

Recommended Framework for the Delivery of HIV Clinical Care in Hong Kong

(Scientific Committee on AIDS co-sponsored by the Hong Kong Advisory Council on AIDS and the Centre for Health Protection, Department of Health January 2005)

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CME : 1 point

Purpose

1. This paper sets out the recommended goal, principles and standards of a practical model for delivering HIV clinical care in the Hong Kong setting. These core components are knitted to form a framework for effective HIV care. The objective of constructing the framework is, based on the progress made in the last two decades, to recommend the minimum components of an HIV clinical care system that is locally relevant, with a view to make further improvement.

Background

2. As from the 1980s, Hong Kong has been providing clinical care to People Living With HIV and AIDS (PLWHA). The Special Medical Service of the Queen Elizabeth Hospital (QEH) and the Special Preventive Programme of the Department of Health (DH)¹ are the two designated units providing specialist care to PLWHA. At QEH, inpatient and ambulatory care are integrated at service level. At DH, the service is outpatient based. Since 2001, the Infectious Disease (ID) unit of Princess Margaret Hospital (PMH) has joined the Kowloon Bay Integrated Treatment Center (KBITC) of DH in the delivery of HIV clinical care. (Annex I)
3. HIV clinical care has undergone revolutionary changes in recent years as a result of scientific advancement in HIV medicine, changing epidemiology and the expectations of PLWHA and the community. In the course of summarizing the local experiences, the Scientific Committee on AIDS² proposes a framework for the HIV clinical care model that is relevant to the Hong Kong setting. (Annex II)

Rationales

4. While HIV respects no country barrier, the dimensions and diversity of its societal impacts vary from one place to another. The development of clinical care models must naturally tie in with other factors - epidemiology, advances in medical sciences, local strategy and the existing health infrastructure. Their characteristics provide the rationales for establishing the goal and the principles in this recommendation.
5. Over the years, the HIV prevalence in Hong Kong has remained at a low level of <0.1% in the general population. The Advisory Council on AIDS has put forward the goal of "maintaining Hong Kong as a low HIV prevalence area" in its proposed strategy for 2002 to 2006.³ A focused approach aiming at the provision of clinical management to as many HIV positive individuals as possible would serve the dual purpose of effective clinical care and public health control.
6. On the other hand, advances in medical sciences have led to the use of highly active antiretroviral therapy (HAART) as an effective means of restoring health in patients living with

the infection. In Hong Kong, antiretroviral drugs were first introduced in 1987. HAART has become generally available in the public service ever since 1997. Essential laboratory investigations including CD4 and viral load determinations are regularly used in disease monitoring. A body of expertise has steadily grown, despite the small critical mass.

7. Finally, in the delivery of HIV care, a robust health care system is crucial. There is in place a coordinated and comprehensive health infrastructure for managing patients with chronic illnesses, plus a public health programme on disease control. HIV management can be effectively integrated with the existing infrastructure.

Goal and Principles of HIV Clinical Care

8. Naturally, the aim of any form of clinical care is to restore optimum health in affected individuals. This applies to PLWHA, who should be able to lead a healthy life. There is the need to establish a overarching public health goal to guide the development of effective delivery of HIV care. It is, therefore, proposed to establish the goal of minimizing morbidity arising from HIV/AIDS in Hong Kong.
9. Six principles are proposed to exemplify the public health goal:
 - a. HIV medicine shall be developed as expertise area for promoting the delivery of specialist care to PLWHA.
 - b. A multidisciplinary professional team, working in line with international standards, shall lead the coordination and governance of HIV care.
 - c. Easy access to quality clinical care and services in all settings is ensured.
 - d. Continuum of prevention and care shall be observed, with the integration of clinical care with public health control of the infection.
 - e. Community involvement should be promoted through the encouragement of participation and the mobilisation of community resources.
 - f. HIV patient's confidentiality and privacy must be upheld.
10. These principles should not be interpreted in isolation but rather treated as the common pillars in support of the development of core service components, for achieving the aim of effective delivery of HIV care. The observance of the principles requires that the clinical care model be integrated with the health care infrastructure. For each principle a number of standards are recommended. (Annex III)

Principle One: Practice of HIV Medicine

11. HIV medicine is fast becoming a medical specialty of its own. As the cornerstone of HIV care, the standards of HIV medicine are reflected by (a) the practice of specialist physicians, (b) provision of antiretroviral treatment, and (c) provision for sustainable expertise development.
12. For effective delivery of clinical care, *clinician(s) with a special interest in HIV medicine* should lead and oversee the HIV service. The clinician should preferably be an infectious disease (ID) physician but could also be a general internist, or specialist physician in any branch of internal medicine.
13. Through the work of an HIV physician and his/her team, HIV patients shall have *access to HAART* when clinically indicated. The decision is supported by CD4 enumeration and viral load

determination, coupled with access to resistance testing, which are fast becoming the standards in laboratory monitoring. Antiretroviral therapy forms the core of the clinical consultation for controlling the course of the diseases, which must be paralleled by prophylaxis against opportunistic infections, and treatment of complications as they arise.

14. To ensure that a sustainable system is in place, *training* in HIV medicine must be developed. This can be undertaken in conjunction with specialist training in Hong Kong.

Principle Two: A Multidisciplinary Professional Team

15. A multidisciplinary team approach in the clinical management of HIV/AIDS should be adopted. Psychological, social and physical care is part and parcel of the overall management of HIV patient. HIV physician, nurse, medical social worker form the *core members of the team*. They are supported by nutritionist, clinical psychologist and pharmacist. The inputs of other disciplines would also be desirable, for example, psychiatrist, dermatology-venereologist, occupational therapist and physiotherapist. (Principle Three). The participation of public health professionals provides a dimension that links treatment with HIV prevention, a concept enshrined also in Principle Three.
16. The service system should allow the *development of professional expertise* in the care and management of HIV infection. A doctor practising HIV medicine should commit to continuing professional development. A nurse acts as the case manager and is professionally competent in overseeing drug adherence, counselling patient, planning nursing care and coordinating services for each patient. *Capacity building* is an essential part of the care model. Members of the multidisciplinary team should undergo both theoretical and in-service training and participate in continuing education so as to keep abreast of advances in management of HIV infection. Participation in *research* is important for generating locally important new knowledge and evaluating and improving the local service model.
17. A governance framework shall be developed to ensure the delivery of quality service, against a set of established standards. Governance here refers therefore to clinical as much as administrative governance of the team-based organization of HIV services.

Principle Three: Prevention and Care Continuum

18. The provision of clinical care to HIV patients contribute to the overall control of the infection in a public health context. HIV care services provide a window of opportunity to focus prevention on those living with the infection, highlighting the principle of *prevention and care continuum*.
19. In realising the principle, the following standards are proposed: (a) incorporation of risk reduction counseling for PLWHA, (b) access to STI (sexually transmitted infection) diagnosis and treatment, (c) provision and/or access to partner counseling and referral, (d) prevention of mother-to-child HIV transmission, and (e) the operation of antiretroviral adherence programme both for enhancing clinical effectiveness and to minimize the emergence of mutants. In practice, an HIV clinical service plays an active role in the public health surveillance of HIV/AIDS.

Principle Four: Access to Care

20. HIV patients should have access to care in order to achieve optimal health outcomes as are expected from current medical knowledge and technology. This standard is gauged by the

patient's access to (a) designated HIV services, (b) range of other clinical and (c) support services, and by such access in different settings.

21. HIV patients should, as for other patients with a chronic condition, have equal access to services provided by other *clinical specialties* if medical complications arise, as well as *palliative care* for the terminally ill. The former includes psychiatric, ophthalmologic, surgical, obstetric/gynecological and other clinical consultations as the condition may require. All services must be affordable, as in the case of other chronic illnesses.
22. In the development of the care system, working partnership should be developed to enable effective and efficient referral. Health care professionals under different specialties should be involved in the care of HIV patients. To ensure *continuity of care*, relevant medical information should be readily available to the clinician providing care to the patient during hospitalization and out-patient visits. Effective communication between HIV clinician and laboratory personnel must be established to enable prompt actions to be initiated in case of needs.
23. VCT (voluntary counseling and testing) offers the best contact point for the diagnosis and management of HIV infection. Access to care shall however not be limited to that provided by designated HIV service. Quality care shall be accessible in other settings including the prison, and irrespective of the risk factors associated with the infection. In the latter situation, drug users, men having sex with men (MSM) and commercial sex workers should have access to care no different from that for other individuals with the same clinical condition.

Principle Five: Community Involvement

24. Involvement of the community enhances the effectiveness of the care model on one hand, and contributes to the role of promoting acceptance of PLWHA on the other.
25. Community involvement can take many forms. In the Hong Kong setting, medical social workers and/or specialty nurses play the coordinating role in the mobilization of community resources. This could range from conducting support groups to the involvement of community based organizations to support care delivery. The role of the private sector would need to be enhanced to broaden community participation.

Principle Six: Confidentiality and Privacy

26. Medical information of PLWHA, like that for other clinical conditions, should be kept in strict confidence. The disclosure of one's HIV status is generally not required, and must be treated on a need-to-know basis in the health care setting.
27. Infection control refers to protective measures in the health care setting for preventing and controlling the spread of infections. In the case of HIV, standard precaution should be practiced, which is adequate both for protecting the carers and other patients. HIV patients should be treated no differently from other patients. Stigmatization arising from infection control practices should be avoided.

Issues of Concern and for Future Consideration

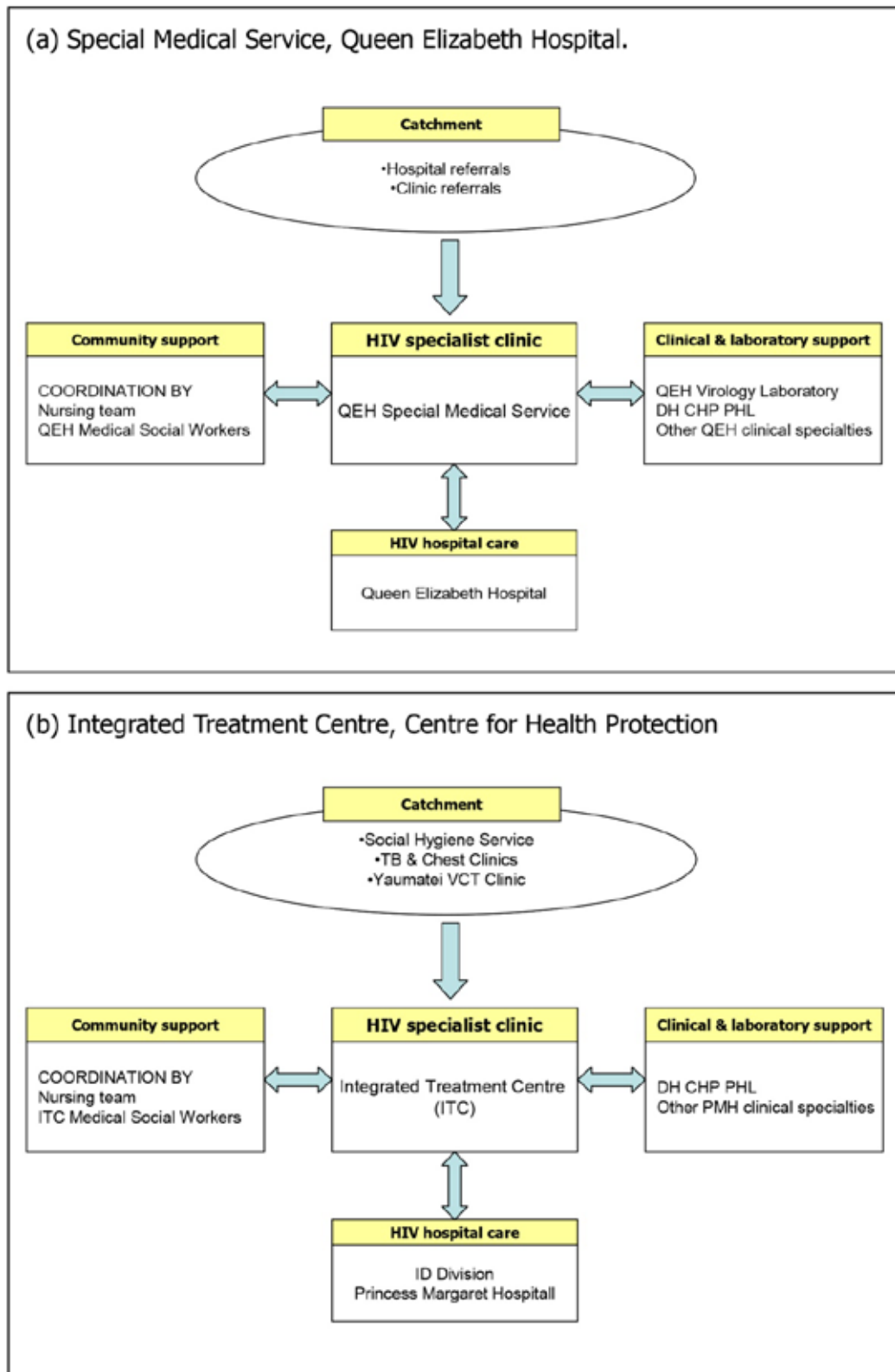
28. The rationales in para 4 to 7 set out not only the foundations for the principles, but also spell out the limitations inherent in the proposed models, which are, respectively, the HIV epidemiology,

applications of medical sciences, and the current health infrastructure, as are explained in the following paragraphs.

29. The current framework was developed at a time when the HIV prevalence was low. It is assumed that currently most, if not all, of the diagnosed cases are offered treatment and care in accordance with the established principles. These principles should be upheld in the event that the HIV rate rises. The delivery model may however need to be adjusted appropriately.
30. State-of-art HIV treatment is provided to PLWHA. This refers to treatment options that have been proven to be effective, using an evidence-based approach. In the absence of effective clinical trials system, the access to treatment does not extend to experimental therapy.
31. Currently, HIV care is delivered almost exclusively through the public service (Hospital Authority and Department of Health). Treatment is heavily subsidized under the current mode of health care financing in the public service. While there is the advantage of realizing the prevention and care continuum, and hence the recommendation of a public health goal, the framework has not YET included the option of providing for similar care systems in the private sector, nor has considered the impacts of any alteration in the health care infrastructure in due course.
32. Finally, the framework has been developed with the care of adult patients in mind, though the principles shall equally apply to paediatric patients. The emphases may however vary, with stronger focus on integrated care, and less on the public health role in the reduction of risk behaviours associated with HIV spread.

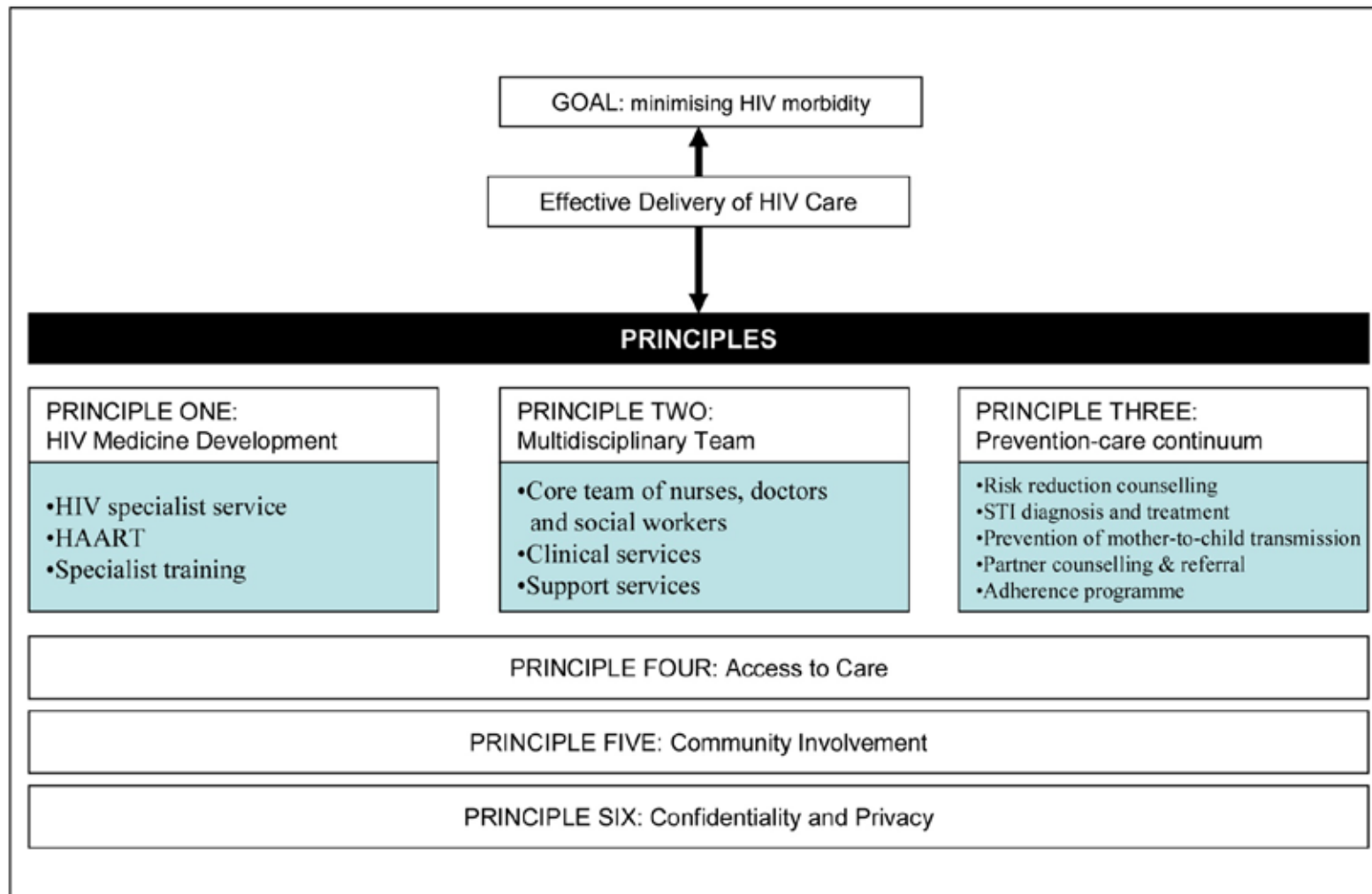
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1. Special Preventive Programme is incorporated within the Public Health Services Branch of the Centre for Health Protection (CHP) of the Department of Health, effective from 1 June 2004
 2. A Working Group on HIV clinical care was formed by the Scientific Committee on AIDS in November 2003 to review the subject and draft the recommendations in this paper. The Working Group comprised the following members - Dr ST Lai, Dr Patrick Li and Dr KH Wong, and was supported by Dr Michael Chan of the Committee Secretariat, and Dr SS Lee of the Council Secretariat.
 3. Hong Kong Advisory Council on AIDS. Recommended HIV/AIDS strategies for Hong Kong 2002 to 2006. Hong Kong: ACA, 2002.

Annex I. Layout of HIV services in Hong Kong



*Catchment refers to the main sources of referrals, which includes but is not limited to those in the box.

Annex II. A flow diagram to represent the recommended framework for the delivery of HIV care in Hong Kong



Annex III: Checklist on the development of standards in clinical HIV care

- ☒ Protocols on clinical management that have been established in accordance with international and/or local guidelines
- ☒ An audit or equivalent mechanism, for example, chart review, to ensure the adherence to standards recommended in protocols
- ☒ An evaluation framework for monitoring output and outcome of the service
- ☒ Preventive intervention as a component of the service or through referral to the appropriate public health service
- ☒ Pursuance of quality standards in Infection control practice
- ☒ An information system to support service development and evaluation
- ☒ Training as an integral component for enhancing expertise development in medicine, nursing and other health care disciplines
- ☒ Linkage, where appropriate, to community-based care
- ☒ Participation in research

Test paper - Recommended Framework for the Delivery of HIV Clinical Care in Hong Kong

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1. What are the factors to be considered in the development of clinical care model in a locality?
 - (a) HIV epidemiology
 - (b) Advances in medical sciences
 - (c) HIV/AIDS prevention and care strategy
 - (d) Health infrastructure
 - (e) All of the above

2. Which of the following is not true about highly active antiretroviral therapy (HAART) in Hong Kong?
 - (a) Available since 1994
 - (b) Effective in controlling HIV disease and restore health
 - (c) Current standard of treatment
 - (d) A small group of expertise developed
 - (e) Parallel laboratory monitoring essential

3. What is not true about the practice of HIV medicine?
 - (a) Specialist physician is needed, which preferably is an Infectious Disease Physician
 - (b) Access to HAART
 - (c) Prophylaxis and treatment of opportunistic infections
 - (d) HIV medicine training is needed
 - (e) Acute but not long term care is the focus

4. Which of the following is normally not a key member of the multidisciplinary professional team in HIV care?
 - (a) HIV physician
 - (b) Nurse
 - (c) Medical social worker
 - (d) Optometrist
 - (e) Psychiatrist

5. Which is not a core component of HIV service system?
 - (a) Continual development of professional expertise
 - (b) Capacity building
 - (c) Participation in research
 - (d) Governance for quality service
 - (e) Disregard of HIV prevention

6. What is the standard in achieving prevention and care continuum of HIV management?
 - (a) Risk reduction counseling
 - (b) Access to sexually transmitted diseases diagnosis and treatment
 - (c) Provision of partner counseling and referral service
 - (d) Prevention of mother-to-child transmission
 - (e) All of the above

7. Which of the following specialty service is commonly required by HIV/AIDS patients?
 - (a) Surgery
 - (b) Obstetrics & Gynaecology
 - (c) Ophthalmology
 - (d) Psychiatry
 - (e) All of the above

8. Which of the following is essential for a quality HIV care?
 - (a) Community involvement
 - (b) Observance of confidentiality and privacy of patients
 - (c) Equal access to care irrespective of social background of patients
 - (d) Voluntary counseling and testing service as a contact point for diagnosis and care
 - (e) All of the above

9. Which of the following is a concern for future HIV care model?
 - (a) Change in HIV prevalence
 - (b) Changes in HIV treatment and standards
 - (c) Provision of health services in public and private sectors
 - (d) Availability of professional expertise
 - (e) All of the above

10. Which of the following is not a standard in HIV care system?
 - (a) Pursuance of quality standard in infection control practice
 - (b) Penalizing patients who do not adhere to interventions
 - (c) Evaluation for outcome of the service
 - (d) Protocols on clinical management
 - (e) Training