

NSW HIV/AIDS Strategy

Environmental Scan 2006 – 2009

Suggested citation:

NSW Department of Health. 2006. *NSW HIV/AIDS Strategy: Environmental Scan 2006–2007*, Sydney.

NSW DEPARTMENT OF HEALTH

73 Miller Street
North Sydney NSW 2060
Tel. (02) 9391 9000
Fax. (02) 9391 9101
TTY. (02) 9391 9900
www.health.nsw.gov.au

This work is copyright. It may be reproduced in whole or in part for study training purposes subject to the inclusion of an acknowledgement of the source. It may not be reproduced for commercial usage or sale. Reproduction for purposes other than those indicated above, requires written permission from the NSW Department of Health.

© NSW Department of Health 2006

SHPN (AIDB) 060090
ISBN 0 7347 3956 7

Further copies of this document can be downloaded from the
NSW Health website: www.health.nsw.gov.au

July 2006

Contents

Executive Summary	3	Chapter Two: HIV/AIDS Health Promotion	20
Chapter One: The Current Moment	4	1 HIV prevention among gay men	21
Introduction	4	a Community engagement among inner city gay men	22
Policy Linkages	4	b Addressing sexually transmissible infections	23
Goals and targets	5	c Settings-based health promotion	23
Goals	5	d Issues associated with alcohol and other drug use	24
Targets	5	e HIV prevention among gay and other homosexually active men in suburban, regional and rural areas	24
Baseline data on targets	5	f Preventing new infections among gay men from culturally and linguistically diverse backgrounds	25
HIV/AIDS in NSW	6	2 Health promotion for people living with HIV/AIDS	26
Emerging challenges	8	a Information about living with HIV/AIDS	26
Principles	8	b Supporting self care	26
Research	10	c Peer support	27
Key research findings	10	d Sexual health	27
Surveillance	10	e Specific issues for positive women and positive heterosexual men	28
Projections	11	f Specific issues for people from culturally and linguistically diverse backgrounds who are living with HIV/AIDS	28
Social research	12	3 Health promotion for people in HIV sero-discordant relationships	28
Clinical research	12	4 Harm minimisation	29
Priority populations	13	a Maintaining support for the Needle and Syringe Program	30
Roles and responsibilities	13	b Improving access to the Needle and Syringe Program for marginalised communities	30
a NSW Government	13	c Providing peer education and health promotion for people who inject drugs	30
b Ministerial Advisory Committee	14	d Improving access to services among people who inject drugs	31
c NSW Department of Health	14		
d Area Health Services	14		
e Community-based organisations	15		
f Other non-government organisations	16		
g Australian Government	16		
h Local government	17		
Funding	17		
Monitoring and Evaluation	19		

5	HIV Prevention among people from priority culturally and linguistically diverse backgrounds	31	6	Individuals with complex needs	44
6	HIV prevention with other priority populations	32	7	Collection and monitoring of utilisation data	45
a	Aboriginal sexual health	32	8	Treatments and monitoring	46
b	Sex workers	34		Side effects and toxicities	46
c	Prisoners	34		Access to treatments	46
d	Other populations	35		Access to monitoring	46
7	HIV testing	35	9	General Practitioners	47
8	Creating a supportive environment for People living with HIV/AIDS	36			
Chapter Three: Treatment, Care and Support			Chapter Four: Infrastructure and Support		
	Responsive health services	37	1	Workforce development	48
	Quality of life	38	2	Research, data and evaluation	49
	Identity and community	38	3	Statewide services	50
	Services providing HIV treatment, care and support	38	4	Linkages to related health and human service agencies	51
	National priorities	39			
	Principles for HIV treatment, care and support	39		Glossary	53
	Priorities	40		Abbreviations	54
				References	55
1	Matching funding and service models to need	40			
2	Coordination, partnership and service linkages	41			
3	Social housing and supported accommodation	41			
4	Oral Health	42			
5	Health and wellbeing	42			
a	Healthy lifestyles	42			
b	Mental health and psychosocial wellbeing	43			
c	Early intervention	43			
d	Health and wellbeing for people living with HIV/AIDS from culturally and linguistically diverse backgrounds	43			
e	Aboriginal people living with HIV/AIDS	44			
f	Women living with HIV/AIDS	44			

Executive Summary

The Australian response to HIV/AIDS has been highly effective in minimising rates of infection and improving health outcomes for individuals with HIV/AIDS.

NSW is, however, at a significant point in the history of the epidemic with the number of HIV/AIDS notifications starting to rise again after levelling off in the late 1990s. This Strategy, which will operate from 2006-2009, provides a framework for safeguarding gains made to date and responding to emerging challenges.

The partnership approach to HIV/AIDS has served the people of NSW well. It has provided a framework for collaboration between government, affected communities, researchers and medicine, and has ensured that programs and services are informed by both the best available evidence and the experience of those living with or at risk of HIV infection. Strengthening the partnership is an ongoing priority for the NSW response to HIV/AIDS.

This Strategy provides a framework for reducing future infections among those populations considered at highest risk: gay men, people from culturally and linguistically diverse backgrounds, Aboriginal people, people who inject drugs, and sex workers. It also identifies priorities for improving the health of people living with HIV/AIDS, through both population level programs and individual clinical services.

The Strategy also provides a framework for ensuring that funding and service delivery infrastructure is allocated in line with the current needs of members of priority populations. It spells out those activities that will be undertaken in the following four years to review the current service needs of these populations and improve alignment of resources to those needs. This includes ensuring that workforce development, research, and state-wide service infrastructure supports best practice health promotion, and treatment, care and support service delivery.

The Strategy identifies current priorities in HIV/AIDS and is intended to be of use to both HIV/AIDS program funded services, and other health and human services with responsibilities for HIV prevention, and improving health outcomes for people living with HIV/AIDS.

Introduction

HIV/AIDS has had a significant impact in NSW: it has led to significant loss of life and diminished quality of life for many individuals. Responding effectively to HIV/AIDS required the reshaping of the health system to improve its ability to respond to the needs of individuals and communities affected by a poorly understood, stigmatised infectious disease. This, in turn, led to a stronger emphasis on partnership and the role of affected communities in the development and delivery of health services.

Within NSW, HIV infections plateaued from the mid 1990s until 2001. However, during 2001 and 2002 there were notable rises in HIV notifications. HIV notifications increased by 15 per cent from 2001 to 2002; this was followed by a further six per cent increase from 2002 to 2003. These were the first sustained increases since the epidemic was effectively brought under control in the late 1980s. This highlights a point of significant vulnerability in the NSW response to HIV/AIDS and requires a strengthening and focusing of health promotion activities.

There is also a need to safeguard gains achieved in the NSW response to HIV/AIDS. For example, the prevention of a major epidemic among injecting drug users has been reliant on the capacity of the Needle and Syringe Program to provide sterile injecting equipment and health promotion, and this requires ongoing investment.

Within Australia, responsibility for HIV/AIDS health promotion, treatment, care and support, and research is shared between the members of the HIV/AIDS partnership, that is, the collaboration between the Australian Government and state governments, affected communities, and medical and scientific organisations, bodies and agencies. Within NSW, the dedicated HIV/AIDS program includes Area Health Services, community-based organisations, non-government organisations and state-wide services. However, responsibility for preventing HIV infection and improving the health of people living with HIV/AIDS is also shared by the health system and human service system more broadly and should be embedded in population health programs, inpatient service delivery and whole-of-government strategies.

The development of the *NSW HIV/AIDS Strategy* is a requirement of the Public Health Outcomes Funding Agreement. The Strategy translates the priorities within the National HIV/AIDS Strategy into the NSW context, and sits under *Healthy People 2006*. This policy document provides a framework for improving the health of the people of NSW by preventing new HIV infections, improving the health of people living with HIV/AIDS and reducing the impact of HIV on individuals and communities. The purpose of this policy is to safeguard gains in the NSW response to HIV/AIDS, outline emerging challenges and articulate strategic priorities for the NSW response to HIV/AIDS in the years 2006 to 2009. At a programmatic level, this policy document identifies priorities for action and for the allocation of resources, and provides a framework for assessing the performance of the HIV/AIDS partnership and broader government and health systems in responding to HIV prevention, treatment and care.

Policy linkages

This Strategy provides the framework for HIV/AIDS prevention, health promotion, treatment, care and support and research in NSW. This Strategy translates national priorities for the response to HIV/AIDS into the NSW context and identifies a program of activities to meet nationally agreed outcomes. NSW continues to contribute to the national response, including through the development of successive national strategies on HIV/AIDS. Strategic approaches to hepatitis C and sexually transmissible infections (STIs) in NSW will be addressed separately, as will a more detailed approach to improving sexual health outcomes for Aboriginal communities.

Goals and targets

Goals

- To reduce new HIV infections in NSW.
- To improve the health of people living with HIV/AIDS.
- To reduce HIV-related discrimination and address systemic barriers to HIV health promotion.

Targets

- To reduce newly acquired HIV infection by 25 per cent by 2009.
- To achieve annual reductions in the rates of gonorrhoea, infectious syphilis and chlamydia among priority populations.
- To reduce physical and psychological disorders and disabilities in people living with HIV/AIDS.
- To decrease the number of late diagnoses of HIV infection by 25 per cent by 2009.
- To achieve successive annual reductions in AIDS related deaths by 2009.
- To increase the number and distribution of s100 prescribers across NSW, and increase the number of general practitioners (GPs) involved in HIV care by 20 per cent by 2009.

Service delivery objectives

- To improve the quality of HIV health promotion programs through community engagement, strengthened planning, and workforce development.
- To improve access to, and the quality of, HIV/AIDS treatment, care and support services available to people living with HIV/AIDS in both specialist and mainstream settings through strengthened planning and workforce development.
- To improve the alignment between service delivery, utilisation, resource allocation and strategic priorities in HIV prevention, treatment, care and support.

Baseline data on targets

There is a range of data that can be used to measure the current status of the above targets. This data will also be used to monitor progress toward the targets during the life of the Strategy.

Target One: To reduce newly acquired HIV infection by 25 per cent by 2009

There were 124 notifications of newly acquired HIV infection in 2004. The intention is to reduce this to fewer than 93 notifications per year by 2009.

Target Two: To achieve annual reductions in the rates of gonorrhoea, infectious syphilis and chlamydia among priority populations

Notification data for STIs does not currently record population factors such as gender of sexual partner, country of birth or Aboriginality. Data on rates of the above STIs is gathered via a range of clinical and social research projects, including the Health in Men Study and the Sydney Gay Community Periodic Survey. In addition, there is a range of strategies used to determine the impact of STIs on priority populations. This includes the use of indicators such as notifying GP and data from sexual health services. In the first instance, progress toward these targets will be measured using overall notifications of gonorrhoea, syphilis and chlamydia.

There were 1,430 notifications of gonorrhoea, 301 notifications of infectious syphilis and 9,976 notifications of chlamydia in NSW in 2004.¹

Target Three: To reduce physical and psychological disorders and disabilities in people living with HIV/AIDS

There is currently no single definitive measure of the incidence and prevalence of physical and psychological disorders among people living with HIV/AIDS. Rather, there is a range of indicators, including data from Positive Health and HIV Futures studies, on self-reported health status, the impact of HIV-related symptoms on lifestyle, and physical and psychological co-morbidities. Just over 50 per cent of participants in the Positive Health study (Prestage et al, 2005) reported their general health was very good or excellent, while 29 per cent reported it was good, 15 per cent reported it was fair, and three per cent reported it was poor. The activities outlined in this Strategy are intended to increase the proportion that experience good or excellent health.

Target Four: To decrease the number of late diagnoses of HIV infection by 25 per cent by 2009

An individual is defined as a late presenter if they have been diagnosed with AIDS within 90 days of being diagnosed with HIV (Kaldor and French, 1993).

¹ The NSW Sexually Transmissible Infections Strategy outlines priorities and activities for reducing the incidence of Chlamydia among women and men who fall outside the priority populations for this Strategy.

Individuals who are diagnosed with HIV late in the clinical course of their illness are unable to benefit from antiretroviral therapies that can prevent or delay progression to AIDS. They may also be more likely to transmit HIV to their partners.

Forty individuals received a late diagnosis of HIV in 2003. The majority of these were gay or other homosexually active men, although heterosexuals were disproportionately represented: heterosexuals accounted for 18 per cent of overall notifications but a much larger proportion of late diagnoses (about 40 per cent).

From 2000 to 2003 inclusive, there were 1,494 notifications in NSW of people testing positive for HIV for the first time. Of these, 132 (nine per cent) were considered late presenters. There were on average 33 late presenters each year, with the actual number ranging from 22 to 44 per year.

The intention of this target is to reduce late presentations to fewer than 30 per year by 2009.

Target Five: To achieve successive annual reductions in AIDS-related deaths by 2009

Some 32 people with HIV/AIDS died in 2004. This number has not varied greatly since 2001 (in 2000, 79 deaths were notified). People with HIV/AIDS have a death rate ten times that of the general population. It is the intention of this Strategy to reduce this difference by focusing on preventable deaths in people with HIV/AIDS, and achieving continual annual reductions in AIDS-related deaths.

Target Six: To increase the number and distribution of s100 prescribers across NSW, and increase the number of GPs involved in HIV care by 20 per cent by 2009

There were 134 community-based s100 prescribers in NSW in 2005. In addition, there were an undetermined number of GPs and other primary care providers involved in the diagnosis of HIV and the care of people living with HIV/AIDS. It is intended that by 2009 the number of community-based s100 prescribers will have increased to 160, and that there will have been particular emphasis on increasing prescribers in those areas where they are most needed. It is also intended that there will be an increase in the number of GPs actively involved in offering HIV tests and providing care for people living with HIV/AIDS.

Achieving the six targets of this Strategy will require integrated health promotion, clinical services and research.

HIV/AIDS in NSW

HIV was first identified in NSW in 1981, following the diagnosis of an individual with what was described as 'Gay Related Immune Deficiency' in Sydney. HIV is transmitted via infected blood and body fluids such as semen and vaginal fluids. HIV is also present in transmissible doses in breast milk.

HIV and other communicable diseases are unique in that any increase in infections in and of themselves further contributes to the momentum of the epidemic. This means that in order to support individual health and achieve population level gains, every effort must be made to prevent infections from increasing in the first instance. This requires the program to have sufficient capacity, flexibility and responsiveness to balance the allocation of resources to prevent outbreaks among low prevalence populations while focusing on those areas where vulnerability is considered greatest.

NSW is more heavily impacted by HIV, and the threat it poses to individual and public health, than other Australian jurisdictions. NSW is home to some 58 per cent of people in Australia living with HIV/AIDS and has sizable communities at risk of HIV infection, including a significant gay population, and some 29 per cent of the nation's Aboriginal and Torres Strait Islander people (NSW Department of Health, 2005).

In Australia, HIV has been predominantly transmitted via male-to-male sexual activity. In NSW, 63 per cent of HIV notifications from 1981-2004 were attributed to homosexual-bisexual sex, and three per cent of infections attributed to injecting drug use. In the period 1981-2004, eight per cent of HIV infections in NSW were attributed to heterosexual intercourse. There were also a small number of individuals who were infected as a result of receipt of infected blood/organs prior to 1985, or occupationally acquired needlestick injuries. There have been no documented cases in the world of individuals acquiring HIV from needlestick injuries in community settings.

HIV has resulted in significant loss of potential life years in NSW. Because people die from HIV/AIDS at a younger age than they do from other leading causes of death, the impact of HIV/AIDS is most apparent when considered in terms of years lived with disability (YLD) or years of potential life lost (YPLL). The national *Return on investments in public health* (Applied Economics, 2003) report concluded that, on average one HIV infection results in 44 disability adjusted life years (undiscounted).

HIV/AIDS has also had a significant economic impact in NSW. Government investment in the response to HIV/AIDS has included the costs to the health system associated with the provision of hospital and community-based care and support, and the investment in HIV prevention. In addition, individuals have borne costs associated with treatments and health services, and experienced significant loss in relation to foregone earnings. The *Return on investments in public health* report concluded that the monetary value of the morbidity and premature mortality avoided by preventing one HIV infection is \$2.64 million undiscounted or \$684,000 discounted (Applied Economics, 2003). Future costs to individuals and the health system can be most effectively minimised through a strong focus on disease prevention and early intervention.

There have been many achievements in the NSW response to HIV/AIDS. HIV diagnoses in NSW since the mid-1990s have fallen more than most other western industrialised jurisdictions for which comparable data is available (Wilson et al, 2004). Central to this was the rapid and sustained mobilisation of the gay community, in partnership with government, clinicians and researchers.

The NSW HIV health promotion program has also been highly successful in containing the spread of HIV among people who inject drugs. The Needle and Syringe Program (NSP) has been particularly critical in providing access to sterile injecting equipment and thus reducing rates of sharing of equipment. Despite the successes of the program, it has been subject to community concern, and there is a need to address those concerns without compromising health outcomes.

However, the experience in other developed countries points to the potential for sudden increases in HIV infection among other populations – in particular, migrant communities, indigenous communities, people in correctional facilities, sex workers and people who inject drugs – when investment in prevention is wound back or fails to keep pace with changes in the communities themselves. The need for vigilance against this is supported by the recent small but significant increase in HIV notifications among women in NSW.

NSW has successfully created an environment that enables the delivery of effective health promotion and treatment, care and support services. Progressive law reform has improved the legal standing of gay men

in NSW and criminalized discrimination against gay men and people living with HIV/AIDS. There has also been significant reform of the legislation governing sex work. In addition, post exposure prophylaxis is now widely available following high risk non-occupational and occupational exposures, and new initiatives such as the Medically Supervised Injecting Centre have been established in order to trial new methods of improving service delivery to marginalised communities.

The social and medical landscape has changed radically with regard to HIV treatment and care since the mid to late 1990s, with the advent of highly active antiretroviral therapies transforming health outcomes and health service needs for people living with HIV/AIDS. This has increased the lifespan and improved the quality of life for these people.

Advances in HIV treatments have contributed to a significant shift in the relationship between people living with HIV/AIDS and medicine. The experience of living with HIV/AIDS has become more individualised, with a focus on individual medical management rather than community and population level initiatives. This has been characterised by increased diversity in the health and support needs of individuals living with HIV/AIDS, requiring more tailored and more holistic health improvement programs and services.

Despite these improvements, HIV/AIDS remains stigmatised and poorly understood in the community, and this can adversely affect the quality of life of those living with HIV/AIDS and hamper prevention activities. Redressing myths and stigma attached to HIV/AIDS remains an ongoing priority for the program.

In this context, individuals living with HIV/AIDS and their community-based organisations are central to the effective response to HIV/AIDS in NSW. Accordingly, priority should be given to engaging them as partners and participants in program development and implementation.

This policy affirms that health promotion forms the foundation of the HIV prevention and health improvement program in NSW, and that there continues to be a need for multi-strategic and effective health promotion interventions that prevent HIV infection and improve the health of people living with HIV/AIDS.

Emerging challenges

The twin priorities for the HIV/AIDS program for the coming four years are safeguarding gains already made in the NSW response to HIV, and responding to emerging challenges. Addressing emerging challenges in HIV health promotion, HIV prevention and treatment and care will require innovation in program and service delivery, underpinned by access to research and data and supported by a funding model which aligns funding to strategic priorities. The key challenges addressed by this Strategy are as follows:

- **Reshaping HIV treatment, care and support mechanisms** to appropriately reflect the current and future service needs of people living with HIV/AIDS. This will include gaining a more accurate picture of current service utilisation patterns among people living with HIV/AIDS and reorienting resources to meet current and future service needs. Achieving this will require clarification of the roles and responsibilities of HIV/AIDS designated services, and of the contribution of the broader health and human services sector.
- **Identifying mechanisms to retain flexibility and responsiveness within the hospital system** to respond to changing inpatient needs of people living with HIV/AIDS. There has been a reduction in demand for HIV-specific inpatient services, and increased need for other inpatient services such as cardio-thoracic, oncology and metabolic interventions. This shift is a consequence of the convergence of HIV-treatment-related toxicities and ageing. As such, the challenge is building the capacity of the broader health system to treat people living with HIV/AIDS while also retaining necessary levels of specialist inpatient HIV services.
- Responding to the **vulnerability of HIV prevention efforts** among those populations where risk is greatest. In particular, this will require innovative health promotion programming that responds to changes in risk practices among inner Sydney gay men, the population that continues to be most heavily affected by HIV/AIDS.
- Addressing **sexually transmissible infections** and their relationship with HIV transmission and acquisition. There are significant epidemics of some STIs among inner city gay men and some Aboriginal communities in NSW, causing poor health for individuals and facilitating the transmission of HIV. Reducing the number of HIV infections in NSW requires improving STI prevention, diagnosis, treatment and management among priority populations.

- Responding to actual and potential increases in **HIV infections in people from culturally and linguistically diverse backgrounds and non-gay identified homosexually active men** in regional and rural areas.
- **Safeguarding gains** in priority populations such as Aboriginal people, sex workers and people who inject drugs where the prevalence of HIV infection remains low against a background of heightened risk.
- **Engaging affected communities** in HIV prevention efforts in order to ensure the effectiveness and appropriateness of programs and services directed at preventing new infections.
- **Building whole community support** for the response to HIV/AIDS, including addressing stigma and discrimination, and strengthening support for sensitive measures necessary to achieve individual and public health outcomes.
- **Strengthening the broad HIV/AIDS workforce** and improving its ability to plan, deliver and evaluate programs and services. This includes the workforce within Area Health Services, community-based and other non-government organisations, research, and primary health care settings (including general practice).

Principles

The NSW response to HIV/AIDS is based on principles shared among members of the HIV/AIDS partnership. The principles listed below should guide programming and service delivery in this area.

Partnership and joint action

The NSW HIV/AIDS partnership, which consists of government, affected communities, medical and health services, and research providers, is responsible for advising the NSW Minister for Health on key issues in HIV prevention, treatment, care, support and research. Each member of the partnership has a unique contribution to make to HIV prevention, treatment, care and support, and has different expertise. Effective partnership requires respectful sharing of that expertise, recognition of the unique contribution of each partner, and the undertaking of shared activity where appropriate. The partnership between HIV/AIDS services should be supported by a whole-of-government approach to preventing new HIV infections and maximising health outcomes for people living with HIV/AIDS.

Involvement of affected communities

Individuals living with and at risk of HIV infection are the experts in their own experience. Community-based organisations exist as the formal mechanism for representing that experience and ensuring that services and programs are effective and appropriate for the target audience. Involving affected communities requires actively engaging those most at risk of contracting HIV and those living with HIV/AIDS in identifying their own health needs and improving their control over the determinants of their own health. Peer-based initiatives, community participation and consumer consultation contribute to the delivery of health promotion programs in NSW.

Bipartisanship

The response to HIV/AIDS relies on bipartisan support for HIV prevention, treatment and care at a national and state level. Sustaining and building bipartisan support continues to be one of the central principles of HIV prevention, treatment and care. Building bipartisan support requires effective community education and community engagement to enable political leaders to demonstrate support for sensitive programs.

Primary and secondary prevention

Achieving individual and population health outcomes requires a strong focus on preventing HIV infection and providing early access to diagnosis and health care for people who contract HIV. There is a substantial body of research that indicates that health outcomes are greater, and the cost to the health system minimised, where a strong investment in prevention is maintained and proactive measures are taken to support health outcomes for people living with HIV/AIDS.

Harm minimisation

HIV infection is a critical potential harm associated with injecting drug use. While not condoning injecting drug use, the health system has a responsibility to take action to enable people who inject drugs to avoid HIV and other blood borne infections through access to the means of prevention.

Providing an enabling environment

Creating supportive environments is one of the five action areas of the Ottawa Charter (World Health Organisation, 1986) and refers to creating social, legal and political environments that enable individuals and communities to take actions that support their own health and reduce risk taking. In order to create such environments, it is critical that health services maintain the capacity to reach at risk populations.

Redressing health inequities. Priorities should be determined based on incidence of HIV/AIDS, vulnerability to HIV infection, the health impact of HIV/AIDS, and equity. Thus, priority must be given to those populations that are most at risk of HIV infection or are most adversely affected by HIV. These priorities should be informed by local and state-wide data, including HIV notification data and research.

Effectiveness in achieving health outcomes.

Priorities for local and population-based services should be based on their capacity to reduce the incidence of HIV infection and improve the health of people living with HIV/AIDS. All individual and population-based services and programs should be regularly reviewed for their contribution to health outcomes. Population-based programs often work more effectively in a broad health framework; however, there should also be a clear link between activities and improvements in the health status of the target population.

Good practice service and program development.

Achieving health outcomes requires ongoing investment in planning, service development, research, and workforce development. Service and program development should be informed by analysis of research and the best available theory regarding health promotion, treatment, care and support. Likewise, workforce development is an essential element of all program planning, implementation and evaluation.

Accountability, transparency and evaluation

The HIV/AIDS partnership is committed to transparency in decision-making regarding the effectiveness of programs and services, the development and review of policies, and decisions regarding funding allocation and service delivery. Services are required to participate in collecting data on service utilisation and program effectiveness, and to regularly review programs and services and reallocate resources where needs change. The NSW Department of Health is required to maintain collaborative and consultative policy development mechanisms.

Maintaining mechanisms that reduce risks

There are a number of well-established mechanisms that must be maintained in order to reduce the risk of HIV infection. This includes the Needle and Syringe Program, the screening of the blood supply, universal infection control procedures in health and related fields, the prevention and control of sexually transmissible infections, and health promotion programs aimed at reducing risk practices.

Taking a population health approach

This Strategy is grounded in a population health approach which acknowledges that, while the factors that lead to HIV exposure and infection are behavioural and biological, they involve people and are determined by social processes. As such, programs must balance activities and services that are oriented to meeting individuals' needs while also attending to the long-term tasks of building a legal, social and policy environment that supports access to the means of prevention and community empowerment. Population health programs should be developed in collaboration with the members of the HIV/AIDS partnership, in particular, affected communities, and other health and human service agencies.

Collaboration between population programs and services for individuals.

Services that provide individuals with testing, education, counselling and medical care are an important part of the continuum of services that contribute to health promotion outcomes. These services are currently provided by specialist HIV and sexual health services, mainstream public health services such as drug and alcohol services, mental health services and generalist counselling services, as well as GPs and other private service providers. In addition, direct service delivery is also undertaken by state-wide and local community-based organisations and non-government organisations. Individual services are well placed to tailor information and skill development to the specific needs of the individual, and to situate issues within the specific context of the life of an individual, and as such should complement and inform population level programs.

Research

Research is a fundamental component of the NSW HIV/AIDS program. The participation of key research bodies in the HIV/AIDS partnership has contributed to improved health outcomes for individuals and populations, and supported evidence-based programming.

The development, implementation and evaluation of effective programs and services in HIV prevention, health promotion, treatment, care and support requires access to epidemiological, behavioural, social, virological, and clinical research. Epidemiological data is used to monitor trends in HIV and AIDS, including the number of individuals diagnosed with HIV or AIDS and the number of deaths among people with AIDS. Epidemiological data also provides insight into population-based and geographically based patterns of infection. Qualitative and quantitative social and behavioural research provides valuable information on patterns of risk behaviour

among members of priority populations, knowledge and attitudes towards health and risk, and cultural understandings and norms regarding HIV/AIDS. Clinical and virological research is important in identifying emerging and ongoing issues for the management of HIV/AIDS, and improving clinical service delivery to people living with HIV/AIDS. In addition, there is an ongoing need for research into effective practice and service delivery. This should be complemented by a focus on research dissemination.

The Australian Government is responsible for providing leadership on HIV/AIDS research priorities and for allocating funding to key research agencies. The NSW HIV/AIDS partnership is committed to the allocation of funding and initiation of research that is relevant to NSW and will be used to inform service delivery and program development. Responsibility for supporting the infrastructure that enables research, such as the public health laboratory network, is shared by the NSW HIV partnership.

Key research findings

Surveillance

NSW has a well-established HIV surveillance system. It consists of case notification surveillance, sentinel surveillance and special population studies.

There were a total of 13,618 HIV notifications in NSW from 1981 to 2004 inclusive. HIV notifications peaked in 1987, while annual AIDS notifications and AIDS deaths peaked in 1994. Notification data indicates that there are approximately 9,933 people currently living with HIV/AIDS in NSW.

HIV notifications declined from 1987 until the early 1990s. There was a plateau in annual HIV notifications until 2001. This was followed by a 15% increase in HIV notifications from 2001 to 2002, and a further 6% increase from 2002 to 2003. This increase was predominantly concentrated among gay and homosexually active men in inner city Sydney. There were also numerically small but proportionally significant increases in HIV notifications in the Hunter and Illawarra regions.

The increase in HIV notifications from 2001 to 2003 occurred at the same time as increases in HIV notifications in other Australian states, and in other nations with comparable epidemics. It is noteworthy that, prior to the increase, HIV notifications in NSW had fallen more than in comparable jurisdictions, and the increase has been less than that experienced elsewhere (Wilson et al, 2004).

There was a slight decline in total HIV notifications from 2003 to 2004. There was a marked decline in HIV notifications attributed to male to male sex from 2003 to 2004. However, there was a significant increase in HIV notifications among women, the majority of which were attributed to heterosexual sex, including sex with a partner from a country where HIV is highly prevalent. Women born outside Australia accounted for 66% of HIV notifications among women in 2004 where country of birth was specified.

The number of newly acquired HIV infections notified doubled from 1998 to 2003. Notifications of newly acquired HIV declined from 2003 to 2004. The significant increase in notifications from 1998 is believed to reflect an increase in newly acquired HIV infection during that period, but may also reflect improvements in testing technologies and data collection.

There has been a marked decline in the number of people diagnosed with AIDS since 1996, and a quartering of AIDS deaths since 1998. In 2004, there were 82 people notified as having AIDS, and 32 deaths of persons with HIV/AIDS were notified.

Gay men have been the population most significantly affected by the Australian HIV epidemic, with some 63 per cent of HIV notifications in NSW from 1981 to 2004 attributed to male-to-male sexual activity. There have been 8,544 homosexually active men diagnosed with HIV in NSW since the onset of the epidemic.² The majority of these diagnoses were in men living in the inner city, where the National Centre in HIV Epidemiology and Clinical Research estimates that the prevalence of HIV among gay men is approximately 15 per cent.

Since 2001, there have also been increases in HIV notifications among **non-gay identified men who have sex with men**, particularly late diagnoses among men living in regional NSW.

Maintaining a low rate of HIV infection among **people who inject drugs** has been one of the great successes of the NSW HIV health promotion program. From 1981 to 2004 there were 454 notifications attributed to injecting drug use.

There is limited data on the number of **sex workers** diagnosed with HIV/AIDS but notifications among this population are believed to be relatively small.

The per capita rate of HIV diagnosis among **Aboriginal people** in NSW is similar to that experienced by non-Indigenous Australians. However, notification data may provide an underestimation of the prevalence of HIV among Aboriginal peoples in NSW, as Aboriginal people have less access to health services and thus may be

less likely to be tested for HIV. Work is currently being undertaken by the NSW Department of Health, the Aboriginal Health and Medical Research Council and the National Centre in HIV Epidemiology and Clinical Research to establish protocols for the collection and dissemination of data regarding HIV notifications among Aboriginal people.

NSW HIV notifications among **people from culturally and linguistically diverse (CALD) backgrounds** increased to 20% of notifications for the three-year period 2000-2003. The profile of HIV/AIDS among CALD communities is different to that of mainstream groups, with notifications being almost equally divided between gay men, and heterosexual women and men. People who spoke a language other than English accounted for over 40% of all heterosexual notifications in NSW and over 10% of all gay male notifications for the years 2000-2003. Asian and Sub-Saharan African communities are over-represented in CALD notifications, with a pattern of increased risk associated with being born in, or having strong cultural ties to, overseas regions where the HIV prevalence is high.

Despite achievements in promoting access to HIV testing, **late HIV diagnosis** continues to be an issue in NSW. Gay men account for 40% of late diagnoses, with disproportionately high rates of late diagnosis among people from culturally and linguistically diverse backgrounds, Aboriginal people, heterosexuals, and non-gay identified homosexually active men in rural and regional NSW.

Projections

There is some debate about anticipated future trends in annual notifications. In the period 2000-2004, annual HIV notifications ranged between 338 and 415, with an average of 380 notifications per year. Over the same five-year period the number of deaths has been between 26 and 79 per year, with an average of 48 deaths per year.

Mathematical modelling undertaken by the National Centre in HIV Epidemiology and Clinical Research suggests that movement in HIV notifications will be significantly affected by rates of unprotected anal intercourse among gay men, and the uptake of HIV treatments among people living with HIV/AIDS. This research indicates that HIV notifications in Australia will rise slightly over the coming five years if current levels of unprotected anal intercourse and treatments usage are sustained, but that there is the potential for more marked increases should rates of unprotected

² This includes homosexually active men whose exposure category was either 'male homosexual-bisexual' and 'male homosexual/bisexual and IDU'.

anal intercourse increase and treatments use decline concurrently (Clements et al, 2004). Conversely, if the number of notifications continues to increase slightly over the next five years and the number of deaths remains constant at approximately 35 deaths annually, there will be an additional 2000 people living with HIV/AIDS in NSW in 2008, or between 11,500 and 12,000 in total (Hardwick and Cotton 2005).

Social research

There is a relatively strong social research infrastructure in place to provide insight into the experience of people with HIV/AIDS, and those populations most at risk of HIV infection.

Gay men are a diverse population. Though most concentrated and visible in the inner city, gay men reside throughout NSW and Australia, and participate in the gay community in a variety of ways. Social research indicates that condom use continues to be the norm among gay men, with approximately 80% of gay men consistently using a condom when having sex with a casual partner. The percentage of gay men who never use condoms is very low and has been stable for many years. However, the current rate of consistent condom use is lower than rates of condom use ten years ago. Research indicates that most gay men in Sydney are regularly tested for HIV, with some 70 per cent of participants in the most recent *Gay Community Periodic Survey* (Hull et al 2005) indicating that they had been tested in the previous 12 months and 90% having ever been tested.

Data from the National Centre in HIV Social Research on the behaviours of rural men who access Sydney gay community venues and events show that homosexually active men in rural areas tend to be less likely to identify as gay (92% of gay men in Sydney and 89% of gay men in rural areas), and less likely to have been tested for HIV (91% vs 88%), though just as likely to be HIV positive (Prestage, unpublished data). There is little difference between city men and rural men with regard to likelihood of engaging in unprotected anal intercourse with either casual or regular partners. Behavioural data indicate that non-gay identified men who have sex with men are less likely to practice anal intercourse and, in particular, are less likely to practice receptive anal intercourse.

Overall, there have been significant improvements in the health and quality of life experienced by people living with HIV/AIDS. Advances in treatments have played a key role in this. Social and clinical research indicates high but slightly declining levels of use of highly active antiretroviral therapy among people living with HIV/AIDS, and regular health monitoring among this population.

The majority of people living with HIV/AIDS rate their own health as good or excellent. However, while there has been a general increase in participation in the workforce, the proportion of people living with HIV/AIDS who are not in full or part-time employment has remained steady. Successive HIV Futures reports have also confirmed the experience of poverty to be a common and ongoing problem for people living with HIV/AIDS, with some 50% of participants reporting that they were below the poverty line. HIV Futures 4 indicated that there also continue to be relatively high rates of anxiety, depression and social isolation among people living with HIV/AIDS, though these rates may be comparable with those in other populations of people with chronic conditions.

There has been limited research into the HIV knowledge and risk behaviours of people from culturally and linguistically diverse (CALD) backgrounds. Broadly, people from CALD backgrounds have less access to health services and lower levels of health literacy. For several of the priority CALD communities this is compounded by the complexities of emerging communities with poor community infrastructure, and the social impacts of being from refugee backgrounds.

There is a need to continue monitoring the impact of rates of sharing of injecting equipment, and to improve understanding of the service access needs of people who inject drugs. There is also a need to strengthen the evidence base for programs targeting other priority populations. Accordingly, this Strategy gives priority to developing further social research with Aboriginal people, people from CALD backgrounds and HIV positive heterosexuals.

Clinical research

At a population level, advances in treatments have contributed to remarkable improvements in life span and quality of life for people living with HIV/AIDS. The majority of participants in the *Australian HIV Observational Database* (AHOD) are on three or more antiretroviral drugs, while some 60% of participants have an undetectable viral load. The median number of CD4 cells among AHOD participants is 480, which is a significant increase on median CD4 levels reported pre HAART. However, these improvements at a population level do not provide a full picture. The Australian HIV Observational Database indicates that people with HIV/AIDS have a 2% death rate per year, which is ten times that of the general population, and the St Vincent's Hospital database shows no decline in admissions of people living with HIV/AIDS requiring treatment for HIV-related cancers.

Treatment-related toxicities continue to have a significant impact, both physically and emotionally, on the health of many people living with HIV/AIDS. Visible side effects such as lipodystrophy can make people living with HIV/AIDS feel self-conscious and exposed, diminishing their self-esteem and resulting in social isolation.

There has been an increase in the prevalence of AIDS Dementia Complex (ADC) and associated neuropsychological disorders. Overall improvements in the lifespan of people living with HIV/AIDS has increased the length of time between onset of ADC and death from 12 months to 44 months, requiring a shift from a short-term service provision model to a chronic care model.

Concurrently with the advances in treatments and changes in the impact of treatments for individuals, there has been a strong focus on the potential of pharmacological prevention technologies, including vaccines, pre-exposure prophylaxis, and microbicides, and an increasing interest in the role of HIV treatment regimens which reduce the risk of transmission. These emerging prevention technologies have the potential to have a major impact on community views about the significance of HIV infection, the ongoing need for safe sex, and the demands on the HIV/AIDS funding program. They require close monitoring and ongoing consideration.

There are also rapid developments occurring within HIV-related diagnostic pathology. New, more refined, and more costly testing technologies have emerged in the areas of HIV diagnostic testing (including the use of the detuned ELISA test to distinguish between recent and established HIV infection) and therapeutic drug monitoring. These technologies have the potential to improve the understanding of epidemiological features and to improve the tailoring of care provided to individuals, but careful consideration must be given to ensuring their efficacy and justification (taking account of their cost-effectiveness) before incorporating them into standard care.

Priority populations

Priority populations have been identified based on HIV incidence, heightened vulnerability to HIV infection, health impact of HIV infection, and health equity. The priority populations for the NSW HIV/AIDS program are as follows:

- gay men and other homosexually active men
- people living with HIV/AIDS

- people from priority culturally and linguistically diverse backgrounds
- Aboriginal people
- people who inject drugs
- sex workers.

In addition to these populations, there are also populations whose HIV prevention, treatment, care and support needs warrant specific attention. These include HIV negative individuals in sero-discordant relationships (relationships with HIV positive people), people in correctional facilities, people with an intellectual disability, and people with a mental illness.

Roles and responsibilities

The effectiveness of the NSW HIV/AIDS partnership is predicated on recognition of the complementary roles of the members of the partnership. The partnership comprises the Australian Government and the NSW Government, affected communities, medical and health services, and researchers.

a NSW Government

Government has a key leadership role to play in relation to HIV/AIDS. International research suggests that political leadership is one of the determinants of the effectiveness of HIV prevention and health improvement (Barnett and Whiteside in Hickson et al, 2003).

Under the terms of the Public Health Outcomes Funding Agreement, state governments and state health departments have core leadership responsibility with regard to HIV/AIDS policy, funding and program development. However, NSW government agencies such as the Department of Education and Training, the Department of Corrective Services, the Department of Housing, and the Department for Ageing, Disability and Home Care, share responsibility for contributing to HIV/AIDS-related outcomes where those outcomes intersect with their legislated responsibilities.

The NSW Department of Health is responsible for developing collaborative mechanisms to strengthen the partnership between the HIV/AIDS program, the health system and other government agencies. At present, there are no overarching collaborative mechanisms, and liaison between agencies is undertaken on an issue-by-issue basis. During the life of this Strategy, greater efforts will be made to strengthen the ongoing strategic partnerships between the NSW Department of Health and other government agencies.

Responsibility for the establishment and maintenance of a supportive policy and legislative environment is held by the NSW Government and the NSW Parliament. Sustaining supportive environments requires an ongoing commitment to bipartisan support for sensitive but effective programs.

b Ministerial Advisory Committee

The Ministerial Advisory Committee on HIV and Sexually Transmissible Infections (CAS, reflecting its origins as the Committee on AIDS Strategy) consists of invited representatives of the NSW HIV/AIDS partnership. These representatives are appointed by the Minister for Health on the basis of their expertise in the clinical management of HIV/AIDS, policy development, and program design. Affected communities are represented through key community-based organisations. The CAS is responsible for providing independent expert advice to the Minister on emerging priorities in treatment care and support, research and health promotion, and liaison with other advisory committees and professional groups. The CAS and its Health Promotion Sub-Committee have primary responsibility for advising the Minister and monitoring the implementation of measures identified in this HIV/AIDS Strategy.

c NSW Department of Health

The NSW Department of Health has overall responsibility for establishing strategic frameworks for the NSW response to HIV/AIDS in consultation with members of the NSW HIV/AIDS partnership, and for monitoring implementation of policies aimed to prevent HIV infections and improve the health of people living with HIV/AIDS.

The Department is responsible for translating national priorities into the NSW context, and for monitoring and reporting on program activities, outputs and outcomes. The Department is responsible for implementing government policy and establishing mechanisms that support a whole-of-government approach to HIV prevention, health promotion and health improvement. This is done in a manner consistent with broader NSW Government policy, including other population health policies implemented by the Department. Within the Department, lead responsibility for the programmatic response to HIV/AIDS rests with the AIDS/Infectious Diseases Branch (AIDB).

The AIDB is responsible for the development of policy, planning mechanisms and implementation of strategies in relation to HIV and STI prevention, health promotion, community development, and treatment, care and support. This includes the oversight of the Needle and Syringe Program, and the monitoring of and commissioning of research.

In addition, the AIDB is responsible for the oversight of funding to HIV and STI related services and programs. This includes responsibility for distribution of funding to HIV-related services and programs, monitoring the performance of those services and programs, and reporting on the achievement of HIV-related outcomes. It is responsible for reviewing the AIDS Program Resource Distribution Formula, and the use of this formula to distribute funding, and for developing mechanisms which support the collection and analysis of standardised activity data in order to track service development, service utilisation and unmet needs.

Whilst operational management of the program is the role of Area Health Services and Non-Government Organisations, the AIDB is responsible for articulating minimum service levels and the development of role delineation guides for HIV/AIDS program funded services.

The NSW Department of Health has overall responsibility for supporting the members of the HIV/AIDS partnership to collaborate effectively to achieve outcomes. This includes responsibility for strengthening and supporting those forums, such as the Ministerial Advisory Committee on HIV and STIs, that have strategic oversight of the NSW response to HIV/AIDS and provide advice to the Minister for Health, as well as supporting specific planning and coordination mechanisms.

Lead responsibility for the development and maintenance of HIV case notification mechanisms and the analysis and dissemination of accurate and timely notification data rests with the Communicable Diseases Branch.

Other branches of the Department, including the Centre for Mental Health, the Centre for Aboriginal Health and the Centre for Drug and Alcohol, contribute to HIV/AIDS outcomes in specific areas.

The NSW Department of Health is responsible for discharging these roles in a manner that is effective, efficient and transparent, in accordance with best practice public sector service delivery.

d Area Health Services

Area Health Services make a critical contribution to HIV/AIDS-related outcomes by providing health promotion programs, needle and syringe services and other harm reduction initiatives and clinical services.

Area Health Services are responsible for the planning, coordination, provision of services and allocation of funding in health promotion, treatment, care and support. Each Area should meet the agreed minimum service levels in a manner that is appropriate for the needs of their local population.

Areas are responsible for ensuring that local services implement state policies in a way that is consistent with and appropriate to the needs of the local population.

Services must be located and developed in a way that maximises access for priority populations. Effective partnerships, including those with affected communities and community-based organisations, contribute to the impact and relevance of programs and services and maximise the efficient use of resources. Similarly, Areas should use their particular expertise, including their clinical expertise, to support initiatives by partner organisations wherever appropriate.

Every Area must also have in place processes for planning and reviewing programs and for accounting for the allocation and disbursement of HIV/AIDS program funds in a transparent manner. Each Area is required to collect standardised activity data to account for the service utilisation of local populations and monitor unmet needs or emerging challenges.

Each Area Health Service is required to have an HIV/AIDS program that includes both HIV health promotion and clinical service delivery, with an appropriate emphasis on each. Health promotion, with its emphasis on preventing infection and improving health outcomes for people living with HIV/AIDS, is a critical component of the HIV/AIDS program and vital in achieving the goals of this of this Strategy. Areas should structure their HIV/AIDS program funding allocation in such a way as to ensure that a dedicated health promotion program exists and that there is ongoing support for the Needle and Syringe Program.

Clinical service delivery may vary from one Area Health Service to another, depending on local prevalence of HIV/AIDS, population need and resource allocation. All services should, however, incorporate culturally appropriate and accessible sexual health services for priority populations, HIV testing, HIV diagnosis, and arrangements for the treatment, care and support for people living with HIV/AIDS. They should also work with the Australasian Society for HIV Medicine (ASHM) and local GPs to build their capacity to address HIV/AIDS in primary health care settings.

A number of Area Health Services in NSW manage state-wide services such as the Workforce Development Program (WDP), the Multicultural HIV/AIDS and Hepatitis C Service (MHAHS), the Paediatric HIV Service and the Heterosexual HIV/AIDS Service (incorporating PozHets, a group for HIV positive heterosexuals). Areas are also responsible for administering and monitoring funding to non-government organisations, including some locally funded community organisations.

The amalgamation of Area Health Services creates opportunities for revising existing models of service delivery and resource allocation within Area HIV/AIDS programs. The Chief Executive of each Area Health Service is responsible for ensuring that the Area continues to provide HIV health promotion, Needle and Syringe Program services and clinical services appropriate to the needs of their local populations.

e Community-based organisations

NSW Health funds a range of community-based organisations to undertake advocacy, represent affected communities and provide population and individual level programs and services. These include organisations such as the AIDS Council of NSW (ACON), People Living With HIV/AIDS (NSW), and the NSW Users and AIDS Association (NUAA), which are state-wide organisations with their origins in volunteer/peer-based responses to the impact of HIV/AIDS on specific communities. Funding is also provided to Aboriginal Community Controlled Health Services (ACCHS) across NSW, and the Aboriginal Health and Medical Research Council. HIV program funds are also provided to a range of other community-based organisations to undertake service delivery at a local level.

Community-based organisations play a key role in ensuring that affected communities are central to the HIV/AIDS program. In particular, they advocate on behalf of people at risk of, or living with, HIV/AIDS, to ensure that programs and services are accessible and responsive to the current and changing needs of affected communities. They provide advice on policies and programs, and advocate to ensure policies and legislation create an enabling environment. Achieving this effectively requires that each community-based organisation develops and maintains strong mechanisms for consulting with their community and informing it of interest regarding current issues, proposed policy directions, and changes to service systems, while at the same time monitoring changes in the community, including changes in the needs of community members.

Community-based organisations are also key partners in the direct delivery of programs and services for individuals and populations. This includes the provision of health promotion and peer education/support, clinical services such as individual counselling and group work, and volunteer-based care and support services.

Most community-based organisations were originally volunteer-based, but have become increasingly professionalised and now consist largely of a paid workforce and a smaller number of volunteers.

Whether as direct service providers or board members, however, volunteers continue to make a vital and valuable contribution to these organisations.

Community-based organisations are subject to similar requirements to Area Health Services with regard to collection of activity and service utilisation data, evaluation and rigorous service planning to ensure a good match between population need and service system. Both community-based and other non-government organisations are required to undertake an annual review of services and resource allocation in order to respond to changing needs. This must demonstrate a high level of transparency and be consistent with the NSW Department of Health *Operational Guidelines: Non-Government Organisation Grant Program*.

As with Area Health Services and the NSW Department of Health, community-based organisations are required to work in partnership and to support the activities of partner organisations where appropriate.

f Other non-government organisations

A range of other non-government organisations receive HIV/AIDS program funding to provide programs and services that address the needs of specific populations. This includes funding provided to non-government organisations such as FPA Health for health promotion with heterosexual women and men and people with an intellectual disability, the Leichhardt Women's Community Health Centre for the Women Partners of Bisexual Men's Project, and the Prisoners, Relationships and AIDS Project undertaken by CRC Justice Support.

The specific program of activities and services undertaken by these non-government organisations varies depending on the needs of their target population and on whether their brief is state-wide or local. The organisations are responsible for consulting with their target populations and undertaking integrated health promotion programs that prevent HIV infection.

There are also a number of professional associations that play a key role in workforce development and advocacy. These include the Australasian Society for HIV Medicine, the Australian Chapter of Sexual Health Medicine of the Royal Australasian College of Physicians, the Royal Australian College of General Practitioners, the Australian College for Rural and Remote Medicine (ACRRM), the Australian and New Zealand Association of Nurses in AIDS Care and Social Workers in AIDS.

There are other non-government organisations, such as ethnic-specific organisations, unions, women's organisations and churches, that do not receive HIV/AIDS program funding, but which contribute to creating an environment that supports HIV-related outcomes. This work is undertaken at the discretion of members of those organisations and is a valuable demonstration of community support for HIV prevention, and for care for those living with HIV/AIDS.

g Australian Government

The Australian Government is responsible for providing leadership in the response to HIV/AIDS and for facilitating the implementation of the fifth *National HIV/AIDS Strategy* across jurisdictions. It does this in consultation and collaboration with the other members of the HIV/AIDS partnership. The Australian Government and the Australian Government Department of Health and Ageing are responsible for coordinating program implementation across the nation, and for creating linkages between the HIV/AIDS strategies and other related strategies as part of a whole-of-government approach to HIV prevention, treatment, care and support.

The Australian Government is responsible for allocating funds to HIV prevention, treatment, care and support, and research. This funding includes monies provided through the HIV/AIDS Research Program, the Australian Health Care Agreement and the Public Health Outcomes Funding Agreement, and funding for monitoring the performance of funded jurisdictions and agencies. The Australian Government also directly funds national peak community and non-government organisations such as the Australian Federation of AIDS Organisations, the Scarlet Alliance (an Australian sex workers' organisation), the National Association of People Living with HIV/AIDS (NAPWA), the Australian Injecting and Illicit Drug Users League and the Australasian Society for HIV Medicine (ASHM).

The Australian Government is also responsible for promoting HIV-related outcomes through mainstream health programs such as the highly specialised drugs program, and through broader welfare policies such as employment and income support policies. This includes responsibility for addressing national systemic barriers to achieving HIV/AIDS outcomes, such as the Health Insurance Commission 'three test rule', which currently limits access to STI screening among priority populations.

Australia's contribution to HIV prevention, treatment, care and support internationally is also the responsibility of the Australian Government.

h) Local government

Local government has a unique contribution to make to the creation and maintenance of physical environments and planning infrastructures that improve the health of local populations. Local government is responsible for key public health activities, including the processing of development applications relating to the sex industry, and for the regulation of sex on premises venues. It is also responsible for maintaining some sites that are used as beats, such as parks and public toilets. Partnerships with local government are thus important for site-based health promotion activities.

Local government is also a key partner in addressing community concern related to inappropriate disposal of waste, including disposed injecting equipment. Given its duty of care to its local community, local government is encouraged to work collaboratively with other members of the HIV/AIDS partnership to support HIV prevention and improve the health and circumstances of people living with HIV/AIDS.

A number of recent initiatives have sought to strengthen this partnership, including the successful Community Sharps Disposals project and the Beats Interagency. There is potential to further expand the role of local government, for instance through the inclusion of HIV within social planning frameworks and through local activities to address discrimination against people living with HIV/AIDS.

Funding

The NSW Government and the Australian Government share responsibility for funding the response to HIV/AIDS, STIs and hepatitis C in NSW. This funding is provided in accordance with the priorities and directions established by the National and NSW HIV/AIDS, STI and Hepatitis C Strategies.

During 2004/2005, the NSW Department of Health allocated funding of approximately \$84.2 million for HIV/AIDS, STI and hepatitis C prevention programs and for HIV/AIDS and STI clinical services. In recognition of the very high projected costs for future hepatitis C clinical services, the Department makes available funding for these services through its general allocation of funds to Area Health Services.

Australian Government

Funding for HIV/AIDS, STI and hepatitis C programs is derived from a number of sources. Program funding provided to NSW by the Australian Government includes:

- funding through the Australian Health Care Agreements for the provision of free hospital services
- funding provided under the Public Health Outcome Funding Agreements (PHOFAs) from which an annual quantum of approximately \$12 million³ is made available for HIV/AIDS and related programs
- an annual grant of approximately \$1.9 million for the implementation of the *National Indigenous Australians' Sexual Health and Blood Borne Viruses Strategy*
- funding of \$2.6 million over four years to 2006/2007 for the Hepatitis C Education and Prevention Initiative
- funding of \$10.7 million over four years to 2006/2007 for needle syringe program access, education, counselling and referral into treatment.

Additionally, NSW benefits from Australian Government expenditure on national HIV/AIDS, STI and hepatitis C initiatives and from the provision of HIV/AIDS and hepatitis C treatment through the Pharmaceutical Benefits Scheme at a cost nationally of approximately \$114 million during 2003/2004.

In 2005, the Australian Government marked the launch of the National HIV/AIDS, STI and Hepatitis C Strategies by announcing new funding for:

- Medicare Benefits Schedule Listing of HIV testing
- a commitment to the continuation of funding provided to the National Centres in HIV Research until 2008
- increased awareness, improved surveillance and a pilot testing program for chlamydia
- improved surveillance for hepatitis C.

NSW Government

During 2005/2006, the NSW Government will invest \$10.9 billion in the provision of health care to the people of NSW. The NSW Department of Health utilises a Resource Distribution Formula to guide the allocation of funds to Area Health Services in order to achieve equity in funding across populations in accordance with population-based health needs. Incorporated within this funding formula are components reflecting acute inpatient, outpatient and other health service activity, including where delivered to patients with HIV/AIDS, STIs and hepatitis C.

³ Funding amounts in this section are based on the 2004/2005 levels unless otherwise specified.

Additionally, the NSW Government makes available annual funding of approximately \$84.2 million for the implementation of the NSW HIV/AIDS, STI and Hepatitis C Strategies. As noted above, this funding excludes the cost of hepatitis C clinical services.

Although an annual cost escalation contribution is applied to the AIDS Program, the budget for the NSW AIDS Program has stabilised in real terms. It is not anticipated that significant new program funding will be made available to the AIDS Program during the course of this Strategy.

This stabilisation occurs in a context of significantly increased service demand. The dramatic reductions in AIDS deaths, and the corresponding increase in HIV prevalence, is amplifying the demand for HIV clinical and support services. Similarly, rates of many notifiable STIs continue to increase and hepatitis C incidence and prevalence remains at an extremely high level.

Accordingly, it is necessary that all AIDS Program funded services operate with the expectation that new AIDS Program funds will not be forthcoming. This requires that service planning be undertaken rigorously with a view to generating cost efficiencies and discontinuing services which are assessed to be of lower priority. Service planning should include a close consideration of the purpose for which AIDS Program funds are provided. Savings generated through this approach will be able to be re-deployed to meet the demand for critical services and to fund innovative programs.

Proposals by Area Health Services and non-government organisations to significantly re-orient or discontinue services will require the approval of the Department through annual Area Health Service Funding Plan processes and through the re-negotiation of non-government organisation Funding and Performance Agreements. The Department will be guided by the priorities and directions established by the NSW HIV/AIDS, STI and Hepatitis C Strategies in reviewing the proposals.

In addition to AIDS Program funds and AIDS Non-Government Organisation funds (see below), the Department receives non-recurrent funding from the Australian Government for the implementation of specific initiatives. During 2004/2005 the Department received funding for three initiatives, being the implementation of the *National Indigenous Australians' Sexual Health and Blood Borne Viruses Strategy*, the Hepatitis C Education and Prevention Initiative and the Illicit Drug Diversion Initiative – Supporting Measures for Needle Syringe Programs. Funding from these programs is allocated in accordance with Deeds of Agreement between the Department and the Australian Government.

Area Health Services

As with Area Health Service funding generally, the distribution of funding to support the implementation of the NSW HIV/AIDS, STI and Hepatitis C Strategies within Area Health Services is determined using a purpose-specific formula. This AIDS Program Resource Distribution Formula (AIDS Program RDF) is used to calculate the equitable distribution of funding based on data for HIV/AIDS and STI prevention and clinical care and Needle Syringe Program / hepatitis C prevention programs.

As the overall funding to Area Health Service budgets incorporates a recognition of HIV/AIDS, STI and hepatitis C activity, AIDS Program funds are provided to strengthen capacity and are considered a contribution to the costs of HIV/AIDS, STI and hepatitis C service delivery.

A major review of the AIDS Program RDF was undertaken during 2004. As an outcome of the review, the Department is taking steps to adjust some maldistribution in the allocation of AIDS Program funds. This adjustment is proposed to occur over a four year period commencing 2005/2006.

During the 2004/2005 financial year, some \$63.2 million in AIDS Program funding was distributed to the eight Area Health Services in NSW and to Justice Health. This included \$5.6 million in purpose-specific tied funding for Area-administered state-wide services, \$2 million for confirmatory HIV testing and other complex pathology services provided by public reference laboratories, and a dedicated allocation of \$1.4 million for hepatitis C services and programs.

AIDS Program funds are dedicated funds provided solely to support the implementation of the NSW HIV/AIDS, STI and Hepatitis C Strategies. AIDS Program funding to Area Health Services includes discrete allocations for HIV/AIDS and STI prevention and clinical care and Needle Syringe Program / hepatitis C prevention programs. From the total allocation of \$58.4 million, the AIDS Program RDF calculates at state-wide level the distribution of funding of \$36 million for HIV/AIDS health promotion and clinical care, \$12 million for the prevention and clinical management of STIs and \$10 million for the Needle Syringe Program / hepatitis C prevention program.

At Area Health Service level, the relative weight of these three funding components varies based on local circumstances. Area Health Services have been advised of the relative local values for these components.

As a condition of AIDS Program funding, Area Health Services are required to submit to the Department an annual Funding Plan that specifies the proposed internal distribution of AIDS Program funds for the forthcoming financial year. Funding Plans are reviewed and assessed against Departmental criteria and are subject to formal Departmental approval. The *Guidelines for Completing Area Health Service AIDS and Related Program Funding Plans* provide instructions to Area Health Services on the completion of the Funding Plans and detail funding conditions for the AIDS Program.

Non-Government Organisations

During 2004/2005, funding of \$15.8 million was disbursed to HIV/AIDS, STI and hepatitis C community based and other non-government organisations (NGOs). This includes organisations with state-wide responsibilities as well as organisations with a local reach. Responsibility for the funding and performance management of NGOs is largely devolved to Area Health Services which administer this program on behalf of the Department.

The NSW Department of Health *Operational Guidelines: Non-Government Organisations Grant Program* provide the policy framework for the administration of funding to NGOs within the health system.

Each NGO is funded on the basis of a formal Grant Application which specifies the objectives, activities, performance indicators and budget for the grant. Grants to NGOs are approved by the NSW Minister for Health. If a grant is approved, the information provided in the Grant Application forms the core of a Funding and Performance Agreement which is then legally executed. It is a requirement of this contractual arrangement that NGOs provide an annual financial acquittal and activity statement for each grant.

Monitoring and evaluation

Monitoring and evaluation are required to determine progress toward identified targets and objectives, and to account to government and stakeholders on the effectiveness and efficiency of the program in achieving health outcomes and administering government funding.

Overall responsibility for monitoring the implementation of this Strategy rests with the Ministerial Advisory Committee on HIV and Sexually Transmissible Infections and its Health Promotion Sub-Committee and, under their guidance, the NSW Department of Health. Evaluation of the Strategy and progress toward the six targets of this Strategy will be undertaken at a state-wide level.

Each funded service is responsible for translating state-wide priorities into strategic and operational plans. Each service is required to regularly evaluate the effectiveness of their programs and services and to review the alignment between local priorities and state-wide priorities.

A mid point review of the Strategy will be undertaken at the beginning of the 2008. The review will encompass process and impact evaluation, and will cover the extent to which strategies have been implemented, the quality of implementation initiatives, and the extent to which objectives have been met. The findings of the mid point review will be used to refine priorities for the remaining two years of the Strategy.

In Australia, health promotion has been extremely successful in preventing new HIV infections and in improving the health and quality of life of people living with HIV/AIDS. Health promotion is a core aspect of the NSW response to HIV/AIDS, and makes a vital contribution to improving the health of the people of NSW and minimising the burden of illness for individuals and communities. As such, the health and economic benefits of health promotion programs are significantly greater than the costs (Applied Economics, 2003).

There is a well-established HIV/AIDS health promotion infrastructure in NSW. Health promotion programs are undertaken by Area Health Services, community-based organisations and other non-government organisations. In addition, GPs, other clinical and allied health workers, other government agencies such as the NSW Department of Housing and the Department of Education and Training, and other agencies concerned with advocacy and community development also contribute to HIV health promotion outcomes. Maintaining these mechanisms requires ongoing investment in the HIV health promotion workforce, and ensuring access to data and research that supports program development and evaluation.

In NSW, HIV/AIDS health promotion programs are based on the following principles:

- 1 All individuals have the right to information, education and skill development that enables them to protect themselves and others from HIV infection and to avoid being involved in HIV transmission. Even when shared HIV prevention, treatment and care needs exist, the diversity of the target audience should be considered – particularly in relation to cultural and linguistic diversity, sexuality, and learning needs – and catered for.
- 2 Health promotion is most effective when it is developed in collaboration with members of affected communities. This collaboration may take a variety of forms, including direct delivery of education and community development initiatives, advocacy, or participation in project or agency advisory structures.
- 3 Programs and services should be developed in a way that is relevant and appropriate to the needs and experience of the target audience. HIV prevention has limited salience as a stand alone health issue for many individuals and populations, and consideration should be given to integrating HIV prevention messages into broader sexual health, health, and quality of life programs and messages where that is more meaningful for the target audience. State-wide programs should be responsive to the needs of populations in inner and suburban Sydney, and regional and rural NSW.
- 4 HIV health promotion materials – including health education and social marketing resources – should be designed to maximise audience reach and impact. Images and language should be culturally appropriate to the target audience, and can include sexually explicit materials where this is necessary to convey educational messages. Such tailoring enhances the ability of social marketing and health education to communicate with the target audience.
- 5 HIV programs should address broader social determinants of health where there is a link with vulnerability to HIV infection or health outcomes for people living with HIV/AIDS. There is a well-documented relationship between health outcomes and broader social determinants such as poverty,

education and access to services. HIV services should contribute to building cultures, legislation and policies that improve the control that individuals and communities have over their own health. Initiatives that address the broader social determinants of health should be undertaken in partnership with other agencies and should make a contribution to the targets of this Strategy.

The HIV/AIDS epidemic is at a crossroad in NSW. There is a critical role for effective and robust health promotion programs that ensure that achievements made to date are safeguarded, and respond to emerging challenges.

1 HIV prevention among gay men

In 2004, 75 per cent of those HIV notifications for which an exposure category was recorded were among men who have sex with men. Most of these were among gay identified, gay community attached men. Inner city gay men continue the experience the highest burden of HIV/AIDS and as such are a high priority for HIV health promotion. In addition to this, serious consideration must be given to the HIV prevention needs of those populations of gay men, and men who have sex with men, who live in suburban, regional or rural areas.

Although there is no conclusive data on the size and distribution of the population of gay men or non-gay identified men who have sex with men in NSW, the Australian Study of Health and Relationships (Smith et al, 2003) found that 1.6 per cent of respondents identified as gay, with higher concentrations of gay men in the inner suburbs of Sydney.

Consistent condom use is the most effective strategy for preventing HIV transmission or acquisition, and is particularly important with casual partners. Social research indicates that the majority of gay men consistently use condoms with casual partners; however, rates of condom use among gay men in Sydney peaked in the mid 1990s, and declined from 1996 to 2001. There are indications that unprotected anal intercourse with casual partners peaked in 2001 and has declined since then.

Changes in individual risk practices and community participation in the response to HIV/AIDS have occurred in parallel with the arrival of highly active antiretroviral therapy (HAART). At a population level, the arrival of HAART improved health outcomes for people living with HIV/AIDS and reduced the transmissibility of HIV by increasing the proportion of people living with HIV/AIDS with an undetectable viral load. For many HIV negative

gay men, HIV/AIDS is now viewed as a chronic but manageable illness, which may in turn contribute to a lesser priority being placed on condom use. Research suggests that rates of unprotected anal intercourse are higher among that relatively small proportion of gay men who do not consider HIV to be a serious health threat.

Although HIV occupies a different place in the gay community compared to previous decades, HIV negative gay men are not complacent about HIV. Gay men continue to undertake regular HIV testing and report high levels of engagement with primary care in relation to HIV and sexual health care. Moreover, the community response to the recent increase in HIV notifications in NSW suggests that many gay men have replaced ongoing participation in community responses to HIV/AIDS with responsiveness and engagement around issues that are personally relevant to them. This may reflect HIV prevention having shifted from being a collective concern to an individual concern. For a proportion of gay men, HIV risk may now be addressed primarily through regular testing and personal risk reduction strategies rather than through participation in a community culture of consistent condom use.

The PHAEDRA study (NCHECR, 2004) interviewed gay men with newly acquired HIV infection and found that the majority of seroconversions were attributed to unprotected anal intercourse with casual partners of unknown serostatus. The majority of highest risk events occurred at the home of either the individual who sero-converted or the home of their sexual partner. Alcohol continues to be the drug most frequently consumed at the time of a risk event. Those who sero-converted were more likely to have had higher numbers of sexual partners, more likely to report adventurous sex, and more likely to report the use of crystal methamphetamine or Viagra, or to have injected drugs, compared to gay men surveyed in the Sydney Gay Community Periodic Survey.

There is a complex range of factors that influence an individual's decision to use a condom with casual or regular partners, with condom use being potentially influenced by circumstances, environment or partner. Individual behaviour can also change as a result of effective health promotion programs, such as those that create environments that support safe sex, or improve an individual's understanding of the risk of HIV infection. This was best demonstrated by the rapid uptake of condoms among gay men in the early days of the epidemic in the developed world.

The AIDS Council of NSW (ACON), Area Health Services (including health promotion and sexual health services), PLWH/A (NSW), the Multicultural HIV/AIDS and Hepatitis C Service and the NSW Users and AIDS Association (NUAA) undertake HIV prevention programs targeting gay men. Gay Men's HIV Prevention Interagencies undertake program coordination in the inner city and western Sydney.

There is potential for HIV infections to increase again among gay men in Sydney. This can be prevented by effective health promotion interventions that are informed by and speak to the lived experience of gay men and other men who have sex with men. The interventions should include programs and activities that address the different experiences and roles of HIV negative and HIV positive gay men in HIV prevention. Programs should also take into account the diversity of negative and positive men, including the differences between the HIV health promotion needs of men living in the inner city and those of men living in suburban, regional and rural areas; cultural and linguistic diversity; diversity in education levels and learning needs; age; community engagement; and knowledge and understanding of effective HIV prevention strategies.

a Community engagement among inner city gay men

Working in partnership with affected communities underpins the NSW response to HIV/AIDS. Early research conducted by the NCHSR indicated that men who were gay community attached were less likely to practice unprotected anal intercourse and had better access to health services than gay men reporting less community attachment or participation.

To date, community participation strategies have included direct consultation with gay men, individual consumer involvement in program/service development and delivery, and the representation and advocacy work undertaken by community-based organisations such as ACON, PLWH/A NSW and the Bobby Goldsmith Foundation (BGF). Community engagement activities have included site-based outreach, and community and cultural level interventions that emphasise community norms regarding shared responsibility for HIV prevention and raise awareness of the experience of people living with HIV/AIDS.

There have been significant shifts in the nature of gay and HIV positive communities since the late 1990s, including the demise of many gay community social venues and community organisations. Social research indicates that individuals remain strongly gay identified but there has been a trend away from participation

in formal gay community infrastructure, resulting in a decline in volunteering and reduced participation in gay community organisations. This is consistent with an overall decline in participation in community organisations and community infrastructure in many parts of Australian society.

This decline in gay community infrastructure presents a challenge for the HIV/AIDS health promotion program, which has traditionally relied on gay community organisations and venues as sites for health education, to source volunteers, and to conduct cultural interventions that support safe sex and acknowledge people living with HIV/AIDS. Community volunteers have played a critical role in peer education, advocacy and community mobilisation.

Effective health promotion requires a balance between individual and cultural level interventions. There is a need to establish innovative cultural interventions that sustain safe sex as the norm. These require careful planning as using traditional community development sites may reach fewer men than previously and in particular may fail to reach those who are at greatest risk of HIV acquisition or transmission.

While participation in traditional community infrastructure has declined, the internet has contributed to new forms of gay sociability and sexuality that are changing the social geography of the gay community in currently unknown ways. This also creates new potential for health promotion initiatives.

Research indicates that HIV negative and untested gay men significantly underestimate the number of people living with HIV/AIDS in the community, and that their attitude towards people living with HIV/AIDS is hostile. This is linked to the declining visibility of AIDS, and has significant implications for quality of life for people living with HIV/AIDS. There is a need for increased awareness of the place and participation of people living with HIV/AIDS in the gay community, and to address the discriminatory attitudes displayed by many HIV negative gay men towards gay men living with HIV/AIDS. This could include specific initiatives that raise the visibility of gay men diagnosed with HIV/AIDS post HAART and address community misconceptions about the current experience of living with HIV/AIDS. This work should be done in close consultation with gay men and community-based organisations to ensure that it is acceptable and effective.

b Addressing sexually transmissible infections

Addressing sexually transmissible infections among gay men is now understood to be critical to preventing HIV infections and improving the sexual health of gay men. HIV and sexually transmissible infections (STIs) have a synergistic relationship, with the presence of an STI potentially increasing the risk of HIV transmission or acquisition by up to ten times. STIs can also be a source of significant morbidity in their own right, and can have more serious health implications for people living with HIV/AIDS. At present, the *STI Testing in Men Who Have Sex With Men Guidelines* (STIGMA, 2005) indicate that men who have sex with men should be screened for STIs at least annually, with more frequent testing recommended for individuals at higher risk.

Prior to the arrival of HIV, there were significant epidemics of STIs among Sydney gay men. These epidemics were largely eradicated by the shift in sexual practices among gay men in response to HIV. However, the incremental increases in unprotected sex that have occurred since the mid 1990s have also been accompanied by a series of outbreaks of STIs among Sydney gay men. This has included outbreaks of hepatitis A, shigella and gonorrhoea, with rates of gonorrhoea, syphilis and chlamydia of particular concern at this time. Although data is not collected on viral STIs, there is growing evidence that herpes and anal human papilloma virus are also implicated in HIV transmission, and may require additional attention during the life of this Strategy.

Research undertaken by the National Centre in HIV Social Research suggests that gay men do not have a strong knowledge base regarding specific STIs, their transmission and prevention and health implications (Holt et al, 2004). Nearly 60 per cent of participants in the 2004 Sydney Gay Community Periodic Survey (Hull et al, 2005) reported having had a blood test for an STI other than HIV in the previous year, while about a third had had anal or penile swabs, 42 per cent had had a throat swab and almost half had had their urine tested. The Syphilis Study (Holt et al, 2004) found that 25 per cent of participants included syphilis testing within a regular STI testing pattern, but the majority relied on the presence of symptoms to initiate testing. Reducing the duration of infectiousness of STIs is reliant upon prompt diagnosis and treatment of STIs, indicating the need to increase the regularity of STI screening among those men most at risk, and education regarding recognising and responding to the often subtle symptoms of STIs. This study also recommended that education continue with gay men with increased numbers of sex partners who participate in 'adventurous' sex scenes and who use sex-on-premises venues.

A reduction in STI incidence and prevalence will require increasing gay men's understanding of STIs, decreasing rates of unprotected sex, increasing access to regular screening, and the provision of high quality clinical services.

Responsibility for programs and services addressing STI prevention, diagnosis and management and surveillance is shared between sexual health services, health promotion, community organisations, public health units, and general practitioners. Health promotion and clinical services have complementary roles in achieving a reduction in STIs among gay men. General practitioners and sexual health services are key partners in promoting access to clinical services, increasing individuals' understanding of transmission dynamics, recognising symptoms, and ensuring appropriate completion of treatment. Health promotion is required to build awareness of STIs, their symptoms, transmission and prevention, appropriate testing patterns, and to encourage gay men to discuss STIs with their doctor/nurse. Advocacy is also required to address existing systemic barriers to regular screening, including the amendment of the Health Insurance Commission coning regulations that limit the number of pathology tests that can be charged to Medicare (commonly referred to as the 'three test rule').

c Settings-based health promotion

Settings-based health promotion is a key part of the NSW HIV prevention program. In particular, health promotion and outreach has occurred through those settings gay men use to socialise and meet sexual partners, including gay community venues such as bars, clubs and cafes, sex-on-premises venues, private and commercial parties, beats and the Internet. While these sites are important settings for meeting potential sexual partners, and thus for health promotion, the majority of sero-converters report that their highest risk episodes occurred at their own home or the home of their sexual partner (Jin et al, 2004).

There has been a strong emphasis on using sites to distribute condoms and lubricant, display campaign materials and distribute health education resources. Work with sex-on-premises venues has included work with venue owners and managers and the establishment of a Code of Practice for sex-on-premises venues. More recently, an interagency has been established to coordinate health promotion activities undertaken at beats and work systemically with police and local government. These are important strategies and should be retained.

However, there is potential for more integrated work to be undertaken at those venues where gay men meet their sexual partners and have sex, and for greater targeting of emerging or growing environments, such as the Internet and private parties. Internet-based health promotion should include convenience advertising on sites targeting gay men, the direct provision of health information through dedicated websites, and the exploration of newer approaches, such as the use of chat rooms to engage gay men and address HIV and STI prevention. A settings-based approach to HIV health promotion also involves addressing those other factors that may influence an individual's risk taking in relation to sex, in particular, use of alcohol and other drugs.

d Issues associated with alcohol and other drug use

Alcohol and other drug use forms part of the social context in which many Australians, including gay men, socialise, meet new partners and have sex. There is divergent international evidence on the relationship between alcohol and other drug use and unprotected sex. Rather than a direct causal relationship, alcohol and other drug use may (intentionally or unintentionally) contribute to a general lowering of inhibitions and a reduced sense of vulnerability. These in turn may contribute to unprotected sex. Alternatively, recreational drugs, including newly popular drugs such as crystal, and treatments prescribed for the management of erectile dysfunction may be a part of a culture of sexual risk-taking.

Research suggests that vulnerability to HIV infection may be greatest among those gay men who have regular alcohol or drug binges, particularly where this is associated with higher rates of unprotected sex or high numbers of sexual partners. There are strong indications that injecting drug use is predictive of HIV and/or syphilis acquisition among gay men, with the PHAEDRA study (Jin et al, 2004) showing high rates of injecting drug use in the six months immediately preceding HIV sero-conversion. It should be noted that men in this study largely attributed their sero-conversion to unprotected anal intercourse, rather than to transmission via sharing of injecting equipment.

Responding to issues associated with alcohol and other drug use requires a multi-strategic approach and should include population level activities, health education to individuals, settings-based interventions that support health, and improved access to support and treatment facilities. This requires strengthened partnerships between HIV programs and alcohol and other drug programs. In addition, there is a need for research that will inform education addressing drug use in gay community contexts.

e HIV prevention among gay and other homosexually active men in suburban, regional and rural areas

Within suburban, regional and rural areas, gay men and other homosexually active men are the population at highest risk of HIV infection. In 2004, 18% of HIV notifications were attributed to male-to-male sexual activity among residents of suburban, regional or rural NSW. This includes both gay identified and non-gay identified men. As NSW notification data is collected based on postcode of residence it is not possible to determine what proportion of these infections occurred in the individual's area of residence and what proportion may have occurred in other locations, including the inner city.

Since 2001, sexual health services in regional and rural areas have noted an increase in diagnoses of HIV and AIDS among non-gay identified men who have sex with men. Of particular concern has been the trend to late presentation and late diagnosis among this population, which has rendered individuals vulnerable to poorer long-term health outcomes and has also posed significant risk of HIV transmission to their partners.

It is difficult to quantify the proportion of non-gay identified homosexually active men and their relative risk of HIV infection. The Australian Study of Health and Relationships found that approximately two per cent of men surveyed identified as homosexual, while a further nine per cent reported some experience of having been attracted to or sexually active with another man in their lifetime. Nonetheless, just two per cent of men had been homosexually active in the previous twelve months. The researchers concluded that risk of HIV and STIs was greatest among gay and bisexually identified men, but that there was a need for ongoing attention to the risks experienced by non-gay identified men who have sex with men.

There is limited social and behavioural research regarding the sexual practices, HIV and STI awareness and health promotion needs of suburban, regional and rural gay men and non-gay identified men who have sex with men. Research conducted by the National Centre in HIV Social Research found that, at a population level, non-gay identified men who have sex with men are less likely to have sex with an HIV positive man, and are also less likely to have anal intercourse than gay identified men. As a consequence, they are less likely to be at risk of contracting HIV.

Non-gay identified men who have sex with men are believed to use many of the same venues to seek sexual partners as gay identified men, including the Internet, beats and sex-on-premises venues.

While gay men are more likely to meet sexual partners in gay social venues (for example, gay bars), non-gay identified men who have sex with men often report meeting partners in heterosexual social venues.

There are a range of health promotion initiatives in place in suburban, regional and rural areas targeting gay and non-gay identified men who have sex with men. These include support for gay and lesbian community groups, distribution of community newspapers and HIV prevention resources, and promotion of clinical services. There has also been some ongoing investment in site-based health promotion, in particular at sex-on-premises venues and beats.

There are different challenges facing HIV health promotion programs in working with gay men in suburban, regional and rural areas. Overall, these areas may have a limited or non-existent gay community infrastructure, which reduces opportunities for site-based health promotion. There may also be differences in the nature of gay community attachment in suburban, regional and rural areas. Concern about homophobia, or a desire for privacy and anonymity, may reduce participation in community organisations and access to health services among this population of gay men. The smaller numbers of gay identified men may make community building more difficult due to lack of critical mass.

There are additional challenges in identifying and meeting the HIV health promotion needs of non-gay identified men who have sex with men. Research suggests that non-gay identified men who have sex with men are unlike gay men in ways that affect both the issues that require attention and the strategies required for working successfully with them. Non-gay identified men may not recognise themselves as members of a population of men who have sex with men, or recognise themselves as having any commonality with other men who have sex with men. This reduces the potential impact of community education or development activities and suggests the importance of individualised approaches, possibly through clinical services.

The Gay and Married Men's Association (GAMMA NSW) provides counselling and support to homosexually active men who seek assistance. The Women Partners of Bisexual Men's Project (WPBMP) is well placed to support the female partners of these men with health and HIV/STI prevention information, and potentially act as a conduit to providing health information to men who have sex with men. Both GAMMA and WPBMP provide telephone support and assistance for education and clinical staff working with these populations.

Responding to the HIV health promotion needs of suburban, regional and rural gay men and non-gay identified men who have sex with men requires first building an improved understanding of the awareness, behaviours and service access issues for these populations. This can be achieved through social research, local needs assessments, and efforts to engage the target audience as informants and partners in program development. It is anticipated that there will be significant commonalities between the needs of men in rural and regional areas, indicating the potential for greater cross-Area Health Service and cross-agency collaboration on developing social marketing and health education resources which speak to the experience and needs of this population. The HIV Rural Forum provides an important opportunity for peer support and cross-Area program development among workers targeting these populations.

f Preventing new infections among gay men from culturally and linguistically diverse backgrounds

Some 11 per cent of all gay male HIV notifications in NSW for the period 2000-2003 were among men who spoke a language other than English at home. Notification data suggests there is a relationship between countries where HIV/AIDS is highly prevalent and culturally and linguistically diverse (CALD) gay men. This relationship may affect men originally from high prevalence countries, men who travel to high prevalence countries, and men whose partners are from high prevalence countries.

Research conducted with Asian gay men has provided insight into some particular HIV health promotion needs of CALD gay men. The two *Asian Gay Community Periodic Surveys* have shown that Asian gay men differ from Anglo-Celtic gay men in relation to patterns of HIV testing, disclosing their sexuality to their doctor, connectedness to the HIV epidemic, and experiences of racism and homophobia.

Addressing rates of HIV infection among gay men from CALD backgrounds requires dedicated health promotion targeting these populations; initiatives addressing sexuality and knowledge of HIV/AIDS in their communities of origin; and the active inclusion of gay men from CALD backgrounds in HIV health promotion programs and social marketing targeting gay men.

2 Health promotion for people living with HIV/AIDS

The improvements in health and longevity associated with HAART have changed the lived experience of HIV/AIDS and the health promotion needs of people living with HIV/AIDS. Effective health promotion programs can increase individuals' health literacy and skills, improve access to appropriate health and related services, reduce social isolation and build cultures of care.

For the majority of people living with HIV/AIDS, HIV is an important but not defining aspect of their life. Since the introduction of HAART, the HIV experience has become more diverse and more individualised, with health promotion needs now clustered around identity (including sexuality, gender and cultural and linguistic identity), geographic and social location, and shared needs. Individuals may also have specific needs related to time since diagnosis, experiences of poverty and social isolation, and participation in the workforce.

Improving health outcomes for people with HIV/AIDS requires attention to the broader determinants of health, such as housing, employment, and income support. Some 27 per cent of respondents in the HIV Futures 4 Study reported living below the poverty line, while 56% reported not being in full or part-time employment. These figures are largely unchanged since the commencement of the HIV Futures research program in 1998 and have significant implications for quality of life, access to services and community participation.

Responding to the diversity of needs will require effective collaboration between community-based organisations, state-wide services such as the Multicultural HIV/AIDS and Hepatitis C Service, and Area Health Services.

a Information about living with HIV/AIDS

The active participation of people living with HIV/AIDS in seeking, interpreting, disseminating and debating information about HIV/AIDS, treatments and improving health, has been one of the most distinctive characteristics of the response to HIV/AIDS in Australia. However, successive HIV Futures studies have shown that some people living with HIV/AIDS feel that they do not have sufficient information about living with HIV/AIDS to make informed decisions about certain aspects of their life or to make plans for the future.

HIV Futures 4 found that the majority of people living with HIV/AIDS rely on doctors (including HIV GPs/s100 prescribers, HIV specialists and sexual health services), the gay and HIV positive press, publications from HIV/AIDS groups and HIV positive friends for information about treatments, HIV management and living with HIV/AIDS. Areas in which HIV Futures 4 participants indicated they lacked information included: the management of side effects, interactions between HAART and other drugs, employment and financial planning, treatment breaks and changing HAART.

Sub-populations of people living with HIV/AIDS may lack access to information available to the broader HIV positive population, or require more tailored information. For instance, it is widely reported that no specific information is available for people diagnosed post HAART, and that there are significant gaps in information for people from culturally and linguistically diverse backgrounds.

There is significant potential for issues-based and sub-population based health promotion initiatives, including social marketing, workshops and work with individuals, to provide information and facilitate community connections between people living with HIV/AIDS.

b Supporting self care

The current complexity of HIV-related health issues requires that people living with HIV/AIDS be given support to develop those specific skills which they need to care for their own health and maintain wellness. This includes skills and information in addressing health issues ranging from regular access to health monitoring to addressing oral health and accessing dental services.

For those people living with HIV/AIDS who are taking HAART, managing HIV/AIDS and their health requires that they maintain adherence to HAART regimens and manage the side effects and potential toxicities associated with HAART. Individuals living with HIV/AIDS manage HAART in a variety of ways, including the use of complementary therapies, structured treatment interruptions, and treatment breaks to reduce or minimise side effects or long-term toxicities. These decisions may be made in consultation with doctors, other health care providers, or peer networks.

Research indicates that addressing health issues such as smoking cessation, diet and nutrition, exercise and mental health may have a greater impact on health outcomes for people living with HIV/AIDS than for the general population. Research suggests that the impact of smoking may be greater on people living with HIV/AIDS than on HIV negative individuals, and supporting

smoking reduction/cessation may therefore be particularly important for them. Likewise, adjustments in diet may be necessary in order to improve treatment bioavailability, manage cholesterol, maintain a stable weight and manage side effects associated with HAART. Improving the general health of people living with HIV/AIDS may improve their physical wellbeing, in addition to improving their self-esteem and sense of personal capacity.

c Peer support

Contact with other people living with HIV/AIDS and HIV/AIDS organisations can provide people living with HIV/AIDS with information and support regarding treatments, managing HIV/AIDS and living with HIV/AIDS and can be an important counterpoint to social isolation. The vast majority of people living with HIV/AIDS personally know other people with HIV/AIDS, and some 72% of respondents in HIV Futures 4 had some contact with HIV/AIDS organisations.

Improvements in treatments and prognosis have contributed to changes in community engagement and engagement with community organisations among people living with HIV/AIDS. Overall, there has been a tendency toward more episodic engagement with community-based organisations, related to specific points such as diagnosis and early coping with diagnosis, engagement around illness, and engagement around instances of discriminatory or other unsatisfactory service provision from health and human services.

Traditional models of health promotion initiatives may be less relevant or appropriate for specific sub-populations. For instance, the potential for community development activities with people living with HIV/AIDS may be more limited in suburban, regional and rural areas owing to lack of community infrastructure, smaller populations of people living with HIV/AIDS and additional concerns about anonymity.

Maintaining responsiveness to current and emerging needs among people living with HIV/AIDS would be enhanced by mapping those points where people living with HIV/AIDS might most benefit from peer support or education and developing programs that respond to those. Organisations undertaking health promotion with people living with HIV/AIDS should also recognise and respond to differing support needs of this group in terms of gender, sexuality, Aboriginality and cultural and linguistic backgrounds.

d Sexual health

Sexuality, relationships, sexual health and HIV prevention are key concerns for people living with HIV/AIDS. People living with HIV/AIDS share a universal human right to fulfilling and enjoyable sexual and personal relationships, and entitlement to a full and active sex life.

An HIV diagnosis can place a significant burden on the ability to realise these goals, with nearly 65 per cent of respondents in HIV Futures 4 agreeing with the statement "HIV has had a negative effect on my sexual pleasure" (Grierson et al, 2004). In particular, sexuality and relationships may be affected by fear of transmission to partners, concern about rejection, and experiences of stigma.

People living with HIV/AIDS have specific needs in relation to STI prevention and management. There is evidence that STIs may progress more rapidly and be more difficult to treat in people living with HIV/AIDS. In addition to STIs, there have been documented cases of transmission of treatment-resistant strains of HIV ('superinfection'). These can pose significant threats to the health and wellbeing of people living with HIV/AIDS.

HIV prevention is a significant issue for many people living with HIV/AIDS in NSW. Most people living with HIV/AIDS are strongly committed to preventing HIV transmission and are actively engaged in protecting their sexual partners from exposure to HIV infection. The majority of sexual activity involving HIV positive people in Australia is safe for HIV transmission, as it is either protected or with a sero-concordant partner. (Specific issues related to HIV prevention in sero-discordant relationships are addressed in Section 3).

Issues related to sexual health, relationships and STIs for people living with HIV/AIDS are addressed through individual education and counselling, through group workshops, the production of educational materials, and social marketing campaigns. This has reflected the contributions of health promotion and clinicians (including doctors, nurses and counsellors) working in community organisations, Area Health Services and general practice. Supporting the role of people living with HIV/AIDS in HIV prevention includes providing individuals (and couples, where appropriate) with information about factors that increase the risk of transmission, assisting individuals to develop negotiation and communication skills where these are lacking, and facilitating access to peer support.

Improving sexual health for people living with HIV/AIDS and supporting the role of HIV positive people in HIV prevention must be undertaken in collaboration with people living with HIV/AIDS to ensure the effectiveness and appropriateness of services and programs. Activities aimed at reducing HIV transmission risk will work most effectively in equilibrium with a continuing recognition of the rights of positive people to a complete and fulfilling sexual identity.

Improving sexual health outcomes for people living with HIV/AIDS will require improving individuals' access to regular STI testing (tailored to their specific needs) together with provision of health information about STIs, their prevention and their potential impact for people living with HIV/AIDS. This should be complemented by programs that support individuals to develop communication and relationship skills, and by social marketing that addresses sexual and general forms of discrimination against people living with HIV/AIDS. Activities targeting individuals must be complemented by community level campaigns that raise awareness of the current experience of living with HIV/AIDS and address HIV/AIDS-related stigma and discrimination.

e Specific issues for HIV positive women and HIV positive heterosexual men

There are specific health promotion issues for women and heterosexual men living with HIV/AIDS. These include a greater vulnerability to isolation, owing to the relatively small number of women and heterosexual men living with HIV/AIDS, concern about reproductive rights and parenting, and a desire, among the women, for specific information about living with HIV/AIDS as a woman. Women and heterosexual men living with HIV/AIDS are highly diverse and are geographically dissipated. However, HIV Futures 4 (Grierson et al, 2004) reported that women living with HIV/AIDS experience poorer health outcomes than men, are less likely to be taking HAART, are more socially isolated and disadvantaged (including having higher rates of poverty) and more likely to be caring for others in addition to addressing their own health needs. Research suggests that HIV positive heterosexual men may also be affected by some of these issues, in particular social isolation and poorer access to health services.

f Specific issues for people from culturally and linguistically diverse backgrounds who are living with HIV/AIDS

Some 20% of HIV notifications in NSW are in people from culturally and linguistically diverse (CALD) backgrounds. Service provider feedback indicates that people living with HIV/AIDS from CALD backgrounds have less access to health information, including information about treatments and living with HIV/AIDS, experience specific difficulties accessing health services and are vulnerable to social isolation. As a consequence, this population is vulnerable to poorer health outcomes.

Health promotion with and for this population should include specific programs and services, as well as greater inclusion in mainstream health promotion for people living with HIV/AIDS. There is a need for accessible and culturally appropriate health education materials addressing treatments, side effects and relationships, and a need for inclusion of cultural and linguistic diversity in initiatives addressing HIV stigma and discrimination.

3 Health promotion for people in HIV sero-discordant relationships

Supporting individuals in HIV sero-discordant relationships, that is, relationships where one partner is HIV positive and the other is HIV negative, is a high priority for the HIV health promotion program. Relationships are a key determinant of the quality of life and health experienced by people living with HIV/AIDS.

Research conducted with individuals with newly acquired HIV infection suggests that approximately one third of new sero-conversions occur within the context of regular relationships. As such, there are prevention and wellbeing issues that are unique to people in sero-discordant relationships. While these issues may be the same for gay and heterosexual couples, the context, lived experience and health promotion needs may differ.

Of those participants in HIV Futures 4 who were in a regular relationship, some 60% reported that their partner was HIV negative. There are, however, an additional proportion in unknown sero-discordant relationships; the majority of these unknown sero-discordant relationships are a result of an individual being unaware that they have sero-converted, rather than a failure to disclose status to their regular partner. Research into sero-conversion suggests that approximately half of sero-conversions in regular relationships occur where the HIV positive partner's sero-status is unknown (Wilson et al, 2004). Accordingly, increasing individuals' awareness of their own sero-status is an ongoing priority for the program.

Since the late 1990s, there has been a decline in the proportion of sero-conversions attributed to regular relationships. This suggests that initiatives to support individuals and couples to navigate sero-discordancy may have had some success in reducing transmissions, but there is a need for further work in this area.

Social research indicates that the majority of couples in known sero-discordant relationships consistently practise safe sex, but where they have unprotected sex with their regular partner they are more likely to practise risk reduction techniques using scientific information such as viral load. Factors that may contribute to the risk of HIV transmission include condom use being perceived as a barrier to love and intimacy, and breakdowns in communication, in particular (although not exclusively) in the early and later stages of a relationship.

Social research with gay men shows that the HIV negative partner in a sero-discordant relationship is more likely to report unprotected anal intercourse with casual partners and use of recreational drugs and Viagra. Moreover, there are indications that some HIV negative male partners experience erectile dysfunction as a result of the sexual anxiety associated with being in a sero-discordant relationship. These factors suggest that this population is at significantly greater risk of contracting HIV, and yet there are limited services or material available that address specific issues for HIV negative partners of people living with HIV/AIDS.

Supporting HIV prevention in sero-discordant relationships can occur on an individual and population level. Clinical services, including those provided by GPs, sexual health services and counselling services, are well placed to provide support to both HIV positive and HIV negative partners in sero-discordant relationships. In addition, health promotion programs that include social marketing and skill development initiatives can raise the visibility of issues and provide information and support.

4 Harm minimisation

Harm minimisation is a strategy that aims to prevent or reduce the harms associated with the use of drugs in the community. It was adopted by the Prime Minister, six premiers and two chief ministers on 2 April 1985 and has been endorsed on several subsequent occasions by the Ministerial Council on Drug Strategy. The Australian harm minimisation program is highly regarded because of its success in preventing an epidemic of HIV among people who inject drugs. It has achieved this through pragmatic application and maintenance of a harm minimisation framework and an ongoing commitment to providing sterile injecting equipment and other

services and supports to individuals who inject drugs. Needle and syringe program services are provided in all Area Health Services, and by some community-based organisations such as NUAA and ACON.

National estimates of the number of people who inject drugs in Australia vary. Modelling undertaken in 1997 estimated that there were between 80,000 and 100,000 people who regularly inject drugs in Australia, and 175,000 people who inject drugs on occasion. It is likely that NSW accounts for almost one-half of each of these two groups.

In the mid to late 1990s there was a significant increase in the number of people who injected drugs and the number of occasions each individual injected (Wilson et al. 2004). This increase in occasions of injecting rendered people who inject drugs extremely vulnerable to HIV infection. At the same time, however, there was a decline in the number of individuals who reported having recently shared injecting equipment. This led the evaluators of the *NSW HIV/AIDS Health Promotion Plan 2001-2003* to conclude that 'the capacity of the NSW Needle and Syringe Program to respond to the large increase in injecting drug use in the latter half of the 1990s probably averted an epidemic of HIV infection among people who inject drugs and its subsequent spread to the heterosexual population' (Wilson et al. 2004).

The NSW Needle and Syringe Program has also successfully expanded access to sterile injecting equipment and increased access to education, counseling and referral by expanding the range and number of outlets which provide sterile injecting equipment, increasing referrals to drug treatment programs, and expanding the capacity of needle syringe outlets through improved planning processes and workforce development. NSW leads the world in the provision of clean injecting equipment via vending machines. NSW has further strengthened the program by developing a comprehensive Needle and Syringe Program data and reporting system, and has reduced community concern about disposal of used injecting equipment through a partnership with councils to address disposal of community sharps. The re-development of the Needle and Syringe Program Policies and Procedures Manual will improve consistent Needle and Syringe Program services, and provide an opportunity to clarify expectations and strengthen partnerships between Needle and Syringe Programs and Area based alcohol and other drug, sexual health and population health programs.

Access to readily available drug treatment is an important component of HIV prevention and health promotion for people who inject drugs, with research showing that methadone and buprenorphine programs in particular assist HIV prevention.

These programs have been assisted by the introduction of the Supporting Measures for Needle and Syringe Programs, part of the Australian Government's *Tough on Drugs* initiative, which was approved by the Council of Australian Governments (COAG) in 1998.

a Maintaining support for the Needle and Syringe Program

The goal of the Needle and Syringe Program is to prevent the transmission of blood borne viruses associated with injecting drug use. It achieves this through health education, the provision of injecting equipment, and counselling and referral of people who inject drugs to appropriate health and welfare services, including drug treatment programs. While referral to drug treatment programs may have a long-term impact on reducing the harms associated with injecting drug use, it is not sufficient to reduce immediate harms, and thus must be supported by ongoing access to sterile injecting equipment for those who continue to inject.

The *Return on Investment in Needle and Syringe Programs in Australia* study reported that since the introduction of Needle and Syringe Programs in 1988, to the year 2000, approximately 25,000 HIV infections were estimated to have been prevented among injecting drug users, and by 2009 it is projected that approximately 4,500 deaths will have been prevented. This resulted in savings of \$7,025 million in treatment costs, and a gain of 588,000 life years. Health Outcomes International (2002) concluded that "NSPs [Needle and Syringe Programs] are effective in reducing the incidence of both diseases and ... they represent an effective financial investment by government. From a financial perspective, NSPs have yielded a significant public health benefit, and ... continued investment will result in further financial savings to government and improvements in both the quantity and quality of life of injecting drug users accessing NSPs".

Despite the successes of the harm minimisation program, and the Needle and Syringe Program in particular, the program is politically sensitive because it is perceived as unpopular with the public. This renders the Needle and Syringe Program vulnerable. Accordingly, priority must be given to addressing those factors that reduce community support for the program, including concerns regarding disposal of used injecting equipment, and to educating local communities

regarding the public health benefits associated with the program. The *National Drug Strategy Household Survey* (Australian Institute of Health and Welfare) found that community support for the Needle and Syringe Program increased from 50% to 57% from 1998 to 2001, indicating that community support can be strengthened. Implementation of the *Community Sharps Management Guidelines*, developed collaboratively between the NSW Department of Health and the Local Government Association, provides a local tool for addressing concern about discarded injecting equipment, and a framework for strengthening partnerships between local government and local Needle and Syringe Program services.

b Improving access to the Needle and Syringe Program for marginalised communities

There is a need to improve access to Needle and Syringe Program services for some marginalised communities, in particular, Aboriginal communities. Notification data indicates that injecting drug use is more commonly reported as the route of transmission for HIV among Aboriginal than among non-Aboriginal people. There is an urgent and ongoing need to develop strategies to improve Aboriginal people's access to sterile injecting equipment in ways that are culturally appropriate and acceptable to Aboriginal communities.

There is also some evidence that CALD people who inject drugs are at increased risk of HIV in NSW. People who spoke a language other than English made up 27 per cent of notifications among people who inject drugs for the years 2000-2003. There is a need to develop strategies appropriate to priority CALD communities.

c Providing peer education and health promotion for people who inject drugs

Peer education and health promotion is critical to providing individuals with information and support that enables them to reduce the harm associated with injecting drug use. Peer education has the potential to provide people who inject drugs with accessible and credible information about health and harm reduction.

Responsibility for health promotion for people who inject drugs is shared between community-based organisations and Area Health Services. Peer-based education and support for people who inject drugs has been a staple of the NSW HIV/AIDS health promotion program and is undertaken at a state-wide level by the NSW Users and AIDS Association, while each Area's Needle and Syringe Program is also responsible for providing health education and health promotion.

d Improving access to services among people who inject drugs

There is a broad range of health issues for people who inject drugs, including co-infection with hepatitis C, mental health issues (including those related to psychostimulant use or polydrug use), and the greater risk of contracting sexually transmissible infections. Improving health outcomes will require improvements in access to the full spectrum of treatment services, greater availability of generic drug information resources and enhanced education and training opportunities for staff working with people who inject drugs. In addition, there is a need to improve access to primary health care among people who inject drugs. There is also a need to maintain support for HIV positive people who inject drugs to remain on drug treatment programs, as this may assist individuals to maintain antiretroviral treatment regimes.

5 HIV prevention among people from priority culturally and linguistically diverse backgrounds

People from culturally and linguistically diverse (CALD) backgrounds have emerged as a population experiencing disproportionate risk of contracting HIV and being at higher risk of late HIV presentation and associated poorer health outcomes. Changes in the Australian Government immigration program are expected to result in an increase in the number of people from priority CALD backgrounds in NSW over the life of this Strategy.

Globally, HIV disproportionately affects people from lesser-developed countries, in particular countries in sub-Saharan Africa and South East Asia. While Australian immigration policy currently restricts the entry of people living with HIV/AIDS into Australia, allowing them residency only in limited circumstances, global patterns of migration and mobility are likely to continue to affect the Australian HIV epidemic in the long term. This can be seen in other first world nations such as England, where the bulk of HIV notifications are now occurring among citizens born overseas. At present, some 20 per cent of Australian notifications come from people from CALD backgrounds, but this proportion is expected to increase over the life of this Strategy. This includes people from countries of high prevalence who contract HIV here, and people from these countries who contract HIV while travelling overseas or visiting their country of origin.

HIV epidemiology is vastly different in many overseas countries, and this is mirrored in local diagnoses among people from CALD backgrounds. HIV in many overseas countries, including high prevalence countries, is more commonly transmitted via heterosexual sex and injecting drug use than via sex between men. The profile of HIV/AIDS among CALD communities in NSW reflects this pattern, with notifications being almost equally divided among gay men, and heterosexual men and women. Similarly, there appears to be a pattern of increased risk among CALD communities who were born in, or have strong cultural ties to, overseas regions where the prevalence of HIV is high.

Australian and international research has indicated that people from CALD backgrounds are at higher risk of receiving a late HIV diagnosis, that is, being diagnosed with an AIDS defining illness within three months of first being diagnosed with HIV. Late diagnosis is associated with poorer long-term health outcomes. There are strong indications that people living with HIV/AIDS from CALD backgrounds have poorer knowledge of HIV/AIDS and HIV services and report fear of receiving test results (Wilson et al, 2004).

Women make up a greater proportion of people living with HIV/AIDS from CALD backgrounds than they do in the locally born population. These women tend to experience multiple disadvantages linked to their HIV status, their experience of migration/dislocation, racial discrimination in Australia, and their responsibilities for supporting family members overseas. They may be at particular risk of late HIV diagnosis, poor access to treatments and health services, and social isolation. There are also follow-on issues in terms of risk of mother-to-child transmission, the higher risk of being diagnosed in pregnancy and the issues associated with antenatal testing.

Within the population of people from CALD backgrounds, some populations are considered to be at greater risk than others. Communities should be prioritised using the following criteria:

- NSW HIV notification data on country of birth and language spoken at home.
- the size of the community in NSW, as identified through Australian Bureau of Statistics data, with particular emphasis on emerging and/or growing communities.
- migration category, with particular emphasis on communities with a greater proportion of refugees or where there has been significant social disruption in the country of origin.

- prevalence of HIV in the country of origin, with a greater emphasis on those countries where HIV prevalence is high.
- consultation with members of the CALD community and analysis of local service utilisation patterns.

Targeting specific communities for HIV awareness health promotion must be done in partnership with the communities themselves and ethnic community-based organisations in order to develop interventions that are culturally appropriate. This can be challenging because of the highly stigmatised nature of HIV/AIDS in many communities, and the fear of community leaders that addressing HIV will lead to further stigmatising of their community. For communities with complex demands and limited infrastructure, HIV/AIDS may be considered a very low priority and an issue of limited salience.

The NSW Department of Health and the Australian Government Department of Health and Ageing fund the Multicultural HIV/AIDS and Hepatitis C Service (MHAHS) to provide support to individuals, to undertake HIV health promotion projects and to support the capacity of generic HIV services to work with CALD communities. MHAHS is a critical resource for those services seeking to work with people from priority CALD backgrounds.

People from CALD backgrounds are considered a priority population for all HIV-funded services. Each service needs to identify their capacity to undertake appropriate HIV prevention work with people from priority CALD backgrounds. This work must be done in consultation and collaboration with the communities themselves and with the MHAHS in order to ensure its appropriateness and effectiveness.

Reducing late diagnosis will require initiatives to promote the advantages of HIV testing among these communities and to raise awareness of the confidential nature of testing and treatment. This will require work to ensure HIV-related confidentiality among GPs and interpreters is upheld. It will also mean improving overall the capacity of the NSW HIV program to provide health promotion and treatment, care and support for priority CALD communities. This will require the participation of all parts of the HIV sector, including GPs and sexual health services, non-government organisations and Area Health Services.

6 HIV prevention with other priority populations

The prevalence of HIV infection is low in populations other than gay men in NSW. However, there are a number of populations that experience heightened vulnerability to HIV infection owing to risk behaviours, proximity to the epidemic, poor access to services or ongoing social disadvantage. Over the coming four years it will be necessary to safeguard the gains in averting epidemics among these populations, monitor signs of any change in the vulnerability or incidence of HIV among these populations, and respond strategically.

a Aboriginal sexual health

Approximately 30% of Australia's Aboriginal population lives in NSW, and is geographically distributed between urban, suburban, regional and rural NSW.⁴ Australia's Aboriginal and Torres Strait Islander population has the poorest health status of any identifiable population within Australia (Aboriginal Health and Medical Research Council and Mandala Consulting, 2005).

Aboriginal people are a priority for the NSW HIV/AIDS program for both HIV prevention and treatment, care and support. There are relatively low numbers of Aboriginal people with HIV/AIDS in NSW. However, the per capita rate of diagnosis among Aboriginal people is similar to that experienced by non-indigenous Australians, but with an overall younger age of diagnosis. There has been no marked decline in AIDS diagnoses among Aboriginal and Torres Strait Islanders since the introduction of HAART.

National data on HIV notifications among Aboriginal people indicates that there is a higher proportion of diagnoses attributed to heterosexual transmission and injecting drug use. However, male-to-male sex accounts for a significant proportion of diagnoses in Aboriginal and Torres Strait Islander communities.

If an HIV epidemic were to become established among Aboriginal communities in NSW, there would be significant potential for it to spread rapidly before detection, and its impact would be devastating. The poor background health (including sexual health) among some Aboriginal communities in NSW would potentially facilitate the spread of HIV and contribute to poorer health outcomes among Aboriginal people with HIV/AIDS. The significant social and health consequences of such an epidemic renders its prevention a high priority.

⁴ This policy refers predominantly to Aboriginal people, in accordance with the agreement between the NSW Aboriginal Partnership.

This ongoing vulnerability is a consequence of Aboriginal people's disadvantage in regard to all social determinants of health, in particular (at a population level) their experience of poverty, disempowerment and social disadvantage, compounded by their poor access to relevant health information and health services. Other factors that contribute to this vulnerability include a younger population compared with the rest of the population, a much more mobile population, and Aboriginal people having fewer opportunities to access appropriate health care services.

Specific vulnerability is demonstrated by the high rates of STIs in those areas where accurate data exists, the emerging phenomenon of increasing injecting drug use within Aboriginal communities, and the higher reported rates of sharing injecting drug equipment. Addressing these issues can be compounded by cultural barriers and shame associated with unsafe sex, homosexuality and injecting drug use.

Strategies for improving sexual health outcomes for Aboriginal people in NSW are articulated in the *Implementation Plan of NSW HIV/AIDS, STI and Hepatitis C Strategies for Aboriginal People 2006-2009*.

This *Plan*, produced in 2005 by the NSW Department of Health in consultation with the Aboriginal Health and Medical Research Council and the NSW Aboriginal Sexual Health Advisory Committee, articulates the following principles for providing appropriate sexual health services to Aboriginal people:

- fostering and supporting community ownership of the response to sexual health
- developing programs and services using a holistic health focus rather than a disease focus. It is recommended that specific HIV/AIDS initiatives be undertaken in the context of broader sexual health, and in a whole-of-health and wellbeing model, in order to maximise salience and cultural appropriateness
- building a collaborative approach, and acknowledging the leadership role of Aboriginal Community Controlled Health Services
- using a population health approach to improve the health of all Aboriginal people, reduce health inequities and build the capacity of services to address the sexual health needs of Aboriginal people
- giving priority to an active outreach model, where outreach is facilitated by Aboriginal sexual health workers and there is the involvement of the local Aboriginal community

- taking an evidence-based approach to service delivery and use of data
- building a skilled and supported workforce.

The *Implementation Plan of NSW HIV/AIDS, STI and Hepatitis C Strategies for Aboriginal People 2006-2009* identifies the following populations as the priority populations for improving Aboriginal sexual health outcomes: young people in all settings, adults and young people in correctional settings, and the families and communities of those at risk. It identifies injecting drug use, unsafe sex, tattooing, and violence as those behaviours most associated with risk of transmission of blood borne infections.

The *Implementation Plan of NSW HIV/AIDS, STI and Hepatitis C Strategies for Aboriginal People 2006-2009* provides a framework for further developing the infrastructure for sexual health service delivery to Aboriginal people in NSW, and articulates clear roles and responsibilities for Aboriginal sexual health workers in Area Health Services and Aboriginal Community Controlled Health Services (ACCHS), the mainstream HIV/AIDS and sexual health program, Area-based Aboriginal health services and other population health programs, including women's health, men's health, mental health and alcohol and other drug use.

There are tensions inherent between a holistic approach to health, and the planning and delivery of services and programs that address HIV/AIDS outcomes more specifically. Planning and service delivery should respect the preference of Aboriginal people for a holistic approach to issues affecting their health and wellbeing (Aboriginal Health and Medical Research Council and Mandala Consulting, 2005). HIV/AIDS and sexual health services should contribute their specific expertise to holistic health programs. This can best be achieved through working in partnership with Aboriginal communities and the broader Aboriginal health sector.

HIV and sexual health promotion activities undertaken with Aboriginal communities work most effectively when they include a mix of strategies, including working with individuals, sub-populations and the community as a whole.

The objectives and strategies of the *Plan* are set out below.

Objectives

- Reduce rates of HIV and STIs among Aboriginal people in NSW.
- Improve access to HIV and STI testing among Aboriginal people in NSW.

Strategies

- Increase understanding and acceptance by key Aboriginal community members of the processes and benefits of providing health services to deal with STI, HIV and hepatitis C education, prevention and management issues, targeting people most at risk.
- Increase Aboriginal community engagement with sexual health, HIV and hepatitis C education, prevention and management services within a holistic health framework.
- Develop culturally appropriate and sensitive sexual health service delivery models that are accessible to local Aboriginal people and meet state-wide service planning standards.
- Put mechanisms in place to support Aboriginal Sexual Health Workers to develop culturally appropriate Aboriginal-specific sexual health education resources.
- Increase early opportunistic basic sexual-health-related interventions by health service staff other than sexual health staff and Aboriginal sexual health workers.
- Increase the number of holistic health outreach activities undertaken by health services.
- Define the roles and responsibilities of key stakeholders in contributing to sexual health service delivery under a holistic health model.
- Reduce the stigma associated with injecting drug use, sexuality and related issues, including harm minimisation and safe sex.
- Increase health service access to Aboriginal people with or key risk factors.
- Increase health service access to Aboriginal people within key settings of risk, in particular correctional facilities and settings attended by young people

Further information on how these strategies are to be implemented is provided in the *Implementation Plan of NSW HIV/AIDS, STI and Hepatitis C Strategies for Aboriginal People 2006-2009*.

b Sex workers

Sex workers are a diverse population working in a range of settings. There is some debate regarding the number of sex workers currently working in NSW, with some sources indicating that there are between 2,000 and 3,000 sex workers in NSW, while other sources suggest the number may be between 6,000 to 10,000. It is believed that approximately 10% of sex workers are street based. The majority of sex workers report high rates of consistent condom use, though it is believed that this is higher among parlour-based workers than

among street-based workers, and higher among locally born sex workers than among international sex workers. There is some debate about the rates of consistent safe sex among gay male sex workers.

The *Evaluation of the NSW HIV/AIDS Health Promotion Plan 2001-2003* concluded that the NSW HIV prevention program has been highly successful in averting an epidemic of HIV among sex workers and their clients. Sex workers were considered vulnerable to an epidemic of HIV infection from the outset of the epidemic, owing to high rates of STIs and low rates of safe sex in the early to mid 1980s.

Peer based education has played a key role in preventing an outbreak of HIV among sex workers and their clients, with sex workers taking a strong lead in implementing safe sex practices, improving access to condoms and lubricant within brothels, and creating environments that support HIV prevention. This has been supported by an effective HIV prevention program that has included access to sexual health services, and education and training for brothel managers/owners. In addition, there has been extensive legislative reform that has improved sex workers' access to education and health services. Services to sex workers are provided by the ACON Sex Workers Outreach Project (SWOP), Area Health Services and GPs. In regional areas, partnership initiatives between the Sex Workers Outreach Program (SWOP) and regional Area Health Services have built the capacity of local services to access sex worker populations.

Maintenance of the current infrastructure for prevention among sex workers is considered an ongoing priority. At the same time, investment is required in gathering and analysing data that provides a more thorough picture of current prevention practices, service utilisation, and notification rates among sex workers.

c Prisoners

Overall, HIV prevalence within the inmate population is low. However, high turnover of inmates, the frequency of risk practices such as unsafe injecting drug use, unsafe tattooing, unprotected sex (including sexual assault), and an over-representation of priority populations (including Aboriginal people and people who inject drugs) heighten the risk of exposure to HIV during incarceration.

Prevention issues can be compounded by lack of access to the means of prevention, limited skills and capacity to maintain protective practices, high turnover of inmates, and background population health issues. The over-representation of people with an intellectual disability or who are functionally illiterate poses particular challenges

for HIV prevention education in correctional settings. As such, undertaking effective HIV prevention in these settings requires systemic interventions that improve the overall prison environment and increase access to the means of prevention, and individual interventions that improve awareness of HIV and other blood borne viruses, and assist individuals to develop skills in preventing HIV acquisition.

At present, harm minimisation in prison contexts includes access to condoms and cleaning solution, as well as referral to pharmacotherapy and provision of information and education about harm minimisation.

The evidence base for prison Needle and Syringe Programs continues to increase slowly and the issue is under consideration in a number of countries. Improving access to sterile injecting equipment has the potential to improve public health outcomes. However, this is a sensitive issue owing to community views, the administration of correctional facilities and the achievement of public health and occupational safety objectives. In addition, it has significant industrial implications. It remains the Government's policy at this time that, on balance, the risks of establishing prison-based needle and syringe programs outweigh their potential benefits.

In NSW, lead responsibility for the health of prisoners is shared between Justice Health and the NSW Department of Corrective Services. Justice Health works with the Department of Corrective Services and Department of Juvenile Justice to improve health outcomes for inmates. Justice Health is implementing a Targeted Screening Program for Blood Borne Viruses and STIs, and continues to provide health services to inmates with HIV/AIDS. This is supported by partnerships with visiting HIV physicians and with specialist services such as ADAPHS. Community-based organisations (including CRC Justice Support and ACON) also contribute to HIV prevention, care and support outcomes for prisoners.

Within the correctional setting, particular priority should be given to supporting HIV prevention among Aboriginal people because of their over-representation within prisons and their poorer general health.

d Other populations

There is significant variation across the population in access to health information and access to environments that support HIV prevention. There is some evidence that people with an intellectual disability, individuals with a mental illness, and those who are functionally illiterate have limited access to mainstream education campaigns, or may experience difficulty decoding social marketing

images and slogans. FPA Health is funded to support the disability sector to undertake HIV prevention activities with people with an intellectual disability, while the Sydney South West Area Health Service has a number of initiatives targeting people with a mental illness. Health promotion programs targeting these populations should be developed in consultation with members of the target audience, disability services and other HIV and sexual health services.

7 HIV testing

Access to HIV testing continues to be a fundamental element of the Australian response to HIV/AIDS but there is a need to ensure that testing practices and technologies are appropriate to current needs. Testing contributes to individual and public health outcomes through enabling diagnosis and access to treatment and care for those with HIV, and reducing the proportion of individuals with undiagnosed infection.

HIV testing is undertaken in a range of settings, including general practice, specialist HIV and sexual health services, and mainstream health services, including hospitals and antenatal services. Individuals access testing in diverse contexts, varying from the regular annual testing undertaken by many gay men in Sydney to pre-surgical testing and antenatal testing.

There are significant differences in access to HIV testing between populations in NSW. At a population level, gay men in Sydney have very high rates of regular HIV testing, and as a result it is believed that between 80 per cent and 90 per cent of existing HIV infections among gay men have been diagnosed. People who inject drugs also have relatively high rates of HIV testing.

Among other populations, however, uptake of HIV testing is much lower. This accounts for the over-representation of heterosexual women and men, people from culturally and linguistically diverse backgrounds and Aboriginal people among late presentations. There is some suggestion that poor access to testing may have contributed to a significant burden of undiagnosed HIV infection among people from culturally and linguistically diverse (CALD) backgrounds and Aboriginal people.

Reducing late HIV diagnoses by 20 per cent by 2009 will require a programmatic approach to building community awareness of the role of HIV testing, and developing the capacity of health services to offer HIV testing opportunistically.

Gay and other homosexually active men constitute the majority of those who receive a late diagnosis of HIV. There continue to be a significant number of late diagnoses among inner city gay men each year, suggesting that there is a relatively small population of inner city gay men who may have not been tested for HIV for many years, if at all. There is a need to improve understanding of the experiences and personal risk assessments of these men, and to encourage appropriate HIV testing among them. In addition, reports from clinicians in suburban, regional and rural NSW suggest a recent increase in late presentations among non-gay identified homosexually active men, indicating a need for ongoing promotion of HIV testing and other sexual health services. Homosexually active men from culturally and linguistically diverse backgrounds may be at particular risk of late diagnosis owing to limited access to health education and clinical services.

Moreover, late presentation is strongly associated with the often overlapping categories of people born in non-English speaking countries and women and men heterosexually exposed to HIV/AIDS (NCHECR, 2004). Work is being undertaken with a number of priority CALD communities to improve community awareness of the benefits of HIV testing, and to facilitate appropriate antenatal HIV testing in line with the NSW Department of Health Policy Directive.

The Australian Government articulates good practice requirements in the *National HIV Testing Policy*. This policy restates the centrality of informed consent in testing, and requires clinicians to provide pre-test discussion and post-test counselling regardless of the result. The Australian Government Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis and the Inter-governmental Committee on AIDS, Hepatitis and Related Diseases will jointly oversee the revision of this policy during the life of this HIV/AIDS Strategy. This process will focus on improving access to appropriate testing and updating recommendations regarding pre-test discussion and post-test counselling. NSW will contribute to this process, and implement revised guidelines as appropriate.

It is anticipated that there may be major advances in access to HIV testing technologies over the life of this Strategy. In particular, rapid testing may become an option. This will pose challenges for the program at a number of levels, and will require the development of models to ensure maintenance of quality in testing, pre-test discussion, delivery of test results, and participation in HIV surveillance.

8 Creating a supportive environment for people living with HIV/AIDS

Stigma and discrimination against people living with HIV/AIDS has been a problem since the first days of the epidemic in Australia. A very high proportion of people living with HIV/AIDS report having ever experienced discrimination based on their sero-status (Grierson et al, 2004). A smaller proportion of people report experiences of discrimination in the past two years. However, reports of discrimination in relation to accommodation and access to health services have significant potential impact on health and wellbeing for people living with HIV/AIDS, as do experiences of exclusion or rejection by community members. There has been enormous progress in reducing vilification and refusal of service delivery, but there remains a need to address stigma and discrimination. Discrimination can be linked to a range of factors, including the association between HIV/AIDS and traditionally stigmatised behaviours such as homosexuality or injecting drug use, and confusion about modes of transmission.

Access to highly active antiretroviral therapy (HAART) has contributed to significant improvements in health outcomes at a population level for people living with HIV/AIDS. Relatively high levels of uptake and sustained use of HAART have contributed to dramatic declines in opportunistic infections and AIDS-related deaths among people living with HIV/AIDS and have enabled many individuals living with HIV/AIDS to experience both improved quality of life and greater lifespan.

According to the Australian HIV Observational Database, in 2002 some 69% of people living with HIV/AIDS in Australia were taking HAART, with some 50% of those reporting an undetectable viral load at follow up. However, there has been an increase in the proportion of people reporting taking treatment breaks, both structured and unstructured. HIV Futures 4 (Grierson et al, 2004) reported that a majority of people living with HIV/AIDS are actively engaged in monitoring their health and undergo regular testing for viral load and CD4 cell counts.

Some 70% of people living with HIV/AIDS report that they are living well, with the remainder reporting fair or poor health. There continues to be uncertainty about the long-term effectiveness and resistance profiles of HAART, and concern about the toxicities associated with long-term use of HAART. A small number of people continue to die each year from AIDS-related illnesses, and the overall death rate of people diagnosed with HIV/AIDS continues to be ten times that of the general population.

In addition, there have been other changes in the health status of people living with HIV/AIDS. In particular, there is now greater awareness of the impact of pre-existing illnesses on HIV/AIDS, and the interaction between living with HIV/AIDS and ageing. People living with HIV/AIDS now experience a greater risk of developing serious health conditions that are not traditionally defined as HIV/AIDS related, such as heart disease, cancer and neuropsychiatric conditions, due to toxicities associated with long-term use of HAART. In recent years, there has been increased attention given to mental health, cognitive impairment and the health and personal

impacts of alcohol and other drug use among people living with HIV/AIDS. In addition, HIV disease progression continues to be an issue.

A significant proportion of people living with HIV/AIDS experience co-infection with other illnesses, with 44 per cent of respondents in HIV Futures 4 (Grierson et al, 2004) reporting that they had at least one major health condition other than HIV/AIDS. The current prevalence of Hepatitis C among people living with HIV/AIDS is estimated to be 13%. Other health conditions commonly reported by respondents include hepatitis B, asthma and psychological disorders.

Responsive health services

These shifts in the population level health of people living with HIV/AIDS have presented new challenges to the health system. The majority of people living with HIV/AIDS access primary health care, and primary HIV management, from a General Practitioner specialising in HIV/AIDS. This is consistent with the findings of the recent *HIV/AIDS Care and Treatment Services Needs Assessment*, which estimated that 70% of people living with HIV/AIDS live independently at home or in the community with support, 29 per cent require more intensive levels of support and approximately one per cent have AIDS Dementia Complex or other HIV related psychiatric conditions and require high levels of support.

While there has been a decrease in the number of admissions to inpatient facilities, there has been no real decline in the length of stay for admitted patients, and an increase in the number of individuals requiring highly coordinated care from multi-disciplinary health and human service agencies. There has also been an increase in the diversity and complexity of health care needs of people living with HIV/AIDS, requiring greater involvement of mainstream hospital services and other, non-HIV specialists. There creates the need for greater investment in coordination, case management and the development of models of care which provide access to the continuum of care required by diverse populations.

In addition to responding to individuals' identified treatment, care and support needs, there is also a need for increased emphasis on developing an early intervention approach to improving the health of people living with HIV/AIDS.

Quality of life

These changes in the health status of people living with HIV/AIDS have made it possible for many individuals to plan for their future with greater confidence. To some extent, these options and experiences differ among those who have contracted HIV pre and post HAART.

Individuals who have contracted HIV since HAART have been able to benefit from access to effective treatments and more sophisticated dosing regimens. This in turn has made it more possible for individuals to remain within the workforce, which in turn is protective against poverty. A substantial proportion of this population may have experienced HIV as a chronic, manageable infection since diagnosis.

For those diagnosed pre-HAART, improvements in treatments may have made it possible to return to education or the workforce, often in a part-time capacity. This in turn has contributed to improved financial security and improvements in quality of life and mental health. For some HIV positive women, improved treatments have reduced the risk of mother-to-child transmission, and this in turn has led to greater confidence in having children. Anecdotal reports suggest that a desire for an improved quality of life has also led some people living with HIV/AIDS to move away from the city and to seek a new life in the country.

However, it must be noted that the population of people living with HIV/AIDS continue to experience disadvantage in relation to the social determinants of health. In particular, there are high rates of poverty among people living with HIV/AIDS, with 26.9 per cent of respondents in HIV Futures 4 (Grierson et al, 2004) living below the poverty line. More than one half of respondents in Futures 4 identified that their main source of income was a government pension or benefit, and approximately one third of respondents were living below the poverty line. Some 54 per cent of respondents reported that they found it difficult to pay for food each week, and 44 per cent reported difficulty paying for medical services. The experience of dependence on welfare can impact health indirectly through its relationship with disrupted housing, poorer nutrition, stress related to financial vulnerability, and social isolation owing to limited finances.

Identity and community

Shifts in the health of people living with HIV/AIDS have contributed to a re-positioning of HIV/AIDS within individuals' lives, whereby HIV status is less important, and other components of identity – including but not limited to gender identity, sexuality and relationships, participation in work, career and/or home ownership – have taken a more central place. For those diagnosed post-HAART, there may have been limited initial identification with a notion of positive community. Many people living with HIV/AIDS report that they have found it beneficial to receive support from educated and skilled peers; however, they are more likely to access peer support programs at specific points in their experience of HIV/AIDS rather than maintain ongoing participation in groups or organisations.

This shift has occurred in parallel with changes in the relationship between people living with HIV/AIDS and the broader gay community. There has been a general decline in gay community participation in volunteering and community activism with regard to HIV/AIDS.

At the same time, the Male Call Study demonstrated that HIV negative gay men actively discriminate against sexual partners on the basis of sero-status, heightening the sense of isolation and vulnerability that some positive gay men experience.

Services providing HIV treatment, care and support

At present, there is a range of agencies with responsibility for HIV treatment, care and support, including Area Health Services, community-based organisations and non-government organisations, and other government agencies. General practitioners play a critical role in HIV treatment, care and support. Some people living with HIV/AIDS also access a range of private health service providers, including private counsellors and complementary therapists.

Dedicated HIV/AIDS treatment, care and support funding is allocated to each Area Health Service to provide people living with HIV/AIDS with access to medical and allied health care, sexual health services, and mainstream health services such as hospitals, laboratories, mental health services and home nursing within their local area. This is provided at varying levels depending on the Area. For a variety of reasons, there is a general flow of people living with HIV/AIDS to the specialist HIV/AIDS services, particularly those located in the former South Eastern Zone of the South Eastern Sydney Illawarra Area Health Service. AIDS Program funding allocations to Area Health Services are therefore adjusted to account for the flows between Areas.

The NSW Department of Health's Role Delineation Guidelines (NSW Health, 2002) describe six levels of HIV/AIDS services. Area Health Services are required to meet Minimum Service Levels consistent with the needs of their population. The former South Eastern Sydney and Central Sydney Areas are those with the highest concentration of people living with HIV/AIDS, and accordingly are where the greatest focus of services and greatest investment in funding is directed.

Seven hospitals (St Vincent's, Prince of Wales, Royal Prince Alfred, Westmead, John Hunter, Royal North Shore and Liverpool) located in five Area Health Services (South Eastern Sydney Illawarra, Sydney West, Northern Sydney Central Coast, Hunter New England and Sydney South West) operate as Level 5/6 services, and as such provide designated HIV/AIDS services staffed by specialist multidisciplinary teams with training and experience in HIV/AIDS.

The non-metropolitan Area Health Services, which overall have smaller local populations of people living with HIV/AIDS, are required to provide services consistent with Level 4 of the HIV/AIDS Minimum Service Levels Guideline. Approximately three-quarters of people resident in these areas receive HIV/AIDS treatment, care and support in their own Area, with the remaining one-quarter accessing services provided by other Area Health Services.

NSW Health also funds through the AIDS Program community-based organisations and other non-government organisations to undertake both direct service delivery and advocacy related to the treatment, care and support needs of people living with HIV/AIDS. These services may be provided on a local or state-wide basis. For instance, ACON provides a broad range of care and support services, including a Vitamins Service, group programs, counselling and Enhanced Primary Care. Likewise the Australasian Society for HIV Medicine provides state-wide workforce development programs and representation for health professionals working in HIV/AIDS.

A number of agencies and services also fulfil state-wide HIV/AIDS functions. These services include Sydney Children's Hospital Paediatric HIV Service, the Multicultural HIV/AIDS and Hepatitis C Service, the NSW Health Workforce Development Program in Hepatitis, HIV and Sexual Health, the NSW Infection Control Resource Centre, the NSW 24-hour Needlestick Injury Hotline at Albion Street Centre, the AIDS Dementia and HIV Psychiatry Service (ADAHPS), the HIV/AIDS Dental Program, and the Transfusion Related AIDS and Infectious Diseases Service (TRAIDS).

The diversification of the health and support needs of people living with HIV/AIDS increasingly requires a whole-of-government response. This should include involving mainstream health services, development of formal partnerships and joint action with other government human service agencies, particularly those that include the Department of Housing and the Department of Ageing, Disability and Home Care.

National priorities

The fifth National *HIV/AIDS Strategy* identifies a range of priorities for HIV/AIDS treatment, care and support. In particular, the Strategy identifies the need to develop a coordinated continuum of care that is both integrated and client oriented. It suggests that priority be given to the following areas:

- ensuring access to approved therapies and monitoring tools, such as viral load testing
- extending access to anti-retroviral drugs beyond hospital pharmacies and in rural and remote communities
- supporting GPs and sexual health physicians in rural and remote communities
- ensuring access to mental and other health services.

Progress has been made in a number of these areas in NSW, including through the establishment of a pilot project to trial provision of HAART through community pharmacies in inner Sydney.

Principles for HIV treatment, care and support

The NSW response to the treatment, care and support needs of people living with HIV/AIDS is guided by the same broad principles that underpin the NSW HIV/AIDS program. However, there are also additional principles that inform the development and provision of treatment, care and support to people living with HIV/AIDS. This Strategy affirms the NSW HIV/AIDS program's ongoing commitment to the following principles:

- HIV antibody tests should be available in all Area Health Services through a range of public and private sector outlets (for example, sexual health services and GPs). Pre-test discussion and post-test counselling should accompany all HIV antibody testing.

- Services providing HIV care to populations where STIs that facilitate HIV transmission are prevalent should incorporate STI screening and treatment into their core work. Advocacy work should be undertaken to remove systemic barriers to the provision of these services.
- Continuity of care should be ensured through the use of mechanisms such as case management to coordinate and integrate a range of services.
- Service delivery models should enhance quality of life and be responsive to the medical, psychosocial and welfare needs, including housing, of patients/clients.
- People with HIV/AIDS should have access to quality health care on an equitable and non-discriminatory basis.
- Service delivery models should be responsive to the health care needs and socio-economic situations of a range of clients with HIV/AIDS, including gay identified and other homosexually active men, transgender people, people who inject drugs, Aboriginal people, people from culturally and linguistically diverse backgrounds, heterosexuals, prisoners, women, children and adolescents, transfusion recipients, and people with haemophilia.
- No single service model will be effective for all needs in all Area Health Services.
- Public sector programs and services should actively engage the contribution of the private sector, primary care providers and non-government organisations.
- The planning and delivery of HIV/AIDS treatment, care and support services should reflect a partnership between government, community organisations, health professionals, people living with HIV/AIDS and other affected people.
- Area Health Services should work collaboratively with community-based organisations.
- There should be transparency in resource allocation and expenditure.
- All health services involved in the care and treatment of people living with HIV/AIDS have an important role in preventing the further spread of infection.
- Initiatives which address prevention should not be at the expense of the health, wellbeing or service access of people living with HIV/AIDS.

Priorities

1 Matching funding and service models to need

The current HIV/AIDS treatment, care and support services were largely established in the early days of the epidemic, at a time of high demand for acute inpatient care. Services have evolved incrementally in response to shifts in HIV illness and the changing needs of people living with HIV/AIDS but require further alignment to more accurately reflect the current needs of people living with HIV/AIDS. The majority of people living with HIV/AIDS in NSW today require access to ambulatory care and community-based services that enable them to manage HIV as a chronic condition. However, many individuals also experience episodes of acute illness requiring inpatient treatment, care and support in either HIV or other specialist wards. Such realignment should be informed by the emerging needs of people living with HIV/AIDS and build in sufficient flexibility to allow responsiveness to future shifts in health status and service needs.

Realigning systems for treatment, care and support requires developing new models of service delivery that are appropriate to the needs of local populations and specific communities, and building dynamic partnerships with the range of agencies responsible for providing services to people living with HIV/AIDS. In particular, such realignment should reflect the reality that the majority of people living with HIV/AIDS currently receive their care through community-based prescribers and ambulatory care services rather than through inpatient services.

This should be informed by collection and analysis of data on occasions of service and patient flows. Data on ambulatory care, inpatients, bed days and flows is required to identify service levels currently required and to plan accordingly.

The development of models should take into account the range of contributors to treatment, care and support, including inpatient, outpatient and community-based services provided by Area Health Services, community-based organisations, GPs, sexual health physicians and the Australasian Society for HIV Medicine.

The 2004 Review of the AIDS Program Resource Distribution Formula was an important initial step taken by the NSW Department of Health to ensure equity in the distribution of AIDS Program monies across NSW. Implementation of the revised formula will redistribute resources to Areas where need is greatest.

All Area Health Services will then have appropriate proportions of funding that enable planning of service delivery based on local needs.

2 Coordination, partnership and service linkages

Improving long-term health outcomes requires that agencies work together to deliver treatment, care and support services in a coordinated and holistic manner. This requires investment in systems that strengthen partnerships and collaboration and enable each service to contribute their own expertise.

Services that share responsibilities for a population should ensure that there are mechanisms in place that facilitate shared planning and dissemination of data on trends and emerging needs for people living with HIV/AIDS. Such shared planning should minimise duplication and maximise the resources available for effective service delivery.

It is widely reported that some people living with HIV/AIDS seek HIV treatment, care and support outside their local area. This occurs for a range of reasons, including long standing relationships with care providers, referral relationships between GPs and specialist services, concerns about confidentiality, and personal preference. Overall, the 2004 *HIV/AIDS Care and Treatment Services Needs Assessment* concluded that the majority of patient flows are to the former South Eastern Sydney Area Health Service (now South Eastern Sydney/Illawarra). A significant number of these were from the former Central Sydney Area Health Service (now part of Sydney South West), which was the largest net exporter of people living with HIV/AIDS. In view of this, joint planning mechanisms across the inner metropolitan area should be considered a priority. Community-based and non-government organisations working with inner city populations should participate in these processes as service providers and advocates for people living with HIV/AIDS.

Coordination is also required to provide effective services to individuals living with HIV/AIDS. Such coordination should facilitate improved access to multidisciplinary inpatient and ambulatory care services, advocacy and peer support, and to those services that support individual health, wellbeing and capacity to manage living with HIV/AIDS. In particular, the 2004 *Needs Assessment* identified improved discharge planning for people living with HIV/AIDS as an important service for facilitating recovery and service access following their stay in hospital.

There are a number of existing mechanisms which contribute to coordination, including the Social Workers in AIDS network and the Accommodation Crisis Working Group. There is, however, a need for further investment in coordination and formal partnerships at both a local and state-wide level as well as a need to address a range of issues affecting access, including poor access to transport in rural areas, discrimination and homophobia, and poor understanding of the needs and rights of people living with HIV/AIDS.

3 Social housing and supported accommodation

Safe and secure housing is a pre-requisite to health. In the absence of secure accommodation, individuals experience heightened difficulty maintaining health, accessing services and implementing strategies which reduce the impact of HIV/AIDS on their daily life. Social housing can include public housing provided by the Department of Housing, access to the special assistance subsidy to offset the costs of the private rental market, housing through community housing providers, and crisis services. Difficulty maintaining a tenancy may be related to a range of factors, including but not limited to poverty, violence, mental illness, conflict with neighbours and poor health. Individuals' accommodation needs may change following a decline in health, or the need to live closer to health services and support networks. In the context of AIDS Program services, supported accommodation refers to services for those for whom housing can only be managed successfully where support is provided because of HIV/AIDS related needs. Individuals requiring support to access housing may have a range of additional support needs.

Sixty per cent of people living with HIV/AIDS in NSW reside in the inner city of Sydney. This places significant pressure on the social housing infrastructure in those areas. The current criteria for social housing for the most part requires people to live on their own, which may exacerbate isolation and social dislocation. These issues will be addressed in a broader review of housing and service needs for people living with HIV/AIDS which is to be undertaken by the NSW Department of Health.

There is a small but significant number of people living with HIV/AIDS who require support to live independently or who require intensive supervision in the home. Problems with living independently may be related to physical or mental health issues, neurological or cognitive impairments, or limited independent living skills such as the ability to manage money. It may also be related to co-existing conditions such as problems with alcohol or other drugs.

Barriers to effective money management resulting from these conditions frequently result in unpaid rent and utility bills and contribute to service disconnection and homelessness, with devastating health consequences.

The NSW Department of Housing is the lead agency with responsibility for the establishment and maintenance of housing services that meet the needs of disadvantaged populations, including people living with HIV/AIDS in NSW. The health system is responsible for providing those health services which support individuals to maintain a tenancy, such as case management, and health care. Given the centrality of housing to health outcomes for people living with HIV/AIDS, supporting access to appropriate, stable housing is considered a high priority.

There is a range of services involved in the provision of social housing and/or supported accommodation to people living with HIV/AIDS. AIDS program funded supported accommodation services include Stanford House, Foley House, The Bridge, Bobby Goldsmith House and the Bobby Goldsmith Foundation 'Floating Care' service. In addition, the Marrickville and Port Jackson Housing Projects are partnership projects between health and housing service providers and provide supported accommodation for clients with complex needs. Access to social housing is provided through community housing cooperatives, the NSW Department of Housing, and ACON. Support for individuals at risk of homelessness or in need of assistance with negotiating housing is also provided by ACON's Housing Project.

4 Oral Health

Oral health is a significant concern for many people living with HIV/AIDS. HIV/AIDS illness and use of HAART can adversely affect oral health. International research has suggested that poor oral health can result in poorer health outcomes for people living with HIV/AIDS through compromising an individual's immune system and rendering them more vulnerable to infections. Oral health for people living with HIV/AIDS encompasses both prevention and oral health promotion, and treatment. Oral health is a part of the holistic health care needs of individuals and as such needs consideration in Area Health Service planning.

Access to dental care and oral health promotion can be difficult for people living with HIV/AIDS because of the cost of dental care, the need to see a dentist with an understanding of the impact of HIV and HAART on oral health, and concern about stigma, discrimination and refusal of service. There are emerging challenges in identifying and providing services to people with newly diagnosed HIV, as well as challenges in the long-term oral health needs of people living with HIV/AIDS.

At present, a number of Area Health Services receive enhanced AIDS Program funding to improve access of people living with HIV/AIDS to dental care and oral health promotion. This funding, known as Program 2.3, provides access to dentists with a specialised knowledge of HIV-related oral health care needs and funds a limited range of oral health promotion initiatives. This is intended to complement the public dental program and the private dental system, and targets those on low incomes or with other priority needs.

5 Health and wellbeing

The overall health and wellbeing of people living with HIV/AIDS is shaped by the relationship between HIV illness, side effects and treatments-related toxicities, lifestyle, access to services, environmental factors and the person's physical and psychosocial health. Health outcomes for people living with HIV/AIDS can be improved through the provision of services that address health and wellbeing in a holistic way. In particular, this should include the provision of services that address the impact of HAART on health, and programs that support the self-efficacy of people living with HIV/AIDS in managing health and wellbeing.

Access to effective services may be hampered by discrimination arising from homophobia and a lack of understanding about HIV/AIDS, its transmission and the health needs of people living with HIV/AIDS. In addition, consultations in rural areas have highlighted that limited transport can hamper the ability of people living with HIV/AIDS to attend health services and access health monitoring.

There are a number of identifiable sub-populations of people living with HIV/AIDS who experience poorer access to health services or who are vulnerable to poorer health outcomes owing to their social location. This includes people living with HIV/AIDS from culturally and linguistically diverse backgrounds (in particular those who are ineligible for Medicare), Aboriginal people living with HIV/AIDS, and women with HIV/AIDS. Services should be responsive to the particular disadvantages experienced by different populations and ensure service planning responds to differences in need.

a Healthy lifestyles

There is now evidence that treatments-related toxicities and side effects can be reduced and health outcomes improved through supporting people living with HIV/AIDS to address lifestyle factors such as diet, exercise, and smoking. In particular, addressing these aspects of an individual's lifestyle can improve cardio-vascular health and reduce vulnerability to cardio-vascular illness and diabetes, reduce the impact of side effects such as lipodystrophy, and promote individual self-efficacy.

There is a range of mechanisms in place to support individuals to maintain lifestyles that improve health. Allied health care providers such as dietitians and physiotherapists have a critical contribution to improving the health and wellbeing of people living with HIV/AIDS, through individual services, group programs and participation in the development of health education and social marketing campaigns addressing these issues. In addition, community based organisations conduct health education and group programs, such as ACON's Healthy Life and Stop Kissing Butts (smoking cessation) program.

A significant investment has been made in building the capacity of GPs to support individuals to reduce or cease smoking and to improve diet and exercise. A significant proportion of s100 prescribers actively incorporate these issues into the overall care of people living with HIV/AIDS. People living with HIV/AIDS are also eligible for assistance from publicly funded services, such as those provided by QUIT with regard to smoking cessation.

b Mental health and psychosocial wellbeing

The mental health needs of people living with HIV/AIDS range from general wellbeing issues to complex psychiatric disorders. Improving the quality of life and quality of health of people living with HIV/AIDS requires investment in programs and services that promote mental health and psychosocial wellbeing, and address depression, anxiety, and social isolation. Programs and services are also required to address the needs of individuals with HIV/AIDS with co-existing mental illness or personality disorders (see Section 6 'Individuals with complex needs').

At a population level, people living with HIV/AIDS report relatively high rates of depression, anxiety and social isolation. This is consistent with the relatively high prevalence of depression and anxiety among other populations affected by chronic and/or life-threatening illnesses. Addressing mental health and wellbeing will increase individual self-esteem and self-efficacy, and as such is integral to improving the health of people with HIV/AIDS, and supporting individuals to manage their health.

Research indicates that – as with the population generally – depression, anxiety and social isolation among people living with HIV/AIDS can be attributed to a range of factors, some of which are related to HIV/AIDS and some of which are not. HIV/AIDS-related depression, anxiety or social isolation may be caused by the psychological work of accepting an HIV diagnosis and its implications, treatment-related side effects, coping with social factors such as stigma and

discrimination, social isolation related to poverty and reduced participation in the workforce, and other long-term impacts of living with HIV/AIDS.

Anxiety, depression and social isolation are addressed at an individual level through community-based prescribers; psychologists, social workers and counsellors working within specialist HIV services and sexual health services; and counselling and Enhanced Primary Care services offered by ACON. ACON and PLWH/A (NSW) also provide a range of group programs that promote mental health and wellbeing among HIV positive people, including support groups, skills-building programs, and social activities that facilitate peer support and reduce isolation. These group programs act as early intervention and potentially prevent the development of more serious illness. The Multicultural HIV/AIDS and Hepatitis C Service provides bilingual/bicultural support to CALD people living with HIV/AIDS, which complements the work undertaken by other services. There is also potential for people living with HIV/AIDS to access mainstream counselling services such as those provided by community health centres.

c Early intervention

The majority of people living with HIV/AIDS are living relatively well, and report their health and wellbeing to be either good or excellent (Grierson et al, 2004). Developing strategies that maintain and enhance the health and wellbeing of this population is part of a proactive approach to health improvement and illness prevention in the long term.

There is not yet a consensus on the form that early intervention programs for people living with HIV/AIDS should take. A programmatic approach to early intervention could incorporate skill building programs, reducing social isolation and building community connectedness, and assisting individuals to develop strategies for recognising when they may benefit from peer support or assistance from health services. Positive Living Centres which provide both community based and centre-based services may be well placed to undertake this work.

d Health and wellbeing for people living with HIV/AIDS from culturally and linguistically diverse backgrounds

Approximately 20 per cent of people living with HIV/AIDS in NSW are from culturally and linguistically diverse (CALD) backgrounds. This group constitutes a diverse population, with a higher proportion of women and men heterosexually exposed to HIV, and includes speakers of languages other than English, and people ineligible for Medicare.

People living with HIV/AIDS from CALD backgrounds are vulnerable to poorer health outcomes owing to late HIV diagnosis, less access to health services, less access to health education materials, poverty (including poverty resulting from having financial responsibility for family members overseas) and social isolation.

Access to Medicare is determined by the Australian Government, and is currently restricted to Australian residents and those with particular visas. Illegal immigrants and temporary visa holders are ineligible for Medicare and as such have limited access to HIV treatment, care and support. Provision of HAART to people living with HIV/AIDS who are ineligible for Medicare has obvious benefits for the health of individuals. In addition, provision of treatments also has significant public health benefits and may reduce the long-term costs borne by the health system. On these grounds, local services are able to provide treatments to individuals ineligible for Medicare from their discretionary budgets. Developing mechanisms to resolve this issue at state and local levels should be given priority.

Improving health outcomes for people from CALD backgrounds will be supported by the establishment of a CALD HIV/AIDS interagency. This interagency will guide the implementation of treatment, care and support and health promotion initiatives with and for people from priority CALD backgrounds across the NSW HIV program.

e Aboriginal people living with HIV/AIDS

At a population level, the rate of HIV among Aboriginal people in NSW is the same as that of the population overall but Aboriginal people living with HIV/AIDS are vulnerable to poorer health outcomes. AIDS diagnoses among Aboriginal people have remained stable since AIDS diagnoses were first collected for Aboriginal people. This is counter to the general trend of declining AIDS diagnoses and may reflect the convergence of a range of potential factors, including later presentation, less uptake or adherence to treatment regimens, or the intersection of HIV/AIDS and poorer background health of Aboriginal people. Moreover, analysis of data on Aboriginal and Torres Strait Islander participants in HIV Futures (Grierson et al, 2004) indicates that Aboriginal people with HIV/AIDS experience greater changes in housing and other social circumstances, and greater mental health issues (due to the stressors already existing within the Aboriginal community) than other populations of people living with HIV/AIDS .

f Women living with HIV/AIDS

Analysis of women-specific data from consecutive Futures studies (Grierson et al, 2004) indicates that women continue to have particular treatment, care and support needs. Overall, women living with HIV/AIDS are believed to have poorer health outcomes than men, with more rapid disease progression and more reservations about the effectiveness and safety of treatments. Women may experience greater difficulty with adhering to treatment regimens as their responsibilities for caring for children and other family members may leave limited time, money and capacity to focus on self-care. In addition, women living with HIV/AIDS are particularly vulnerable to poverty and report experiencing difficulty paying for food or medication.

6 Individuals with complex needs

The phrase 'complex needs' has been used by practitioners to describe individuals with a range of co-morbidities or psychosocial needs, which may or may not be related to HIV/AIDS. These may include mental illness (including personality disorders), HIV/AIDS- or treatments-related cognitive impairment, intellectual disability, and/or multiple co-existing health conditions. Individuals may be defined as having complex needs because they require support from multiple service systems; have significant health issues, including but not limited to co-morbidities; require intensive support to access health and welfare services; are vulnerable to crises related to mental health or psychosocial issues; or experience vulnerability in maintaining a tenancy, or at times are incarcerated.

People with HIV/AIDS with complex needs constitute a minority of people with HIV/AIDS. It is estimated that while 70% of people living with HIV/AIDS live independently in the community, the remaining 30 per cent have needs that require more intense support, and in particular may require a range of well coordinated services from across the health and human services system.

There is a need for health promotion principles and strategies to be applied to service delivery with individuals with complex needs as there is a strong body of evidence that suggests health outcomes are improved when individuals have a greater sense of self-efficacy.

Individuals are particularly vulnerable where their needs fall slightly outside strict diagnostic criteria used to determine eligibility to services, or where support is required from multiple service systems but no single agency takes a lead in coordinating services. Improving services to those who require support from multiple

service systems is a key priority for the Chief Executive Officers of the NSW Government Human Service Agencies. In the long term, it is anticipated that a whole-of-government approach to improving service delivery to individuals with complex needs will be developed. In addition, a long-term agenda must include the development of early intervention models. However, the vulnerability of individuals and the impact on service providers requires that this be considered an immediate priority for the HIV program and its partners. While interdepartmental partnerships are essential for resolving a number of service responsibility issues, complex needs are a key area of focus in this Strategy and must also be addressed in local Area planning.

Preventing further life-disrupting events for individuals with complex needs requires the provision of pre-crisis, crisis and post-crisis services. There is a need for models that assist services to build mental health literacy in those with mental health or psychosocial difficulties, build the capacity of those individuals to maintain a locus of control (for instance, through building insight into personal patterns and strategies for averting crises or seeking assistance pre crisis) and building mental health promotion principles into current care and support programs.

Providing services to individuals with complex needs can be challenging for individual agencies, particularly those agencies that rely heavily on volunteers to provide services. An effective client-centred response requires all agencies to work together within an explicit partnership and case management model. This should be underpinned by a commitment to collaboration and shared responsibility from all agencies involved, but is most effective where one agency provides leadership in the form of individual case management. It also requires building a supportive, safe environment, building the skills of those working in mental health services and referral where appropriate to these services.

The AIDS Dementia and HIV Psychiatry Service (ADAHPS) – which includes the co-case management services provided by the AIDS Dementia and HIV Psychiatry Team (ADAHPT), and the accommodation and support services provided by The Bridge and the Marrickville and Port Jackson Housing Projects – has state-wide responsibility for supporting HIV and mainstream service providers to meet the needs of individuals with complex needs. This includes gradual levels of care from outreach services provided by ADAHPT to supported accommodation provided through The Bridge. Since the service's establishment, ADAHPT has worked across NSW providing education and support for professionals, co case-management, and links with relevant services, as well as brokerage for care. The work of ADAHPT has been important element in making support available across NSW.

Each Area Health Service and community-based and non-government organisation that receives AIDS program funding is responsible for participating in delivering quality services to people with complex needs within an overall case management framework.

General practitioners play an ongoing role in monitoring and supporting people with complex needs in the community. Support for GPs is provided through the ACON Enhanced Primary Care project, and through ASHM. Support for the role of GPs could be strengthened through the development of Area plans that link GPs to a range of specialist services, including alcohol and other drug services and mental health services.

7 Collection and monitoring of utilisation data

In the context of overall trends in service utilisation and unmet need, the collection of minimum data for both inpatient and ambulatory care is essential to future planning. There are well established mechanisms for the collection of consistent and comparable inpatient data on a state-wide basis. More recently, there has been significant investment in the development and implementation of an Ambulatory Care Minimum Data Set (MDS). The final Minimum Data Set for Ambulatory Care has been agreed upon and is currently being implemented across NSW. This has required each ambulatory care service to establish mechanisms for the collection and reporting of service utilisation data.

The NSW Department of Health has provided high level support to the development of a data dictionary that will enable the collection of data that is consistent and easily compared across locations, services and disciplines. In addition, the Department has invested significant funds in the provision of data management and technical support to assist each Area Health Service during the first year of data collection.

Once available, this data will be used to monitor needs, plan services, and review resource allocation. While the establishment of Ambulatory Care MDS has been resource intensive, this data will provide the basis for the long term responsiveness and transparency of services and programs.

8 Treatments and monitoring

The majority of people living with HIV/AIDS have taken highly active antiretroviral therapy (HAART) and at any given point in time between 60% and 70% of people living with HIV/AIDS are currently taking it. There continues to be a relatively high uptake of HAART among individuals newly diagnosed with HIV, although there has been a decline in the overall proportion of people using HAART at any time.

Decisions about HIV treatments are shaped by a range of factors and should be determined by individuals in consultation with health services and other supports, based on individual health and wellbeing. In view of the benefits evident with HAART, however, there is a role for the health system in supporting treatments use among people living with HIV/AIDS, and for addressing barriers to access to treatments or adherence to treatment regimens.

Side effects and toxicities

Concerns about the side effects and toxicities that arise with the long-term use of HAART pose a significant challenge to individuals living with HIV/AIDS and the health system. Use of HAART is associated with a decline in viral load, and significant delays in progression of HIV illness; however, it is also associated with side effects that range from inconvenient to debilitating. In addition, certain treatments or combinations are associated with significant increases in cholesterol and cardiovascular disease, lipodystrophy and lipoatrophy, diabetes, and a range of uncommon but severe conditions. Many people living with HIV/AIDS successfully manage these side effects in consultation with community-based prescribers and HIV specialists through lifestyle management, structured treatment breaks and use of complementary therapies.

Access to treatments

Access to HAART is one of the cornerstones of the Australian response to HIV/AIDS. Ensuring access to treatments currently available is a priority for the Australian health system. In addition, people living with HIV/AIDS continue to advocate for the prompt listing of new therapies as they emerge.

Of particular relevance for adherence to treatment is the issue of access to s100 prescribers and dispensing pharmacies. The location of access points for highly specialised drugs prescribed by GPs is determined by Australian Government legislation. At present, Australian government regulations require that Highly Specialised Drugs (including HAART) be dispensed through hospital-based pharmacies. For the majority of people with HIV, the need to make a separate journey to a hospital

pharmacy to collect s100 drugs (as is currently required) results in lost time and potential employment difficulties. In addition, some people living with HIV/AIDS reported concerns regarding discrimination and confidentiality in the pharmacy setting.

Combined, these factors may restrict access to HAART for people living with HIV/AIDS and thus contribute to difficulties with maintaining adherence and increase the risk of interruptions to therapy.

In response, the NSW HIV partnership undertook a project trialling the provision of HAART through a limited number of community pharmacies. The evaluation of this Community Pharmacy Pilot scheme indicated that it was extremely well received by people living with HIV/AIDS and improved self reported adherence to HAART. In addition, this improved access to HAART was found to decrease wastage and increase the motivation of people living with HIV/AIDS to access and adhere to HAART regimens. Improving access to HAART is considered a priority for the life of this Strategy, in particular through working with the Australian Government. This may include expanding the range of pharmacies able to dispense HAART, which would be appropriate for metropolitan Sydney, as well as the identification of alternative models (such as community prescriber dispensing and home delivery of HAART) that may be more appropriate in regional and rural NSW. Achieving this will require that the NSW HIV partnership continues to work with professional organisations and the Australian Government to explore other mechanisms to improve the access of people living with HIV/AIDS to antiretroviral drugs.

It has been reported that, under current arrangements, maintenance of stock by hospital pharmacies can be an issue in some areas and notice of orders needs to be given. Where this is the case, mechanisms (including alerting patients to the issue) should be put in place to reduce waiting times and ensure supply at appropriate times. These changes can be made within the current s100 guidelines.

Access to monitoring

Laboratory services which monitor viral load, CD4 cell count and other clinical markers (such as therapeutic drug monitoring, and resistance testing) are critical in providing individuals living with HIV/AIDS with information on which to base decisions about their health and health care. Improvements in testing technologies have expanded the information available to people living with HIV/AIDS, and improved the provision of health care matched to the needs of individuals. However, such advances in technology

have led to an increase in costs associated with monitoring and the provision of laboratory services. Developing systems which support access to cost effective monitoring is a priority for this HIV/AIDS Strategy. This work will be undertaken in collaboration with the Australian Government and its Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis, and may be addressed through the review of the *National HIV Testing Policy*.

9 General Practitioners

General Practitioners (GPs) have substantial responsibility in providing treatment, care and support to people living with HIV/AIDS in NSW. GPs have been key contributors to HIV treatment, care and support since the early days of the Australian HIV epidemic. The emergence of HAART and the shift to community-based rather than inpatient management of HIV/AIDS has further expanded the role of GPs since the latter half of the 1990s. At the same time, increases in the number of people living with HIV/AIDS has led to greater demand for primary care for people living with HIV/AIDS.

Australian research indicates that some 50% of people living with HIV/AIDS see a GP who specialises in HIV for their general health care, and 45% see a GP who specialises in HIV for HIV-specific treatment. In addition to their prescribing role, GPs are identified as a key source of information and advice about living with HIV/AIDS and managing general wellbeing.

There are three basic categories of GPs who contribute to HIV/AIDS care in NSW:

- the 'specialist' HIV GP, who has a high volume of patients with HIV/AIDS, is an accredited provider of s100 drugs, and initiates and directs treatments;
- the s100 prescriber with a smaller volume of patients with HIV/AIDS; and
- the GP who provides non-HIV-related primary care to people living with HIV/AIDS; these GPs have not sought antiretroviral prescribing rights.

The number of GPs who are s100 prescribers has remained relatively static in recent years, though there has been a decline in numbers in some areas. At the same time, the number of people living with HIV/AIDS has increased (owing to improved lifespan and increased prevalence), the complexity of HIV management and the associated need for training has intensified, and access to other bulk-billing GPs has declined. These factors together have increased the demands on s100 prescribers.

At the same time, many GPs have experienced a range of financial and business pressures that have mitigated against involvement in HIV medicine. The nature of consultations with people with HIV is not conducive to optimum fee generation, and many GPs see the level of the Medicare rebate as inadequate. In addition to the above issues, there are particular difficulties in engaging GPs in HIV care in rural and regional areas.

Access to community-based care and prescribing is critical for the ongoing health and quality of life of people living with HIV/AIDS. Responsibility for supporting general practice is shared between the Australian Government, the NSW Government and other members of the HIV/AIDS partnership.

General Practice is funded through the Australian Government through Medicare (supplemented by individual payments per visit) and a range of other federal mechanisms. The Australasian Society for HIV Medicine (ASHM) provides support for GPs through training and information updates, professional representation and management of the s100 prescribers program.

Each Area Health Service is responsible for providing local GPs with education, support and referral for patients with complex needs. Some organisations – including the Albion Street Centre and the AIDS Council of NSW (ACON) – support general practice and patient care by providing services such as counselling, nutrition advice and enhanced primary care on site.

The importance of maintaining a strong and responsive network of community-based s100 prescribers to support the health and wellbeing of people living with HIV/AIDS and is recognised and considered a high priority for this HIV/AIDS Strategy. Key steps for the future will require the development of a range of strategies that support GP infrastructure, as well as programs such as Enhanced Primary Care and the strengthening of referral pathways to other appropriate services.

1 Workforce development

The capacity of the NSW HIV/AIDS program is built upon the skills and professionalism of the broad workforce responsible for HIV health promotion, treatment care and support outcomes. Supporting this workforce and enabling it to carry out its work more effectively are pre-requisites for HIV prevention and the achievement of health outcomes over the coming four years.

Workforce development is a process initiated within organisations and communities, in response to identified strategic priorities, for the purpose of workers gaining or extending their capacity to contribute to organisational and community goals. It is a multifaceted approach that can include leadership, intersectoral skills, and partnership skills, and strengthening professional knowledge and skills across all sectors of the public health workforce (NSW Department of Health, 2001).

Each service has a responsibility to develop strategies that achieve this for their own workforce. Strategies should be complemented by the work of the NSW Health Workforce Development Program in Hepatitis, HIV and Sexual Health, which has state-level responsibility for supporting the workforce and distributing funding to enable participation in relevant workforce development activities.

The HIV health promotion workforce is diverse, and scattered across NSW, rendering individual units prone to isolation. At its broadest, it includes specialist HIV and sexual health promotion staff, educators/health promoters working in community-based organisations, Aboriginal sexual health workers, allied health workers, and clinicians (including nurses, sexual health physicians and GPs). There is a relatively small specialist HIV/sexual health promotion workforce, which is responsible for developing and implementing multi-strategic programs targeting priority populations. Other health care workers contribute to HIV health promotion outcomes through work undertaken with individuals, and through outreach, or opportunistic programs.

Within the specialist HIV and sexual health promotion workforce, there is a need for ongoing attention to developing the skills of the workforce. With health promotion, workforce development may in particular require staff to be highly skilled in core areas such as developing partnerships and in community capacity building and advocacy (Wise, 2004). The HIV/AIDS sector has always drawn on a highly skilled workforce but in the past decade there has been a greater emphasis on recruiting workers with specific skills and knowledge in the area of HIV health promotion. There is a high degree of competition for staff with specialist experience and training in health promotion. Although this may vary from agency to agency and Area to Area, the ongoing entry of new workers into the field creates a continual need for workforce development initiatives which address core issues in HIV health promotion. There is also a need for local and state-wide activities that support and extend the skills of more experienced workers. These activities include providing regular opportunities to showcase and discuss effective HIV health promotion practice and consider the challenges facing HIV health promotion. These opportunities are quite well established in some aspects of the sector, for instance, among Aboriginal Sexual Health Workers and the needle and syringe program workforce, but significantly absent in others.

Particular effort may be required to provide support for workers in rural and regional areas. The bi-annual Rural HIV Forum provides an opportunity for rural people living with HIV/AIDS, and staff working in rural areas in HIV health promotion, allied health and clinical services, to gather, provide peer support and showcase good practice. There may also be potential to strengthen the relationship between rural areas and state-wide services, including through mentoring.

In addition to their own workforce development needs, health promotion staff have a role to play in reorienting health services and improving the capacity of mainstream health services, public and private, to respond to the needs of people living with HIV/AIDS and other priority populations. Within this, priority

should be given to those health services that work most directly with priority populations. Such services include emergency departments (including, but not limited to, those handling PEP-related issues), mainstream hospital services most frequently accessed by people living with HIV/AIDS (including cardio-thoracic services and antenatal services), and GPs whose caseloads include high numbers of individuals from priority populations.

The increasing diversity and complexity of needs of people living with HIV/AIDS has significantly shifted the range of services required and accessed by these people in NSW. The majority of people living with HIV/AIDS access HIV treatment and other primary care through GPs with s100 prescribing rights. In addition to this, there is a spectrum of dedicated HIV services available to people living with HIV/AIDS in NSW, including community prescribing and sexual health provided by sexual health services, inpatient care, outpatient and ambulatory care, and individual, group and community-level programs undertaken by community-based and non-government organisations. People living with HIV/AIDS also access the mainstream health system, including other inpatient services and community-based services, and the mainstream human service system for needs both related and unrelated to HIV/AIDS.

The greater diversity of service needs among people living with HIV/AIDS has led to an expansion in the range of health and human service agencies providing services to people living with HIV/AIDS. This, combined with major shifts in the needs of people living with HIV/AIDS since the advent of HAART, presents significant challenges with regard to workforce development. The training requirements will vary depending on HIV/AIDS prevalence. In particular, staff working in health services may require training in the relationship between HIV, HAART and other health conditions. Staff working across health and human services may also require training in confidentiality and discrimination issues related to HIV/AIDS.

It is difficult to predict the long-term health service needs of people living with HIV/AIDS and the service models that will be most effective in meeting those needs. There is a need to balance the allocation of resources in order to meet current needs – in particular, needs for ambulatory care – and retain sufficient skilled staff in case there is a shift in need and greater requirement for inpatient care in the future. Workforce development opportunities currently in place include the specialist nurses course conducted by Sydney Hospital, Sexual Health Medicine training conducted through the Australasian Chapter of Sexual Health Medicine, and the range of face to face and distance training provided by ASHM.

There are also long-term challenges for community-based and non-government organisations in retaining and supporting their paid workforce and the pool of volunteers involved in direct service delivery. Volunteers have played a key role in the NSW response to HIV/AIDS by providing peer support, education and care services. Recruiting and training volunteers has also provided a strategic opportunity to create a viable pool of potential employees in the community sector. Volunteering has also played a role in formalising community members' participation in community organisations, and contributed to community development in affected communities.

The HIV sector has a particular role in forming partnerships with the mainstream health and human service agencies to support the provision of ongoing professional development to those workforces to enable them to effectively meet the needs of people living with HIV/AIDS. In particular, the NSW Health Workforce Development Program in Hepatitis, HIV and Sexual Health plays a leadership role in the provision of direct workforce development and in supporting organisations to institute workforce development plans.

2 Research, data and evaluation

The NSW HIV health promotion program is well served by the research and data available to inform program development. In particular, the National Centre in HIV Social Research provides high quality research on the behaviours and experiences of gay men in inner Sydney, with other research conducted as commissioned by the NSW Department of Health and the Australian Government.

Research funded by the NSW Department of Health should reflect the programming needs of the workforce and should be used to inform program development and service delivery. This means that research, including action research, should be commissioned that is informed by health promotion theory and the needs of health promotion practitioners.

The priorities for social and behavioural research funded by the NSW Department of Health should continue to be set in collaboration with the HIV/AIDS health promotion sector, including those working in community, non-government and Area Health Service health promotion and clinical services. It is also important that the experience of those working in different locations and with different populations across NSW is represented.

This collaboration could include a more systematic approach to building relationships between regional and rural services and local universities.

There is a need to continually disseminate research findings, and maintain mechanisms for incorporating the use of research into practice. Responsibility for this is shared between researchers, health promotion practitioners, and program managers. For instance, the Workshops and Research Feedback sessions facilitated by the Community Liaison Officer at the National Centre in HIV Social Research provide an invaluable opportunity for workers to access current research and to discuss implications of research findings for health promotion practice. There is also a need to examine new models for engaging service delivery practitioners, as time constraints imposed by client services currently limit their access to research and their capacity to inform research.

As the HIV epidemic and technologies change, and the interaction between the epidemic, technologies and affected individuals and communities also changes, there is a need to promote a research environment that encourages ongoing critique of approaches to research, in terms of the theoretical frameworks, methods and designs used. This will enable Australian research to remain well theorised, effective and highly regarded.

In addition to strengthening mechanisms by which the research agenda is set and research findings are disseminated, there are a number of areas where program development would be enhanced by access to more social and behavioural research. This includes a need for more qualitative research into risk practices and safe sex among gay men, and qualitative and quantitative research into the needs and experiences of Aboriginal people and people from culturally and linguistically diverse backgrounds.

Likewise, the NSW HIV and AIDS surveillance program provides the workforce with data which enables it to identify current trends in HIV diagnoses, as well as any shifts in populations most affected by HIV/AIDS. This is complemented by the sentinel surveillance and special population studies undertaken by the National Centre in HIV Epidemiology and Clinical Research. There are, however, areas requiring some attention in order to strengthen the timeliness and accuracy of data, as well as the capacity of the sector to effectively utilise case notification and sentinel surveillance data for program development and review purposes.

Currently, each agency collects data on health promotion programs, activities and services. However, each agency largely does this according to local guidelines and local data collection priorities. This makes the data useful for local purposes but is a major barrier to comparison of activities between agencies, hampering attempts to map the program at a state level and identify gaps in HIV health promotion among populations. Over the four years of this HIV/AIDS Strategy, priority will be given to the establishment and implementation of standardised systems for tracking the activities of the HIV/AIDS health promotion program. Where practicable, this should apply to area-based, community-based and non-government HIV/AIDS services.

Improving access to research and data will enable programs and services to target those populations and contexts in which risk of HIV infection is greatest or health outcomes poorest. This requires skills in accessing and utilising data for programming purposes. Improving these skills is part of the broader challenge of supporting theory- and evidence-based programming, which of necessity is also linked to improving skills in evaluation and program/activity planning. Effective programming requires skills in reviewing literature, defining intended outcomes and objectives, and then evaluating achievement of anticipated and unanticipated objectives.

3 State-wide services

There are a number of state-wide services auspiced by Area Health Services. State-wide infrastructure services include the telephone information lines provided by the Albion Street Centre and Sydney Sexual Health Centre, the Infection Control Resource Centre, and the NSW Health Workforce Development Program in Hepatitis, HIV and Sexual Health. In addition, state-wide functions are undertaken by Sydney Hospital, the Paediatric HIV Service, and those services funded to respond to specific issues or populations, including the Multicultural HIV/AIDS and Hepatitis C Service, the HIV and Heterosexuality Service (Positive Heterosexuals), the AIDS Dementia and HIV Psychiatry Service and the HIV Dental Program. At present, these services provide tailored support to individuals and health care workers in a cost effective manner. This is in addition to those community-based organisations and non-government organisations with state-wide or cross-Area roles.

The *2004 HIV/AIDS Care and Treatment Services Needs Assessment* recommended that the NSW Department of Health develop criteria for state-wide service status, and regularly review the relevance of a state-wide service, in order to improve program monitoring and accountability. These criteria would provide a basis for the identification of services that may be eligible for funding, and for future performance monitoring. This will be supported by the development of Memoranda of Understanding between the NSW Department of Health and individual state-wide services.

4 Linkages to related health and human service agencies

Improving health outcomes for the priority populations identified in this HIV/AIDS Strategy will require improving access to mainstream health services such as counselling, alcohol and other drugs services, and mental health services.

In addition, there is a need to strengthen the ongoing partnership between the NSW HIV/AIDS program and other human service agencies such as Department of Education and Training and the Department of Ageing, Disability and Home Care. For instance, mainstream disability services have a significant potential role to play in relation to access to HIV prevention materials for people with physical, intellectual and/or psychiatric disabilities, and providing services to people living with HIV/AIDS, while the Department of Education and Training has lead responsibility for education to young people through the public school system. Likewise, disability services may have a greater contribution now that the pattern of care required by people living with HIV/AIDS more closely parallels that of people with other chronic illnesses or disabilities.

This will require action at both a state-wide and local level.

Glossary

The Beats Interagency

The Beats Interagency aims to review current beats-related health promotion activities and assist in the planning of future projects in a coordinated, efficient and evidence-based manner. Membership includes Area Health Services and ACON.

CD4 cell count

the CD4 cell is a part of the immune system responsible for orchestrating the immune response of other cells. One method to measure the impact of HIV in an individual is to count the number of CD4 cells in a given quantity of blood. The normal CD4 cell count is between 800 and 1,200 cells per microlitre.

Harm minimization

an overarching strategy that aims to prevent and reduce the myriad harms associated with the use of psychoactive drugs (licit and illicit) in the community

Lipodystrophy

A disorder of fatty tissue characterized by a selective loss of body fat

Microbicides

refers to a range of different products that share one common characteristic: the ability to prevent the sexual transmission of HIV and other sexually transmissible infections (STIs) when applied topically

NSW HIV/AIDS partnership

a framework for collaboration between government, affected communities, researchers and medicine, set up to ensure that programs and services are informed by both the best available evidence and the experience of those living with or at risk of HIV infection.

Positive Speakers Bureau

A project of People Living With HIV/AIDS NSW that coordinates talks given by people living with HIV/AIDS at schools and to professional and community groups

Scarlet Alliance

the Australian Sex Worker Association

HIV sero-discordant relationship

a relationship between an HIV-positive person and an HIV-negative or unknown HIV serostatus (serodiscordant) person.

Sentinel surveillance

Sentinel surveillance involves collecting detailed information about HIV prevalence and risk behaviour from individuals considered 'high risk' at sentinel sites such as STI clinics, health care centres, needle exchange programs, sex venues and prison etc.

Three test rule

A Health Insurance Commission rule that prevents Medicare from reimbursing the cost of more than three pathology tests ordered for a patient during a single visit to a general practitioner

Abbreviations

ACCHS	Aboriginal Community Controlled Health Services
ACON	AIDS Council of NSW
ADAHPS	AIDS Dementia and HIV Psychiatry Service
ADC	AIDS dementia complex
AHOD	Australian HIV Observational Database
AOD	Alcohol and other drugs
ASHM	Australasian Society for HIV Medicine
BGF	Bobby Goldsmith Foundation
CALD	Culturally and linguistically diverse
CAS	The Ministerial Advisory Committee on HIV and Sexually Transmissible Infections (originally the Committee on AIDS Strategy)
CRC	Community Restorative Centre A community organisation that provides support for prisoners, ex-prisoners, and their families and friends.
FPA Health	(formerly Family Planning NSW) A not-for-profit organisation that provides reproductive and sexual health services in NSW
GAMMA NSW	Gay and Married Men's Association, NSW
GP	General practitioner
HAART	highly active antiRetroviral therapy
PLWHA	People living with HIV/AIDS
MACASHH	Ministerial Advisory Committee on AIDS, Sexual Health and Hepatitis
MHAHS	Multicultural HIV/AIDS and Hepatitis C Service
MSM	Men who have sex with men
NCHSR	National Centre in HIV Social Research
NPEP	Non-occupational post exposure prophylaxis
NSP	Needle and Syringe Program
NUAA	NSW Users and AIDS Association
PEP	Post exposure prophylaxis
RACGP	Royal Australian College of General Practitioners
s100	Section 100 drug
STI	Sexually transmissible infection
SWOP	Sex Workers Outreach Project
TGA	Therapeutic Goods Administration
UAI	Unprotected anal intercourse
WPBM	Women Partners of Bisexual Men's Project

References

- Applied Economics 2003, *Returns on investment in public health*, Commonwealth Department of Health and Ageing, Canberra.
- Australian Institute of Health and Welfare 2002, National Drug Strategy Household Survey, *Drug Statistics Series Number 9*, Canberra.
- Clements M, Prestage G, Grulich A, Van de Ven P, Kippax S, Law M 2004, Modeling trends in HIV incidence among homosexual men in Australia 1995-2006, *Journal of Acquired Immune Deficiency Syndrome*, vol 35, No 4, pp 401-6.
- Grierson J, Thorpe R, Saunders M, Pitts M 2004, *HIV Futures 4: State of the [positive] nation*, Australian Research Centre in Sex, Health and Society, Melbourne.
- Hardwick J, Cotton R 2005, *HIV/AIDS care and treatment services needs assessment*, NSW Department of Health, Sydney.
- Health Outcomes International 2002, *National Return on Investment in Needle and Syringe Programs in Australia*, Commonwealth Department of Health and Ageing, Canberra.
- Hickson F, Nutland W, Weatherburn P, Burnell C, Keogh M, Doyle T, Watson R, Gault A 2003, *Making it count: a collaborative planning framework to reduce the incidence of HIV infection during sex between men*, Terence Higgins Trust, London.
- Holt M, Jin F, Grulich A, Murphy D, Smith G 2004, *Syphilis, STIs and men who have sex with men in Sydney*, National Centre in HIV Epidemiology and Clinical Research and National Centre in HIV Social Research, Sydney.
- Hull P, Rawstorne P, Prestage G, Crawford J, Kippax S 2005, *Sydney gay community periodic study: February 1996 to August 2004*, National Centre in HIV Social Research, Sydney.
- Kaldor J, French M 1993, When do patients present with HIV infection? *Medical Journal of Australia*, vol 158:37-38.
- Mao L, Van de Ven P, Prestage G, Wang J, Hua M, Prihaswan P, Ku A 2003, *Asian gay community periodic survey Sydney 2002*, National Centre in HIV Social Research and National Centre in HIV Epidemiology and Clinical Research, Sydney.
- NSW Department of Health 2005, *Aboriginal Sexual Health Implementation Plan*, Sydney.
- Prestage G, Song A, Grierson J, Race K, Grulich A, Rawstorne P, Kippax S 2001, *positive Health: treatments, services, health*, National Centre in HIV Social Research, Sydney.
- Smith A, Rissel C, Richters J, Grulich A, de Visser R 2003, Sex in Australia: Australian study of health and relationships, *Australian and New Zealand Journal of Public Health*, vol 27, No 2, special edition.
- STI Testing in Gay Men (2005), *Sexually Transmitted Infection Testing Guidelines for Men who have Sex with Men*, STIGMA, Sydney.
- Wilson A, Wise M, Fowler D, Spina A 2004, *Evaluation of the NSW HIV/AIDS Health Promotion Plan 2001-2003*, NSW Department of Health, Sydney.
- World Health Organization 1986, Ottawa charter for health promotion, *Paper presented at the 1st International Conference on Health Promotion*, Ottawa, 21 November.

