

Differentiated service delivery for key populations - men who have sex with men, sex workers, transgender people, people who inject drugs and prisoners and other people living in closed settings: A background review

7 November 2016

Prepared for the consultation on *HIV differentiated service delivery models for specific populations and settings: Pregnant and breastfeeding women, children, adolescents and key populations*, Geneva, 16-18 November 2016

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List of acronyms used

ART	Antiretroviral therapy
ARV	Antiretroviral
CBO	Community-based organization
CDC	Centers for Disease Control and Prevention
CTC	Care and treatment centre
DIC	Drop in centre
DOH	Department of Health
DSD	Differentiated service delivery
EFV	Efavirenz
FP	Family planning
FSW	Female sex worker
HCW	Health care worker
HTS	HIV testing services
LGBTI	Lesbian, gay, bisexual, transgender, intersex
LHCW	Lay health care worker
MOH	Ministry of Health
MOM	Moonlight outreach model
MSM	Men who have sex with men
NGO	Non-governmental organization
NIMART	Nurse-initiated management of ART
OCF	Optimized case finding
OST	Opioid substitution treatment
PEP	Pre-exposure prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PHC	Primary health clinic
PLHIV	People living with HIV
PrEP	Pre-exposure prophylaxis
PWID	People who inject drugs
SRH	Sexual and reproductive health
SW	Sex worker
TB	Tuberculosis
VL	Viral load
WHO	World Health Organization
WWUD	Women who use drugs

Part 1. Introduction

WHO, UNAIDS and PEPFAR identify “key populations” as men who have sex with men (MSM), sex workers, transgender people, people who inject drugs (PWID), and prisoners and other people living in closed settings. They are categorized as such because specific higher-risk behaviours place them at increased risk of HIV, irrespective of the epidemic type or local context. Also, they have legal and social issues related to their behaviours that increase their vulnerability to HIV. Members of key population groups may be socially marginalized and experience frequent human rights violations, systematic disenfranchisement, social and economic marginalization and/or criminalization.

Key populations are disproportionately affected by HIV. People who inject drugs are 24 times more likely to acquire HIV than adults in the general population, sex workers are 10 times more likely, and men who have sex with men are 24 times more likely (1). Transgender women are 49 times more likely to be living with HIV than other adult females (2). In 2013, it was estimated that as many as 50% of all new HIV infections worldwide were among key populations (3). In many settings, HIV incidence in key populations continues to increase, even as incidence stabilizes or declines in the general population (3).

Barriers to accessing health services

It is difficult to estimate the full extent of key population access to services due to a lack of data and challenges in data disaggregation. However, people from key population groups often face more barriers than others in accessing HIV testing and treatment and, once started on antiretroviral treatment (ART), to retention in care and adherence to treatment. Barriers include social exclusion, stigma and discrimination in health care settings, the inflexibility and inconvenience of public sector health service provision, and the criminalization of consensual same-sex sexual activities, sex work and drug use. The criminalization of behaviours means that many members of key population groups are reluctant to self-identify, which impacts on their ability to access necessary, appropriate and relevant health services; it also results in a lack of accurate data available to monitor and assess key population health service coverage. Many people from key populations face dual stigma and criminalization of both their behaviour and as people living with HIV (PLHIV). As a result, many individuals from key populations experience similar barriers to those of other PLHIV, but more frequently, more acutely, and with less opportunity to overcome them (4).

Despite high HIV burden and increasing global coverage of HIV testing and treatment services, individuals from key populations may lack awareness of HIV treatment benefits, are underserved and have low coverage across components of the prevention and test-and-treat cascade, including ART coverage. While data is limited, reports to UNAIDS estimate an average of 24% of PWID, 21% of sex workers and 14% of MSM were enrolled on ART in 2015 (2); these are in contrast to UNAIDS estimates of global coverage of ART at 46% in 2015 (5). Existing programmes specifically serving key populations are often small scale, and coverage of interventions and services for these communities remains low.

People from key populations may have co-morbidities or additional health needs (e.g., sexually transmitted infections, drug dependence, mental health disorders) that require clinical attention and may necessitate additional adherence support for ART, although these should never preclude enrolment on ART programmes.

Differentiated service delivery for key populations

Effective health care must reflect the particular needs of individuals in key populations, as well as the constraints and opportunities of the social and legal contexts in which they live. Differentiated service delivery may have benefit for client groups that currently have poor outcomes. There is currently no specific guidance for key population organizations and programmes on how they might adopt differentiated service delivery components to improve both patient/client management and service provision.

Part 2. Key issues in differentiated service delivery for key populations according to the building blocks

WHAT services should be provided?

Comprehensive HIV health sector interventions for key populations include HIV prevention, harm reduction for people who inject drugs, sexual and reproductive health, HIV testing services (HTS), HIV treatment and care, and prevention and management of co-infections and co-morbidities (TB, hepatitis and mental health disorders).

Integrated “one-stop-shop” services can refer to the integration of ART delivery into other clinical services, such as TB services, sexual and reproductive health services, and drug dependence treatment; this can facilitate access, strengthen linkages and ensure timely care. Integration of services facilitates provision of comprehensive and consistent care. It allows individuals to take care of their various health needs at the same time and in the same location. Integration of services involves not only providing related services in a single setting, but also linkage systems to share information and provisions for referrals across settings and among providers (3).

Sub-population-specific considerations

Opioid-dependent people: For opioid-dependent people who are prescribed ART, adherence is increased when support services, OST and evidence-based drug dependency interventions are used. When initiating a patient onto ART or adding drugs during continuing treatment, doctors and nurses should assess substance use for all licit drugs (alcohol, tobacco), illicit (recreational) drugs and drugs for co-infections and co-morbidities of people seeking treatment to understand potential drug interactions. WHO recommends methadone and buprenorphine to treat opioid dependence. Co-administering efavirenz (EFV) decreases methadone concentrations. This could subsequently cause withdrawal symptoms and increase the risk of relapse to opioid use. People receiving methadone and EFV should therefore be monitored closely, and those experiencing opioid withdrawal may need adjustment of their methadone dose. Attention should be paid to counselling on possible consequences of drug interactions, and an environment that promotes and enables reporting of concomitant medications is critical.

Transgender people: Hormones are used in cross-hormonal treatment protocols for transgender women and men. Published data indicates that the effect of oestrogen on ARV efficacy is limited, but the concomitant use of certain ARV drugs may decrease oestrogen levels. Testosterone and ARVs have been co-administered for many years with no published reports of problematic drug interactions. While more systematic research on the impact of hormone therapy on ART is required, hormone use should not exclude someone from ART. The potential for drug interactions may require monitoring and adjustment of the drug regimen.

WHO should provide services?

Task shifting

Task shifting involves reassigning tasks from highly qualified health workers to health workers with shorter training and fewer complementary qualifications or to supervised lay people, including key population members. Task shifting can increase the effectiveness and efficiency of available personnel, enabling the existing workforce to service more people. Specifically for key populations, provision of services by peers may be preferable to those provided by physicians and nurses who may stigmatize key populations or have judgmental attitudes about their behaviours.

In particular, WHO recommends that:

- Trained and supervised lay providers can distribute ART to people living with HIV. This can be applied to key population peers (as lay providers and recipients of ART).
- Trained non-physician clinicians, midwives and nurses can initiate first-line ART, maintain ART and dispense ART between regular clinic visits. This can be applied to clinical staff working in key population targeted services.
- Lay providers who are trained can, using rapid diagnostic tests, independently conduct safe and effective HIV testing services.

Respectful and non-judgmental health providers

It is important to note that primary care clinicians may not be “key population friendly”. In this case, there should be specialized sensitization and clinical competency training for health providers to work with all key populations and with specific subgroups, such as young members of key populations. When providers respect confidentiality and demonstrate good communication skills, and when they are knowledgeable, sensitive, non-judgmental, empathetic and supportive, key population service users are more likely to seek services and to benefit from the prevention, treatment and care interventions they need.

Meaningful peer involvement

The presence of peer educators, promoters, counsellors and supporters is regarded as essential to engaging with key populations and building trust that encourages uptake of

services and retention in care. The peer approach includes using trained peer navigators and/or community outreach workers to facilitate specific health actions, from accompanied referrals to adherence support and follow up, and to accompany individuals from key populations to clinics to receive ART. Programmes should clearly designate roles for peers to ensure that their involvement is clearly spelt out. Reasonable incentives for peers should be considered.

WHERE should services be provided?

Providing the full range of HIV prevention, diagnosis, treatment, care and support services for key populations through decentralized community-based outreach, mobile and drop-in centres (DICs) and “targeted interventions” improves access to services, care-seeking behaviour and retention in care, as well as provides safer, discreet and more accessible health care options for key populations. This approach can further strengthen community engagement, as well as link community-based interventions with health facilities. Targeted services for key populations may not always be appropriate or acceptable; in some settings, general HIV services provided outside of the community may provide greater anonymity.

Decentralization brings HIV services closer to certain individuals, especially in settings where transport costs, long waiting times or prejudicial provider attitudes are significant barriers to accessing services and retention in care. ART can be provided and maintained in hospitals and in peripheral health facilities, with maintenance at community level between regular clinic visits (i.e., outside health facilities in settings such as outreach sites, health posts, home-based services or community-based organizations) (3). Provision of ART through private general practitioners can support decentralization of ART, relieve overburdened government health systems, and provide additional options for people living with HIV in terms of where they can access care. Existing community and private sector health system infrastructure and resources can be harnessed to increase coverage of ART without investing in new facilities (6,7).

Many communities prefer, are more comfortable with and are more likely to access services outside the formal health sector when they are provided in safe and convenient places where members of key populations are less likely to experience stigma, discrimination, abuse or arrest. Community elements can be provided in parallel with formal clinical services to improve ART and health care for key populations. Some individuals from key populations may choose to receive HIV services in a facility that is not in their communities or close to their homes due to stigma- and disclosure-related concerns; in such settings, programme managers should incorporate preferences of their clients in designing appropriate service delivery models.

Prioritization of areas with concentrations of key populations, such as with mobile services and peer outreach in bars or other social settings, are effective in reaching marginalized and hard-to-reach communities.

Part 3. Methods

The aim of this review was to consolidate the experience and evidence regarding DSD models for key populations utilizing both published and grey literature. In addition to searching the peer-reviewed literature and conference databases, additional data was collected through outreach to contacts, key stakeholders and experts in the HIV/AIDS sector who are knowledgeable of DSD models for key populations.

Details of models for key populations are summarised below both for models for HIV testing and treatment. First, general model types are summarized with key features and selected examples. Thereafter, specific differentiated service delivery models for ART delivery to key populations are summarised as a result of the rapid review.

Differentiated service delivery models for testing and treatment for key populations

Model type	Features	Select examples
Task shifting	<ul style="list-style-type: none"> - HTS in community outreach settings - “Test for triage” - Lay provider testing using - Peer monitoring of ART and adherence counselling - Partnership with NGOs/CBOs to deliver services on behalf of national programmes - ART initiated by nurses with maintenance support from community health workers - National government accreditation for one-stop-shop key population clinics to deliver ART and care, including PPT for STIs - Self-testing with or without peer assistance 	<ul style="list-style-type: none"> - Red Umbrella National Sex Work Programme, South Africa - Ghana - Kenya - CITI model, Ukraine - Curitiba Brazil for MSM - Tanzania through ICAP - Mauritius MOH PWID programme - Self-Testing in Africa (STAR) programme, Zimbabwe, Malawi and Zambia
Case management/peer navigation	<ul style="list-style-type: none"> - Case workers/outreach workers engage with clients and accompany them through every step of the continuum of care - Peer navigators facilitate ART initiation and support through the cascade and provide info, counselling, adherence support, accompany to testing, linkage to treatment and care services - Incentivized referral - Optimized case finding - Escorted referrals 	<ul style="list-style-type: none"> - Malaysia AIDS Council MSM programme - A Hora e Agora, Brazil - CITI Project, Ukraine - Peer-driven intervention (PDI) to increase uptake of HIV services among hard-to-reach key populations, Vietnam - Ukraine’s Optimized Case Finding (OCF) Approach - SAUTI Project, Tanzania - ICAP Tanzania - MARPI, Uganda - Kenya sex worker programmes - CHAMP, Cameroon - Sisters Transgender Women Programme, Thailand

Comprehensive/ integrated services	<ul style="list-style-type: none"> - Comprehensive services at one location, including ART - Opioid substitution therapy (OST) programmes providing daily ART and TB meds alongside methadone 	<ul style="list-style-type: none"> - Kenya sex worker programmes - Tanzania - ICAP Central Asia - Armenia DoH - Centre for Sexual Health and HIV AIDS Research (CeSHHAR), Zimbabwe - Transgender Family Program, Community Healthcare Network, USA - MARPI, Uganda
Community-based services	<ul style="list-style-type: none"> - Mobile outreach - Community-based testing services - Drop-in centres - Prioritized area/hotspot outreach - “One-stop shops” - Linkage and referral to clinical services - Peer educators with various roles, including linking patients to appropriate services, reminding patients about appointment and assisting with follow up (see above, case management) - Community safe spaces - Community distribution points for ART 	<ul style="list-style-type: none"> - Pakachere Sex Worker Programme, Malawi - SAUTI Project, Tanzania - Sexual Health and Rights Programme (SHARP), Kenya, Uganda, Tanzania and Zimbabwe - A Hora e Agora, Brazil - Kenya sex worker programmes - Naz Male Health Alliance, Pakistan - Mysore/Avahan, India - Sisters Transgender Women Programme, Thailand - Heartland Alliance, Nigeria - TB/HIV Care Association, South Africa - Mauritius MOH PWID programme - Zimbabwe National Sex Worker Programme
Community-led services	<ul style="list-style-type: none"> - Community support and empowerment groups for HIV-positive key populations - Community committees to monitor service delivery, and feedback loops to ensure appropriate, accessible and high-quality treatment - ART adherence support groups at community-based organizations (CBOs) - ART distribution through CBOs 	<ul style="list-style-type: none"> - Naz Male Health Alliance, Pakistan
Using online	<ul style="list-style-type: none"> - Online platforms to engage and mobilize, promote uptake of services and 	<ul style="list-style-type: none"> - Malaysia AIDS Council MSM programme

platforms	<ul style="list-style-type: none"> support adherence to treatment - Online channels of communication and/or confidential ways to contact programme staff, provide/share information in discreet and confidential way to preserve anonymity - Web-based HIV self-testing platforms 	<ul style="list-style-type: none"> - AdamLove, Thailand - mHeath4KPs, Ghana - A Hora e Agora, Brazil
Enhanced facility-based ART	<ul style="list-style-type: none"> - Clinicians sensitized to key population service and psychosocial needs and preferences - Community accountability committees routinely engage to improve quality of clinical services - Fast track key population patients in MOH clinical settings - “Hosting” public sector ART providers at key population clinics/DICs 	<ul style="list-style-type: none"> - Mwanza, Tanzania - Makongeni integrated clinic – Homabay, Kenya - Ghana Health Services nurses, Accra - Avahan, India
Flexible client-centred services	<ul style="list-style-type: none"> - Ability to have someone else retrieve ART when individual has travelled to distant location for work - Flexible clinic opening hours (weekends, evenings) - “Moonlight Outreach Models” (MOMs) or Moonlight Testing Programs to bring health services, including HIV testing and counselling, to the spaces in which sex workers typically work or live and at times of the day that can have the greatest impact, such as sex work “hotspots” - “No appointment needed” and drop-in services available - “Emergency” drug pickups available when running out of ARVs - Differentiated schedules: adapting or dedicating hours, or clinic days, for specific client groups (e.g., sex workers, MSM/LGBTI, PWID) - Services at sites located near places of work (sex work and drug use sites) - Facility-based ART sites dedicate specific clinic days to specific groups of clients 	<ul style="list-style-type: none"> - Kenya sex worker programmes - TB/HIV Care Association, South Africa - Sex worker programme in Zomba District, Malawi
OTHER CONSIDERATIONS		
Data safety/confidentiality and patient-held records	<ul style="list-style-type: none"> - Clients can attend any clinic and are not required to self-disclose key population status - Electronic health passports enabling clients to obtain services, including ART refill, at different sites 	<ul style="list-style-type: none"> - Kenya sex worker programmes - North Star Alliance

Medicine storage	- ARV storage services: people without safe place to store ARVs (homeless, socially vulnerable, PWID) may keep them at clinic/drop-in centre and collect when needed	- Health Options for Young Men on HIV, AIDS and STIs (HOYMAS), Nairobi
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RAPID MODEL REVIEWS: Differentiated ART delivery models for key populations

Project/model name	Health4Men
Overview	Delivery of holistic package of sexual health and wellness interventions, including prevention and treatment of HIV, with ART provision and management, HIV testing and CD4 measurement. Centres of excellence provide community-based HIV prevention initiatives and HIV counselling and testing
Implementer	Anova Health Institute, collaborating with the DOH to train public health care clinics in MSM competency
Location/context	Nationally across South Africa and regionally with partners Anova's Health4Men services are located in each province of South Africa, including urban, peri-urban and rural settings Generally, these are in high-burden key population contexts centred within a high-burden generalized HIV epidemic Centres of excellence in MSM health care in Cape Town and Johannesburg
Population	MSM focused, inclusive of transgender people, male sex workers and people who use drugs
WHAT	<ul style="list-style-type: none"> - ART is provided according to DOH guidelines - Health4Men services are provided to a full spectrum of patients, including those who are stable pre-ART, newly initiated and ART experienced - Stable and virally suppressed clients are migrated to a pre-package med system to avoid lengthy pharmacy waiting times and are provided with multi-month scripting for ART - Attempts to migrate stable participants to an adherence club system
WHO	Majority of services are rendered in partnership with DOH staff
WHERE	MSM targeted services are situated within government primary care clinics in each of the nine provinces across South Africa and within the centres of excellence in Cape Town and Johannesburg
WHEN	<ul style="list-style-type: none"> - Multi-month dispensing (2 months most of year but 4 months from Oct to Jan to allow for holiday travel) - LTFU system as per DOH guidelines – they are contacted if one week late for meds and again at 1 month and LTFU if missing for 3 months
Project/model name	Single-window approach
Overview	Part of efforts to expand comprehensive HIV prevention, care and treatment for key populations, including PWID. Programme

	providing integrated HIV, TB and OST services to PWID in Kazakhstan, Kyrgyzstan and Tajikistan Focus is on building the capacity of health workers and systems to enable the integration of TB, HIV and OST services at select OST sites
Implementer	ICAP at Columbia University partnering with PEPFAR, CDC and ministries of health in Central Asia
Location/context	Kazakhstan, Kyrgyzstan and Tajikistan
Population	PWID
WHAT	<ul style="list-style-type: none"> - Dispensing of ART drugs at OST sites, isoniazid, cotrimoxazole and TB drugs, HTS, drawing of blood for viral load and CD4 testing, HTS of sex partners at OST sites - Regular clinical assessments of patients by part-time HIV specialists and TB specialists at OST sites - To improve the adherence of patients on ART, a text-message reminder system for patients on ART and home-visiting service, which deploys clinicians to patient homes to provide counselling and medication, and to re-engage individuals previously lost to follow up, is implemented
WHO	Nurses trained in methadone disbursement provide routine TB symptom screening and HIV care and treatment
WHERE	Patients receive OST/TB/HIV services at one site
WHEN	<ul style="list-style-type: none"> - OST and TB symptom screening services provided every day; HTS every 6 months; ART care as needed, but at least one clinical assessment and viral load and CD4 testing every 6 months, plus monthly adherence assessment for ART patients - Sites have extended operating hours
Current service limitations	OST remains a controversial issue in Central Asia; as a result, the number of OST sites remains limited and services may be high threshold and difficult to access
Project/model name	Most At Risk Populations Initiative (MARPI)
Overview	MARPI serves as a referral centre for young people who sell sex and young men who have sex with men, in addition to other LGBTI communities aged 10-24
Implementer	International HIV/AIDS Alliance
Location/context	Affiliated to National STD Control Unit, located within premises of national hospital (Mulago Hospital), Kampala, Uganda
Population	Young people who sell sex, young MSM and other LGBTI communities
WHAT	Integrated SRH and HIV services, including family planning, STI screening and treatment, condom education and distribution, psychosocial support, HTS, HIV treatment and care, PEP, post-abortion care, referral services for voluntary medical male

	circumcision, prevention of vertical transmission, antenatal and postnatal care
WHO	Peer navigation: Young people are escorted by their peers to access additional services
WHERE	Service delivery provided at static public health facilities and in communities through moonlight outreach (at night), community centres and hotspots
Project/model name	Nai Zindagi Trust, Pakistan
Overview	Project provides a range of services to marginalized drug users and associated vulnerable populations groups in Pakistan. Aims to increase access to services for people who inject drugs and people living with HIV
Implementer	Supported by Global Fund and Mainline Foundation, Netherlands
Location/context	30 districts across Pakistan
Population	PWID, street-based people who inject drugs, their wives, sexual partners and children
WHAT	<ul style="list-style-type: none"> - Needle and syringe programmes - HIV and STI prevention, diagnosis, treatment, care and support services - As an alternate to OST and prerequisite for ART, PWID are offered voluntary 15-20-day residential drug treatment - Voluntary residential 2-month ART adherence programme for PWID living with HIV – PWID with CD4 below 500 initiated onto ART - CD4 measurement (also available on outreach)
WHERE	Services provided at static and mobile settings
Current service limitations	A prerequisite for initiating ART in the public sector services in Pakistan is that an HIV-positive drug user should first be drug free This can be a significant barrier for people to access HV treatment OST is the most effective treatment for opioid dependence but is not provided in Pakistan
Project/model name	Kenya sex worker programmes SWOP, University of Nairobi, Hope World Wide, Shujaa Project, International Medical Corps, Tekeleza project, Impact Research Development Organization (IRDO) and LVCT Health Key Populations Programme
Overview	Multiple implementers in Kenya providing peer-led, hotspot-based outreach services Provide comprehensive and integrated service delivery covering entire testing and treatment continuum and general health care and support
Implementer	Under Kenya AIDS Control Program, working closely with National AIDS and STI Control Program (NAS COP), Ministry of Health,

	affiliated with University of Manitoba/University of Nairobi
Location/context	Urban hotspots (brothels, clubs and lodges), close to transport/trucking routes and sex work sites, Nairobi, Kenya
Population	Sex workers (both male and female), PWUD/PWID and HIV-infected family members, friends and clients of sex workers Also serves MSM specifically at neighbouring clinic
WHAT	<ul style="list-style-type: none"> - Comprehensive HIV prevention and treatment package as per Kenya MOH guidelines: SRH services; family planning; cervical cancer screening; STI and TB screening and treatment; PEP; emergency contraceptives; psychosocial support and referral; peer support; treatment literacy and psychosocial support services; risk reduction counselling; distribution of condoms and lubricants; referral for anal wart removal/surgery for MSM, including residential services for surgical recovery - For HIV-positive clients: ART and management of opportunistic infections, including laboratory monitoring delivery; STI screening, diagnosis and treatment; alcohol and substance abuse counselling, screening and linkage to support centres; TB screening, diagnosis and treatment; secondary HIV prevention counselling and information; condom and lubricant provision; psychosocial support groups; nutritional assessments and support; gender-based violence (GBV) counselling - ARVs supplied by DOH Kenya Medical Supplies Authority (KEMSA) – computerized stock management system at high-volume ART sites to track ARV supplies and place re-orders
WHO	Peer leaders and peer-led networks employed to reach out to (male and female) sex workers as a community engagement strategy
WHERE	<ul style="list-style-type: none"> - Hotspot mobilization and outreach services - Services provided at 10 health clinics and drop-in centres in Nairobi - Static main clinic and satellite clinics
WHEN	<ul style="list-style-type: none"> - Dedicated days for MSM and female sex workers; peer-driven counselling - Extended hours of service to cater to key populations
Project/model name	Medicins du Monde (MdM)
Overview	Comprehensive services and support through outreach, drop-in centres and accompanied referrals
Implementer	Medicins du Monde (MdM), partnering with local NGOs/CBOs and existing health care services, and with MOH
Location/context	Kachin region, Myanmar Temeke district, Dar es Salaam, Tanzania
Population	PWID, female sex workers, MSM, transgender people

WHAT	<ul style="list-style-type: none"> - Services include: health education and behaviour change communication; distribution of syringes and other injection paraphernalia; condom promotion and distribution; testing and counselling on HIV, HBV, HCV and syphilis, and vaccination for HBV; screening and testing for TB; PMTCT; HIV care, including treatment for opportunistic infections, ART and psychosocial support; basic medical care (wound dressing, skin infections, STI treatment) - HIV counselling and testing is delivered through the DIC and outreach services - Facilities for showering and laundry, food aid, distribution of sanitary pads, clothes - Counselling, legal support by legal officer - Self-support groups, training and mentoring peer educators, income-generating activities, savings and loan associations, reading and writing classes (English and Swahili), computer classes - For PWID, comprehensive harm reduction approach, including needle and syringe programme, OST and ART - Distribution of harm reduction outreach kits - Facilitates safe disposal of used needles, provides puncture-resistant safe disposal containers to clients, and collects discarded needles - Accompanied referrals and fast-track system at referral hospitals and peer support groups for adherence - Fast-track system
WHO	<ul style="list-style-type: none"> - Trained personnel, including outreach workers, peers, volunteers, mentors - Nurse secondment partnership with local health councils
WHERE	<ul style="list-style-type: none"> - Fixed DIC for comprehensive services - Outreach (via truck and rickshaw) and distribution of harm reduction packs through mobile services - Outreach provided through mobile facility (bus with separate education and counselling area in the rear, which can be sectioned off with curtains). In some locations, outreach team leave bus to access camps by foot. Bus stops en route if beneficiaries are seen or hail bus
WHEN	<ul style="list-style-type: none"> - Outreach: 5 days per week + one morning shift, one evening shift, one investigation shift and “women outreach” . Mobile/outreach units visit rostered “camp” areas on the same days and times each week - Drop-in centre (DIC); 6 days per week, five hours per day + weekly “ladies night” for women who use drugs (WWUD); 4 days per week for PWID and WWUD only

Project/model name	CSW Community Outreach Clinic
Overview	Sex worker-friendly clinic
Implementer	Run jointly between MSF and Nsanje Ministry of Health
Location/context	Nsanje district, Malawi
Population	Female sex workers and their clients
WHAT	<ul style="list-style-type: none"> - Comprehensive HIV package of care provided, including STI management, HTS (offered 3 monthly), ART, family planning and hepatitis B vaccination - Post-exposure prophylaxis and emergency contraception also available for those who come forward after episodes of unprotected sex - All sex workers who test positive are put on treatment immediately regardless of stage - Condoms and lubricants provided from clinics
WHO	<ul style="list-style-type: none"> - Services provided by MOH nurses - Peer educators
WHERE	<ul style="list-style-type: none"> - Community outreach clinics performed in specified community locations where the sex workers feel comfortable gathering and peer educators are used to mobilize clients to attend these outreach clinics - Night-time HTS services are offered at bars and other hotspots where female sex workers and their clients are present
WHEN	Moonlight outreach services (night time)
Project/model name	TB/HIV Care Association Key Populations Programme
Overview	Key population programmes include behaviour change interventions and structural interventions with health care facilities
Implementer	TB/HIV Care Association in collaboration with partners
Location/context	South Africa
Population	Sex workers and PWID in urban hotspots
WHAT	<ul style="list-style-type: none"> - HIV testing services, screening for viral hepatitis, TB and STIs, PrEP - ART provided at some sites - Harm reduction programme includes needle and syringe programme via outreach and facility-based services, referral for OST and detox

	<ul style="list-style-type: none"> - Condoms, hygiene commodities and behaviour change interventions, overdose prevention - TB screening and treatment
WHO	ART services are provided by the NIMART (nurse-initiated management of ART) clinic on site
WHERE	<ul style="list-style-type: none"> - Services provided at drop-in centres/clinics and through mobile units - Community drop-in centre with showers, kitchen, computers
WHEN	Day and night shifts, 5 days a week
Project/model name	North Star Alliance
Overview	Network of primary health clinics at hotspots along major transport routes; wellness centres offer health services to key populations, including sex workers, and general community, as well as community health workers doing community-based outreach
Implementer	Bridging the Gaps, CoC Netherlands
Location/context	Along transport corridor routes and in trading towns, Kenya
Population	Sex workers, truck drivers and broader community
WHAT	<ul style="list-style-type: none"> - Community-based outreach HTS - Drop-in centres provide HTS, HIV care, STI screening, PEP and ARV refill (NB ARV and PEP at some but not all centres), family planning, condom and lubricants distribution, TB screening and treatment, treatment for common illnesses - Electronic health passport systems – clients can use any clinic in alliance
WHERE	<ul style="list-style-type: none"> - Community-based outreach - Drop-in centres
Project/model name	New Start Programme
Overview	Integration of HIV treatment with other health services, including contraception and maternal and child health. Programme aims to reduce morbidity and mortality, and to support HIV prevention efforts by reducing HIV viral load among female sex workers who are HIV positive
Implementer	PSI/Zimbabwe; USAID and Global Fund support In partnership with Ministry of Health and Child Welfare and Family AIDS Caring Trust (FACT) Zimbabwe
Location/context	Zimbabwe

Population	Female sex workers and their families
WHAT	HIV testing services, family planning, TB screening and diagnostic services, rapid CD4 cell count testing and ART, HIV risk reduction counselling, male and female condoms
WHERE	<ul style="list-style-type: none"> - Static ART clinics and outreach - ART services in rural mines for female sex workers and their clients, especially casual mine labourers, who have no access to public health services
Project/model name	Increasing Access to HIV Prevention, Care and Treatment Services for Key Populations in Mozambique
Overview	Programme uses peer-led, hotspot-based mobilization and outreach services. Aims to strengthen national response to HIV epidemic among female sex workers, MSM and prisoners, and to contribute to reduction of HIV incidence by increasing access to clinical and community services that protect human rights
Implementer	Pathfinder International, Mozambique
Location/context	15 urban districts, 6 provinces
Population	Sex workers, men who have sex with men, and prison populations – in urban hotspots, tourist sites, corridors, new economic development areas (e.g., extracting, mining, gas)
WHAT	<ul style="list-style-type: none"> - HIV care and treatment services are integrated services provided by public health facilities, ARVs are supplied by the government of Mozambique to high-volume ART sites - Peer support, treatment literacy and psychosocial support services are also provided - Key population-friendly health facilities – health service package: risk assessment and reduction; HIV testing services (including partners and counselling for safe sexual practices and community-based HTS); provision of condoms and lubricants; screening, diagnosis and treatment of opportunistic infections/tuberculosis, STIs; screening for cervical and prostate cancer; family planning methods; SRH; family planning contraceptive mix and PMTCT; PEP provided according to the national algorithm; gender-based violence service package; Test and Start for MSM and female sex workers (new) - Provision of ARV treatment for prisoners and PWID according to norms for general population
WHERE	<p>16 public health facilities and 11 prison sites</p> <ul style="list-style-type: none"> - For female sex workers and MSM, intervention is taking place in 16 key population-friendly health facilities in 3 provinces (Nampula, Cabo-Delgado and Inhambane) - For prison population, interventions take place in 11 prison sites, and HIV services are provided by 10 referral health facilities in 6 provinces (Maputo, Gaza, Inhambane, Nampula, Zambezia, and Cabo-Delgado)

Project/model name	Makongeni Health Centre
Overview	Fully integrated key population model implemented at Makongeni sub-county hospital in Homa Bay, the highest HIV burden area in Kenya
Implementer	Kenya Ministry of Health with key population outreach support by International Medical Corps, supported by CDC
Location/context	Homa Bay, Western Kenya
Population	Female sex workers, MSM
WHAT	<ul style="list-style-type: none"> - Drop-in centres and outreach programmes providing fully integrated services, including HIV care and treatment, STI screening and treatment, cervical cancer screening, risk reduction, drug and alcohol abuse assessment and counselling, and voluntary medical male circumcision - Comprehensive package of care for female sex workers includes screening for STIs, HIV testing and treatment, prophylactics and counselling for risk reduction
WHERE	Drop-in centres and outreach
Project/model name	ICAP Tanzania
Overview	Community-based HIV prevention initiatives through peer-led outreach and various mobile/community-based HIV testing services. Recently began implementing system to link and initiate key populations into care at the point of diagnosis through a “mobile CTC” system. Through this model, the government health care workers conducting the testing also bring ARVs and care and treatment centre (CTC) paperwork to the field to be able to assess and initiate key populations into care right after testing in the community with follow-up appointments scheduled at a health facility – especially when conducting HIV prevention outreach and testing in remote areas with limited health services, such as islands in Lake Victoria
Implementer	ICAP Tanzania, supported by CDC
Location/context	Tanzania
Population	PWID, sex workers (Due to recent anti-homosexuality legislation in Tanzania, ICAP is no longer providing MSM services)
WHAT	<ul style="list-style-type: none"> - Case management system; peer outreach workers deliver HIV prevention interventions in the field, including mobile HIV testing, escorted referral to health facilities, behaviour change communication, condom/lubricant distribution, STI/tuberculosis screening, community-based testing and escorted referral to CTCs - Tracks individuals throughout testing-and-care cascade by assigning unique identifier codes to clients in the field, and tracks

	services delivered over time with outcomes (for testing, linkage, etc). This is made possible through the case management system of peer outreach workers who each follow his/her group of beneficiaries over time and through monitoring of data entered into an electronic database disaggregated to the individual level
WHERE	Health facilities and outreach
Project/model name	Community-based One-Stop Shop
Overview	Community-based ART clinic model designed to improve HIV prevention, treatment and care for key populations in Nigeria Integrated centres for HIV/AIDS and STI prevention and treatment services and at one centralized location
Implementer	Heartland Alliance International, in collaboration with PARTNER – Nigeria Under USAID Integrated MARPs HIV/AIDS Prevention Program (IMHIPP)
Location/context	Eight prioritized states of Nigeria’s 36 states
Population	Key populations
WHAT	“One-stop shops” provide integrated services: HIV testing and counselling; STI screening and treatment; provision of commodities: condoms and lubricants. Drop-in centre where ART is integrated into other services, such as comprehensive HIV prevention, psychosocial counselling, life skills building, paralegal trainings and other forms of community empowering interventions
WHO	Services provided by outreach coordinators and trained peer educators
WHERE	Community-based ART clinics/DICs
Project/model name	Ten81 Key Populations Clinic
Overview	Delivery of a comprehensive package of sexual health and wellness interventions, including prevention and treatment of HIV, with ART provision and management, HIV testing and CD4 measurement. Ten81 Key Populations Clinic is a demonstration project aimed at supporting key populations at a dedicated key populations-friendly clinic, operating under the auspices of the provincial Department of Health (Gauteng, South Africa)
Implementer	OUT Well-Being LGBT (with funding from CDC/South Africa through TB/HIV Care Association, Global Fund, Mainline, COC and Gauteng Department of Health)
Location/context	The clinic operates as a satellite government clinic, reporting directing into the South African government reporting system, using the “mother” clinic’s lab, medication, and other resources. Located in Tshwane (Pretoria) with outreach to peri-urban areas to MSM and PWID
Population	MSM, PWID, transgender women and sex workers

WHAT	<ul style="list-style-type: none"> - HIV testing services, STI and TB screening and treatment, provision of PEP, initiation and management of ART, sexual and reproductive health services and basic wound care - Needle and syringe programme and drop-in centre (with showers) provided for PWID - Opioid substitution therapy - Referrals of complex cases - Peer-led outreach to MSM and PWID
WHERE	Satellite government clinic and outreach services
Current service limitations	Demonstration project. To be evaluated for feasibility and acceptability in 2017

REFERENCES

1. Joint United Nations Programme on HIV/AIDS (UNAIDS). Prevention Gap Report. Geneva, Switzerland: UNAIDS; 2016.
2. Baral SD, Poteat T, Strömdahl S, Wirtz AL, Guadamuz TE, Beyrer C. Worldwide burden of HIV in transgender women: a systematic review and metaanalysis. *Lancet Infect Dis.* 2013;113(3):214–222).
3. WHO (2014). Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations.
4. HEARD (2016). Challenges to antiretroviral adherence among MSM and LGBTI living with HIV in Kampala, Uganda. <http://www.heard.org.za/wp-content/uploads/2016/02/CHALLENGES-TO-ANTIRETROVIRAL.pdf>.
5. UNAIDS (2016). Joint United Nations Program on HIV/AIDS (UNAIDS). Global AIDS Update. Geneva, Switzerland.
6. International HIV/AIDS Alliance (2016). Increasing access to HIV treatment through a community-supported public private partnership in Myanmar: A case study.
7. Mburu et al (2016). Retention and mortality outcomes from a community-supported public/private HIV treatment programme in Myanmar. *Journal of the International AIDS Society.* 2016, 19:20926. <http://dx.doi.org/10.7448/IAS.19.1.20926>.