

SUPPLY SIDE ANALYSIS OF SOCIAL  
HYGIENE CLINICS AND TREATMENT  
HUBS AS PROVIDERS OF HUMAN  
IMMUNODEFICIENCY VIRUS (HIV)  
INFECTION-RELATED CARE AND  
SERVICES IN THE PHILIPPINE SETTING:  
REVISED FINAL REPORT *(January 15, 2012)*

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## List of Abbreviations

AIDS	Acquired immune deficiency syndrome
AMTP	AIDS Medium Term Plan
ART	Antiretroviral therapy
DOH	Department of Health
DSWD	Department of Social Welfare and Development
FSW	Female sex worker
GFATM	Global Fund for AIDS TB and Malaria
HACT	HIV AIDS Core Team
HIV	Human immunodeficiency virus
IHBSS	Integrated HIV Behavioral and Serological Survey
LAC	Local AIDS Council
LGU	Local government unit
MARP	Most at risk population
MSM	Men having sex with men
NEC	National Epidemiology Center
NGO	Non-governmental organization
OFW	Overseas foreign worker
PNAC	Philippine National AIDS Council
PrEP	Pre-exposure prophylaxis
PSMID	Philippine Society of Microbiology and Infectious Diseases
PWID	Persons using intravenous drugs
QC	Quezon City
RA	Republic Act
RAAT	Regional AIDS Action Team
RITM	Research Institute for Tropical Medicine
SHC	Social hygiene clinic
STI	Sexually transmitted infection
TB	Tuberculosis
UNAIDS	Joint United Nations Program for HIV/AIDS
UNGASS	UN General Assembly Special Session on AIDS
UP – PGH	University of the Philippines – Philippine General Hospital
VCT	Voluntary counseling and testing
WHO	World Health Organization

## Executive Summary

The epidemiology of HIV infection in the Philippines has shifted dramatically in the last 5 years. A combination of increased risk behavior among young Filipinos, low levels of knowledge regarding HIV transmission and prevention, and underfunded HIV prevention and treatment programs may have led to a rapid rise in HIV incidence and prevalence. Much of the increase in HIV transmission appears to have occurred among young men who have sex with men (**MSM**) and persons who use intravenous drugs (**PWID**) in major urban centers.

For most local government units (**LGUs**), social hygiene clinics (**SHC**) are the primary implementers of HIV prevention programs. With certain exceptions, these programs primarily target female sex workers (**FSW**) and do not address the current HIV epidemic among MSM and PWIDs. Arguably, these programs have kept HIV infection among FSWs at a stable rate. Many SHCs are hobbled by inadequate mandates, funding and manpower capacity. However, SHCs are the only LGU institution that can readily address local HIV epidemics. SHCs can serve as the locus of HIV prevention programs but this will require buy-in from LGUs, who need to enact ordinances expanding their mandates and pass budgets that will support the enhancement of their SHCs' capacity to provide prevention services to MSMs and PWIDs. The latter will require investments in: a) additional manpower, b) manpower training in the design and execution of prevention programs for most-at-risk populations (**MARPs**), provision of voluntary HIV counseling and testing (**VCT**) and provision of education regarding HIV transmission and risk reduction, and c) procurement of HIV testing materials, condoms and HIV prevention education resources. A few SHCs have already started prevention programs directed to MSMs and can serve as models for other SHCs.

SHCs are not capable of providing HIV treatment, which is currently the domain of the 16 HIV treatment hubs. Hubs are Department of Health (**DOH**)-designated tertiary care centers located in major urban centers that provide care for HIV+ persons. They are also the sole purveyors of antiretroviral agents. They are an ideal and cost-effective set-up for providing programmatic care in an archipelagic setting where most HIV+ persons live in major urban areas. To handle the expected surge in HIV+ cases, significant investments are needed to create new treatment hubs, and to expand the manpower of the current hubs, and enhance their capacity to perform essential functions, such as monitoring tests (e.g., CD4 T-cell counts and plasma viral loads).

With the limited resources available, financing for HIV programs should focus in areas of high HIV prevalence and incidence, and on MARPS, particularly MSMs and PWIDs. Local governments must be engaged as they can be a significant source of funding for these programs. In addition, all HIV+ persons must be enrolled in the national health insurance program, PhilHealth, which has an outpatient HIV package that will cover the cost of antiretroviral therapy (**ART**) and laboratory monitoring.

# Background

## The Philippine HIV Epidemic

The incidence of HIV infection in the Philippines has dramatically worsened in recent years. Unlike the remarkable declines or stabilization in HIV transmission rates seen in most countries, the Philippines' HIV incidence rose by > 25% from 2001 to 2010<sup>1</sup> (see figure 1). According to the National Epidemiology Center (NEC) of the DOH, the number of new cases of HIV infection has been doubling every year for the past 3 years with a new infection being diagnosed every 5 hours<sup>2</sup>. This marks a shift in the epidemiology of HIV in the Philippines, which prior to 2007 had been characterized as low (prevalence) and slow (transmission). While some of this upsurge may be due to more voluntary testing, the rising trend likely represents a true increase in the number of cases. The biennial Integrated HIV Behavioral and Serologic Survey (IHBS), which actively surveys sentinel sites across the country also showed a rapid rise in HIV prevalence and incidence in the past 3 surveys (2007, 2009 and 2011)<sup>3</sup>. Also, anecdotally, treatment hubs like the University of the Philippines – Philippine General Hospital (UP-PGH) have seen an escalation in the number of cases of acquired immune deficiency syndrome (AIDS) admitted to their wards<sup>4</sup>.

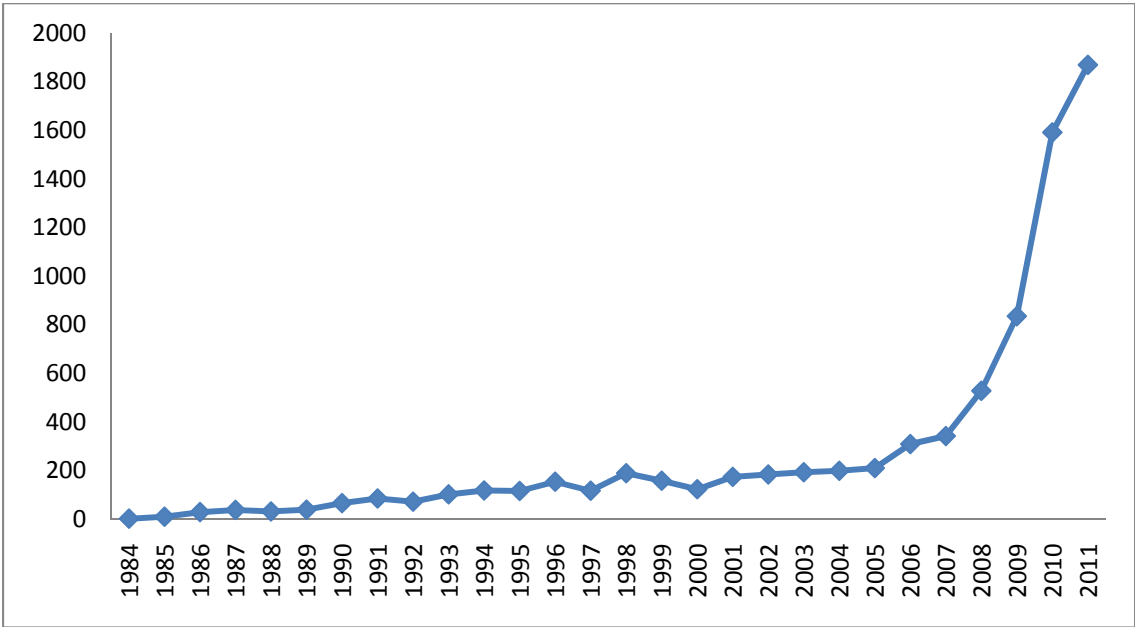


Figure 1: Number of HIV cases in the Philippines from 1984 to October 2011 (Source: National Epidemiology Center, Philippine Department of Health)

Overall prevalence remains low, but the rapid rise in new cases has led to a significant increase in prevalence in certain MARPs. While sexual transmission, the predominant form of transmission, had occurred largely among heterosexuals, most sexually-transmitted infections since 2007 have occurred among MSMs (see figure 2). Prevalence among MSMs went from

0.28% in 2006 to 0.99% in 2009<sup>3</sup>. In urban areas like Metro Manila, Cebu and Davao HIV prevalence among MSMs is as high as 4 – 5%. Also, a focal epidemic is brewing among PWIDs in urban centers such as Cebu. The 2009 IHBSS showed that 53% of PWIDs in Cebu had HIV. Hence, as HIV incidence is escalating, most new cases are concentrated among MSMs and PWIDs. In contrast, new HIV infection rates among other MARPs, particularly FSWs and overseas foreign workers (**OFWs**), have remained stable during the same time frame. At the same time, the median age at diagnosis has decreased from the 35 to 27 years– i.e., most new cases are occurring in individuals who are in the prime of their lives. In short, the Philippines now has an HIV epidemic primarily among young people, particularly MSMs and PWIDs, in major urban areas. This epidemiologic paradigm shift has implications for the type of prevention strategies that should be adopted to control this burgeoning epidemic. The Philippine National AIDS Council (**PNAC**) has categorized LGUs based on their HIV prevalence rates, presence of high risk groups/behaviors/factors and recent incidence trends among local MARPs<sup>5</sup>. Category A LGUs are characterized by high HIV prevalence rates, the presence of ongoing high risk behaviors and increasing HIV incidence rates among MARPs. These LGUs include Metro Manila, and the cities of Angeles, Cebu and Davao<sup>5</sup>.

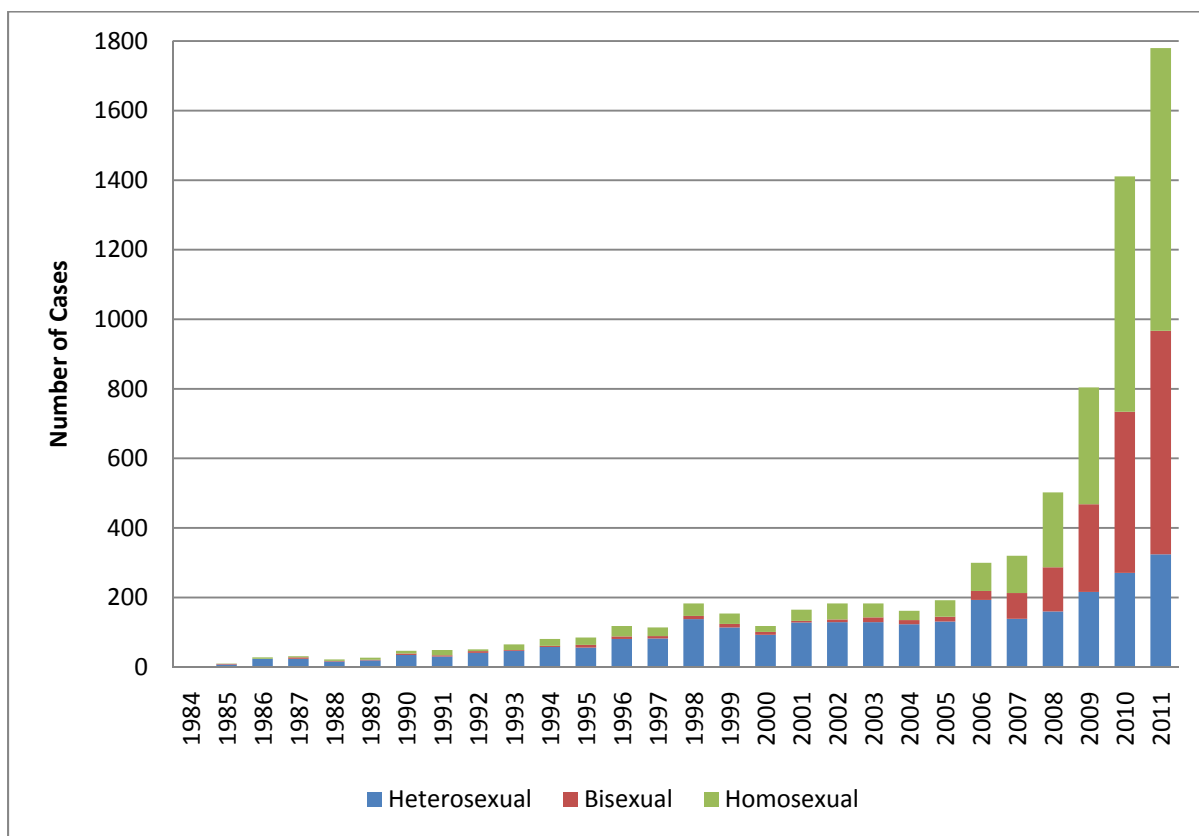


Figure 2: Trend in sexual transmission of HIV in the Philippines from 1984 - October 2011. Since 1984, 91% of HIV transmission was been through sexual contact (Source: National Epidemiology Center, Philippine Department of Health)

HIV is one of the most intensely researched disciplines in medicine. The large amount of money and mind power that was applied to understanding this disease in the past 2 decades has led to relatively rapid advances in knowledge regarding disease cause, transmission, pathogenesis, diagnosis, prevention and treatment. Due to these advances, HIV disease in resource-rich countries is now a chronic manageable disease albeit one requiring lifelong ART. Deaths due to HIV or AIDS have declined significantly worldwide due to the spreading use of ART. Life expectancy among treated HIV+ individuals approximates that of seronegative persons<sup>6</sup>. Even in a resource poor setting like Uganda, the life expectancy of an HIV-positive individual on ART approaches that of an HIV-negative Ugandan<sup>7</sup>. HIV prevention research has lagged behind therapeutic research although remarkable breakthroughs were also seen in this arena in the past 3 years. While much of these recent prevention breakthroughs are not ready for prime time, time honored prevention strategies such as the use of condoms during sex and use of sterile needles, have been shown repeatedly to decrease HIV transmission effectively. A lot is already known about what works and what does not work in HIV prevention and treatment. The Philippines' HIV control efforts benefits from the knowledge gained by the experience other countries had in decreasing HIV incidence, morbidity and mortality using evidence-based HIV prevention and treatment strategies.

Providing care will require identifying and reaching out to HIV+ persons, many of whom are in populations that are subject to stigmatization and bias by mainstream Philippine society<sup>8</sup>. Being HIV-positive is also stigmatizing and can lead to discrimination even from health care workers. These may lead to patient denial, fear, apprehension, and social isolation. These, in turn can lead to delays in diagnosis with dire consequences for patient outcomes.

Providing HIV prevention services is just as challenging. Clearly, current prevention efforts have failed as shown by the escalating trajectory of the HIV epidemic. The epidemic is concentrated in high risk groups that are stigmatized by society, which makes them hard to reach by government-sponsored programs. More importantly, preventive interventions that are known to be effective, condom use during sexual intercourse and using clean needles when injecting drugs, may encounter cultural and political obstacles if implemented. All these challenges will need to be considered when crafting HIV prevention programs.

This project will conduct a review of global best practices in the provision of HIV preventive and treatment services and place these in the context of the changing paradigms in Philippine HIV epidemic. It will provide recommendations that will allow social hygiene clinics (SHCs) and treatment hubs to enhance their capacity to provide HIV-related services. It will also identify potential sources of local and national funding support for these enhancements in SHC and treatment hub scope and services.

## **Methodology**

The published literature was reviewed for best practices in HIV prevention and treatment in a resource-limited setting. In addition, interviews were also conducted with HIV specialists. Published articles, reports, news items, and online reports were also reviewed for information regarding the Philippine HIV epidemiology, the Philippine HIV/AIDS programs, Global Fund programs, social hygiene clinics and treatment hubs. Focused interviews were done with key personnel from the Pasay City and Quezon City Social Hygiene Clinics, UP-PGH SAGIP Clinic/Treatment Hub, Research Institute for Tropical Medicine, National STI/HIV/AIDS Control and Prevention Program, National Epidemiology Center, Philippine National AIDS Council and the Take The Test Campaign.



# Global Best Practices in HIV Prevention and Treatment

## Best Practices in HIV Prevention

UNAIDS recently reported that the incidence of HIV is declining in most countries of the world<sup>9</sup>. Much of this decline is related to the scaling up of HIV prevention programs, particularly those that promote knowledge and behavioral change, including the use of condoms with sex and clean needles when using intravenous drugs. Many examples exist of programs that have been successfully implemented and that have had an impact on HIV transmission<sup>10-12</sup>. Research has led to a growing number of proven, cost-effective approaches to reduce the risk of HIV infection. Many of these approaches can be particularly effective when tailored to address the social, community, financial, and structural factors that place specific groups at risk. In developed country settings, proven strategies include<sup>11</sup>:

1. HIV testing and linkage to care: Testing is a critical component of prevention efforts because when people learn that they are HIV-infected, research shows that they take steps to protect their own health and prevent HIV transmission to others. Linkage to care helps ensure that people living with HIV receive life-saving medical care and treatment, and helps reduce their risk of transmitting HIV.
2. Access to condoms and sterile syringes. In order for HIV prevention efforts to work, people who are living with, or at risk for, HIV infection need to have access to effective prevention tools. Research has shown that increasing the availability of condoms and sterile syringes is associated with reductions in HIV risk.
3. Antiretroviral therapy. Treating people living with HIV early in their infection dramatically reduces the risk of transmitting the virus to others, underscoring the importance of HIV testing and access to medical care and treatment. A recent clinical trial showed that treating people living with HIV at an early stage reduces the risk of transmitting the virus to others by 96%. Treatment is also essential for reducing the risk of transmission from HIV-infected pregnant women to their infants. ART cuts the risk of maternal-to-child transmission by at least 75%.
4. Prevention programs for people living with HIV and their partners. Individual and small-group interventions have been shown to significantly reduce risk behaviors among people who have been diagnosed with HIV to help ensure they do not transmit the virus to others. In addition, partner services can reduce the spread of HIV by facilitating the confidential identification and notification of partners who may have been unknowingly exposed to HIV, providing them with HIV testing, and linking them to prevention and care services.

5. Prevention programs for people at high risk of HIV infection. Individual, small-group, and community interventions for people who are at high risk of HIV infection can reduce risk behavior and can play an important role in many comprehensive HIV prevention strategies.
6. Substance abuse treatment. Effective substance abuse treatment that helps drug users stop injecting eliminates the risk of HIV transmission through injection drug use.
7. Screening and treatment for other sexually transmitted infections. Many sexually transmitted infections (**STIs**) increase an individual's risk of acquiring and transmitting HIV, and STI treatment may reduce HIV viral load. Therefore, STI screening and treatment may reduce risk for HIV transmission.

While the strategies listed above represent best practices in a resource-rich setting, they are applicable to the Philippine setting as well, with certain caveats. Active promotion of condom use, as discussed later, has had checkered history in this country due to opposition from the Roman Catholic Church and conservative sectors of society. Needle exchange programs are an even harder sell and will run amok of many laws governing the use of illegal drugs. Also, both strategies are seen as condoning and/or promoting culturally unacceptable behavior (promiscuous sex and use of illicit drugs). Strategies that incorporate condom use and needle exchange would have to take these factors into consideration. Resource limitations also pose a challenge to the use of ART in HIV+ individuals at an early stage of their disease.

In 2011, the World Health Organization (**WHO**) released a guidebook for public health authorities in low- and middle-income settings regarding the prevention and treatment of HIV and sexually transmitted infections in MSMs and transgendered persons<sup>13</sup>. To develop these guidelines, the WHO convened a group of experts and stakeholders, including representatives from the MSM and transgendered communities, to review the evidence regarding strategies for the prevention of the transmission of, and treatment of HIV and STIs in MSM and transgendered individuals. Acceptability of these approaches among stakeholder communities was also rated. The panel used the GRADE approach in formulating their recommendations. A list of recommendations based on efficacy and applicability in low- and middle-income countries, and acceptability to MSM and transgendered community was drawn up. This list of 21 recommendations represents state of the art evidence-based public health approaches that the WHO proposes as the minimum standard for providing prevention and treatment for HIV and STIs in MSM and transgendered communities in resource-limited settings like the Philippines. These recommendations are listed in Appendix 1. These recommendations frame HIV prevention and treatment in the framework of access to health care as a basic human right. The recommendations are similar to the best practices listed in the above paragraphs.

A major limitation of the WHO and other guidelines is that many of the recommendations are based on limited or low quality evidence. Some of the evidence is also based on studies done in high resource settings, which may have limited applicability to countries with limited resources, although the WHO was very careful to frame their recommendations in the context of low- to middle-income countries. Clearly, implementation and outcomes research are needed to validate many of these recommendations. Nevertheless these recommendations are based on best-available evidence, and will likely be adopted as the standard of care for the prevention and treatment of HIV among MSM and transgendered persons in resource-limited countries.

The preventive strategy best supported by evidence, particularly among MSM, is the use of condoms consistently during anal intercourse. Multiple cohort studies, albeit in MSM communities in resource-rich settings, have demonstrated a 64% reduction in HIV transmission with use of condoms<sup>13-15</sup>. An aggressive program for distributing free condoms is both feasible and effective in low- and middle-income settings<sup>16, 17</sup>. Thailand's 100% condom use program has been credited with that country's success in decreasing HIV transmission in the last decade<sup>17</sup>. Promotion of condom use in this country, however, faces considerable hurdles, not least of which is opposition from the Roman Catholic Church to its promotion. Framing the issue as one of human rights (right to access to best available medical care) and as a last resort (ABCD strategy) may increase the palatability of condom use promotion<sup>18</sup>.

Sex venue-based outreach strategies, including outreach through internet and social networking sites, is increasingly being used by HIV prevention programs. Preliminary data from the 2009 IHBSS indicates that MSM use both public (bathhouses, parks) and internet venues to meet sex partners, and that unprotected sex is more likely in public venues<sup>19</sup>. Evidence of the efficacy and feasibility of sex venue-based approaches is limited<sup>20</sup>, but WHO recommends its adoption pending the results of ongoing studies in low- and middle-income countries<sup>13</sup>.

Among PWIDs, the best prevention strategies include promoting the use of sterile needles either through needle exchange programs or by increasing the availability and access to sterile needles (e.g., through pharmacies). A recent review summarized international trials that collectively demonstrate that needle exchange programs are effective, safe and cost-effective in reducing HIV transmission<sup>21</sup>. Other practices that have been shown to decrease transmission include treatment of the substance abuse, either through opioid agonist therapy (e.g. methadone, buprinorphine) or behavioral interventions<sup>22</sup>. However, the former is only effective for heroin and not for other drugs such as nalbuphine, the drug of choice of local PWIDs.

More recently, the use of antiretroviral agents either as topical microbicides or as pills taken for pre-exposure prophylaxis (**PrEP**) has gained traction with the release of many randomized placebo controlled trials demonstrating their efficacy, acceptability and safety<sup>23, 24</sup>. The use of PrEP by MSM led to a 94% decline in HIV transmission<sup>24</sup>. While studies are needed to validate

these initial observations in resource-limited settings, some country programs, including the United States', have made preliminary recommendations to offer PrEP to MSM on the strength of these findings<sup>25</sup>. Of interest to the Philippines is a study done in discordant couples<sup>26</sup>. In this randomized controlled trial, treating the seropositive partner with ART (regardless of whether there was an indication to treat) led to a 96% decline in HIV transmission. With the small size of the Philippine HIV+ population, a possible cost-effective preventive strategy is to aggressively identify HIV+ individuals and treat them, a strategy called "test and treat". Mathematical modeling studies have shown that such a strategy, if applied consistently, may eradicate HIV transmission<sup>27</sup>. In addition, large observational cohort studies have shown that treating HIV regardless of CD4+ T-cell level (which currently drives treatment recommendations) confers a morbidity and mortality advantage<sup>26</sup>. However, uncertainty remains in regard to the long-term effect of a test and treat strategy on the evolution of viral resistance to drugs. Cost-effectiveness, long-term safety and feasibility studies in a resource-poor setting are needed before this strategy is pursued.

### **Best Practices in HIV Treatment**

ART has clearly saved and extended lives. Recent cohort studies are beginning to show that the life expectancy of HIV+ persons on ART is approximating that of seronegative individuals in both resource-rich and resource-poor settings<sup>6, 7</sup>. Moreover, ART following the latest WHO treatment guidelines is cost-effective<sup>28, 29</sup>. Global best practices for HIV treatment follows a dichotomous approach that is determined by a society's ability to provide ART for its HIV+ population. Resource-rich settings provide individualized care and are starting ART for most HIV+ individuals, while resource-limited settings provide programmatic care and restrict ART to individuals with modest and severe immune deficiency.

The goal of ART is to control viral replication and allow the immune system to recover so that morbidity and mortality due to opportunistic infections and cancers are prevented. Historically, the indications to start ART were based on the patient's underlying immune status as determined by a CD4+ T-cell count. However, it has long been known that HIV inflicts damage to the host's immune system from the moment of infection, and that this damage has significant long-term consequences even for those who start ART early. Based on available data, it is now clear that initiating ART, regardless of underlying immune status, is beneficial<sup>26, 30</sup>. Consequently, high-income countries now recommend initiating ART at higher CD4+ T-cell levels ( $\leq 500$  CD4+ T-cells) than has been the norm historically<sup>31</sup>, and in some areas (e.g., San Francisco) ART is recommended for everyone regardless of CD4+ T-cell count<sup>32</sup>. In addition to the sartorial effect on individuals, such an approach may decrease HIV transmission.

In resource-limited settings, the incremental value of starting at higher CD4+ T-cells in terms of cost-effectiveness has not been shown. The 2010 WHO guidelines recommend starting ART

when the CD4+ T-cell count is  $\leq 350$  cells/mm<sup>3</sup><sup>33</sup>. Other indications to start ART are when a patient is co-infected with and needs to start treatment for hepatitis B, when a patient has had an AIDS-defining event (including tuberculosis) or when a patient is pregnant. The Philippine guidelines for ART initiation is similar to the WHO guidelines<sup>34</sup>.

Evidence-based practices in HIV treatment that are feasible in the Philippines include the following:

1. Initiation of ART when CD4+ T-cells are  $\leq 350$  cells/mm<sup>3</sup>, as recommended by the WHO<sup>33</sup>.
2. Measuring and monitoring CD4+ T-cells. The CD4+ T-cell count is the best surrogate marker for immune function in a person with HIV. CD4+ T-cell level is associated with short-term HIV-related disease progression and death, and using CD4+ T-cell count in decision making regarding when to initiate ART and in monitoring response to ART is both effective<sup>35, 36</sup> and cost-effective<sup>37</sup>. The Philippine guidelines recommend using CD4+ as a basis for deciding when to initiate ART and in monitoring response to ART<sup>34</sup>. However, not all treatment hubs have the technical facility for measuring CD4+ T-cells. For many, blood has to be shipped to San Lazaro Hospital in Manila for CD4+ T-cell determination. The GFATM is currently distributing flow cytometers to select treatment hubs which should make CD4+ T-cell determination more accessible.
3. Measuring and monitoring plasma HIV-1 RNA level (viral load). The viral load has prognostic value similar to the CD4+ T-cell count, but in addition, it is a direct measure of ART efficacy. Monitoring viral load allows for earlier detection of treatment failure due to drug resistance and, with early switching of ART, prevents the development of resistance mutations that can compromise the efficacy of second and third-line ART regimens<sup>38</sup>. However, measuring viral load is a costly proposition and, hence the WHO recommends measuring viral loads when feasible<sup>33</sup>. The Philippine guidelines recommend measuring viral loads yearly after ART initiation<sup>34</sup>. However, only 5 treatment hubs (San Lazaro Hospital, RITM, UP-PGH, Medical City, Makati Medical Center) can measure viral load.
4. Prophylaxis for opportunistic infections. Providing antimicrobial prophylaxis to prevent the development of opportunistic infections (e.g., *Pneumocystis jirovecii* pneumonia, *Mycobacterium avium-intracellulare* infection, *Toxoplasma gondii* encephalitis, bacterial and parasitic gastroenteritis) once certain CD4+ T-cell thresholds are met is effective and recommended by both the WHO and Philippine guidelines<sup>33, 34</sup>. In addition, universal treatment of HIV+ persons for latent

tuberculosis in highly endemic settings is effective<sup>39</sup> and recommended by the WHO<sup>40</sup>. This recommendation remains controversial among Philippine providers, and the Philippine guidelines do not address this issue. GFATM has historically provided support for prophylaxis until recently. With the exception of treatment for latent TB, prophylaxis for opportunistic infection is currently an out-of-pocket expense for patients.

5. Screening for STIs, tuberculosis and co-infection with hepatitis B and C. Co-infection with other STIs, tuberculosis and hepatitis B and C is more frequent in HIV+ persons due to overlapping risk factors. STIs increase the risk of transmitting and acquiring HIV, and may identify persons that may benefit from behavioral prevention interventions. The presence and treatment of TB and hepatitis B modifies the treatment approach to HIV. For these reasons, screening for these conditions is recommended by most guidelines<sup>31, 33</sup>.
6. Prevention for positives. While little data exists that prevention counseling for HIV+ individuals is cost-effective and effective at reducing HIV transmission, it makes theoretical sense. Also, prevention counseling for HIV also covers counseling for preventing other STIs.
7. Preventing mother to child transmission (**MTCT**) by starting all HIV+ pregnant women on ART. ART is the most effective intervention for preventing MTCT and it is recommended that 100% of all pregnant women be started on ART<sup>33</sup>.
8. Monitoring for adverse events due to ART by clinic visits and safety labs (CBC, AST, ALT, creatinine) every 3 – 6 months.

Other practices that are ideal but dependent on resource availability and technical capacity include: a) use of HIV drug susceptibility testing to identify the presence of drug-resistance prior to initiation or switch of an ART regimen, b) monitoring fasting lipids and glucose once a year<sup>31</sup>.



In the 2000s, with help from the UN, 17 Regional AIDS Action Team (**RAAT**) were created to facilitate the development and scaling up of local AIDS responses in the country<sup>44</sup>. RAAT is a regional body consisting of regional representatives from the Departments of Interior and Local Government, Social Welfare and Development, and Health that serves as a bridge between central government/PNAC and the LACs. They provide technical assistance, support capacity building activities, coordinate between LGUs and community-based organizations, disseminate HIV-related information, do advocacy among the different regional stakeholders, and monitor and evaluate regional data and situation to enable LGUs to tailor their HIV and AIDS response.

The DOH is also tasked with providing direct HIV care. HIV is thus one of a few diseases (e.g. TB) for which DOH retains responsibility for the delivery of treatment. It does so through a network of HIV treatment hubs. These are tertiary medical care centers located in major urban centers that have the capacity to provide diagnostic and treatment services for HIV-infected individuals. More importantly, they are the sole purveyors of antiretrovirals in the country. While most treatment hubs are DOH-retained regional hospitals, one is an academic university hospital and 2 are private hospitals. In parallel, many major hospitals that are not treatment hubs also have HIV AIDS Core Teams (**HACT**). These are teams of physicians, nurses, social workers, and other health care workers that are responsible for the developing and implementing hospital's HIV prevention and treatment programs. Treatment hubs are tackled in more detail later.

In addition to policy-making and service provision, DOH also tracks the course of the HIV epidemic through 2 mechanisms: a) the NEC's HIV/AIDS Registry and b) the biennial IHBSS. The NEC's registry captures all the confirmed positive HIV tests done at San Lazaro Hospital, the sole laboratory in the country that performs confirmatory testing. This is a passive reporting system which can easily underestimate the prevalence and incidence of HIV infection. Most HIV cases reported to the NEC are categorized as asymptomatic infection<sup>45</sup>, which is discordant with the experience at one of the treatment hubs, UP-PGH, wherein at least 50% of new cases are either symptomatic or present to care with an AIDS defining illness<sup>4</sup>.

The IHBSS is conducted by the NEC at sentinel sites across the country, and provides a more detailed picture of the epidemic. Detailed surveys are conducted among a sampling of MARPs including MSMs, FSWs and PWIDs. Earlier versions of the IHBSS only provided a general picture, while the last 2 surveys have gone into greater detail regarding risk behavior among MARPs. According to the PNAC, these detailed reports will be forthcoming<sup>19</sup>. While IHBSS provides a national picture of the epidemic, data regarding local transmission patterns and risk behaviors is not available. This data will be important for LGUs to map out and prioritize their HIV prevention strategies.

LGUs, through their LACs and health departments, are primarily responsible for initiating, developing, funding and implementing HIV prevention programs at the local level. The primary



implementers on the ground are the local health departments and SHCs. Technical and logistical support is provided by RAATs, PNAC and DOH. Much hinges on having ordinances passed setting up LACs, and allocating funding for the LAC, health department, SHC and their activities. Unfortunately, most LGUs do not have LACs. HIV/AIDS is not perceived as an urgent problem by most LGUs, partly because of its relatively low prevalence, but also partly because of confusion regarding their responsibilities vis-a-vis the DOH's. There are exceptions, however. For instance, the cities of Angeles, Quezon and Zamboanga have functional LACs and SHCs or health departments that have prevention programs for MSMs and FSWs.

Non-governmental organizations (**NGOs**) play a major and important role in the delivery of HIV prevention programs. NGOs are represented in PNAC and participate in the formulation of policy. They are major recipients of external funding for HIV programs. In settings where LGU HIV initiatives are non-existent or inadequate, NGOs fill in the gaps. For instance, the NGO "Take The Test Campaign" provides peer educators and HIV tests for a GFATM-funded outreach program to MSMs in several Metro Manila cities, many of whom do not have their own funded outreach programs<sup>46</sup>.

### **Financing for HIV Programs**

Unfortunately, implementation of the AMTP lags well behind the intent. Despite a well thought-out plan of action, as listed in the 5 AMTPs, and a well defined infrastructure for delivering care (RAATs, LACs, treatment hubs), HIV programs have been consistently underfunded, and very dependent on external funding. Consequently, many programs have never been implemented. For instance, 84% of the 4<sup>th</sup> AMTP was unfunded<sup>3</sup>. Also, since its inception the PNAC has never been fully funded. As mentioned earlier, due to absence of LGU buy-in and/or funding, most LGUs do not have LACs or an action plan for initiating, developing and implementing HIV programs<sup>47</sup>. Besides being underfunded, PNAC admits that available resources have been poorly invested<sup>3</sup>. For example, 34% of prevention expenditures went to blood safety programs even though only 0.4% of HIV transmission occurred through blood products<sup>3</sup>.

The National AIDS Spending Assessment report by the National Economic Development Authority shows that total spending by the National Government for HIV and AIDS programs from 2000-2009 has essentially been flat (see figure 3)<sup>47</sup>. Recent reports indicate that the 2011 and 2012 national government budget for HIV/AIDS programs is at P65 million, which is even lower than the 2009 budget (P81 million)<sup>48, 49</sup>. Majority (65% on average) of funds for HIV and AIDS programs are sourced from external donor agencies such as GFATM, with most of these funds going to support HIV-related activities carried out by NGOs<sup>47</sup>.

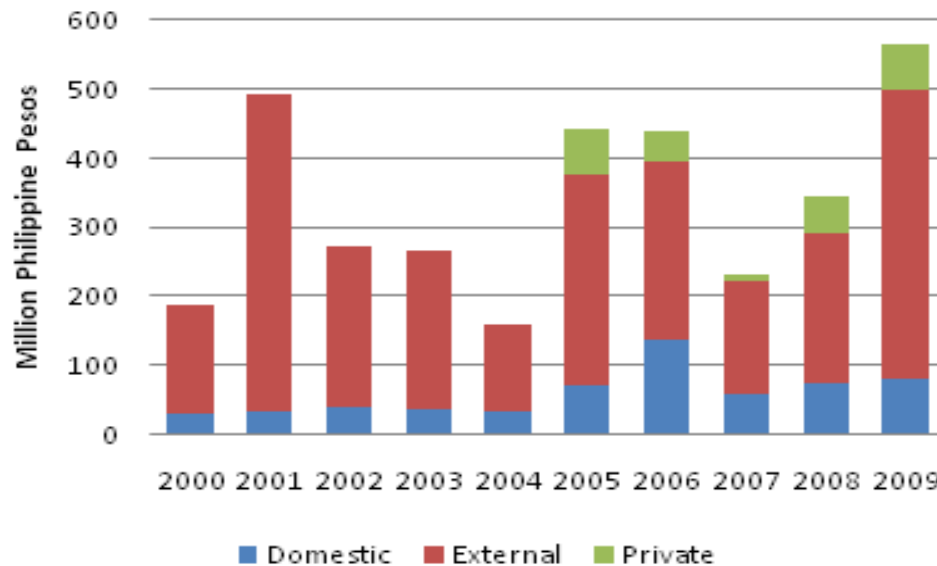


Figure 4: Funding for HIV/AIDS, 2000 - 2009. Majority of funding of HIV programs in the Philippines have been sourced from external funders such as GFATM (Source: National AIDS Spending Assessment, NEDA and PNAC Report: 1999 - 2008<sup>47</sup>)

## HIV Prevention Programs

While PNAC and the DOH, through the AMTP, sets the overall policy direction for HIV prevention, implementation depends on LGUs and community-based NGOs. Ideally each LGU should form an LAC that will provide policy direction, advocacy and coordination of HIV programs. The provision of HIV preventive services in the country is fragmented, with a number of NGOs and even fewer LACs and SHCs scattered across the islands providing these services. Most large urban centers have mature prevention programs that target FSWs through their SHCs. However, very few urban SHCs (e.g. Cebu City, Metro Manila, Angeles, Zamboanga, Davao, Iloilo) specifically target the other risk groups. For many SHCs, this is partly related to their limited mandate, i.e., covering only sex-oriented establishments and their workers, and, consequently, the absence of attention to and funding for outreach activities to other MARPs.

Community based NGOs provide a large proportion of HIV prevention services in the Philippines, occasionally in collaboration with SHCs and LGUs. Most of these endeavors are funded as time-limited projects by external agencies such as UNICEF, UNAIDS and USAID. An example of this program is the UNICEF-funded BALUTI initiative in Paranaque City, which uses peer educators to promote awareness of HIV and its prevention among high school students<sup>50</sup>. BALUTI stands for Batang Laging Umiiwas sa Tiyak na Impeksyon (Young People Who Avoid Infection), an organization that aims to educate the youth on the risks of HIV, AIDS and STIs. BALUTI volunteers from different schools and communities in Paranaque conduct sessions for students and the local youth, particularly young people who are considered to be most at risk from the conditions mentioned above. Another example is the previously mentioned Take The Test Campaign, which provides peer educators and HIV tests for outreach programs to MSMs in Metro Manila<sup>46</sup>. NGOs have flexibility and can mobilize and implement programs rapidly and

efficiently. They have the expertise and track record in providing prevention services to MARPS in a variety of settings. They are also not susceptible to changes in the political leadership of LGUs. On the other hand, NGO projects and their funding are time-limited, and hence sustainability is a big concern.

### Social Hygiene Clinics

SHCs are municipal clinics that provide STI prevention and treatment services. While hard numbers are difficult to come by, there are at least 120 SHCs all over the country but, at most, only 70 are functional<sup>43</sup>. All LGUs that are in areas identified by PNAC as having a rapid increase in HIV incidence and prevalence have SHCs<sup>43</sup>. The SHC's original mandate stems from local ordinances that give them regulatory supervision over employees of massage parlors, night clubs and other establishments that may provide sexual services<sup>51, 52</sup>. SHCs depend on LGUs for their budget. Considering their original mandate, many SHCs are no more than clearinghouses for commercial sex workers.

Most SHCs are manned by a physician, 1- 2 nurses, and a medical technologist<sup>51, 53</sup>. Most physicians are general practitioners and have no advanced specialty training. A typical SHC provides STI diagnosis and treatment services to FSWs and their clients, conducts training regarding STI prevention to the employees of entertainment establishments and provides medical clearances for the workers of these establishments<sup>53</sup>. While autonomous from the DOH, their STI prevention and treatment programs are adapted from DOH's.

When HIV first reached Philippine shores, its designation as a STI, placed SHCs at the forefront of programs to control its spread. Early on, FSWs were among the MARPs most affected by HIV, although at a relatively low level, and since FSWs were the SHCs' target population, many early HIV prevention efforts focused on FSWs and were channeled through SHCs<sup>53</sup>. So when HIV changed course and began spreading among MSMs and PWIDs, SHCs and their programs were not well placed to face this challenge.

SHCs have traditionally concentrated their HIV prevention efforts around entertainment and other establishments that employ FSWs. Some urban SHCs have mature well-established programs that incorporate best practices in HIV and STI prevention and STI treatment for FSWs. Many provide voluntary counseling and testing (**VCT**) for HIV. Recently, largely as a result of funding support from GFATM, a number of SHCs have expanded their programs beyond FSWs to include MSMs (e.g. Iloilo City<sup>54</sup>, Cebu City, Davao, Puerto Princesa and all LGUs in Metro Manila<sup>46</sup>). A few (Angeles, Quezon City, Zamboanga City, Puerto Princesa) even have budget support for HIV prevention programs for MSMs<sup>43, 46</sup>. Many are limited by their legal mandate to only cover entertainment establishments and FSWs (e.g. Pasay City)<sup>51</sup>, while a few (e.g. Quezon City)<sup>55</sup> have the legal mandate to cover MSM-oriented entertainment establishments.

Most are underfunded and understaffed. Pasay's SHC for instance sees 50 FSW clients per day, in addition to conducting training sessions for entertainment workers<sup>53</sup>.

Considering their funding source, SHCs are susceptible to the whims and fancy of local politics. Also, SHC programs that promote the use of condoms may be impeded by local laws. Some municipalities have banned or limited the sale and distribution of condoms<sup>56</sup>, while other LGUs view the distribution of condoms as evidence of prostitution and a basis for closing establishments or arresting individuals.

Ideally, SHCs implement the prevention policies and programs under the guidance of LACs, but only 32 LGUs have functional LACs<sup>42</sup>. The LGUs most affected by the HIV epidemic (Metro Manila, Angeles, Cebu and Davao) have functional SHCs and most have LACs. The formation of LACs by local governments is helpful as they will provide leadership, advocacy and political cover for the SHCs and their HIV control programs<sup>51</sup>. Among other things, LACs may advocate for changes in local ordinances that affect HIV control programs, such as expanding the SHC's mandate to include other MARPs besides FSWs and allowing the promotion of condom use. They also serve as a forum for coordinating the plans and programs of various stakeholders, including NGOs and associations of HIV+ individuals. Nevertheless, regardless of whether an LGU has a LAC, ultimately it is the SHC or local health department that will initiate, craft and implement an HIV prevention program.

Characterization of the nature of local epidemics is important in identifying the appropriate preventive interventions. SHC staff are potentially knowledgeable about the local milieu and are well positioned to characterize the nature of their local epidemic and to conduct preventive interventions. Easy-to-learn-and-use rapid assessment methodologies are readily available through DOH, PNAC and RAATs<sup>44</sup>. Some SHCs already use these methods when they conduct the biennial IHBSS<sup>51, 55</sup>.

Many SHC staff, however, do not have the knowledge needed to design and implement HIV prevention programs<sup>51</sup>. As stated earlier, many SHC physicians are general practitioners and do not have any infectious disease or public health training. Hence, significant investment in manpower capability building, largely in the form of training SHC staff in the design and implementation of HIV prevention programs, and in the hiring and training of peer educators and counselors, may be needed. In addition, allocation for the procurement of essential supplies such as condoms (for distribution), educational material and HIV testing material will be necessary, as most of these expenditures are currently supported by GFATM.

A bigger issue, as noted earlier, is the absence of a concerted effort, political will and, consequently, funding support in most LGUs to face the HIV epidemic head on. Advocacy from above (National Government) and below (civil society, NGOs) will be necessary in order to force

many LGUs to “get their act together”. In addition, measures that will shield SHCs from local politics (e.g. local ordinances mandating HIV programs, etc.) will greatly enhance their efficacy. Recruiting the help of the media may be necessary and should be easy considering the generally supportive attitude of media towards the “Philippine HIV epidemic”<sup>57</sup>.

Another challenge is the difficulty posed by actively promoting condom use, the most effective preventive intervention thus far, in a conservative Catholic country. It is notable that the current epidemic unraveled just as the previous administration discontinued funding for condom distribution, reversing a decade of condom use promotion by the Ramos and Estrada administrations<sup>58</sup>. This has since been reinstated by the current administration<sup>43</sup>.

Besides being concentrated in MARPs, the current HIV epidemic appears to be concentrated in major urban centers<sup>45</sup>. While cases have been reported from most provinces, the overwhelming majority of new cases are being identified in Metro Manila, Cebu and Davao. Theoretically, this would allow for prevention and treatment efforts to be focused in MARPs in these areas.

### **Philippine Scorecard in Preventing HIV Transmission**

The Philippines is failing miserably in preventing HIV transmission among certain MARPs. UNAIDS sets a goal of 80% coverage of MARPs by prevention programs in order to make an impact on the epidemic, and having 60% of target populations with correct knowledge and behavior in order to stop HIV transmission. The 2011 country report to the UN General Assembly Special Session on AIDS (**UNGASS**) shows that only 29% of MSM, 65% of FSW and 2% of PWID were reached by HIV prevention programs and screened for HIV infection, way below the goal<sup>3</sup>. In the 2009 UNGASS country report, PNAC reports that only 14% of MARPs received an HIV test in the last 12 months and knew the results (breakdown by group: FSW: 19%, MSM: 7%, PWID: 1.5%)<sup>45</sup>. Only 38% of MARPs were reached with HIV prevention programs (breakdown by group: FSW: 55%; MSM: 29%; PWID: 11.5%). While 65% of FSW reported using a condom the last time they had sex with a client, only 30% of male sex workers did so. Only 32% of MSM reported using a condom the last time they had sex with a male partner. Eighty-five percent of PWID reported using sterile injecting equipment the last time they injected. Compared to the previous country report to UNGASS in 2007, there was no change in proportion of FSWs and MSMs using condoms the last time they had sex.

A study from over a decade ago noted the increasing rate of casual sex among young Filipinos, and that much of this is unprotected<sup>59</sup>. At the same time, 41% of MSM use social media and other internet tools to connect with others for sexual encounters<sup>60</sup>. These studies and anecdotal reports suggest a general increase in risk behavior among young Filipino MSMs. Hence, the increased risk behavior combined with underfunded and misdirected HIV prevention programs that result in a low level of knowledge regarding HIV and its transmission

and prevention, help explain why HIV incidence and prevalence among young MSM has increased dramatically in the past 5 years<sup>57</sup>.

In contrast to the failure in preventing HIV transmission among MSMs and PWIDs, HIV incidence and prevalence among FSWs has been stable. Anecdotally, both Quezon and Pasay Cities have not seen a change in HIV prevalence or incidence among their FSWs<sup>51, 55</sup>. By this measure, some have argued<sup>43</sup>, SHCs are fulfilling their objectives as far as controlling HIV transmission among their target population - FSWs. While not exactly a stellar record, it highlights the potential of SHCs as providers of HIV prevention programs to other MARPs.

### Financing for Prevention Programs

Sixty percent of all HIV expenditures are for prevention programs, and the majority of financing is sourced externally, primarily from GFATM. The DOH serves as the country manager for GFATM funds and is responsible for their disbursement. It is striking that according to the country report to UNGASS, only 18% of the prevention money went to actual interventions (marketing of condom use, social/behavioral change interventions, KAPs, preventing MTCT), and 82% went to “others”(e.g., support for DOH central office programs)<sup>45</sup>. Financial support from LGUs for SHC-based HIV prevention programs is non-existent in most localities.

### A Tale of Two Cities

The following section describes the different responses by 2 SHCs within Metro Manila to their respective HIV epidemics, and is illustrative of the spectrum of LGU responses nationwide. Both cities have relatively mature SHCs. Quezon City (**QC**) has taken an exceptionally proactive approach to their HIV problem. A few other SHCs (e.g. Angeles, Puerto Princesa, Cebu, Zamboanga) have reportedly taken a similarly proactive approach to their respective epidemics<sup>43, 46</sup>. Pasay City’s response, on the other hand, is more typical and representative of most SHCs.

#### The Quezon City Response

The QC SHC is notable for having an outreach program to MSMs<sup>55</sup>. As a relatively large city (in terms of population and size), QC has 3 SHCs (with plans for setting up a 4<sup>th</sup>). Similarly to other LGUs, these SHCs focus their care on entertainment establishments and their workers, primarily FSWs. Also like other SHCs, each clinic has a physician, nurse and medical technologist. Unlike other SHCs, QC’s legal mandate also extends to MSM-oriented massage parlors and their employees. QC’s SHC programs are spearheaded by a motivated physician who has training in field epidemiology.

QC has seen a dramatic increase in the prevalence of HIV among QC’s MSM population from < 1% to between 5 – 6% in the span of 5 years<sup>55</sup>. In contrast, the prevalence of HIV among FSWs has remained stable (2 cases per year). In response to the increasing incidence and prevalence

of HIV among MSMs, and with the support of the LGU leadership and LAC, the city's health department began an outreach program to MSMs. QC hired 22 peer educators who venture out to MSM social venues (bars, massage parlors and cruise sites) to provide HIV counseling and distribute condoms. Voluntary testing and counseling is also done twice a month at these sites. The budget for the HIV test kits comes from GFATM. With the end of current funding cycle, it is unclear who will pick up the tab for these test kits (QC currently performs 200 tests/month at these outreach sites and the QC SHC estimates a funding shortfall of PhP 2 million once the current GFATM round ends.). GFATM, through an NGO – the AIDS Society of the Philippines – also provides a “chatter”, a peer educator who reaches out to MSMs via the internet. Of note, QC plays host to two of the biggest and most popular MSM-oriented bars in Metro Manila. It is therefore not surprising that half of the MSMs who test HIV positive during these outreach activities are not from QC.

The QC health department also has plans of setting-up a MSM clinic. The hope is that a dedicated clinic that provides care in a non-stigmatizing manner will encourage more MSMs to engage in the health care system and receive HIV prevention counseling and testing. The budget for this clinic is expected to come from the LGU. A site has already been identified.

#### The Pasay City Response

Being a smaller city, Pasay City has one SHC, which is located within the city hall complex. Pasay City's SHC is typical in many respects. It is manned by a physician, nurse and medical technologist. The physician is a trained gastroenterologist with no background in public health. The Pasay SHC provides care to FSWs solely, although it has been providing VCT to all-comers, including MSMs. Much of the staff's time is taken up providing STI care and prevention counseling to FSWs either at the clinic or at their workplace. It has no outreach program to MSMs. Similarly to QC, GFATM provides a chatter who refers clients to the Pasay SHC for VCT.

Pasay has also seen an increase in HIV prevalence among its MSM, from < 1% to 2%, according to the last IHBSS<sup>51</sup>. Similarly to QC, HIV prevalence among FSWs in Pasay has remained low and stable. Partly as a result of GFATM-funded NGO-driven outreach activities, the Pasay SHC has seen a dramatic increase in the number of MSMs visiting the SHC and undergoing VCT. A number of these MSMs are from not from Pasay and come there largely to preserve their anonymity<sup>51</sup>.

Pasay does not have a functional LAC. It used to have one, but the LGU discontinued funding many years ago. Despite the increased prevalence of HIV among MSM (2%), there are currently no plans to design and implement a program targeting MSMs. A recent solicitation for a project proposal from a funding agency went unanswered. When asked why, the SHC physician cited the absence of a mandate for providing programs to MSMs, a lack of knowledge regarding designing and implementing an HIV prevention program for MSMs, and a fear of identifying a

problem without a means of addressing it. When asked to clarify the latter reason, the SHC physician said that they might uncover a large number of HIV+ persons but may not have the capacity to meet their needs. The physician is unaware of programs that are currently in place in treatment hubs and through NGOs to support people living with HIV. Likewise, she is unaware of the minimum HIV prevention package for MSMs recommended by the PNAC<sup>42</sup>. She expects DOH or PNAC to provide the prevention programs that she can implement locally.

QC's approach highlights the potential of SHCs to deliver on their potential role as providers of HIV prevention services. The elements that contributed to a functional program include a legal mandate (i.e., a local ordinance) to provide services to MSM, a supportive LGU leadership as indicated by the budgetary support for SHC programs, and a motivated and knowledgeable SHC staff that designed and implemented a venue-based prevention program. Both these elements were lacking in Pasay City. Pasay, on the other hand, represents the norm, with staff that relies on guidance and direction from either the LGU leadership or national government to implement programs.



## HIV Treatment Program

Just like other resource-limited settings, the Philippines takes a programmatic approach (unlike the individual approach in developed countries) to HIV treatment. This approach allows for a more cost-effective provision of HIV treatment.

HIV+ individuals get diagnosed either as a result of clinical suspicion due to an immune compromising condition, voluntary screening and work-related screening. Most of these diagnoses occur in hospitals and clinics, a few are diagnosed in SHCs, and an increasing number are being diagnosed during SHC's MSM outreach or venue-based prevention activities<sup>55</sup>. Persons who have positive results are referred to a treatment hub for further care. Treatment initiation is based on criteria developed by the DOH and are based on the WHO guidelines<sup>33, 34</sup>.

As with any program, there are drawbacks. The diagnosis of HIV is performed through a centralized laboratory (San Lazaro Hospital in Manila). While this allows for better monitoring of the epidemic and easier quality control of testing methodology, it is also an inflexible system that can delay the provision of timely care in the field. Similarly, treatment initiation is dependent on meeting strict guidelines, which makes it difficult to individualize care. Treatment options are limited to the drugs that can be provided through GFATM. This has had the unintended consequence of inhibiting pharmaceutical companies from marketing their antiretrovirals in the Philippines. While this system brings the cost of care down, antiretroviral options are limited to the following drugs: zidovudine, tenofovir, stavudine, lamivudine, nevirapine, efavirenz and ritonavir-boosted lopinavir. In contrast, in developed countries there are 22 antiretrovirals to choose from. This diversity of treatment options evolved due to rapidity with which HIV develops drug-resistance, and the numerous idiosyncratic adverse reactions to many of these drugs. The limited repertoire of locally available drugs becomes a life-and-death issue for those who do not tolerate, or have virologically failed (due to drug-resistance) first- and second-line ART, which in other settings can account for as much as 20% of HIV+ persons on ART. Also, patients with the means to pay for their medicines and who do not want to be seen at the treatment hubs would need to source their drugs outside of the Philippines (e.g. Hong Kong, Bangkok, Singapore).

Private hospitals and clinics also see a large number of HIV+ individuals, many of whom present with an AIDS-defining illness that leads to the diagnosis of HIV. Some hospitals have HACTs that are able to provide care for these patients. After hospital discharge, these patients are referred to treatment hubs for further care. For patients with health insurance, a new diagnosis of HIV can be problematic, as coverage for the hospital stay can be denied by their insurance companies, most of whom have clauses that deny coverage for STIs, including HIV.

According to the Philippine Society for Microbiology and Infectious Diseases (**PSMID**), there are a little over 400 infectious disease trained specialists in the Philippines. Due to the rarity of HIV

until recently, very few are trained for or have extensive experience managing HIV and AIDS. The PSMID, along with DOH, has started programs designed to update the knowledge and skills of infectious disease physicians in HIV management. Knowledge and attitudes regarding HIV and MARPs is even more limited among physicians other than infectious disease specialists.

The Philippine Department of Social Welfare and Development (**DSWD**) has a program for providing psychosocial support for people living with HIV. Several NGOs, particularly associations of people living with HIV, have similar programs funded by philanthropy and external agencies. Unfortunately, the DSWD program has not been implemented at the local level due to an absence of funding support from both national and local government. Treatment hubs currently rely on NGOs to provide psychosocial services to their patients.

### **Treatment Hubs**

Treatment hubs are DOH-designated hospitals and clinics that provide HIV treatment and prevention services. They were set-up partly to serve as conduits for distribution of ART provided by GFATM to HIV-infected individuals. The treatment hubs perform VCT, diagnose HIV (including early infant diagnosis), provide ART and prophylaxis and treatment of opportunistic infections, and provide psychosocial counseling for HIV-positive individuals.

Hospitals with treatment hubs and functional HACTs are listed in table 1. These hospitals are tertiary care referral centers for their respective regions. Hubs are usually manned by 1 - 2 physicians, nurse, pharmacist and, often, a social worker. They also rely on the remainder of the hospital staff for other services. A few, like the UP-PGH, RITM and San Lazaro Hospital, are training institutions, and have resident physicians manning the hub. All hubs derive budgetary support from the national government, and with the exception of UP-PGH, are DOH-retained hospitals. There are plans to designate more hospitals, including private hospitals, as treatment hubs<sup>52</sup>. According to the UNGASS country report, there are also 68 hospitals, both public and private, with functional and up-to-date HACTs<sup>45</sup>. Among these are 3 private facilities serving as access points for ART.

The hubs obtain their ART supply from GFATM through the DOH. Consistent with a programmatic approach, treatment initiation is rigorously adhered to by the hubs. However, the current round of GFATM funding will expire in November 2012. DOH plans to purchase ART medications directly and distribute to the hubs, but details have not been spelled out.

At present, the volume of HIV cases presenting to the hubs has exceeded the capacity of the current hubs. In UP-PGH, for instance, a single examination area is used for a clinic population that now exceeds 200 patients<sup>4</sup>. Building-up capacity to match demand will rely on an accurate estimation of the epidemic's trajectory in terms of numbers of HIV+ persons and their place of residence. Hence, a clearer picture of HIV prevalence and incidence among MARPs and the

epidemic’s geographic spread is needed. Such data is not currently available, but according to the NEC, some of this data will be forthcoming from an analysis of the 2009 and 2011 IHBSS<sup>5</sup>.

There are no data about the competency of treatment hubs, how often they adhere to the minimum treatment practices listed above, and what their patient outcomes are in terms of treatment success/failure, ART adherence, and adverse events to ART, among others. This paucity of data makes it challenging to determine how much help with capacity building these centers will require. Anecdotally, the acceptability of government–run treatment hubs among some HIV+ patients has been variable. Issues such as the lack of privacy in waiting rooms, rundown nature of facilities and inconvenient location have been expressed by some patients<sup>4</sup>.

Treatment hubs do not have the competency to provide prevention programs to MARPs. They, however, provide limited prevention services such as counseling to HIV+ patients and those who undergo VCT in their clinics, and prevention education among hospital staff members.

In the Philippine setting, with an epidemic that is concentrated in select MARPS and select large urban centers, treatment hubs are ideally placed to provide HIV treatment in a cost-effective manner. If the current epidemic trajectory holds, then treatment hubs will have to scale up in terms of manpower and physical facilities in order to handle the increasing HIV+ patient load. Additional hubs may need to be set up in metropolitan areas like Manila.

**Table 1: DOH designated HIV treatment hubs as of September 2011.**

Treatment Hubs
Ilocos Training Regional Medical Center – San Fernando, La Union
Cagayan Valley Medical Center – Tuguegarao City
Baguio General Hospital – Baguio City
Jose B Lingad Medical Center – San Fernando City, Pampanga
James L. Gordon Medical Center – Olongapo City
San Lazaro Hospital – Manila
UP - Philippine General Hospital – Manila
Research Institute for Tropical Medicine – Muntinlupa, Metro Manila
The Medical City – Pasig City, Metro Manila
Makati Medical Center – Makati, Metro Manila
Bicol Regional and Training Hospital – Legazpi City
Western Visayas Medical Center – Iloilo City
Corazon Locsin Medical Center – Bacolod City
Don Vicente Sotto Memorial Medical Center – Cebu City
Zamboanga City Medical Center – Zamboanga City
Davao Medical Center – Davao City

### Philippines Scorecard in HIV Treatment

Sixty percent of HIV+ individuals in the country are on ART<sup>45</sup>. As of 2010, only 82% of those that meet criteria for treatment initiation are on ART, which is below the target of >90%<sup>3</sup>. More seriously, only 5% of pregnant women were on ART, as opposed to a target of 100%<sup>3</sup>. The reasons for these low numbers are unclear, but DOH officials have publicly speculated that this may be

related to either a sense of hopelessness among some HIV+ patients or a lack of awareness about the availability of treatment among others<sup>61</sup>. In addition, not all treatment hubs have the proficiency to provide peripartum care for HIV+ women. For instance, in Metro Manila, among the 3 government treatment hubs, only UP-PGH has the capacity to provide peripartum care.

## Financing for HIV Treatment

In 2009, only 9% of HIV-related expenditures went to the care and treatment of HIV<sup>45</sup>. Much of it was sourced from external funding, largely from GFATM in the form of support for antiretrovirals, CD4+ T-cell testing and some prophylactic antimicrobials. The proportion borne as out-of-pocket costs by the patient is unknown, but could be as much as 50%. Financing for the treatment of HIV follows the pattern seen with other diseases in the Philippines, with one exception – antiretrovirals are provided by GFATM. HIV testing is provided in many VCT centers but cost is usually shouldered by the patient. Newly HIV-positive persons are usually referred to infectious disease specialists or HIV treatment hubs for further care. Laboratory and other diagnostic testing is usually shouldered by the patient, with the exception of CD4+ T-cell counts, twice a year testing of which is supported by GFATM. Hospitalizations and out-patient treatment for other HIV-related conditions, such as opportunistic infections, is borne largely by the patient as out-of-pocket costs. Most health insurance companies consider HIV as a non-covered disease and have denied coverage for hospitalizations when it is determined that the reason for admission is HIV-related. However, treatment for TB, a common opportunistic infection, is shouldered by the government through enrollment in directly observed treatment (DOTS) programs. While room and physician fees are shouldered by the government in most government hospitals, laboratory and therapy costs are borne by the patient. For many, hospitalization for an HIV-related condition is impoverishing.

In 2006, the Philippine Health Insurance Corporation (PhilHealth) developed an HIV outpatient and inpatient package for HIV-positive members, which it started implementing this year<sup>62</sup>. The outpatient package will provide PhP 30,000.00 per year per member, which theoretically, should cover ART medications, usual laboratories and physician fees. The package is paid on a case payment scheme to designated treatment hubs. Costs over and above these, including treatment for opportunistic infections, will be borne out-of-pocket by patients. Obtaining these benefits is contingent on becoming a PhilHealth member, which with the current administration's aim of universal health coverage, has become easier. Individuals can either become members through their employment, as self-employed individuals (paying PhP1200/year) or as recipients of LGU aid (by being classified as poor, which requires LGU certification and support). Hence, theoretically, PhilHealth will cover a large part of HIV treatment costs, replacing the support currently obtained from GFATM. Treatment hubs are currently actively urging their patient to enroll in PhilHealth. So far, the biggest obstacle to enrollment is the reluctance of many patients to disclose their HIV status for fear of stigmatization and discrimination by employers (in the case of employed members) or neighbors (in the case of those needing LGU certification as poor).

Based on anecdotal experience and as noted above, the current national data likely underestimate the proportion of new HIV cases that present with AIDS and will require ART

initiation. While >85% of new cases reported by the NEC every month are labeled asymptomatic, >50% of new cases seen at the UP-PGH have an AIDS defining event<sup>4</sup>. Determining the numbers needing therapy and where they seek care are important in guiding decision makers on the resource allocation for HIV care and treatment.

## RECOMMENDATIONS

### *1. Focused Response*

A focused prevention strategy is the most cost-effective way forward for an HIV epidemic that is concentrated in MARPs in major urban centers. The Philippines has limited resources and external funding support particularly from the GFATM has become less reliable. A concentrated epidemic offers opportunities to focus resources in evidence-based programs among affected MARPs in a few urban areas. PNAC has targeted Category A areas for priority funding, and these include Metro Manila, Angeles, Cebu and Davao<sup>5</sup>. MARPs in these areas should be the focus of aggressive outreach and prevention programs. These programs should consist of VCT, and education regarding HIV transmission, risk behavior and risk avoidance (emphasizing the ABCD approach), and provision of condoms. In select cities, efforts should be made to reach out to PWIDs and initiate substance abuse programs.

This does not mean that prevention programs directed to the general population should be ignored. Recent data has shown that the mean age at diagnosis of HIV has decreased to 27 years old. This implies that age at acquisition of the disease is in the early 20's, which, in turn, suggests that the period of increased risk behavior occurs just as young adults are exiting school and entering their first jobs. Data shows that knowledge, attitudes and perception of young MARPs towards HIV and its prevention is quite low. Hence, resources should also be directed at developing and implementing HIV educational programs for venues that will reach a wide audience of young individuals. This may include schools, commercial centers (e.g. malls), theatres, and internet and other social media sites. Development of these programs should be spearheaded by PNAC and DOH, built on the experience of other countries and local NGOs, and done in collaboration with NGOs, the academe and media. Considering the fact that the most-affected demographic is the young and productive sector of society, local businesses should be tapped as potential venue and source of funding for these educational activities.

### *2. More data.*

In the mid-term assessment of the 4<sup>th</sup> AMTP, the PNAC questioned the validity of the current national HIV estimates<sup>42</sup>. The absence of detailed reliable data regarding incidence and transmission risk factors and behaviors among MARPs hampers attempts to focus prevention strategies. A countrywide estimation of the HIV incidence and prevalence among MARPs and determining risk factors and behaviors contributing to HIV transmission are a necessary first step in crafting a focused prevention strategy. This data will also be important in planning the expansion of treatment hubs. This data will be essential in resource and strategy prioritization. The current IHBSS can be used as the platform for expanding into a countrywide assessment of HIV prevalence and incidence. Providing funding for this activity is an essential.

A similar local surveillance effort should be undertaken by LGUs, particularly those that belong in PNAC's category A and B areas, and resources should be allocated for this purpose.

Determining local patterns of transmission and risk behaviors among MARPs will be necessary in crafting and prioritizing HIV prevention programs at the local level. This surveillance should be undertaken at least once a year in order to monitor the response to the LGU's prevention interventions.

### ***3. SHC as centers for HIV prevention services and voluntary counseling and testing.***

SHCs are best positioned to serve as providers of HIV prevention services and voluntary counseling and testing. Their mandate, orientation and manpower composition are suitable for these roles. They are the only existing local government institution that can potentially design and carry out HIV prevention programs among MARPs<sup>43</sup>. Their work in STI prevention and treatment and in some cases, HIV prevention and VCT among FSWs provides a useful experience that can be built on. Their limitations include the absence of LGU buy-in into the HIV prevention and treatment agenda, inadequate budget support, their susceptibility to local politics, limited manpower capacity and competence, and hesitancy of MSMs to utilize SHC services. Most SHCs will require a significant build-up of capacity in order to provide HIV prevention services. Only select SHCs should be targeted for capacity build-up, and selection of these SHCs should be based on local HIV incidence patterns, i.e. the 21 SHCs in PNAC's Category A areas should be prioritized (Metro Manila, Angeles, Cebu, Davao). The following steps may be needed in order to enhance SHC capacity for providing HIV prevention services:

- a. Advocacy with LGUs so that they will pass ordinances forming and providing funding for LACs and HIV prevention programs. This is important in order to assure the sustainability of these programs. LGUs in PNAC's category A areas should be prioritized. Such advocacy should be provided by the national government (particularly PNAC, DOH, DILG and the RAATs) and civil society organizations (including NGOs, faith-based organizations and associations of people living with HIV). There is a high level of interest among media, civil society and certain lawmakers in the Philippine's HIV problem. This should be tapped into and leveraged for its maximum potential.
- b. Enhance local ordinances in select LGUs to widen the scope of HIV and STI prevention coverage to include all MARPs, including MSMs and PWIDs. As noted above, many SHCs have mandates that are limited to entertainment establishments and sex workers.
- c. Alternatively, new programs can be created that provide services for MARPs. QC is already planning to open a MSM clinic while RITM has opened an MSM clinic in Manila<sup>52</sup>. Similar efforts are planned by private entities. Theoretically, MSM clinics will provide a secure, non-stigmatizing venue for MSMs to obtain health care. It remains to

be seen whether this approach will increase the frequency with which MSMs access health care in general and HIV preventive services in particular.

d. Advocacy with LGUs to reverse ordinances that make it difficult to promote condom use, and advocacy with LGUs and local pharmacies to promote availability of condoms.

e. In select areas, advocacy with LGUs and local pharmacies to promote availability of sterile syringes.

f. Train SHC staff in tools for rapid assessment and response to HIV epidemic in MSM and PWID using readily available tools from WHO<sup>63</sup>. Establishing local epidemiologic patterns, including size of MARP, local HIV prevalence and incidence, prevalent risk behaviors and settings, among others, is important in planning and implementing an HIV prevention program. Certain LGUs, including many of those in PNAC category A areas, already have the experience with conducting the IHBSS, and this could be built on as a foundation for local surveys. As stated earlier, these surveys will need to be conducted at least yearly to monitor the effect of the LGU's interventions.

g. Train SHC staff and peer educators/counselors in designing and providing HIV prevention strategies among MSM and PWID, including VCT, risk reduction counseling and sensitivity awareness towards MARPs, particularly MSM. In the 5<sup>th</sup> AMTP, PNAC has identified the minimum package of prevention interventions for each MARP<sup>42</sup>. PNAC should disseminate this information to all SHCs. SHC staff should be able to devise plans based on knowledge of local MARP transmission networks. Such knowledge can be derived from local survey described in (e).

h. Provide budgetary support for peer educators and counselors who can provide internet-, social media-, and venue-based counseling and testing to MSMs, as certain LGUs, including Quezon, Angeles and Puerto Princesa City, have done.

i. Imbed budgetary support for purchase and distribution of condoms (and lubricants) to MARPs in yearly local budgets.

j. Provide budgetary support for the development, production and distribution of educational materials that are appropriate to, and target MSMs and PWIDs.

j. Imbed monitoring and evaluation systems in SHC routines.

k. Integrate select SHCs in a surveillance network for HIV. This will entail performing a local version of the IHBSS on a yearly basis. Such a network must include LGUs in category A and B areas.



l. Integrate community-based NGOs in local planning and implementation. NGOs have been the backbone of HIV prevention efforts in the Philippines in the past few years, and, consequently have an intimate knowledge of the MARPs and both the experience and knowledge in planning and implementing prevention programs. They should be integrated into SHC programs as partners. In many areas they will complement the SHC's efforts in preventing HIV transmission. They can also provide the needed expertise that is lacking in many SHCs.

m. A mechanism similar to the provincial AIDS council should be established for coordinating prevention strategies among LGUs within metropolitan areas. As the QC experience showed, half of those testing HIV-positive during their outreach activities are from other areas of Metro Manila. MSM networks do not necessarily follow political boundaries. Economies of scale may be achieved by coordinating the prevention strategies of neighboring LGUs.

n. External funding support from international agencies should be prioritized for SHCs that are located in category A areas. Among the category A SHCs, priority should be given to those that have demonstrated support from their LGUs (in the form of ordinances and budgets supporting their activities), and have existing or ready-to-launch projects for expanding prevention services to MSMs or PWIDs. Such plans may include the setting up of MSM clinics that can provide stigma-free care and services. High priority may also be given to SHCs in category B areas that have existing or ready-to-launch prevention programs.

SHCs are not ideally set-up to provide HIV treatment services. Their manpower contingent is not equipped to handle the challenges of treating HIV-infected individuals. Instead, treatment services should be restricted to treatment hubs, as discussed in the next section.

### ***3. Treatment hubs as centers for the treatment and care of HIV+ individuals.***

Treatment hubs currently serve as referral centers for the treatment and care of HIV+ persons. In addition, PhilHealth will restrict the provision of their HIV package benefits to treatment hubs, thus reinforcing their status as referral centers for HIV care. A network of nationwide treatment hubs seems to be a cost-effective strategy for providing programmatic HIV care in an archipelagic setting with low HIV prevalence and an epidemic concentrated in MARPs in major urban centers. While treatment hub staff are trained in the provision of HIV treatment and care, many staff members have little experience in this role due to the novelty of the epidemic. With the anticipated rise in caseload, treatment hubs will find themselves understaffed in the near future. Steps that can be taken to enhance the hub's capacity include:

a. As stated above, a national survey of HIV incidence and prevalence will be critical to planning the expansion and placement of treatment hubs. This exercise will help match hub expansion to areas of most need.

b. Enhance capacity for performing CD4+ T-cells and viral load. These tests are currently only performed in 5 Manila treatment hubs. The availability of these tests at other hubs will minimize delays in the provision of care to patients. The costs for these tests can be recovered from the PhilHealth outpatient package.

c. Develop mechanism for continuous training of treatment hub staff in the management of HIV. Potential modalities can include yearly conferences, weekly case conferences (via the internet), or a telemedicine referral system (with HIV specialists in Manila and other hubs serving as domain experts). A curriculum can be designed collaboratively by PSMID, RITM and UP-PGH.

Create a one-year HIV medicine training program centered in one of the treatment hubs with a high volume of patients and an academic affiliation. Training programs can be multidisciplinary and include physicians, nurses and pharmacists. Such a program will provide a supply of trained personnel to manage an increasing caseload of HIV+ patients. The necessity of more training programs will depend on the projected number of cases expected in the near future.

d. Imbed monitoring and evaluation systems in treatment hub routines. These systems will monitor adherence of treatment hubs to program goals and best practices.

e. Enhance the capacity of all treatment hubs to provide perinatal treatment services to HIV-infected mothers.

f. Create a formulary plan for antiretrovirals and antimicrobials (for opportunistic infections) modeled after similar programs in other countries such as Thailand or Brazil. Such a formulary should take into account expected failure of first line regimens, and should include as many options as feasible. The Philippines should take advantage of the UNITAID-sponsored Medicine Patent Pool<sup>64</sup>. The Philippines should also explore the feasibility and cost-effectiveness of setting up an ASEAN-wide formulary program.

g. Through the Philippine Medical Association and Philippine Hospital Association, create educational programs that target physicians and other health care workers and that will increase their knowledge of HIV. Such a program should include sensitivity training towards MARPs that aim to reduce the bias and stigma associated with both HIV and MARPs.

h. Provide LGU budgetary support for DSWD and NGO psychosocial support programs for people living with HIV.

i. Explore the possibility of expanding the treatment hubs' role to the provision of HIV prevention services, perhaps in coordination with NGOs and LGUs. Many treatment hubs, particularly the regional medical centers, are the only DOH-run centers at a local level, and represent an opportunity for a centralized program to be implemented locally and free from the influence of local politics. Theoretically, and provided that the national government is motivated and engaged, prevention services can be quickly designed and implemented through the hubs. However, this will require a significant expansion of manpower capacity as hubs currently only provide a limited amount of prevention services to their patients and hospital staff, and do not have the staffing or competency to provide prevention services to MARPs in their respective communities<sup>52</sup>. It is also unclear, at this point, whether program officers at the national or local level, or hub staff will be receptive to this concept<sup>43, 52</sup>. Most hubs will likely be distracted by efforts to expand their capacity to meet the growing need for HIV treatment services.

#### *4. Finding local sources of funding*

Due to increasing financing constraints from external sources, the Philippines has to increasingly source its funding needs locally. An obvious and largely untapped source of funding is the LGU. A great deal of advocacy will be required to convince LGUs to invest in HIV prevention and control programs. Many Category A sites are in relatively affluent areas, and arguably these LGUs can and should fund their HIV prevention programs. PNAC estimates, that for prevention programs alone, the country as a whole needs \$98 million (\$1 per capita, which is the recommended spending level by the Commission on AIDS in Asia<sup>65</sup>) per year.

PhilHealth has stepped up to the plate as far as funding HIV treatment. With the goal of universal health care, the care for every HIV+ person should be partially covered. Nevertheless, for some, particularly those with opportunistic illnesses, a large portion of the cost will still be borne out-of-pocket. For some of these individuals, an option will be supplemental private health insurance. However, most private health insurance carriers do not consider HIV as a "covered" disease. Legislation should be put in place to ban this practice.

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## **APPENDIX 1**

### **World Health Organization's 21 Recommendations for the Prevention and Treatment of HIV and Other Sexually Transmitted Infections in Men who have Sex with Men and Transgendered People**

#### **Recommendations on human rights and non-discrimination in health**

1. Legislators and other government authorities should establish antidiscrimination and protective laws, derived from international human rights standards, in order to eliminate discrimination and violence faced by MSM and transgender people, and reduce their vulnerability to infection with HIV, and the impacts of HIV and AIDS.
2. Health services should be made inclusive of MSM and transgender people, based on the principles of medical ethics and the right to health.

#### **Recommendations on the prevention of sexual transmission**

3. Using condoms consistently during anal intercourse is strongly recommended for MSM and transgender people over not using condoms. (Strong recommendation, moderate quality of evidence)
4. Using condoms consistently is strongly recommended over serosorting for HIV-negative MSM and transgender people. (Strong recommendation, very low quality of evidence)  
  
Serosorting is suggested over not using condoms by HIV-negative MSM and transgender people under specific circumstances as a harm reduction strategy. (Conditional recommendation, very low quality of evidence)
5. Not offering adult male circumcision to MSM and transgender people for the prevention of HIV and STI is suggested over offering it. (Conditional recommendation, very low quality of evidence)

#### **Recommendations on HIV testing and counseling (sic)**



6. Offering HIV testing and counselling to MSM and transgender people is strongly recommended over not offering this intervention. (Strong recommendation, low quality of evidence)

7. Offering community-based HIV testing and counselling linked to care and treatment to MSM and transgender people is suggested over not offering such programmes. (Strong recommendation, very low quality of evidence)

#### **Recommendations on behavioural interventions, information, education, communication**

8. Implementing individual-level behavioural interventions for the prevention of HIV and STIs among MSM and transgender people is suggested over not implementing such interventions.

(Conditional recommendation, moderate quality of evidence)

9. Implementing community-level behavioural interventions for the prevention of HIV and STIs among MSM and transgender people is suggested over not implementing such interventions.

(Conditional recommendation, low quality of evidence)

10. Offering targeted internet-based information to decrease risky sexual behaviours and increase uptake of HIV testing and counselling among MSM and transgender people is suggested over not offering such information. (Conditional recommendation, very low quality of evidence)

11. Using social marketing strategies to increase the uptake of HIV/STI testing and counselling and HIV services among MSM and transgender people is suggested over not using such strategies (Conditional recommendation, very low quality of evidence)

12. Implementing sex venue-based outreach strategies to decrease risky sexual behaviour and increase uptake of HIV testing and counselling among MSM and transgender people is suggested over not implementing such strategies. (Conditional recommendation, very low quality of evidence)

#### **Recommendations on substance use and prevention of bloodborne infections**

13. MSM and transgender people with harmful alcohol or other substance use should have access to evidence-based brief psychosocial interventions involving assessment, specific feedback and advice. (In line with existing WHO guidance)

14. MSM and transgender people who inject drugs should have access to needle and syringe programmes and opioid substitution therapy. (In line with existing WHO guidance)

15. Transgender people who inject substances for gender enhancement should use sterile injecting equipment and practise safe injecting behaviours to reduce the risk of infection with bloodborne pathogens such as HIV, hepatitis B and hepatitis C. (In line with existing WHO guidance)

#### **Recommendations on HIV care and treatment**

16. MSM and transgender people living with HIV should have the same access to ART as other populations. ART should be initiated at CD4 counts of  $\leq 350$  cells/mm<sup>3</sup> (and for those in WHO clinical stage 3 or 4 if CD4 testing is not available). Access should also include management of opportunistic infections, co-morbidities and treatment failure. (In line with existing WHO guidance)

17. MSM and transgender people living with HIV should have access to essential interventions to prevent illness and HIV transmission including, but not limited to, care and support and antiretroviral therapy. (In line with existing WHO guidance)

18. MSM and transgender people with symptomatic STIs should seek and be offered syndromic management and treatment. (In line with existing WHO guidance)

19. Offering periodic testing for asymptomatic urethral and rectal *N. gonorrhoeae* and *C. trachomatis* infections using NAAT is suggested over not offering such testing for MSM and transgender people. (Conditional recommendation, low quality of evidence)

Not offering periodic testing for asymptomatic urethral and rectal *N. gonorrhoeae* infections using culture is suggested over offering such testing for MSM and transgender people.

(Conditional recommendation, low quality of evidence)

20. Offering periodic serological testing for asymptomatic syphilis infection to MSM and transgender people is strongly recommended over not offering such screening. (Strong recommendation, moderate quality of evidence)

21. MSM and transgender people should be included in catch-up HBV immunization strategies in settings where infant immunization has not reached full coverage. (In line with existing WHO guidance)