and medicines to participating patients.

4.5 In case of damage claims arising from medical incidents relating to PPP programmes, there is a risk that the HA cannot claim to be completely unrelated to the treatments provided to the patients. Audit reviewed the medical malpractice insurance the HA had taken out for its hospitals and institutions. The insurance policy did not explicitly mention that it covered the HA's PPP mode of operation. **According to the Good Practice Guide (see para. 4.2), one way to manage such risk is for the HA as the public-sector partner to be co-insured with its private-sector partners for the PPP mode of operation.**

4.6 In this connection, Audit noted that the terms and conditions of the Haemodialysis PPP Programme provided that the HA could require healthcare providers to include the HA as being co-insured when they took out insurance for the Programme (Note 24). **However, the HA had so far not invoked such provision.**

Note 24: *According to the terms and conditions of the Haemodialysis Programme, the HA could require healthcare providers to "take out and maintain adequate insurance with a reputable insurance company and, if required by the Hospital Authority, name the Authority as the co-insured to cover all of its liabilities under ordinances, statues or at common law in respect of personal injury or death of any person and loss or damage to property, whether real or personal, as a result of the provision of the haemodialysis services".*

Audit recommendations

- 4.7 **Audit has recommended that the Chief Executive, HA, should review:**
- (a) **the adequacy of the HA's insurance cover for its PPP mode of operation; and**
 - (b) **the need for adopting the good practice of requiring healthcare providers to include the HA as a co-insured party in their insurance policies for the PPP programmes where appropriate.**

Response from the Hospital Authority

4.8 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that:

- (a) in the initial preparation for each PPP programme, the HA has all along set out to delineate clearly where risks should lie, and has apportioned them appropriately. Such information has then been clearly set out in the respective programme enrolment documents so that all stakeholders are clearly informed about risk apportionment;
- (b) the review as recommended (see para. 4.7) can certainly be conducted as part of the HA's periodic insurance policy renewal/review exercise; and
- (c) the HA adopts a risk-based approach in managing insurance arrangements. Individual programme factors would need to be taken into account when considering co-insurance with PPP healthcare providers.

Risk of service disruption

4.9 Under the Shared Care Programme and the General Out-patient Clinic PPP Programme, a patient selects a participating healthcare provider (private medical practitioner) in the private sector to provide consultations and follow up his medical conditions. To avoid disruption of service to patients, the HA requires private medical practitioners participating in the Programmes to take the following measures:

- (a) during their absence from the clinic, they should arrange for a locum (substitute doctor) to attend to the participating patients; and

- (b) a prior notice should be given to the HA before they withdraw from the Programmes (Note 25).

Audit observations and recommendations

Need to adequately address the risk of service disruption

4.10 Audit noted that the HA had not laid down any specific arrangements for handling service disruption of its other three PPP Programmes, namely the Haemodialysis PPP Programme, the Patient Empowerment Programme, and the Cataract Surgeries Programme.

4.11 Upon enquiry, the HA informed Audit in February 2012 that:

- (a) during service disruption, patients of the Cataract Surgeries Programme and the Haemodialysis PPP Programme would be looked after by the HA's relevant units; and
- (b) for the Patient Empowerment Programme, disruption of training courses would have minimal immediate clinical impact.

Audit considers that patients participating in the PPP programmes would, in general, have expectations in receiving uninterrupted services from private healthcare providers. To manage the patients' expectations, there is a need for the HA to better address the risk of service disruption of its PPP programmes.

Audit recommendations

4.12 **Audit has recommended that the Chief Executive, HA, should:**

- (a) **review the adequacy of the contingency arrangements for addressing the risk of service disruption of the HA's PPP programmes; and**
- (b) **having regard to the review, consider formulating a contingency plan to safeguard against service disruption of the PPP programmes.**

Note 25: *A written notice of no less than 90 days should be given to the HA if the private medical practitioners decide to withdraw from the Shared Care Programme and the General Out-patient Clinic PPP Programme. For terminating the doctor-patient relationship with a patient, the private medical practitioners should give a written notice of no less than 30 days to the HA.*

Response from the Hospital Authority

4.13 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that:

- (a) the potential impact of service disruption of PPP programmes is regularly reviewed and assessed. Whenever there is a service disruption in any PPP programme, the HA stands ready to take care of the affected patients; and
- (b) the existing contingency arrangements will form the basis for the formulation of the HA contingency plan.

Performance-based payments

4.14 Proper sharing of rewards between public-sector and private-sector partners could help ensure long-term success of PPP arrangements. According to the Good Practice Guide, the level of payment (remuneration) to private-sector partners can be linked with the meeting of agreed performance criteria.

Audit observations and recommendations

Need to adopt performance-based payments for more PPP programmes

4.15 Payments to healthcare providers under the HA's PPP programme were primarily related to service outputs (e.g. healthcare providers were paid for the number of haemodialysis sessions conducted). Audit noted that, of the five PPP programmes, only two had performance-based payments in addition to output-based payments (see Table 8). Healthcare providers would receive the performance-based payments if they could meet the performance criteria (see Appendix C).

Table 8
Performance-based payments for PPP programmes
(December 2011)

Programme	Performance-based payments	
	Yes	No
Patient Empowerment	✓	—
Shared Care	✓	—
Cataract Surgeries	—	✓
General Out-patient Clinic PPP	—	✓
Haemodialysis PPP	—	✓

Source: HA records

4.16 Audit considers that the HA needs to consider adopting performance-based payments for future PPP programmes, in order to better encourage healthcare providers to secure quality services as well as enhance the PPP programmes' attractiveness.

Audit recommendations

- 4.17 **Audit has recommended that the Chief Executive, HA, should:**
- (a) **review the effectiveness of performance-based payments in securing quality services and improving attractiveness of the Shared Care Programme and the Patient Empowerment Programme; and**
 - (b) **where appropriate, consider adopting performance-based payments for PPP programmes in future.**

Response from the Hospital Authority

4.18 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that:

- (a) the HA shall continue the direction of encouraging quality services to be provided by healthcare providers when planning PPP programmes; and
- (b) where appropriate, the HA will consider adopting performance-related payments for PPP programmes.

Service protocols

4.19 The HA has set protocols (including service requirements and operating procedures) for delivering services under its PPP programmes. The service protocols provide guidance to the HA's private-sector partners (healthcare providers) in areas such as providing consultation services, administering medicines, and conducting follow-up assessments for patients.

Audit observations and recommendations

Need to better monitor healthcare providers' service delivery

4.20 Audit noted that there were cases in which participating healthcare providers might not have paid adequate attention to the service protocols. For example:

- (a) ***Providing treatment consultations of chronic illnesses.*** Every year, healthcare providers (private medical practitioners) of the General Out-patient Clinic PPP Programme were expected to provide at least six treatment consultations of chronic illnesses to each participating patient. In an audit sample of 285 patients participating in the General Out-patient Clinic PPP Programme, a large proportion of patients had not received the expected number of treatment consultations of their chronic illnesses;
- (b) ***Administering medicines.*** The HA provided healthcare providers (private medical practitioners) of the General Out-patient Clinic PPP Programme with a stock of medicines for onward dispensing to participating patients (see para. 4.4(a)). The HA retained ownership of the medicines and maintained records of them. Stocktaking conducted by the HA found discrepancies between the HA's records and the stocks at the healthcare providers' clinics; and

- (c) ***Conducting follow-up assessments for participating patients.*** Follow-up assessments were a desirable feature of the Patient Empowerment Programme. For every patient who had completed training courses under the Programme, healthcare providers (NGOs) were encouraged to conduct a total of three follow-up assessments of the patient. Audit noted that one healthcare provider generally did not conduct the expected number of assessments on patients.

4.21 In the above cases, there was room for the HA to step up its effort to ensure that healthcare providers had delivered services under the PPP programmes as intended.

Audit recommendations

4.22 **Audit has recommended that the Chief Executive, HA, should:**

- (a) **step up the monitoring of healthcare providers' service delivery, with a view to ensuring that the HA's PPP programmes are operating as intended; and**
- (b) **remind healthcare providers to give due consideration to the service protocols particularly in the following areas:**
- (i) **providing treatment consultations of chronic illnesses to patients under the General Out-patient Clinic PPP Programme;**
 - (ii) **administering medicines to patients under the General Out-patient Clinic PPP Programme; and**
 - (iii) **conducting follow-up assessments on patients under the Patient Empowerment Programme.**

Response from the Hospital Authority

4.23 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that:

- (a) the HA regularly monitors service delivery in each PPP programme through the respective programme management structure, and has set appropriate follow-up procedures;

- (b) the HA will keep monitoring healthcare providers' service delivery under its PPP programmes such that they are operating as intended, and will issue reminders to the healthcare providers after investigation, as part of follow-up of any investigation findings;
- (c) in particular, the HA will continue to remind the healthcare providers of the General Out-patient Clinic PPP Programme to follow the protocols as appropriate;
- (d) for variances noted in stocktaking of medicines, HA staff had immediately asked the private medical practitioners concerned the reasons for discrepancies. This was followed by a written request to the private medical practitioners asking for the reasons. Remedial actions were also taken immediately to minimise variances. The discrepancies were handled after deliberation by the relevant working group; and
- (e) provision of training courses is the core component of the Patient Empowerment Programme while telephone follow-ups are not mandatory. The HA will develop mechanisms to enhance the follow-up assessments, as well as regularly review the overall structure and individual components to enhance the effectiveness of the Programme as a whole.

PART 5: ELECTRONIC PLATFORM FOR PATIENT RECORD SHARING

5.1 This PART examines administrative issues relating to the PPI-ePR as an electronic platform for patient record sharing in support of the operation of the HA's PPP programmes. The following issues are discussed:

- (a) usage of electronic patient records (paras. 5.6 to 5.14);
- (b) updating of patient records (paras. 5.15 to 5.20); and
- (c) way forward for the electronic platform for patient record sharing (paras. 5.21 to 5.28).

Electronic patient records

5.2 In 1995, the HA implemented a Clinical Management System to maintain clinical records of patients. The records are kept in an electronic format in a data repository at the HA (Note 26). Authorised staff of the HA can access the information on its intranet.

Implementation of the PPI-ePR

5.3 In 2006, the HA implemented a new electronic platform, the PPI-ePR (see para. 1.4(a)), **on a pilot basis** to enhance the Clinical Management System. The new platform allows authorised users outside the HA (e.g. private medical practitioners), upon patients' consent, to access relevant records kept in the Clinical Management System through the Internet. The objectives of sharing patient records with the private sector are to:

- (a) enhance collaboration between the public and private sectors;
- (b) facilitate a free flow of patients between the two sectors;
- (c) allow continuity of care for patients; and
- (d) allow timely access of information by users.

To provide guidance to users of the PPI-ePR, the HA has issued guidelines on operating the electronic platform (e.g. the PPI-ePR user manual).

Note 26: *Records kept in the data repository include patients' diagnoses, prescriptions, operation details and laboratory test results.*

5.4 Patients and healthcare providers who wish to participate in the HA's PPP programmes are required to enrol in the PPI-ePR (Note 27). Upon enrolment, healthcare providers participating in the PPP programmes can view the HA's records of the participating patients, and can update records on the patients' condition (e.g. consultation dates, results of assessments and diagnoses) after providing healthcare services to them. The participating healthcare providers can also input into the PPI-ePR other relevant information (e.g. patients' attendance of training courses under the PPP programme) which enables the HA to monitor their services.

5.5 For HA patients and private healthcare providers who are not participants in the PPP programmes, they can enrol in the PPI-ePR on a voluntary basis (Note 28).

Usage of electronic patient records

5.6 According to the HA, electronic patient records are currently not widely adopted in the private sector. Patient records in private clinics are mostly paper-based. For private hospitals, information technology systems are mainly used in relation to electronic billing and financial systems. Electronic patient records, if any, adopted in the private sector generally lack sharing capability.

5.7 As a pilot project, the PPI-ePR will test, among other things, public acceptance of the concept of sharing electronic patient records among healthcare providers and the HA.

Audit observations and recommendations

Need to reduce barriers to using electronic patient records

5.8 Many patients and healthcare providers enrolled in the PPI-ePR had not made use of the system to access patient records since enrolment. Table 9 shows that, up to December 2011, the proportions were 46% and 23% respectively.

Note 27: *In 2008, when launching the HA's PPP programmes, it was decided that the programmes should leverage on the PPI-ePR's medical record sharing capability.*

Note 28: *These private healthcare providers, not being participants in the HA's PPP programmes, can view patient records through the PPI-ePR. However, they cannot input any data into the PPI-ePR to update the records.*

Table 9

**Patients and healthcare providers not making use of the PPI-ePR
(December 2011)**

Patient/ healthcare provider	Number of persons enrolled in the PPI-ePR (a)	Number of enrolled persons not making use of the PPI-ePR (b)	Proportion not making use of the PPI-ePR $(c) = \frac{(b)}{(a)} \times 100\%$
Patient	196,234	90,735	46 %
Healthcare provider (private medical practitioner)	1,752	402	23 %

Source: HA records

5.9 Audit noted that in 2007, the HA conducted a survey on patients enrolled in the PPI-ePR, and ascertained the factors which they had perceived to be barriers to using the PPI-ePR (Note 29). However, the survey did not ascertain the barriers facing healthcare providers. Audit also noted that the results of the 2007 survey had not been updated to collect latest information about the barriers facing patients. **The HA needs to consider conducting more updated surveys to better ascertain the reasons for various users (including healthcare providers and patients) not using the PPI-ePR.**

5.10 Audit considers that barriers to using the PPI-ePR will hinder public acceptance of electronic patient records and hence the implementation of the HA's PPP programmes. **There is a need for the HA to take necessary actions (e.g. stepping up promotion — see paras. 5.11 and 5.12) to improve the situation.**

Note 29: *Examples of the perceived barriers were:*

- (a) *patients forgot to bring the password for the PPI-ePR;*
- (b) *doctors concerned did not join the PPI-ePR; and*
- (c) *patients worried about the security of the PPI-ePR computer system.*

Need to step up promotional efforts

5.11 In 2008, the HA conducted an evaluation of the PPI-ePR. The evaluation found that, among other things, patients and private medical practitioners had low satisfaction with the publicity of the PPI-ePR. It also found that private medical practitioners would welcome the use of a PPI-ePR signature label, which could be posted at the clinics and printed on business cards of medical practitioners who had enrolled in the PPI-ePR.

5.12 Audit noted that the PPI-ePR was mainly publicised through the HA's website, and through posters and leaflets at hospitals and clinics. **Audit considers that stepping up publicity (e.g. advertising on public transport and the media) of the PPI-ePR and providing more relevant information (e.g. about the security of the PPI-ePR) through promotional activities could help enhance public acceptance of the PPI-ePR.** Moreover, implementing a PPI-ePR signature label could help patients locate private medical practitioners who are using electronic patient records. This could help reduce the barrier (see Note 29(b) to para. 5.9) to using the PPI-ePR. However, such a signature label was yet to be implemented.

Audit recommendations

5.13 In order to enhance public acceptance of electronic records, Audit has **recommended that the Chief Executive, HA should:**

- (a) **ascertain the factors which hinder the various users (including healthcare providers and patients) from using electronic patient records;**
- (b) **having regard to the factors identified:**
 - (i) **take effective measures to facilitate the use of electronic patient records; and**
 - (ii) **step up publicity of electronic patient records; and**
- (c) **consider implementing a PPI-ePR signature label to help patients locate healthcare providers who are using electronic patient records.**

Response from the Hospital Authority

5.14 The **Chief Executive, HA** has said that the HA agrees in principle with the audit recommendations. He has also said that:

- (a) the HA will conduct surveys on patients and healthcare providers to identify potential issues that may hinder them from joining or using the PPI-ePR;
- (b) the HA will review the results and findings from the surveys and formulate measures to facilitate patients and healthcare providers to participate in the PPI-ePR;
- (c) in 2007-08, the HA conducted a series of promotions for the PPI-ePR to patients, including presenting nine roadshows in public and private hospitals, and publishing posters to private hospitals and clinics. The number of patients joining the PPI-ePR increased from 19,499 in January 2008 to 52,693 in January 2009. The HA will step up the publicity to further promote the benefits of the PPI-ePR to both patients and healthcare providers; and
- (d) the HA will consider implementing a PPI-ePR signature label to help patients locate healthcare providers who have participated in the PPI-ePR.

Updating of patient records

5.15 One objective of sharing electronic patient records among the HA and private healthcare providers is to allow timely access of information by users (see para. 5.3(d)). Efficient updating of electronic patient records relies on the proper operation of the PPI-ePR system. It also relies on users being able to use the system correctly.

5.16 The HA distributes PPI-ePR user manuals and self-learning kits to private medical practitioners enrolled in its PPP programmes. From time to time, the HA also organises training sessions on the PPI-ePR and invites the private medical practitioners to attend.

Audit observations and recommendations

5.17 As at December 2011, a total of 174 private medical practitioners had enrolled in the HA's PPP programmes. Only 64 (37%) of them had attended the HA's training sessions on the PPI-ePR. **Audit noted that there were cases in which private medical practitioners who had not attended training did not update electronic patient records on a timely basis.**

5.18 **Audit further notes that, while it is the HA's intention for the PPI-ePR to provide timely access of information to users, the HA has not laid down clearly the time frame for private medical practitioners of individual PPP programmes (e.g. the Cataract Surgeries Programme) to create an electronic consultation record in the PPI-ePR after each consultation.**

Audit recommendations

- 5.19 **Audit has recommended that the Chief Executive, HA should:**
- (a) **review the adequacy of the current practice to ensure timeliness in updating electronic patient records through the PPI-ePR;**
 - (b) **having regard to the review, lay down the time frame for updating electronic patient records through the PPI-ePR;**
 - (c) **remind current PPI-ePR users of the need to update electronic patient records in a timely manner; and**
 - (d) **take measures to ensure that users receive adequate training on the PPI-ePR and are familiar with the HA's requirements on electronic patient records.**

Response from the Hospital Authority

5.20 The Chief Executive, HA has said that the HA accepts the audit recommendations. He has also said that:

- (a) based on the nature of healthcare services provided under the respective PPP programmes, the HA will review the required time frame for inputting records through the PPI-ePR; and
- (b) the agreed time frame will be laid down in the individual programme manuals relating to the use of the PPI-ePR. Users will be reminded regularly of the need for timely data input.

Way forward for the electronic platform for patient record sharing

Electronic Health Record Sharing System

5.21 While the HA is implementing the PPI-ePR, the Government is developing a territory-wide patient-oriented Electronic Health Record (eHR — Note 30) Sharing System

Note 30: *An eHR refers to a record in electronic format containing health-related data of an individual. Health-related data include both clinical data (e.g. diagnoses, prescriptions and laboratory test results) and health data (e.g. weight, height, blood type, vaccination records and information on drug allergies).*

(Note 31). It is the Government's intention that the eHR Sharing System will leverage on the PPI-ePR as a key building block for the system. Upon the launch of the eHR Sharing System, PPI-ePR records will be migrated to it, and the PPI-ePR will be decommissioned.

5.22 Unlike the PPI-ePR which is an HA project, the development of the eHR Sharing System is government-led. The FHB is steering and coordinating the development of the eHR Sharing System. In March 2009, the FHB informed the Legislative Council Panel on Health Services that the Government's initial target was to have the system ready by 2013-14. Meanwhile, in December 2011, the Government was conducting public consultation on the legal, privacy and security framework for eHR sharing. The framework aims to give legal protection to data privacy and system security of the eHR Sharing System.

Migration to the eHR Sharing System

5.23 According to the Government's plan, records of patients participating in the PPI-ePR will be migrated to the eHR Sharing System. The records of the patients kept by HA will be uploaded to the eHR Sharing System in accordance with the proposed framework. The FHB and the HA are exploring various possible means to obtain patients' consent for migration to the eHR Sharing System.

Audit observations and recommendations

Need for advance planning for the changeover

5.24 As at December 2011, 196,234 HA patients had been enrolled in the PPI-ePR (see Table 9 in para. 5.8). As noted in paragraph 5.8, many of the patients did not make use of the electronic records. **It is not sure whether all enrolled patients will promptly give consent to transferring their records from the PPI-ePR to the eHR Sharing System (see para. 5.23).**

Note 31: *The eHR Sharing System will provide an information infrastructure for healthcare providers in both the public and private sectors, with express and informed consent of a person for access to the eHRs of the person. The eHR Sharing System will be an essential infrastructure for implementing the healthcare reform (see para. 1.3).*

5.25 At present, the PPI-ePR provides an essential platform for the operation of the HA's PPP programmes. This system, however, will soon need to be phased out with the implementation of the eHR Sharing System. During the transitional period for the migration of patient records to the new system and the decommissioning of the PPI-ePR, it is important for the HA to ensure that the operation of the current PPP programmes is not affected. It is also important for the HA to duly take into account this impending changeover in the platform for patient record sharing when planning for new PPP programmes (including those currently under development — see para. 1.6). As at December 2011, no target date had been set for the decommissioning of the PPI-ePR. There was also no definite plan for the migration of electronic patient records to the new system. **There is a need for advance planning for the changeover, including contingency planning to address issues that may arise in case some patients participating in the current PPP programmes do not promptly give consent to transferring their PPI-ePR records to the eHR Sharing System (see para. 5.24).**

Need to draw lessons from the operation of PPI-ePR

5.26 The future development of PPP in healthcare hinges, among other things, on the successful implementation of an effective electronic platform for patient record sharing. In this review, Audit has noted a number of issues relating to the PPI-ePR (see paras. 5.6 to 5.20). **It is imperative that the HA consolidates lessons learnt from its operation of the PPI-ePR before decommissioning the system and changeover to the eHR Sharing System.**

Audit recommendations

5.27 **Audit has recommended that the Chief Executive, HA should:**

- (a) **formulate an action plan for implementing the impending changeover from the PPI-ePR to the eHR Sharing System, covering among other things contingency planning for addressing issues that may arise from the migration of electronic patient records to the new system; and**
- (b) **consolidate lessons learnt from the operation of the PPI-ePR, with a view to providing timely input to the FHB for planning the implementation of the eHR Sharing System.**

Response from the Hospital Authority

5.28 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that:

- (a) the eHR Sharing System is planned to start implementation following the passing of the new eHR law by the Legislative Council. The HA will work together with the eHR Office of the FHB on the action plan for the changeover from the PPI-ePR to the eHR Sharing System;
- (b) the HA will develop a contingency plan to address issues that may arise during the migration process; and
- (c) the HA will consolidate the experience and lessons learnt from the operation of the PPI-ePR. The information will be passed to the eHR Office for planning the implementation of the eHR Sharing System.

PART 6: PERFORMANCE MANAGEMENT

6.1 This PART examines the HA's performance management relating to its PPP programmes.

Performance measurement and reporting

6.2 Performance measurement includes developing and reporting performance measures. It helps enhance the performance, transparency and accountability of an organisation. Efficiency indicators relate the resources (inputs) used by an organisation to its outputs. Effectiveness indicators relate an organisation's inputs and outputs to the outcomes of its activities.

6.3 The HA has adopted a number of key performance indicators (KPIs) for its PPP programmes (see Appendix D). The performance measures (KPIs, targets and actual attainment) are reported regularly to the FHB. The HA also reports the performance measures to the HA Board as and when required.

Audit observations and recommendations

Need to develop more useful KPIs

6.4 Audit noted that the performance measures reported to the FHB and the HA Board primarily consisted of output indicators (e.g. KPI 1: enrolled private ophthalmologists, and KPI 16: patients enrolled — see Appendix D). These output indicators focused on workloads, and did not adequately assess the performance of the PPP programmes in achieving their service objectives. The HA needs to develop more useful KPIs for assessing the efficiency and effectiveness of its PPP programmes, including for example:

- (a) costs per patient;
- (b) percentage of patients satisfied with the PPP programmes;
- (c) percentage of patients with improvement in health condition (e.g. for the Shared Care Programme);
- (d) percentage of patients with improvement in self-management skills (e.g. for the Patient Empowerment Programme); and

- (e) extent of meeting the programme's service objective (e.g. overall reduction in waiting time of HA patients requiring cataract surgeries).

Need to publish performance measures

6.5 Performance measures for the HA's PPP programmes were mainly reported to the FHB or for internal use within the HA (e.g. by the HA Board and committees). The HA did not publish in the public domain (e.g. HA website and Annual Report) comprehensive information on the performance measures of its PPP programmes. To further enhance transparency and accountability, the HA may consider publishing key performance measures of PPP programmes for reference by all stakeholders (including patients and healthcare providers).

Audit recommendations

- 6.6 **Audit has recommended that the Chief Executive, HA, should consider:**
- (a) **developing more useful KPIs for assessing the efficiency and effectiveness of the HA's PPP programmes; and**
 - (b) **publishing key performance measures of the HA's PPP programmes on its website and in its Annual Report.**

Response from the Hospital Authority

6.7 The **Chief Executive, HA** has said that the HA accepts the audit recommendations. He has also said that the HA shall:

- (a) consider developing more useful KPIs for assessing the efficiency and effectiveness of its PPP programmes; and
- (b) publish key performance measures of its PPP programmes as and when appropriate.

**Hospital Authority's PPP programmes
(December 2011)**

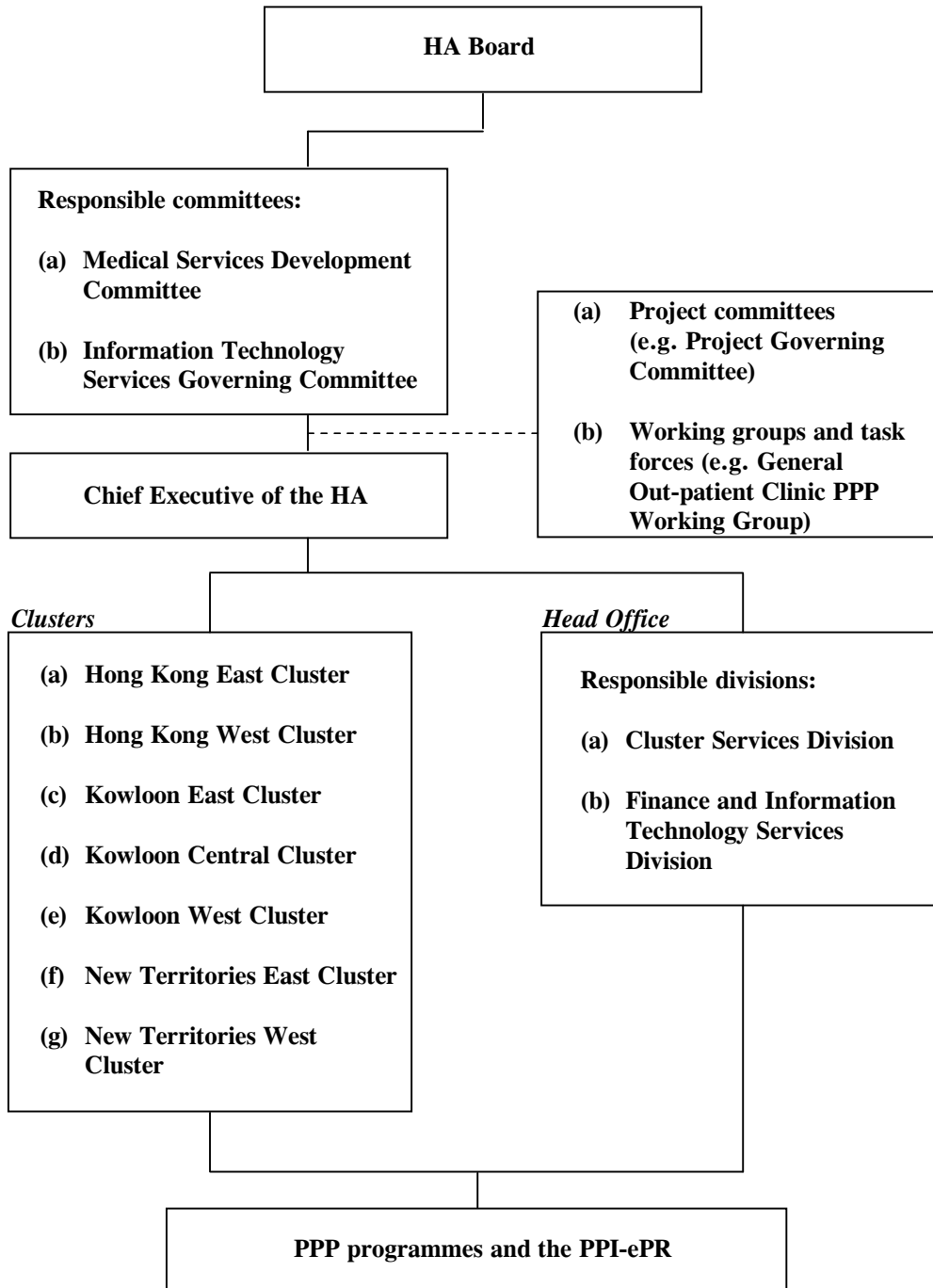
Programme (Commencement date)	Service objective	Salient feature
Cataract Surgeries (February 2008)	To provide additional cataract surgeries to meet growing service demand	<ul style="list-style-type: none"> (a) target group is cataract patients; (b) each participating patient is entitled to a subsidy of \$5,000 per person for receiving cataract surgery (for one eye) from a participating ophthalmologist in the private sector; and (c) the fee charged by the ophthalmologist should not exceed \$13,000 per patient, i.e. the patient's co-payment should not exceed \$8,000 (\$13,000 minus \$5,000 subsidy).
General Out-patient Clinic PPP (June 2008)	To expand general out-patient clinic services in districts with increasing demand, and promote the family-doctor concept in the community	<ul style="list-style-type: none"> (a) target group is chronic disease patients receiving treatments at HA general out-patient clinics; (b) the HA purchases primary care services from participating medical practitioners in the private sector; and (c) instead of attending HA clinics, each participating patient receives a maximum of 10 consultations per year from the participating medical practitioners, at the same fees charged by the clinics.
Shared Care (March 2010)	To enhance support for chronic disease patients with a view to reducing complications and the need for hospitalisation	<ul style="list-style-type: none"> (a) target group is chronic disease patients who received/are receiving treatments at HA specialist out-patient clinics; (b) the HA pays each participating patient a maximum subsidy of \$1,400 a year; and (c) instead of attending HA clinics, the patient selects a participating medical practitioner in the private sector to follow up his health conditions at market fees.

Appendix A
(Cont'd)
(paras. 1.5, 2.6(b), 3.19
and Appendix C refer)

Programme (Commencement date)	Service objective	Salient feature
Haemodialysis PPP (March 2010)	To enhance haemodialysis service and meet growing service demand	(a) target group is end-stage renal failure patients receiving haemodialysis in HA hospitals; (b) participating patients receive haemodialysis treatment in community medical organisations, instead of in HA hospitals, at the same fees charged by the HA; and (c) the HA continues to provide follow-up consultations, medication and regular examination services.
Patient Empowerment (March 2010)	To improve chronic disease patients' knowledge on the disease and their self-management skills	(a) target group is chronic disease patients who are under regular follow-up at HA clinics; (b) the HA develops teaching materials for common chronic diseases, and procures the services of NGOs to deliver training (empowerment sessions); and (c) participating patients pay a nominal fee (e.g. \$10) to the NGOs for attending the sessions.

Source: HA records

**Hospital Authority
Organisation structure for
the operation of PPP programmes
(December 2011)**



Source: Audit analysis of HA records

**Payments made by the Hospital Authority
to healthcare providers of PPP programmes
(December 2011)**

Programme	Payments by the HA	
	Based on service output	Related to performance
Cataract Surgeries	\$5,000 per patient (for providing 1 pre-operation assessment, 1 cataract operation and 2 post-operation checks) (Note 1)	Nil
General Out-patient Clinic PPP	\$105 per consultation provided to each patient (Note 2)	Nil
Shared Care	\$1,200 per patient (for providing at least 4 consultations per year) (Note 1)	\$200 per patient each year if the healthcare provider conducted the specified processes (e.g. measuring blood pressure and body weight, and conducting annual health-risk assessment)
Haemodialysis PPP	Payments were based on the number of haemodialysis sessions provided to patients (the amount for each session varied among healthcare providers)	Nil
Patient Empowerment	Payments were based on the number of patient-sessions delivered (the amount for each patient-session varied among healthcare providers)	<ul style="list-style-type: none"> • 3% of the annual cost (Note 3) of the healthcare provider if 70% or more of participating patients attended at least 4 empowerment sessions (Note 4) • another 4% of the annual cost if 70% or more of participating patients completed a post-programme assessment (Note 4)

Appendix C
(Cont'd)
(para. 4.15 refers)

Programme	Payments by the HA	
	Based on service output	Related to performance
		<ul style="list-style-type: none"> • another 3% of the annual cost if 70% or more of participating patients completed 3 follow-up assessments (Note 4)

Source: HA records

Note 1: Patients under these two Programmes had to make payments (see Appendix A) to the healthcare providers.

Note 2: Each patient needed to pay a consultation fee of \$45 to the healthcare provider. The total amount received by the healthcare provider was \$150 (\$105 from the HA plus \$45 from the patient). For fee-waiver patients (see also Note 17 to para. 3.17), the HA paid \$150 to the healthcare provider per patient.

Note 3: This was the annual cost of providing empowerment training by the healthcare provider. The total annual cost, which varied among healthcare providers, was agreed between the HA and the healthcare provider.

Note 4: Each participating patient needed to complete, within six months, a training programme which consisted of a number of empowerment sessions (which varied among training programmes) and a post-programme assessment. Healthcare providers were encouraged to conduct follow-up assessments for each participating patient at 2-month intervals for a period of 6 months.

**Key performance indicators for PPP programmes
(2010-11)**

Programme	Key performance indicator	
Cataract Surgeries	1	Enrolled private ophthalmologists
	2	Places per month under the charitable arrangements
	3	Enrolled private ophthalmologists who offered to conduct surgeries under the charitable arrangements
	4	Patient applications
	5	Patients with subsidies approved
	6	Patients with surgeries done
General Out-patient Clinic PPP	7	Enrolled private medical practitioners
	8	Enrolled patients
	9	Patients actively participating in the programme
Shared Care	10	Patients invited to the programme
	11	Enrolled patients and response rate
	12	Private medical practitioners invited to the programme
	13	Enrolled private medical practitioners and response rate
Haemodialysis PPP	14	Patients allocated to haemodialysis centres
	15	Patients on haemodialysis
Patient Empowerment	16	Patients enrolled
	17	Patients attended at least one empowerment session

Source: HA records

Acronyms and abbreviations

Audit	Audit Commission
eHR	Electronic Health Record
FHB	Food and Health Bureau
HA	Hospital Authority
KPI	Key performance indicator
NGOs	Non-governmental organisations
PPI-ePR	Public-Private Interface — Electronic Patient Record Sharing Pilot Project
PPP	Public-private partnership