



Queensland Association for Healthy Communities (QAHC)

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A literature review of current sexual health promotion and HIV prevention practice in clinical settings, which target gay/MSM in Australia and other western countries.

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Summary

Men who have sex with men (MSM), particularly those who live in gay epicentres, such as Inner City Sydney and other state capitals, are among the most researched and keenly monitored demographic of men in Australia (Madeddu, 2006). There are innumerable quantitative and qualitative reports and surveys theorising on sexual behaviours, and the challenges of containing the transmission of Human Immunodeficiency Virus (HIV). For several years National and Queensland HIV notification rates have steadily increased, particularly in MSM, which indicates that this population group continues to engage in sexual behaviours which result in HIV transmissions (National Centre in HIV Epidemiology and Clinical Research, 2008). The continued rising rates of new HIV infections in Queensland indicate that the current health promotion interventions have not been successful in targeting these patterns of risky behaviour and new and innovative strategies are imperative to avoid new HIV transmissions.

Male to male sexual contact continues to be the most common risk exposure category for first diagnoses in HIV notifications in Queensland, with 112 (of 145) new diagnoses, where MSM was their only risk factor (Queensland Health, 2007). Increases in sexually transmissible infections (STIs), in particular, Syphilis and Gonorrhoea, as well as inconsistent condom use, among certain MSM populations, are likely factors in increased HIV notifications (Commonwealth Government, 2007) (Wilson, 2008). The Gay Community Periodic Survey of Queensland (GCPSQ) reports that 31% of MSM from the study had engaged in unprotected anal intercourse with casual partners in the last six months (Frankland, 2008).

Transmission synergy between HIV and STIs is well-documented, particularly ulcerative STIs such as genital herpes and syphilis (Kelly, 2004). The Mathematical Modelling report from the National Centre for HIV Social Research (NCHSR) sheds new light on the importance of STIs in the transmission of HIV which predicts alarming projected rates if current trends continue (Wilson, 2008). The majority of Queensland MSM seek HIV testing at their GP (71.3%), though less than half of the men surveyed had had a full sexual health

check in the last year (Frankland, 2008). Comprehensive sexual health screening, including swabs for bacterial infections and serology other than HIV, as well as appropriate HIV pre and post test discussions, is an essential element of HIV prevention. Spina and Fowler (2007) suggest that the nature of private medical practice means that time constraints contravene best practice in terms of inability to undertake pre and post test discussions with patients.

A meta-analysis by Spina and Fowler (2007) suggests that sexual health promotion and HIV prevention in the clinical context is best undertaken when a client receives their results from their clinician post test. Health promotion which utilises cognitive behavioural therapy and motivational interviewing may yield medium term behaviour change, however, reinforcement which challenges social norms is most appropriate in influencing clients to alter their behavioural norms (Spina, 2007).

Innovative strategies, such as rapid, community-based and online testing, have been employed at a state, national and international level. These have proffered dynamic and novel HIV and STI prevention opportunities, which deserve consideration by Queensland's HIV and Sexual Health sector. This report describes a selection of these strategies for consideration and couches them in the context of current HIV/STI rates and MSM risk-taking behaviours. Additionally, it highlights the dilemma for HIV/sexual health policy makers in relation to the clear choice of MSM to access GPs for screening instead of specialised services and how best to support general practice given industry constraints.

The QAHC Clinical Health Education and Promotion project will conduct a wide consultation of the Queensland Clinical HIV Prevention sector in order to provide valuable information on future directions in prevention HIV and recommendations on improvement for service delivery and partnerships between stakeholders.

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List of Terms and Acronyms

| Term | Acronym | Meaning (if required) |
|---|---------|---|
| Human immunodeficiency virus | HIV | |
| Sexually transmissible infection | STI | All infections, including bacterial and viral, which primarily, though not exclusively, affect the genital tract. For the purpose of this report, this term encompasses several infections, including syphilis, gonorrhoea, chlamydia, as these infections are notifiable, but also, in some cases refers to herpes simplex virus, human papilloma virus and others not mentioned here. |
| Acquired Immune Deficiency Syndrome | AIDS | |
| Men who have sex with men | MSM | All men who report sex with other men, including homosexual (gay-identifying), bisexual and heterosexual men who report current or lifetime history of sex with other men |
| Lesbian, gay, bisexual and transgender | LGBT | All people who identify with these or similar labels, and those who chose not to label themselves, but participate in this community. |
| Unprotected anal intercourse with casual partners | UAIC | |
| Unprotected anal intercourse with regular | UAIR | |

| | | |
|---|-------|--|
| partners | | |
| Sex on Premises Venues | SOPVs | Venues which provide spaces for men to have sex with each other in exchange for an entrance fee. |
| Queensland Association for Healthy Communities | QAHC | Formerly known as the Queensland AIDS Council (QuAC) |
| Australian Federation of AIDS Organisations | AFAO | |
| People Living With HIV/AIDS | PLWHA | All HIV positive individuals, including those with an AIDS diagnosis |
| Queensland Gay Community Periodic Survey | QGCPs | Longitudinal behavioral self-report survey of MSM in QLD, also replicated in Sydney and Melbourne. |
| National Centre for HIV Epidemiology and Research | NCHER | |

Purpose

The Clinical Health Education and Promotion (CHEAP) project has been initiated by Queensland Association for Healthy Communities (QAHC) with funding from Queensland Health, in response to the rise in new HIV notifications in recent years in Queensland. As the lead sexual health promotion organisation for MSM in Queensland, QAHC holds a responsibility to support clinicians at the point of testing, HIV prevention and sexual health promotion efforts.

The purpose of this literature review is to inform the practice of the Clinical Health Education and Promotion Project Officer by:

- providing a broad overview of HIV and MSM in Queensland and Australia; and
- examining HIV prevention and MSM sexual health promotion best practice in the clinical setting at a National and International level.

There are several comprehensive and useful documents which have been published in this area and this paper will not replicate this valuable work. This paper will summarise the relevant findings and highlight the deficits of the current body of knowledge that exists around HIV prevention and sexual health promotion in MSM in Queensland. The documents listed below were commissioned by QAHC and the Australian Federation of AIDS Organisations (AFAO) and provide detailed information about the HIV sector and the men it provides health care for, these include:

- AFAO Mapping HIV and STI Prevention Programs and Activities Targeting Gay and Other Homosexually Active Men in 2005/06 (Spina, 2007)
- Gay Men, HIV and Health Promotion: Market Research (Kassulke, 2007)
- Review of Health Promotion Opportunities at the Time of HIV Testing (Among Gay Men) (Spina, 2007)

It is acknowledged that much of the literature on behavioural trends of MSM which has been reviewed focuses on Sydney MSM cohorts, as Inner City Sydney offers a high prevalence of MSM and HIV positive individuals (Madeddu, 2006). This may be a limitation of efforts to accurately target Queensland MSM for HIV prevention campaigns as their behaviours may be fundamentally different. Currently the best indicator of MSM behaviours is the Queensland Gay Community Periodic Survey.

Queensland Association for Healthy Communities

Strategic Intent

The Queensland Association for Healthy Communities (QAHC) is an independent community based organisation. The QAHC formerly known as the Queensland AIDS Council, was formed in 1984 by the gay community in response to the HIV/AIDS epidemic in Queensland. From that time the Queensland AIDS Council grew to deliver HIV prevention programs, client services for people with HIV, peer support through Queensland Positive People and provided a strong voice on HIV and gay issues.

Following changes to HIV funding in 2004 the organisation reformed as a LGBT health promotion organisation and was renamed as Queensland Association for Healthy Communities to better reflect a wider community development role. Currently, QAHC employs over thirty staff across Queensland, who undertake a wide variety of health promotion programs from social marketing campaigns to community events and action groups. While the majority of QAHC's work remains in HIV prevention, the broad remit of LGBT health promotion allows for a diversity of community engagement.

QAHC Vision: A Queensland where all lesbian, gay, bisexual and transgender people achieve the best possible health and well-being and participate fully in the life of communities, free from stigma and discrimination.

QAHC Mission: To enable lesbian, gay, bisexual and transgender people to increase control over and improve their health, as a resource for social, economic and personal development and an important dimension of quality of life.

Programs

QAHC currently receives government funding for three main programs:

- HIV & Hepatitis C Prevention and Sexual Health Promotion for Gay and other Men who have Sex with Men

- Queensland Aboriginal and Torres Strait Islander HIV/AIDS Program (2 Spirits Program)
- Training and Development Project

In addition QAHC uses fundraising, donations and small grants to run projects including:

- LGBT Health Issues – a variety of mainly volunteer action groups to address community concerns (e.g. ageing).
- Healthy LGBT Communities Fund – a small grants fund for LGBT groups and projects.
- LGBT Resource Centre – a centre for QAHC and other LGBT and HIV groups to use for meetings, events and access to office equipment.
- The Hope Fund (in association with Oz Showbiz Care/Equity Fights AIDS Queensland Positive People and Positive Directions) – small grants of goods and services for people living with HIV who are in need.

Health Promotion

As a health promotion organisation QAHC believes that:

- Health is not just the absence of disease, but is a state of physical, mental, social, spiritual and economic health & wellbeing
- Health is a resource for everyday life, not the objective of living.
- Health promotion is the process of enabling people to increase control over, and to improve, their health.
- All people have a right to a fulfilling life (including sex life), free from stigma and discrimination on the basis of age, ability, ethnic/national origin, cultural identity, sexual orientation, gender or HIV status.

The work of QAHC has its foundation in the Ottawa Charter for Health Promotion (World Health Organisation, 1986). QAHC conducts health promotion by:

Develop Personal Skills & Knowledge

- produce HIV prevention campaigns & resources

- post health information on our website
- run workshops for community members
- staff the men's sexual health 1800 line

Strengthen Community Actions

- provide extensive volunteer opportunities
- administer the Healthy LGBT Communities Fund
- maintain the LGBT Resource Centre
- participate in LGBT community events & initiatives

Create Supportive Environments

- challenge stigma and discrimination
- facilitate the sex on premises venue (SOPV) forum
- reinforce the safe sex culture

Re-orient Health Services

- provide LGBT awareness training
- provide cultural awareness training
- address barriers to LGBT health
- produce information on LGBT health issues to services

Build Healthy Public Policy

- are a voice on HIV and sexual health issues
- are a voice on LGBT health issues
- are a voice on indigenous sexual health & LGBT issues

Clinical Health Education and Promotion (CHEAP) Project

The purpose of the project is to:

- Increase health promotion support for gay men in clinical settings
 - gather information state-wide on current sexual health promotion practice
 - enhance networks between sexual health clinicians, specialists and QAHC to elicit and report on constructive recommendations for service improvements
 - develop recommendations for improved MSM sexual health promotion

- Increase communication between QAHC and Sexual Health Clinicians, high caseload GPs and other key stakeholders
 - liaise with sexual health clinicians throughout Queensland and support them to deliver sexual health promotion to gay/MSM
 - link QAHC workers into clinical networks to allow them to provide more comprehensive health promotion support

Health Promotion - Best Practice

Health promotion is defined by the World Health Organisation as:

‘the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social wellbeing, an individual or group must be able to identify and to realise aspirations, to satisfy needs and to change or cope with the environment. Health is, therefore seen as a resource for everyday life, not the object of living. Health is a positive concept emphasising social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being. (World Health Organisation, 1986)’

The Ottawa Charter continues that health promotion is about ‘advocating, enabling and mediating’ through:

- building healthy public policy;
- creating supportive environments;
- strengthening community action;
- developing personal skills; and
- reorienting health services (World Health Organisation, 1986).

In the face of rising HIV and STI notifications, some contingents of the HIV sector have questioned the effectiveness of health promotion efforts. A vital part of the debate is examining evaluation strategies which provide feedback on progress, acceptability and rates of behaviour change. In order to illustrate the value of health promotion in the HIV and sexual health sector, it is important to ensure that health promotion is evidence-based, accountable and demonstrably effective in a variety of ways.

The Dilemma of Evaluation

Evaluation of health promotion has beleaguered efforts by health promoters to demonstrate influence over the health status of priority populations. Nutbeam (1998) suggests that this dilemma is due to the 'value' that funders, governments, communities and health workers place on intervention outcomes. He suggests that while communities may value a health promotion intervention because it is participatory, researchers may value it because of an improvement in reported health behaviours. The difference in stakeholder needs can result in interventions which are not supported by one or more groups of stakeholders, ultimately resulting in inferior health promotion outcomes. Added to this, is the lengthy time with which health outcomes and processes take to change. Hence, Nutbeam suggests multiple evaluation strategies to demonstrate success of health promotion programs at different intervals throughout the life of the project or program, such as data source triangulation, researcher triangulation and methods triangulation (1998). In the Australian HIV sector, this trend of triangulation has emerged, particularly in evaluating the success of HIV prevention efforts in NSW (Fairley, 2008) & (Bernard D. K., 2008). Furthermore, evaluation plans should include indicators of program reach, acceptability and integrity, as well as measure the key outcomes of health literacy, social mobilisation and public policy and organisational practice (Nutbeam, 1998).

Tang et al (2003) continues this theme of problems with the evaluation of health promotion and suggests that the frustrations lie in the adoptions of the 'hierarchical structure established by those working in evidence based medicine'. The authors advocate for a typology of evidence for effectiveness of health promotion strategies rather than a hierarchy, which are as follows:

- Evidence of implemented interventions that meet the criteria for scientific fact—proved predictable, and repeatable, regardless of time and place, eg. immunisation and condom use
- Evidence from interventions that produce desired outcomes and are predictable but are repeatable only at a local level within a certain period of time, eg. Assertiveness training for sex workers combined with the provision of condoms

- Evidence from interventions that work as predicted to produce desired outcomes, without meeting the causality criterion, and are repeatable at any time and anywhere, eg. acupuncture for pain relief
- Evidence from interventions that work as predicted, without meeting the causality criterion, and are repeatable only at a local level within a certain period of time, eg. Social marketing campaigns to increase syphilis testing in MSM

Furthermore, health promotion is conducted with dynamic communities which constantly change and are influenced by behavioural, social and environmental factors. Tang purports that qualitative methods of evaluation should not be underestimated and are useful for achieving generalisability and transferability for evaluation efforts (2003).

Kassulke et al (2007) conducted a qualitative evaluation to provide a broad overview of MSM health promotion and HIV prevention in Queensland. This document is unique in Queensland and provides the most in depth and published insights into HIV prevention from the consumer and provider perspectives. For this reason, a detailed summary is provided here.

Gay Men, HIV and Health Promotion: Market Research (Kassulke, 2007)

SUMMARY

Commissioned by QAHC, this University of Sunshine Coast study aimed to identify issues for gay men in the HIV and health promotion sector which may explain the Queensland context for MSM in light of rises in HIV notifications during 2005.

Research questions:

- What are the attitudes of gay men to HIV?
- What are the attitudes of gay men to HIV prevention?
- What do gay men think about current health promotion action, for example social marketing
- Campaigns to prevent HIV?
- What do gay men see as their role in HIV prevention?

Qualitative methods of research included:

- focus groups
- key informant interviews

Participants were from:

- Brisbane
- Sunshine Coast

Limitations:

- Defined time frame did not allow for extensive recruitment of participants
- Participants self-selected into the study and were sourced from existing the QAHC network
- Small sample size and limited geographical location inhibits the generalisability of the results to the wider Queensland gay community

Results

Participants expressed a high level of awareness of the current status of HIV prevention and were generally aware of the problems, opportunities and the strategies that were associated with dealing with the issue.

Key Health Promotion themes included:

- campaigns and social marketing strategies should be mainstream and focus on all STIs not just HIV.
- success of early awareness campaigns such as the Grim Reaper campaign, though it was acknowledged that this could contribute to further alienation of the gay community
- complacency was identified as a major barrier to condom use and other safer sex practices
- lack of visibility of people living with HIV/AIDS and improvements in the pharmacological treatment of people who are HIV positive

Key Individual themes included:

- emotional issues such as:
 - self esteem
 - grief
 - oppression, homophobia and heterosexism
 - fatigue for continued safer sex and HIV prevention messages and practices

Key Community themes included:

- discrimination continues to be experienced as a consequence of being gay in spite of changes to legislation and community attitudes
- lack of involvement of general practitioners and the Division of General Practitioners in HIV prevention
- Local Government Authorities were also singled out as unsupportive because the dissemination of safe sex messages was not permitted in those places most likely to be frequented by gay men, such as beats.

While the results of this study do not encompass the opinions of all gay men and HIV and MSM health promoters in Queensland, it does provide useful insights for HIV sector improvements. Additionally, it provides a good foundation for further studies of its kind to periodically evaluate sector efforts in HIV prevention from the consumer perspective. Future studies should attempt to obtain a study participant population which accurately reflects the Queensland gay population.

Current HIV Prevention Practice in Clinical Settings

Australia

A review of health care services for MSM in Australia reveals that there is great variance in the number of services treating MSM and PLWHA, dependent on the burden and distribution of disease (Pell, 2008). Most HIV and sexual health services are provided in general practice, especially by s100 prescribers. While Medicare subsidises this, the increasing trend away from bulk-billing services (General Practice Queensland, 2008), begs the questions of affordability and access, particularly for PLWHA. Specialised sexual health services exist nationally, but are generally under-utilised, for a variety of reasons, some of which may relate to service hours, staffing, geographical location, lack of anonymity for patients and many more. The following is a report undertaken by AFAO on HIV and Prevention which target MSM and provides a comprehensive platform for further discussion.

AFAO Mapping HIV and STI Prevention Programs and Activities Targeting Gay and Other Homosexually Active Men in 2005/06 (Spina, 2007)

SUMMARY

- There are 36 organisations providing HIV/STI dedicated programs targeted at gay men, with over half the organisations based in NSW and Queensland.
- Of the 36 organisations, 21 are non-government organisations, 13 government agencies and 2 universities.
- There are 76.9 full-time equivalent positions specifically dedicated to HIV and STI prevention work with gay and other homosexually active men.
- Total funding for these positions was \$4,041,423.

The most common programs and activities that were provided were:

- training for GPs, sexual health staff and other allied health professionals;
- activities to promote HIV and STI testing;

- group work and counselling; and
- activities that use community development approaches, including:
 - supporting LGBT groups and leaders;
 - conducting social and support events;
 - organisational participation in community events; and
 - program partnerships.

HIV/STI testing was provided by 21 organisations, 14 of these indicated that they ran campaigns, and 7 indicated that they ran sexual health testing clinics that specifically targeted gay and other homosexually active men.

Most organisations had websites that provided some health information for gay and other homosexually active men. Nationally, and in NSW and Victoria, websites are also developed to support a particular campaign or to address a particular issue. Currently online internet outreach strategies are being trialled by a number of organisations, including QAHC.

Queensland

HIV prevention and sexual health services are provided in general practice and specialised sexual health and HIV services in Queensland. While there are many challenges in the current HIV climate, innovative strategies are emerging and demand further investigation.

Queensland sexual health clinicians, Communicable Diseases Branch and other HIV/STI sector stakeholders demonstrated their commitment to HIV and STI prevention in gay and other MSM in the 2007 Consultative Forum on the Queensland HIV, Hepatitis C and Sexually Transmissible Infections Strategy 2005-2011 (Porcino, 2007). The Forum assesses the current progress of action areas within the Strategy and informs future directions for the HIV/Sexual Health Sector. Forum participants were widely representative of the HIV/ sexual health sector in QLD and agreed that ‘testing and treatment of STIs in gay men and other MSM as a key plank in the prevention of STIs and HIV’, was one of the highest priority actions relating to STIs. Furthermore, the forum endorsed the support of

innovative technologies, such as oral fluid HIV testing, as a high priority for the implementation of the Strategy (Porcino, 2007). This impetus continues in the current HIV/Sexual Health Sector, with the establishment of the STIs in Gay Men Action (STIGMA) Group and other working parties in development, as well as continued and consistent intersectoral collaboration on this priority area.

HIV and STI Testing Patterns in Gay and other MSM

The majority of the participants in the 2007 Queensland Gay Community Periodic (QGCP) survey reported that they had their sexual health check ups in the last year at their GP (71.3%), and 38.5% attended a sexual health clinic (Frankland, 2008). There is no other published data, apart from self-report in the QGCP, to suggest where the majority of Queensland MSM are receiving sexual health services and where the majority of STIs and HIV in MSM are diagnosed. This gap in the literature warrants further investigation and would provide vital information about resource and funding allocation, clinical support and service requirements to inform health strategy and services planning, as well as future health promotion campaign resources. A recent review (Spina, 2007) of opportunities for health promotion at the time of HIV testing provides guidelines and rationale for continued pre and post test discussions in clinical contexts. This document, which was commissioned by QAHC provides key insights for the CHEAP Project and is summarised here.

Review of Health Promotion Opportunities at the Time of HIV Testing (Among Gay Men)

(Spina, Review of Health Promotion Opportunities at the Time of HIV Testing Among Gay Men, 2007)

SUMMARY

Purpose

To examine opportunities for health promotion interventions at the time of HIV testing, when MSM are contemplative about their risk and their future health behaviours.

Methods

- Literature review

- Key stakeholder interviews

Limitations

- Information about clinical contexts was limited to the literature review and not key stakeholder interviews, which impacts on the practicality of some recommendations

Key Findings

- QLD gay men have relatively high rates of HIV testing, and those MSM who are tested are more likely to report recent UAIC
- Health care providers have a unique opportunity at the point of testing (pre and post) to undertake HIV prevention education because
 - It is efficient, as the patient is already present in the clinical setting;
 - Patients are already concerned with their health if they present for a test and therefore may be contemplative about a proposed behaviour change;
 - It reinforces community health education efforts; and
 - Patients are more accepting of prevention education when they are receiving good clinical care.
- Most MSM get their sexual health services in General Practice, which presents barriers to effective HIV prevention which include:
 - Varying levels of skills and interest among GPs in sexual health
 - Lack of resources to support GPs in effective MSM sexual health promotion
 - Remuneration issues which preclude clinicians from engaging in long consultations for health education.

Interventions which focus on interpersonal skills, including counselling sessions (cognitive behavioural therapy and motivational interviewing), can reduce self-reported UAIC episode among gay men and HIV acquisition (Johnson, 2002), (The EXPLORE Study Team, 2004). While this may not be practical in the context of a busy clinic, referral to existing counselling services at the time of the consultation may be implemented.

Interventions which have demonstrated success in HIV prevention, target:

- alcohol use & recreational drugs,
- social norms encouraging risk taking,
- enjoyment of risk-related sexual behaviour; and
- life events as environments that trigger risk-taking (Strathdee, 1998, Weinhardt, 1999, Smith, 2006 in Spina, 2007)

Clinicians may enhance their HIV prevention efforts by incorporating discussions about this above issues in their consultations with MSM. Health promotion interventions can demonstrate decreases in risk behaviours, though changes are short lived. Interventions which have a high level of clinician involvement are only realistically sustainable in a government clinic context with grant funding, and definitely not in the GP context, due to time and financial constraints (Spina, 2007).

General Practice

Opportunities and Challenges

GPs are the foundation of primary health care, providing front-line health assessment, diagnoses, care and treatment to Australians (General Practice Queensland, 2008). Pitts et al (2006) found in the Private Lives survey, that most MSM (72.4%) had a regular GP, but that disclosure of their sexual orientation did not always happen. Schindhelm (2004) in Baber (2006) reports that lack of disclosure of sexual orientation to social networks, including the individual's GP, is a risk factor for increased numbers of sexual partners and increased sexual risk taking. The increased risk is associated with self esteem and perceived lack of acceptance of the individual, which leads to increased risk taking. A lack of disclosure about sexual orientation and/or behaviours to GPs inevitably leads to incomprehensive STI screening due to a lack of information for the GP to make informed clinical decisions. The barriers to HIV/STI testing in general practice are diverse and may involve internal factors for the MSM client, which are exacerbated by external factors such as stigma and discrimination. Conversely, other barriers are related to a lack of GP skills in sexual health discussions.

Over half of GPs in a UK study reported issues of non-heterosexual orientation as a barrier to discussing sexual health matters; including ignorance about gay lifestyle and sexual

practices, and concerns about using appropriate language and assumptions about gay relationships (Hinchliff, 2005). The authors suggested that improvements in education opportunities for GPs about communication and sexual history taking for gay patients would rectify this deficit (Hinchliff, 2005). Baber (2006) suggests similarly, that sensitive sexual history taking, which identifies sexual behaviours and the level of risk (rather than labels), can be conducted by any GP. Queensland MSM are attending GPs on a regular basis, which provides GPs with an excellent opportunity to engage in discussions about risk and conducting STI/HIV screening, potentially allowing earlier diagnosis of sexual health issues for MSM (Frankland, 2008) & (Baber, 2006).

There are several General Practice clinics in Queensland, which provide, 'gay-friendly' health care in urban and regional centres, including sexual health and HIV screening and treatment (Pell, 2008). As GP clinics are private businesses, services provided vary from clinic to clinic. Many clinics employ practice nurses who may provide health services to MSM, especially in the area of clinical trials, under the direction of the GP (General Practice Queensland, 2008).

General Practice Queensland (GPQ) is the organisation responsible for supporting General Practitioners at a state level on the development of health policy, implementation of Commonwealth Government health initiatives, representation, lobbying and communication with stakeholders (General Practice Queensland, 2008). GPQ highlights the constraints of providing health care in private practice, acknowledging that practice income is generated by consultation fees from seeing patients, and that this limits the amount of time that is available to see each patient as well as the GPs' capacity to engage in activities which do not generate this income, such as participation in meetings and engaging with other services. (General Practice Queensland, 2008). Comprehensive sexual health screening, including sexual history taking and pre/post test discussions, in some circumstances, may prove to be unprofitable to GPs. This area is not covered well in the literature and may warrant further investigation. While there are several Queensland GPs, particularly, notable high case load GPs, who do provide comprehensive sexual health and HIV services, anecdotal evidence and studies from other states indicate that many MSM are accessing services from non-s100 prescribers and high case load GPs (Stoove, 2008).

Knowledge and Skills

White et al (2008) conducted a brief survey of 1061 (of 7755 surveys sent) Queensland GPs to gauge knowledge about sexual and reproductive health. This survey found that there was a broad level of accuracy of responses among participants. However, the authors report that the findings suggest the need for further sexual and reproductive health education of GPs across Queensland (White, 2008). It is important to note, that while this Queensland research provides interesting and valuable insights, due to a low response rate the results are not generalisable for all Queensland GPs. This study is the first in this area and highlights a significant gap in the literature, particularly considering that there were no questions about the sexual health screening and care of MSM.

Sexual Health Clinics

In sexual health clinics, HIV prevention and sexual health promotion in Queensland MSM is undertaken by clinicians, including clinical nurses, sexual health physicians and psychologists, during one-on-one consultations, which can vary in duration from 15 minutes to one hour. Clinicians use a variety of strategies, including:

- sexual history taking;
- pre and post test discussion;
- STI/HIV testing;
- provision of culturally appropriate verbal and written sexual health information;
- health education about safer sex; and
- referral to psychological services (Queensland Health, 2006).

Outreach clinics are provided by several Sexual Health Clinics, including regular Sauna clinics, which allow MSM alternatives for accessing public sexual health services. At the time of writing this report, the clinicians responsible for the Sauna Clinic were preparing data for publication. Sexual Health Clinics also provide extensive education services to the

community and other health care workers on many sexual health topics, which frequently include MSM issues.

Pee it, Pack it, Post it – Chlamydia Testing Trial in Queensland

Buhrer-Skinner et al (2008) recently examined patient acceptability of self collection kits for Chlamydia testing, particularly targeting young people. The state-wide study involved the distribution of kits through many sites, including QAHC offices, and offered a promising STI testing alternative for MSM. While the testing kit was highly acceptable to the majority (99.2%) of the 294 respondents, the majority of these were female (71.3%) (Buhrer-Skinner, 2008). This suggests that the kits available to MSM were either not adequately advertised, that males who did take a kit were not highly motivated to return it via post to the researchers or that this testing method may not be acceptable to men. Nevertheless, this trial is a significant development in alternative testing options for MSM in Queensland.

Non-Invasive HIV Testing

Debattista et al (2007) conducted a trial at the Brisbane Sexual Health and HIV Service to assess the sensitivity and specificity of oral fluid HIV testing in comparison to current serology testing and the viability of offering this service in the current climate. The study, which was not specifically targeted at MSM, recruited participants from a clinical setting and undertook the oral fluid test and serology. The study demonstrated a 99.4% sensitivity (Orasure failed to detect one out of 176 HIV positive specimens) and a 97.6% specificity (there were three false positives for Orasure). The majority of participants preferred Orasure testing to conventional serology because it was more convenient and less painful, but a number of participants made this preference conditional on the sensitivity and specificity of the test. The authors highlight advantages of oral fluid testing being:

- greater safety in collection and handling of specimens;
- easier disposal of body fluids;
- increased patient compliance;

- improved management of difficult venepuncture; and
- simpler collection method, which has significant practical applications in community settings (Debattista, 2007).

A second community based study was conducted in 2007 using Orasure in a number of SOPV and recreational venues to determine the levels of undiagnosed HIV with a gay community setting. At the time of writing, this technology had not implemented in a non-study context in Queensland and there have been difficulties with the supply of the Orasure test. END

HIV and Sexual Health Clinical Networks

Clinical Networks exists in most Area Health Services in Queensland and vary in their focus, participation and function. Most of the Clinical Networks are facilitated by the Area Health Coordinators and provide an opportunity for information sharing and collaboration on projects, which include MSM sexual health and HIV prevention (Rutkin, 2008).

Sexual Health and HIV Clinic Integration within Community Health Precincts

In several regional centres, Sexual Health and HIV Clinics may be integrated into Community Health Precincts in the coming years (Queensland Health, 2007). There is much debate in the HIV/Sexual Health sector about the advantages and disadvantages of this currently. A discussion paper by a Queensland Health sexual health clinic on this topic was in draft at the time of writing, though examination of other countries who trialed integrated sexual health and HIV services provide noteworthy insights. A qualitative study of MSM patient acceptability of integrated HIV and sexual health services (combined with other community health services) in London suggests that some men prefer the 'privacy' of a sexual health waiting room and reception desk, to the anonymity and diversity of a multipurpose community health centre (Centre for Sexual Health and HIV Research, 2007). While these results are not transferrable to the Queensland context, policy makers should ensure that patient services and outcomes are not impaired in the process of integrating community health services (Queensland Health, 2007).

Other Australian States and Territories

New South Wales (NSW)

The HIV notification rate in NSW has remained relatively stable since 1998, while notification rates in Queensland and Victoria have steadily climbed in that time (National Centre in HIV Epidemiology and Clinical Research, 2008). There has been much debate regarding the explanations for this disparity which is summarised here:

- NSW men know their HIV status more than QLD and VIC men (Zlabotska, 2008)
- NSW MSM disclose their status more often (Zlabotska, 2008)
- Serodiscordant casual sex in NSW is less common than in QLD and Victoria (VIC) (Zlabotska, 2008)
- Better access to sexual health clinics (Fairley, 2008)
- Increased and sustained investment on HIV prevention and Sexual Health promotion campaigns (Bernard, 2008) (Fairley, 2008)
- High level of historical and current sustained partnership between government and non-government organisations (Bernard, 2008)

It is noted that Queensland has recently seen an increase in funding for HIV prevention from Queensland Health for the next four years, which has resulted in increased staffing and projects at QAHC.

Sexually Transmissible Infections Programs Unit (STIPU)

STIPU is a unit which was established to provide state-wide support to the implementation of the NSW STIs Strategy 2006-2009 and focuses on preventing and managing STIs. The work of the unit involves supporting general practice and sexual health services, HIV/STI social marketing and state-wide communications about sexual health (NSW STI Programs Unit, 2008). This unit has produced several resources for GPs on STI screening and management. The STI Testing Tool for General Practice was developed to increase access to STI information and education resources for GPs, especially in the areas of:

- Sexual history taking;

- Testing and treating uncomplicated STIs;
- Notification;
- Contact tracing; and
- Appropriate referrals (Murray, 2008).

The STI Testing Tool was focus tested by 110 participants and 82% of them thought that it would provide additional useful information to their practice. STIPU will distribute this resource to every GP and practice nurse in NSW, and further information on its effectiveness should be available in the future (Murray, 2008).

Utilising Communication Technology

In other efforts to support GPs in their sexual health care of patients, another group in Sydney piloted a link for GPs to email a sexual health clinician for clinical advice. The Sexual Health in Western Sydney website was developed to develop partnerships and increase the capacity of GPs to support their sexual health service provision (Biggs, 2008). Part of this service was an 'Email a Clinician' link, which aimed to provide electronic access to the Parramatta Sexual Health Clinic specialists, within five working days. The evaluation data suggests that the email link service was not successful due to difficulties with timely responses, the technology and spam, as well as it being an inferior alternative to historical communication methods (phone call or direct referral to the clinic from GP) (Biggs, 2008). The authors suggest that this technology may be of more use for remote health care workers who have issues of accessibility for advice from specialists. Additionally, improvements in the technology, such as better spam filters and instantaneous responses to GP enquiries may lead to consistent and widespread uptake of this facility (Biggs, 2008).

Sexually Transmissible Infections in Gay Men Action (STIGMA) Group

The Sexually Transmissible Infections in Gay Men Action (STIGMA) Group was formed in 2000 in response to a hepatitis A epidemic among Sydney gay men. STIGMA members include sexual health physicians, sexual health promotion specialists, public health physicians, general practitioners, community organisations of gay men and people with HIV

and the NSW Health Department. The STIGMA group developed a set of local STI testing guidelines for doctors who care for MSM, particularly those who have HIV/AIDS (Bourne, 2008). The STIGMA Guidelines are presented in a flow-chart format on A4 laminated card, which has been widely distributed to GPs.

The STIGMA guidelines (STIGMA, 2008) stipulate that all symptomatic and asymptomatic men who have had any sex with another man in the previous year should be offered tests for STIs at least once a year in the following way:

- Pharyngeal swab – N.gonorrhoea
- Anal swab – C.trachomatis and N.gonorrhoea
- First Catch Urine – C.trachomatis
- Serology – HIV, Syphilis (EIA), Hepatitis A (Immunise if negative), Hepatitis B (Immunise if negative)
- Consider HSV type specific serology

(Gonorrhoea PCR is not a validated test in the anus or pharynx and results should be interpreted with consideration or laboratory recommendations.)

Clinical indicators:

- Any anal sex
- Any anal symptoms (bleeding, itching, discharge, pain)
- HIV positive
- Past history of gonorrheal or chlamydial infection
- Sexual contact with someone recently diagnosed with an STI
- Request for a test

Test three to six monthly for men who:

- Attend sex on premises venues (SOPVs)

- Use recreational drugs
- Seek partners via the internet

Follow up testing is recommended for patients diagnosed with Chlamydia or Gonorrhoea at three months. The STIGMA guidelines are recommended regardless of whether condoms are used or not and a regular partner, increasing age or bisexuality are not necessarily protective against STIs.

It is acknowledged that these guidelines are similar to Queensland and National testing guidelines for MSM, however, the frequency of testing and specification for high risk subgroups are important inclusions to note. Similarly, the easy reference format and wide distribution to NSW GPs and other health care workers attempts to address issues of STI screening in general practice, which have been previously discussed. Queensland has just formulated a group similar to STIGMA, though it is still in its infancy. The group aims to examine issues around current STI and HIV trends and develop appropriate and specific responses to these.

Western Australia

The Western Australian AIDS Council (WAAC) has undertaken an initiative to increase STI/HIV testing options for MSM in Perth, in light of recent Syphilis rate rises, inadequate access to sexual health services for MSM and changing epidemiology of HIV in Western Australia (Bradstreet, 2008). The WAAC Clinic involves WAAC health promotion officers providing HIV/STI screening services out of the WAAC office, which is an extension of the existing WAAC Sauna Clinic project. The initiative is facilitated by:

- Clinical assistance from doctors and sexual health clinics;
- Staff availability;
- Staff knowledge and expertise in pre and post test discussion; and
- Proximity to and relationship with Clinipath (pathology service).

The WAAC Clinic provided testing for 90 clients from March 2007 to May 2008, the majority of which are gay identifying men, and 4.5% of the tests were positive for HIV, HBV, HCV, gonorrhoea or syphilis (Bradstreet, 2008).

Victoria

In 2008, Melbourne Sexual Health Clinic conducted a 12 week trial of a nurse practitioner led after-hours clinic. The after-hours clinic aimed to ascertain the effectiveness of extended hours of service provision and its effect on MSM screening rates and the risk profile of the men who attended (Bush, 2008). The trial was initiated in response to rising rates of HIV and STIs in Melbourne, to address the issue of access to testing for MSM. The investigators found that while after-hours clinics are one strategy to reduce barriers to access screening, the men who participated were mostly regular attenders with low rates of STIs. Thereby, raising the questions of the effectiveness of the provision of after-hours clinics as a strategy for increasing HIV and STI testing in high risk groups. Bush suggests that targeting high risk groups of MSM is a complex issue which requires more and increasing access to clinics in order to increase screening of high risk populations (2008).

A collaborative program between General Practice Victoria, Victorian HIV Consultancy and Victorian Infectious Diseases Reference Laboratory is currently being undertaken to increase the capacity of 'low case load' GPs to provide comprehensive HIV care at diagnosis and to increase HIV/STI screening in MSM (Stoove, 2008). The Local HIV Information, Testing and Support Pilot Program (HITS) has been developed on the premise that one third of HIV diagnoses in MSM occur in GP clinics with less than three diagnoses per year. Furthermore, these patients have lower CD4 counts, because they are diagnosed later, than HIV positive MSM diagnosed by high case load GPs. The program aims to:

- Improve capacity of GPs working in low case load clinics to discuss sexual health and sexual risk behaviours with MSM;
- Improve HIV/STI testing, management and referral; and
- Develop clinical practices that are welcoming to MSM (Stoove, 2008).

This program is currently running and no evaluation data was available at the time of writing.

Other Western Countries Context

Netherlands

Koevoets and van Loon (2004) suggest that poor HIV testing rates among MSM in the Netherlands is partly due to the one-week wait for results from traditional HIV testing. Consequently, they developed a one-hour HIV-testing kit, aimed at motivating MSM at high risk to take a test. The rapid test, Checkpoint, was offered in an exclusive Friday night clinic, which was well attended. No false positives were found during the trial (1455 tests) and the authors report that 67% of the participants chose Checkpoint for its rapidity. Moreover, this method can be used without laboratory infrastructure in settings where reluctant testers may be more likely to undertake testing (Koevoets, 2004).

Switzerland

“The Swiss Consensus Statement”

In January 2008, four Swiss HIV experts produced a consensus statement reporting that HIV positive individuals on effective anti-retroviral medications and with no STIs are not sexually infectious for HIV (Bernard E. J., 2008). The ‘Swiss statement’ has been widely publicised and so it is beholden of clinicians to discuss it when their patients raise it, where appropriate. The clear guidelines of the ‘Swiss statement’, which will preclude some subpopulations of the MSM community because of their sexual practices and STI testing behaviours, are:

- The person adheres to antiretroviral therapy, the effects of which must be evaluated regularly by the treating physician;
- The viral load has been suppressed (<40copies/mL) for at least six months; and
- There are no sexually transmitted infections (Bernard E. J., 2008).

The statement is a synthesis of a body of studies which demonstrate that HIV transmission has not been observed in heterosexual serodiscordant couples with the above stipulations.

Bernard reports that this argument is analogous with arguments about the transmission of HIV via kissing in the 1980s; in being that while it is unable to be proved that HIV cannot be transmitted via kissing, it is not a plausible transmission mode (2008). Currently, many clinicians both in Queensland and nationally have adopted the 'wait and see' approach to the 'Swiss statement', particularly in the context of gay and other MSM, where rates of STIs continue to rise. To this end, in July 2008, a Joint Australasian statement in response to the 'Swiss statement' was issued (ASHM, NCHECR, AFAO & NAPWA, 2008). This statement acknowledged that undetectable viral load in the absence of STIs will result in decreased infectivity with HIV, but that this is not the basis for an effective population HIV prevention strategy and that consistent condom use and STI screening should remain at the core of HIV prevention in Australasia (ASHM, NCHECR, AFAO & NAPWA, 2008).

United States of America (USA)

States across the USA have noted rises in HIV and STIs such as chlamydia, gonorrhoea and infectious syphilis and have consequently, implemented a National Plan to Eliminate Syphilis (NPES) (Fenton, 2007). The plan highlights nine focus areas, which include:

- Surveillance,
- Clinical and laboratory services,
- Community mobilisation,
- Health care provider mobilisation,
- Tailoring of interventions,
- Evidence-based action planning,
- Monitoring and evaluation,
- Training and staff development, and
- Research.

Another prevention strategy in the USA is broad implementation of the HIV rapid test (both fingerprick and oral fluid tests) in the majority of states (National Alliance of State and Territorial AIDS Directors, 2008). The HIV rapid test is used mostly in outreach services, community based organisations/ AIDS organisations, HIV test sites and local health

departments and over one million tests have been administered currently (National Alliance of State and Territorial AIDS Directors, 2008).

San Francisco

From 1999 to 2002 San Francisco experienced a marked increase in early syphilis in MSM and consequently government authorities, in partnership with community based organisations, community members and a commercial advertising company, undertook a social marketing campaign to increase syphilis testing (Montoya, 2006). Montoya suggests that success in social marketing involves:

- Branding (a health behavior message where the desired behavior appeals to the needs and values of the consumer);
- Segmentation (acknowledges variations in the target populations needs, values and beliefs);
- Price (the social, psychological or physical);
- Placement (delivering resources that make the desired health behavior possible when it is most likely to be sought); and
- Promotion (using mediums of delivery which reflect the habits of the consumer) (2005).

The campaign involved the development of the 'Healthy Penis and friends' brand which was widely promoted in identified gay neighbourhoods of San Francisco. Syphilis testing availability was enhanced by providing free testing at HIV clinics, a drug treatment program, a gay men's health clinic and online information services. Here individuals could print out their pathology slip, attend a pathology centre and get their results online (Montoya, 2006). The evaluation strategy involving a convenience sample of men in the campaign targeted neighbourhoods and 80% of the interviewed men were aware of the 'Healthy Penis' campaign, including campaign messages such as the recent rise in syphilis, safer sex and treatment (Montoya, 2006). The authors report that awareness of the campaign was significantly associated with having had a syphilis test in the last six months (Montoya, 2006).

In 2004, the first online STI partner notification system was implemented in San Francisco and has since been replicated in three countries, ten US cities and nine American States (Levine, 2008). Originally targeted at MSM, because it was identified that this population increasingly found sexual partners on the Internet, the inSPOT e-cards are sent to the 'contacts' email address to notify them that they may have been exposed to an STD. Over 30,000 people have sent e-cards, and some local jurisdictions have included other services online such as electronic antibiotic scripts available to notified contacts of Chlamydia and gonorrhoea. The authors note that online partner notification was crucial when syphilis outbreaks began to be linked to online venues and inSPOT provides another useful method of sexual health messages dissemination as the e-cards are linked to sexual health websites (Levine, 2008).

United Kingdom

Lambert et al (2005) examined the feasibility and acceptability of community based syphilis screening and its effectiveness in detecting cases. They found that the intervention was successful in targeting MSM who do not routinely access GUM Clinics. The authors acknowledge that this type of intervention, which compared serology and saliva assay and involved collaboration between researchers, government, community based organisations, venue operators and GUM clinic staff, may not halt an epidemic (Lambert, 2005). Furthermore, effectiveness of this strategy may be improved by combining syphilis screening with both screening for other STIs and effective health promotion strategies such as social marketing of health messages (Lambert, 2005).

A study by Alexander et al (2008) has examined the appropriateness of self-taken pharyngeal and rectal swabs for chlamydia and gonorrhoea in MSM. The authors suggest that high rates of undiagnosed asymptomatic Chlamydia and gonorrhoea, delays in access to health care and increasing levels of high risk behaviours in MSM may explain the continuing rises in STIs in this population. Thorough and appropriate specimen collection in MSM causes significant delays in patient throughput and waiting periods in UK GUM Clinics. Consequently, the Brighton GUM clinic trialed self-collected pharyngeal and rectal swabs for chlamydia and gonorrhoea and compared them to nurse-collected swabs. The case control study recruited 272 participants and found no significant difference in the

sensitivity or specificity between nurse-collected and patient collected swabs (Alexander, 2008). This study, the first of its kind, has the capacity to significantly increase the scope of novel testing options for MSM, including thorough community testing and less invasive clinic testing.

In 2004/2005 Terrence Higgins Trust (THT) piloted their rapid test, 'fasTest', in four GUM clinics, which compared traditional testing methods with the new test across seven areas:

- Feasibility;
- Affordability;
- Access;
- Acceptability;
- Need;
- Effectiveness; and
- Efficiency (Sigma Research, 2006).

The pilot project aimed to reduce high levels of undiagnosed HIV, provide greater access and choice for individuals, provide results at point of testing and establish a fast-tracking procedure into treatment and care for those testing positive. During the pilot, 1120 HIV tests were completed, with 34 people receiving a positive test result from fasTest, three of these already knew they were HIV positive and four were not confirmed with full serology. The main demographic populations who presented for testing were Caucasian MSM (51.1%) and black African heterosexual women (26.3%), which was the intention for some of the testing sites. Overall, the evaluation reports a high level of acceptability to users. One third of testers had never tested and half of all testers reported that the main reason they chose fasTest was because the results were available at the same visit (Sigma Research, 2006).

New Zealand

Auckland Rapid Testing at NZ AIDS Foundation

Similar to the Terrence Higgins Trust fasTest, the New Zealand AIDS Foundation (NZAF) conducted a three month pilot of the Uni-Gold rapid test for HIV at the Burnett Centre in

Auckland in 2006/2007, to test the viability of a rapid test community service which could increase testing in high risk populations, especially MSM (Smythe, 2007). A community testing project already existed at the NZAF, so this program aimed to attract first time testers with the FASTest (Free, Anonymous, Simple, Test for HIV). The pilot program was advertised widely through gay and mainstream media and involved extensive collaboration between NZAF and the NZ Ministry of Health. During the pilot 155 people tested, the majority were male (89.7%) pakeha (Caucasian 63.9% of 89.7%), and the majority of these men were MSM (gay-identified 49.6%, bisexual 20.9%). The project involved the client completing a risk assessment (initially self-administered via a proforma, then later in person with a counselor), then the finger-prick test, followed by post-test discussion with a counselor. This discussion included education and information regarding window periods, safer sex and risk reduction. The participants also completed an evaluation questionnaire and the significant results were as follows:

- 76% reported increased safe sex awareness
- Reasons for choosing FASTest: 28% because it was fast, 20% because it was anonymous, 15% because it was simple, 18% because it was free, 15% because it was convenient
- 85% reported that the availability of the FASTest influenced their decision to test, in comparison with other testing methods
- 98% of participants would choose the FASTest again

NZAF will continue with FASTest in the future as it was acceptable to all stakeholders and fulfilled the ultimate goal of the project, which was to increase HIV testing (Smythe, 2007).

The Australian Federation of AIDS Organisations is currently examining the viability of instituting a pilot for rapid testing in Australia, though no official report was available at the time of writing this report. The Australian National HIV Testing Policy 2006 supports the use of 'short-incubation' (rapid) tests for HIV:

- For the rapid identification of HIV positive individuals to inform clinical decision-making for the patient;

- To overcome difficulties in access to testing and returning for results (eg. Rural and remote communities); and
- In the management of NPEP and PEP (Commonwealth Government, 2006).

Queensland – Current State of Play for HIV and STIs Among Gay/MSM

HIV Notifications and Testing

The current Queensland HIV/AIDS Annual report (Queensland Health, 2006) advises that there were 142 new notifications of HIV in Queensland in 2006, 124 of these were in men, 66% of whom were between 25 and 44 years old. This notification rate has increased 86% since 1998 and the prevalence rate per 100000 is 4.1. The Queensland Gay Community Periodic Survey 2007 reports that only 15.5% of Brisbane men had never had a HIV test (Frankland, 2008). The majority of the participants in the 2007 QGCP survey reported that they had their sexual health check ups in the last year at their GP (71.3%), and 38.5% attended a sexual health clinic (Frankland, 2008). Since 2003, there have been significant increases in the number of HIV negative and positive men having STI screening, including swabs & urine in Queensland (Frankland, 2008). Prestage et al (2008) examined self-reported HIV testing rates across Sydney, Melbourne and Brisbane via an anonymous, self-completed survey and found that any changes in HIV testing do not account for recent trends in HIV notifications. In another publication, Prestage et al (2008) use data from five sources to assess the size, distribution and changes of the male homosexual population of Australia. They estimate that there are approximately 37000 homosexual and bisexual men living in Queensland and that 4% of them are HIV positive (1480 individuals) (Prestage G. F., 2008).

STI Notifications

Rates of STIs in MSM are difficult to report on because enhanced surveillance systems only exist for HIV and Syphilis. For other STIs such as Gonorrhoea and Chlamydia specific isolates, such as rectal Gonorrhoea in males, provide an indication of rates of infections in

the MSM population (National Centre in HIV Epidemiology and Clinical Research, 2008). That is to say, the general population are less likely have rectal swabs as a routine screening test (except male and female sex workers), so, any notifications from this isolate, may be interpreted as a population prevalence among MSM. However, the QGPS suggests that just under half of the men surveyed had had a sexual health check (test other than HIV) in the last 12 months (Frankland, 2008). This figure has consistently increased since 2001.

Surveillance data for gonorrhoea provides an indication of UAI among MSM in Australia. In Queensland in 2007, there were 359 diagnoses of gonorrhoea in men and only 96 diagnoses in women (National Centre in HIV Epidemiology and Clinical Research, 2008). The rate of rectal gonococcal isolates among men in New South Wales increased from 2.7 per 100 000 population in 2003 to 3.7 in 2006 and then declined to 2.6 in 2007. In Victoria, the rate declined from 3.1 in 2003 to 2.2 in 2007 (National Centre in HIV Epidemiology and Clinical Research, 2008).

MSM Issues and Gay Subcultures

In the face of a continuing HIV epidemic, gay men and other MSM are enjoying fulfilling sex lives, and report safe and unsafe sex, regardless of their serostatus (Frankland, 2008 & Pitts M. S., 2006). While condoms and water-based lubricant provide excellent protection against HIV and most STIs, uptake of this prevention strategy varies widely across the MSM and gay-identifying community for many reasons. The following section describes and details three distinct risk-reduction strategies that men consistently report in social and behavioural studies; strategic positioning and negotiated safety, as well as other predictors for risk-taking.

Fengyi et al (2007) examined a cohort (158 males from the PHAEDRA and CORE01 studies) of men who had seroconverted to HIV in the last six months and asked them about particular risk reduction strategies they employed, via a nurse-administered survey. The study particularly looked at the practices of:

- Serosorting, which is where men seek sexual partners of the same serostatus to have UAI with;
- Strategic positioning, which is where, in sex between serodiscordant men, the HIV negative man takes the insertive role, and
- Negotiation around viral load, which is where the HIV negative partner is more likely to agree to engage in receptive UAI when his partner has a low or undetectable viral load.

Most of the participants (91%) were able to identify the high risk event (HRE) they believe lead to their HIV seroconversion, and in 71% of the HRE, UAI was implicated (Fengyi, 2007). Twenty-one per cent (21%) of the men reported that they were certain their partner was HIV negative at the HRE and of the HRE which involved UAI, 38% of the men were employing one of the described risk reduction strategies (Fengyi, 2007). The authors assert that populations of gay men who employ these risk reduction strategies as an alternative to consistent condom use with partners known to be HIV positive or of unknown status should be advised of these findings (Fengyi, 2007).

Strategic positioning

The Health In Men (HIM) Study of the National Centre in HIV Epidemiology and Clinical Research reports that most acts of UAI among the participants took place within their regular relationship, where their partner was known to be HIV negative (NCHECR website, 2005). The HIM Study examines the health behaviours, including sexual health behaviours, of a cohort of HIV negative men and states that very few participants were likely to assume the receptive position in anal sex with ejaculation where a condom was not used and their partner was either HIV positive or a casual partner of unknown status (NCHECR website, 2005).

Serosorting

The findings of the HIM study suggest that men commonly use two criteria for assessing risk when engaging in anal sex without a condom:

- whether the partner is their regular partner or a casual partner; and

- the (assumed) HIV status of that partner.

This method of serosorting for level of risk of HIV transmission is fundamentally flawed, because of the known window period for HIV testing and the assumptions of known HIV status and fidelity.

Serosorting is an increasingly popular 'safe sex' strategy among MSM according to a study of Sydney men in 2006 (Mao). The study defines serosorting as a process of discussion between potential casual sex partners where HIV concordant status allows for unprotected high risk sexual behaviours (Mao, 2006). This practice is a potential high risk for HIV transmission because it involves unprotected anal sex between casual partners whose HIV status is presumed to be equivalent. Though HIV testing is more accurate than ever before, most health care providers still prescribe to the three month window period from the last at-risk exposure to body fluids (Queensland Health, 2008). This means that a person can only guarantee their HIV negative status three months from the last potential exposure they undertook (Queensland Health, 2008). So, for a man who may participate in regular unprotected anal sex with casual partners, regardless of their reported HIV negative status, there is still a risk of HIV transmission because of the process of seroconversion.

Mao et al (2006) reports a fourfold increase from 2002 to 2005 in the proportion of participants of their study who had casual unprotected anal sex with partners who reported to be HIV-negative. Furthermore, the study suggests that '60% of casual unprotected sex ...occurred with partners whose HIV status was unknown'.

Substance Use and Risk Taking

A cross sectional and cohort study by Volk et al (2006) of Sydney and Melbourne MSM examined risk factors for HIV seroconversion by asking participants to recall the HRE which they believe led to their seroconversion. Most (70%) of the participants reported receptive and/or insertive UAIC at their HRE and 63% of the men reported intoxication with alcohol (\geq 5 drinks) or mood altering recreational drug use at the event (Volk, 2006). The authors conclude that the men studied were highly sexually active, reported high rates of UAIC and

use of recreational drugs at the event they attribute to their HIV seroconversion (Volk, 2006). It is important to note that recreational drug use does not cause HIV seroconversion, but rather is an indicator of risk taking behaviours (Volk, 2006).

Many studies have tried to prove or disprove a causal link between drug and alcohol use and UAIC in MSM without success (Rogers Gillmore, 2002). This study about whether 'high=high risk' attempts to reduce confounding factors associated with research about sexual behaviour and substance use (Rogers Gillmore, 2002). The results from the study indicated that there was no significant relationship between condom use for anal sex and alcohol and/or drug use and that condoms were less likely to be used within steady relationships and more likely to be used by HIV negative men. An Australian study within the HIM cohort suggested that although drug use may not be a direct causative factor in UAIC or HIV seroconversion, frequent drug users were at a higher risk of HIV transmission (Prestage G. , 2005).

Zlabotska et al (2008) compared self reported risk behaviours from the NSW, Queensland and Victorian Gay Community Periodic Surveys 1998 – 2006 to explain differences in the HIV notification rates across these three states (Zlabotska I. P., 2008). The authors suggest that there has been a decreasing trend in NSW men who report factors which increase HIV risk, such as having multiple sex partners, engaging in UAIC and not knowing or not disclosing their serostatus (Zlabotska I. P., 2008). The trend in increasing HIV risk factors in Queensland and Victoria has been matched with consistently increasing HIV notification rates in both states, while the NSW notification rate has plateaued (Zlabotska I. P., 2008).

Sex on Premises Venues (SOPVs)

A cross-sectional study of Melbourne men (150, of 447 men approached) who visited SOPVs examined the potential for STI transmission in the venues (Phang, 2007). The study revealed that most men engaged in oral sex (66% receptive, 75% insertive) during their visit, but that fewer men engaged in anal sex (19% receptive, 38% insertive). Interestingly, 29% of men reported unprotected rubbing or touching their penis on another man's anus without penetration ('nudging'), and when asked specifically about anal sex, 39% of them

denied any anal sex. The participants were asked about regular partners outside of the SOPV and 39% reported having a male partner and 9% had a female partner with whom 77% had unprotected vaginal sex with. The report does not specifically mention condom use at SOPVs and concludes that the potential for STI transmission among men who visit SOPVs and their partners outside is high (Phang, 2007).

Grierson et al (2008) researched SOPVs, the men who attended them and how they behaved there, in order to inform health promotion interventions around HIV prevention and sexual health. Specifically, the report provides detailed information about which types of SOPVs certain subgroups are more likely to attend. For example, leather men are more likely to attend a 'dry' (sex club) SOPV than a 'wet' (sauna) SOPV. This information is useful in the development of campaign materials, though it is acknowledged by the authors, that the demographics of the clientele and the amount of time that they spend in certain parts of the SOPV, does not guarantee that they are any more likely to receive and act on health promotion messages (Grierson, 2008).

Australian HIV and STI Notifications

Predictions

In February 2008 the National Centre for HIV Epidemiological and Clinical Research and the University of NSW released the Mathematical Models to Investigate Recent Trends in HIV Notifications among MSM in Australia report which attempts to explain the factors contributing to rising HIV notifications in MSM (Wilson, 2008). The report uses statistical back projection analysis from existing epidemiological, behavioural, biological and clinical data to project rates of notifications when considering:

- Average number of self-reported partners;
- Self-reported STI testing rates;
- Self-reported condom use;
- Self-reported disclosure of HIV status and subsequent risk behaviours;
- HIV treatment trends; and

- Rates of HIV disease progression.

The main finding of the Mathematical Modeling report is that the only factor which adequately explains the continuing upward trend of HIV notifications in Victoria and Queensland is increasing STI rates. The researchers analysed factors such as serosorting, strategic positioning, serodisclosure, numbers of sexual partners and the impact of HAART and early HIV treatment and found that the most significant factor was increased rates of STIs among MSM (Wilson, 2008). The report suggests that increasing rates of STIs are an indicator of decreasing condom use for anal sex and that it is the presence of an STI, not just the absence of a condom during sex which increases the risk of HIV acquisition (Wilson, 2008). The researcher states that the effect of increased HIV testing has had a small impact on HIV notification rates, as increased testing rates only identifies early seroconverters (Wilson, 2008).

It must be noted that this modeling report is a prediction of trends to come and other studies suggest that HIV and STIs may not be linked as strongly as once thought. Middleton et al reviewed data from national surveillance systems, laboratory surveillance systems, self-reported information on STI testing and ad hoc reports of prevalence from 1997 to 2006 and their results suggest that it is likely that changes in STI transmission are responsible for recent rises in HIV notification rates because the data does not correlate between states (Middleton, 2008). The authors suggest that while STI rates among MSM have increased uniformly across Australian states, HIV notification rates have varied (Middleton, 2008). While NSW HIV notification rates have remained steady, Queensland and Victoria HIV notification rates have increased (Bernard, 2008).

Middleton's claims appear valid, though an earlier study by Fleming et al suggests the correlation between HIV acquisition and transmission is demonstrable (Fleming, 1999). HIV acquisition and transmission is facilitated by STIs, particularly ulcerative infections, due to an increased number of susceptible immune cells and viral shedding in the genital tract and a disruption of the mucous membranes (Fleming, 1999) (Medland, 2008) (Kelly, 2004).

Rates of STIs, particularly Chlamydia, gonorrhoea and syphilis, among MSM are increasing across all states (excluding NT), including NSW between 1997 and 2006 (Middleton, 2008). This finding should be interpreted with care, as it is also noted in the study that rates of self-reported testing of sites other than the urethra increased, especially anal swabs (Middleton, 2008).

Wilson et al (2008) prefer a model for optimal syphilis screening, which suggests that targeting highly active MSM frequently for testing could potentially eradicate syphilis. The authors report that there is a complex relationship between 'coverage, frequency and synchronicity' of testing for syphilis, that is, screen the majority of the target population at the same time, or frequently test particular subgroups who are most likely to participate in syphilis transmission (Wilson, 2008). Stipulations on this model are that the screening strategy must be implemented for a sustained period of time to be effective (Wilson, 2008).

Conclusion

It is clear from this literature review that current clinical and community based HIV prevention efforts, while effective on a certain level, have not resulted in a consistent decline in HIV and STI notifications in Queensland. Recurrent and sustained funding into HIV prevention services as well as intricate and cohesive collaboration for the entire HIV sector of NSW has demonstrated a static HIV notification rate for several years in that State. Innovative HIV prevention strategies such as community based and rapid testing, in conjunction with evidence-based social marketing and health promotion campaigns, warrant further investigation and investment. Similarly, dedicated and enhanced services and support for GPs is vital in HIV prevention. It is evident that HIV and sexual health knowledge and a willingness and capacity to engage in dialogue about gay and MSM sex practices among GPs is erratic and time and funding constraints thwart comprehensive HIV/STI screening for MSM. Use of the most oftenly touted HIV prevention strategy, the condom, is inconsistent in some high risk subpopulations and the MSM community at large. Consequently, it is necessary for health promoters to engage men in discussion about risk reduction, provide regular broad and comprehensive HIV and sexual health screening and adopt novel HIV prevention approaches.

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