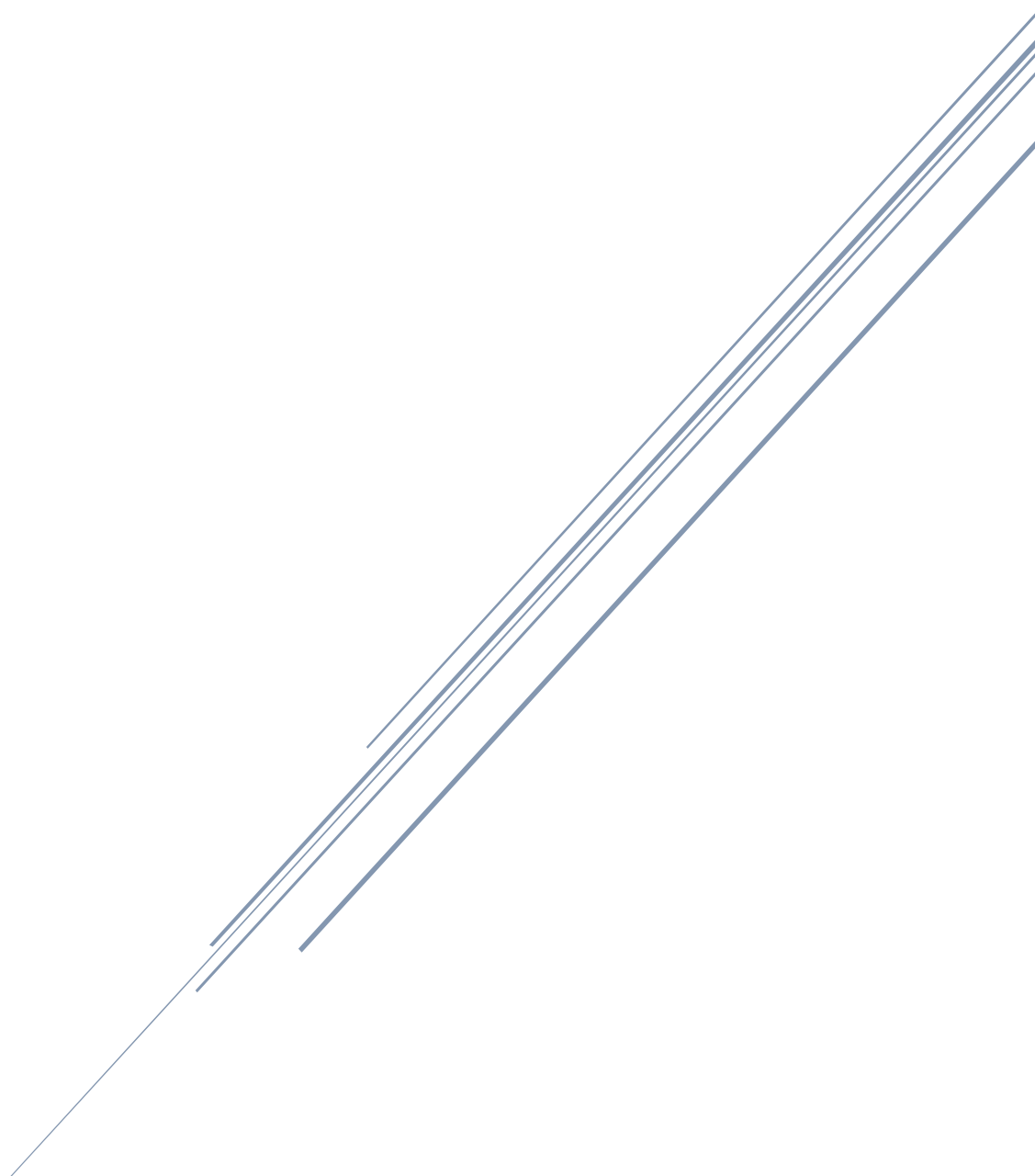


PUNJAB AIDS STRATEGY 2021-2025

June 2020



Foreword

The Punjab AIDS Strategy 2021-2025 is a vivid call to action to reach the people left behind in the AIDS response. It aims to reach the 90–90–90 treatment targets by closing the testing and treatment gap so that the health of people living with HIV in the province is protected and promoted.

The strategy focuses on the unfinished agenda of the previous strategy – drastically reducing new infections to bend the trajectory of the epidemic. Ending the AIDS epidemic will involve reaching children, women, young people, men who have sex with men, people who inject drugs, sex workers and clients, transgender people, and migrants with critical, testing, prevention and treatment services. This strategy provides a roadmap to ensure that no one is left behind by addressing the low treatment coverage for children living with HIV, expecting mothers and adults living with HIV.

The strategy was developed based on WHO recommendations, UNAIDS technical support on epidemic modelling and target setting, and with the involvement of all relevant stakeholders, including people living with HIV and affected communities, the Joint UN Team on AIDS, UNAIDS, and bilaterals.

The principal objective of this strategy is to strengthen the provincial AIDS response so that by 2025, 90% of all people living with HIV will know their HIV status; 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy; and 90% of all people receiving antiretroviral therapy will have viral suppression in the province.

June 2020

Acknowledgements

This AIDS strategy was developed based on a broad consultation process at provincial and national level. The strategy writing team would like to thank all those who have participated in this process by sharing their insights, experiences and feedback on presentations and draft documents. These inputs have been a great help in tailoring the approach to the context in the province of Punjab. Ongoing dialogue has been an especially challenging process on this occasion because the COVID-19 pandemic has forced us to try new ways of communicating with each other. The quality of participation has been exemplary, nonetheless.

Special thanks to the Punjab AIDS Control programme, the National AIDS Control Programme, the programme implementers, the communities (PLHIV and key populations), Association of PLHIV and CBOs whose active engagement was a critical part of the process. Technical inputs from development partners (including the Joint UN Team on AIDS, UNAIDS, and bilaterals) have provided much guidance and we are particularly grateful to the UNAIDS Regional Support Team-Asia Pacific, for their work on epidemic modelling, scenario planning, and target setting.

June 2020

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Acronyms

AAU	ART Adherence Unit
AIDS	Acquired Immune Deficiency Syndrome
ADR	Acquired Drug Resistance
AEM	AIDS Epidemic Model
ANC	Antenatal Care
APLHIV	Association of People Living with HIV
ART	Antiretroviral Therapy
ARV	Antiretroviral (drugs/medication)
BHU	Basic Health Unit
CBO	Community-Based Organization
CCM	Country Coordination Mechanism
CD4	Cluster of Differentiation 4
CNIC	Computerised National ID Cards
COVID-19	Corona Virus Disease 2019
DOTS	Directly Observed Treatment Short-course (for TB)
DSD	Differentiated Service Delivery
EID	Early Infant Diagnosis
FSW	Female Sex Worker
GARPR	Global AIDS Response Progress Report
GF	Global Fund
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GSM	Greenstar Social Marketing
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HIVDR	HIV Drug Resistance
HIVST	HIV Self-Testing
HTS	HIV Testing Service
IBBS	Integrated Biological and Behavioural Surveillance
KP	Key Population
KPK	Khyber Pakhtunkhwa
M&E	Monitoring and Evaluation
MNCH	Maternal, Newborn and Child Health
MIS	Management Information System
MSM	Men who have Sex with Men
MSM (non-SW)	Men who have Sex with Men who are not sex workers
MSW	Male Sex Worker
NACP	National AIDS Control Program

NGO	Non-Governmental Organization
NIH	National Institute for Health
NSEP	Needle Syringe Exchange Program
NZT	Nai Zindagi Trust
OST	Opiate Substitution Therapy
PACP	Punjab AIDS Control Programme
PAS	Pakistan AIDS Strategy
PAS III	Pakistan AIDS Strategy III (2017-2021)
PAS IV	Pakistan AIDS Strategy IV (2021-2025)
PC-1	Planning Commission Proforma – One (Project Document)
PDR	Pre-treatment Drug Resistance
PITC	Provider Initiated Testing and Counselling
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission (of HIV)
PPTCT	Prevention of Parent-to-Child Transmission (of HIV)
PR	Principal Recipient (for GFATM grant)
PrEP	Pre-Exposure Prophylaxis
PSE	Population Size Estimate
PSHD	Primary and Secondary Healthcare Department (Govt of the Punjab)
PWID	People who Inject Drugs
SDG	Sustainable Development Goals
SDP	Service Delivery Package
SOP	Standard Operating Procedure
SR	Sub Recipient (for GFATM grant)
SRH	Sexual and Reproductive Health
SSR	Sub-Sub Recipient (for GFATM grant)
STI	Sexually Transmitted Infection
SW	Sex Worker
TB	Tuberculosis
TG	Transgender person
TWG	Technical Working Group
TSU	Technical Support Unit
UHC	Universal Health Coverage
UNAIDS	Joint United Nations Program on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children
UNODC	United Nations Office on Drugs and Crime
WHO	World Health Organization

1. Introduction

Punjab makes up more than half of country's population (110 million)¹ and constitutes 50% of the total HIV burden with an estimated 92,110² people living with HIV (PLHIV), of which 3% are children aged 14 years of less.³

The Punjab AIDS Control Program (PACP) enjoys full commitment and ownership both from political leadership and the administrative department. Due to this provincial ownership of the programme, Punjab has made progress in identifying and bringing new PLHIV on treatment and increasing the number of treatment centres across the province. However, still much more needs to be done to bring the epidemic under control, where annual HIV infections continue to rise, in 2019 annual new infections in Punjab were 13,471.⁴

This an opportune time for PACP to have an impact on the course of the epidemic by using this strategy in a meaningful way to design, govern and oversee the (domestically funded and foreign funded) provincial AIDS response.

Two important issues came up during discussions with the government of the Punjab and PLHIV communities: (a) in recent years Punjab has seen a few HIV 'outbreaks' in Chiniot, Kot Momin and Jalalpur Jattan, and (b), an increasing number of PLHIV being seen at treatment centres are apparently from the general population. The strategy needs to address these two concerns.

In the first case the evidence points to unsafe injection practices and poor implementation of infection prevention protocols. It is, therefore, important that the need for a Health Systems focus on addressing unsafe injection practices does not detract attention away from the pressing need to effectively control the HIV epidemic among key populations (KP). Preventing such outbreaks requires both a systems approach to healthcare safety and an effective AIDS control programme. The focus of this strategy is the latter. If effective prevention programmes for KP are implemented at scale, there is increasingly less likelihood of such outbreaks occurring. For the infection prevention and control it is assumed that larger healthcare safety issues will be addressed from a broader systems-strengthening perspective by the Primary & Secondary Healthcare Department (PSHD) and Specialized Healthcare & Medical Education Department in Punjab. In this regard the federal Ministry of National Health Services, Regulations & Coordination has recently published '**National Guidelines on Infection Prevention and Control, 2020**' that could guide the provincial response.

For the second point, (b) we need to understand that, firstly, key populations are not static; people move in and out of them.⁵ This means that PLHIV presenting at ART centres may have belonged to a KP group earlier but at the time of seeking treatment were not part of any KP group, and, secondly, due to the moral and social stigma associated with KP behaviours most KP may not disclose their actual behaviours (KP affiliation) while registering at ART centres. This means that the focus cannot be shifted away from the KP, but rather their intimate partners should be an essential component of prevention efforts, instead of the general

¹ Pakistan Population Census 2017

² Annex 4: Baseline Data

³ Spectrum 2019 data

⁴ Spectrum 2019 data

⁵ Analysis of duration of risk behaviour for key populations: a literature review. Fazito E, Cuchi P, Mahy M, Brown T. Sex Transm Infect 2012; 88 Suppl 2:i24–i32.

population. For Punjab, Spectrum modeling shows that 48% of the 89,025 adult PLHIV (15-49 years) in the province belong to KPs, while a further 52% belong to intimate partners of KP (Annex 3: Strategy Targets and PSE).

A recent analysis concludes that “for most ‘concentrated’ epidemics outside of sub-Saharan Africa, KPs must remain at the core of epidemic responses. Although the proportion of prevalent HIV infections among the ‘general population’ grows over time, this growth is primarily reflecting turnover in KPs and transmission from current and former KP members to their intimate partners.” The recommendation of this analysis is that in a concentrated epidemic, such as Punjab’s: “(1) The focus in prevention efforts should remain on KPs and not shift to general population efforts targeting lower risk populations. Resources spent on general population efforts carry major opportunity costs in forgone averted infections and deaths among the KPs and their intimate partners. And (2) programmes for KPs should expand efforts and research to prevent transmission to the intimate partners of current and former KP members, including clients.”⁶ This is what this strategy is trying to achieve.

Strategy

The key objective of this strategy is to review the ground situation and realign the provincial AIDS response so that the course is set to reach UNAIDS 90-90-90 targets by 2025.⁷ This is fully aligned to Pakistan’s commitment to achieve SDGs particularly target 3.3: Ending AIDS as a public health threat by 2030.

Punjab AIDS Strategy covers the period from 2021 to 2025. It cuts short by one year the timeframe of Punjab AIDS Strategy 2017 for two important reasons:

- Recent programme review indicates under-performance against the targets of Punjab AIDS Strategy 2017-21
- By developing the strategies now there is a significant opportunity to ensure that domestic planning and budgeting processes (PC-1) are aligned with strategy targets

Inputs

Punjab AIDS Strategy was revised in 2017 based on new information from round (V) of Integrated Biological and Behavioural Surveillance (IBBS)⁸ data. This provided revised population size estimates (PSE) for key populations, new prevalence estimates and epidemic models that showed how the epidemic was likely to progress given the baseline revealed by the IBBS data. There has been no new round of IBBS since 2016 so the epidemic analysis presented in Punjab AID Strategy 2017-21 still stands, which stated that HIV had established in all KPs in the province. People who inject drugs (PWID) were driving the epidemic in the province while HIV among transgender (TG) sex workers and men who have sex with men (MSM) was on the rise. Among female sex workers (FSW) the picture was changing with HIV infections reported among FSW in five cities of Punjab.

Process

The Punjab AIDS strategy has been developed through a highly consultative process. These consultations have included separate provincial level meetings with KP stakeholders as well

⁶ Evolving HIV epidemics: the urgent need to refocus on populations with risk by Tim Brown and Wiwat Peerapatanapokin – Current Opinion on HIV and AIDS, 2019

⁷ UNAIDS 90-90-90. An ambitious treatment target to help end AIDS epidemic

[<https://www.unaids.org/en/resources/909090>]

⁸ NACP, Pakistan IBBS Round V, April 2017

as a broader range of meetings and consultations with provincial AIDS control programme, health sector stakeholders, academics and clinicians and programme implementers. The consultation process has been influenced by the COVID-19 pandemic, with discussions moving online after the advent of restrictions on face to face meetings. A full list of meetings and consultations that took place to develop the strategies is annexed.

Structure

The strategies take their structure from a standard approach to strategic planning:

- An analysis of where we are now
- A decision about where we want to be at the end of the strategy period
- A plan for how we will get there

In what follows Section 3 covers the current situation, Section 4 the decision about where we want to be in 2025 and, Section 5 the strategic approach to achieving the desired impact. The strategic approach is further supported by a monitoring and evaluation framework (Section 6), a budget (Section 7) and an implementation plan.

Ownership

Punjab AIDS strategy is designed to guide the entire AIDS response at provincial level. This guides what the programme needs to do to gain control of the epidemic. The funding sources for the various activities will vary, part international, part domestic. But it is important to understand that the budgets, targets, M&E framework, and implementation plans are for the AIDS response as a whole, regardless of funding source.

The strategy, therefore, sits above both the Global Fund resourced portion of the response, and the PC-1 resourced portion of the programme, and binds them together into a single response with overall budgets, targets and indicators. It is assumed that the strategy is, therefore, owned by the Punjab AIDS control programme and is used to ensure complementarity between differently funded interventions. Put simply, PC-1 budgets/targets plus the Global Fund budget/targets should aim to equal strategy targets. Any deficit should be identified as a resource gap and efforts be made to mobilise resources to address the shortfall.

2. Provincial Context

Punjab, which literally means the land of five rivers, is the most populous province of Pakistan. Punjab's population stood at 110 million⁹ in 2017, which was a 48% increase in the province's population in 20 years, since 1998. Lahore, the second largest city in Pakistan is the provincial capital with a population of over 11 million. Other large cities of Punjab include Rawalpindi, Gujranwala, Sialkot, Faisalabad, and Multan. Punjab can loosely be divided into north Punjab and south Punjab, with the northern region being more developed, while the southern region is comprised of poor, underdeveloped districts, including Muzaffargarh, Bahawalpur, and Dera Ghazi Khan etc. All political parties in Pakistan believe that Punjab should be divided into two provinces, North and South Punjab and the current government is taking steps to make this happen. If this division happens, it will provide southern Punjab with control over its decisions and resources. How long this process will take to complete is currently uncertain. If it were to happen during the implementation phase of this strategy, this strategy would need to be revisited.

Punjab's advantage lies in the fact that the Chief Minister and Health Minister of the province, and the Secretary, Primary and Secondary Healthcare Department (PSHD), are all committed to the objective of controlling the HIV epidemic in the province and take full ownership of the programme. This commitment is borne out by the fact that main performance indicators of HIV/AIDS Program are taken into regular review by Chief Minister Punjab's Health Roadmap Team. On the directions of the Health Minister Punjab Health Cards are being issued to PLHIV, TB and Hepatitis-C patients; in the next phase, plan is to link these cards and data to Income Support programmes of the Government. On Secretary PSHD's directions the number of ART centres in the province have been increased from 11 to 25 in the past three years.

According to the latest Spectrum modelling, Punjab has an estimated 92,110¹⁰ PLHIV in 2020, which is half the national figure of PLHIV. This high number of PLHIV and the fact that it has the highest share of KP (42% of national total) among provinces (along with Sindh), makes Punjab the most critical province in Pakistan for the AIDS response.

In Punjab, like the rest of Pakistan, the HIV epidemic is concentrated among KP including PWID, FSW, MSM, MSW and TG. The country has not conducted a new round of IBBS since 2017. The 2017 IBBS data estimated the following HIV prevalence among KP in the province.

⁹ Pakistan Population Census 2017

¹⁰ Spectrum modelling 2020

Table 1: HIV prevalence among KP in Punjab

City	PWID	TG (SW)	MSW/MSM	FSW
Rawalpindi	21.5%	5.8%	10.5%	0.3%
Bahawalpur	25.1%	3.5%	1%	0.0%
Kasur	50.8%	0.0	9.1%	0.0%
Jhelum	17.9%	0.0	*	*
Lahore	*	5.8%	5.1%	*
Multan	*	1.8%	*	*
Faisalabad	*	2.9%	0.0	*
Sargodha	*	0.4%	0.0	*
Gujranwala	*	2.2%	1.9%	0.7%
DG Khan	*	9.2%	0.0	0.8%
Gujrat	*	4.1%	*	0.4%
Sialkot	*	0.9%	0.0	*
Sheikhupura	*	3.3%	7.4%	1.7%

* IBBS data for this KP not collected in this city

Table 2: AEM based Population Size Estimates (PSE) for KPs in Pakistan and Punjab

Key population	PSE in Pakistan	PSE in Punjab	% Proportion
MSM (Non-SW)	848,423	306,944	56%
MSW	74,409	39,721	7%
TG	60,924	32,373	6%
FSW	203,277	116,420	21%
PWID	111,330	52,924	10%
Total KP	1,298,363	548,382	43%
PLHIV	183,705	92,110	50%

It is clear from the table above that highest prevalence of HIV in KP is among PWID, but the combined population size estimate of MSW and MSM in Punjab is 346,665, which is 6 times the population size estimate of PWID. This sheer number of MSW and MSM makes HIV prevention programmes for MSM/MSW extremely critical for controlling the epidemic. Unfortunately, beyond a few Global Fund supported service delivery programmes, no other domestically funded programming for these populations exists in Punjab.

The Punjab AIDS Control Programme's (PACP) current PC-1 of PKR 2,042.554 million was approved for the period July 2016 - June 30, 2019. A no cost extension was granted to the project for a year till June 2020. A National HIV Program Pakistan Review conducted in 2019 revealed that out of the total allocation, PACP was able to spend only 47% of its budget, which is better than most other provinces, but still low., The review¹¹ showed that PACP was unable to meet the 2017-21 strategy targets for prevention and treatment programs for KPs, mostly because contracting of NGOs/CBOs was not undertaken using domestic funds.

Despite the challenges highlighted in the National HIV Program Pakistan Review (2019) including, limited coverage of prevention programs for KP, and limited uptake of HTS and treatment, PACP, has shown progress over the past few years. During 2016 - 2019 PACP also provided HTS services to 35,369 truckers out of which 200 (0.57%) were found HIV positive, and 122,814 jail inmates out of which 223 (0.18%) were found HIV positive. The number of HIV treatment centres in the province has increased from 11 in 2016 to 25 in 2019. The

¹¹ National HIV Program Pakistan Review, 2019.

number of PLHIV on treatment has increased from 3,673¹² in 2016 to 10,990¹³ in 2019 which is a 199% increase in treatment coverage in three years. Unfortunately, even after this great achievement only 12% of the estimated number of PLHIV (92,110)¹⁴ are on treatment in Punjab.

PrEP as a prevention protocol for KP and spouses of sero-discordant couples was agreed in the last strategy, but this has not been formally rolled out. Only a few physicians in Punjab are providing PrEP to a few of their patients informally.

During the consultative meetings held with the PACP management and PSHD to inform the development of this strategy, it was alleged that there was poor coordination of the CBOs (SSRs of Green Star Social Marketing) that were implementing the NACP GF grant, with the PACP. PACP also expressed concern about the lack of coordination with Nai Zindagi Trust's (NZN) implementation arrangements for PWID, especially their model for treatment of PWID, whereby a NZN's outreach worker collects ARV refills on behalf of all PWID, instead of the PWID collecting the medicines themselves. This lack of regular/agreed interaction of PWID on treatment with doctors makes the doctors and PACP uncomfortable about the state of ART adherence by PWID. PACP management believed being responsible for province's HIV response, PACP should have oversight over all HIV related activities in the province, including prevention, HTS and treatment. This issue of coordination and lack of ownership needs urgent resolution if the AIDS response in the largest province of Pakistan is to become effective and sustainable.

On the positive side, it was assured by PSHD management that the department it was ready to step up to become a provincial Principal Recipient (PR) for the GFATM grant. To this end the DoH is already in discussions with the GFATM team and has provided them with the required documents/assessments. PACP claimed that its financial system was up to speed to manage any international direct funding, with the required Finance and Accounts officer positions filled. The Development Wing of the PSHD is also ready to provide oversight to the financial matters of TB and HIV programmes in the province.

The program is in the process of developing its PC-1 for 2021-23 for PKR 3,973.481 million in which PACP is proposing setting ambitious coverage for KPs.

¹² NACP MIS Data

¹³ Annex 4: Baseline Data

¹⁴ Programme and AEM data

3. Critical Issues

In 2017, Punjab AIDS Strategy underwent a major revision to take into account new IBBS data,¹⁵ epidemic modelling based on that data,¹⁶ and the (then) recent global guidance¹⁷ on how to fast-track HIV/AIDS responses in order to achieve ambitious 90-90-90 treatment targets. Since Punjab's HIV epidemic was (and still is) concentrated, with an estimated prevalence rate of less than 0.1% among the adult (15-49 years) general population, it was important to reconfigure and focus the response. The aim was to gain control of the epidemic among the KPs whose HIV prevalence was significant and rising.

The resulting 2017-21 Punjab AIDS strategy followed the global guidance in proposing four key (strategic) directions to Punjab's AIDS response:

Increased testing among KP –	New CBO-led, outreach prevention programmes for MSM, HSW and FSW, to be implemented in cities prioritised based on epidemiological evidence.
Increased treatment coverage among KP –	Testing for KP shifted from clinics into community-settings, phasing in treatment for all, expanding community-based treatment preparedness support for PWID, addressing long-standing treatment access barriers.
Addressing loss to follow Up –	Intensified clinic-to-community-and-back case management with particular focus on KP with active involvement of community-based case managers.
Keeping Track of Progress –	Introducing an integrated tracking system to monitor events prior to clinic entry all the way through to treatment and adherence.

These key directions were framed around the need to address four critical issues that were challenging the province's ability to control the HIV epidemic. Three of these were constraining the flow of PLHIV into, and on through, the testing and treatment service cascade, and the fourth was making it impossible to track individuals as they moved through it. These issues were as follows:

1. Low prevention and testing programme coverage among KP
2. The continued existence of barriers to treatment access and initiation
3. High treatment attrition rates
4. A weak monitoring and evaluation system

¹⁵ NACP, Pakistan IBBS Round V, April 2017

¹⁶ NACP, AIDS Epidemic Modelling Exercise for Pakistan, 2017

¹⁷ UNAIDS, Fast Track Commitments to End AIDS by 2030, UNAIDS Strategy 2016-2021, On the Fast-Track to End AIDS, Global Fund Strategy 2017-2022: Investing to End Epidemics, WHO Global Health Sector Strategy on HIV 2016-2021

The main thrust of the 2017-21 strategy was that in order to gain control of Punjab's AIDS epidemic these four critical issues had to be addressed.

This section will revisit each of the critical issues identified in 2017-21 strategy and show that they remain critical and unresolved. It will also highlight an additional critical issue that appears to be preventing the programme from effectively addressing the original four critical issues.

Critical Issue 1: Low prevention and testing programme coverage among key populations

Table 3: Punjab HIV Testing Trends among KP

Punjab AIDS Strategy (2017-21) Indicators	2019 Target ¹⁸	2019 Result ¹⁹
% PWID that received an HIV test within the last 12 months and know the results	60%	19%
% MSM (Non-SW) that received an HIV test within the last 12 months & know the results	25%	2%
% MSW that received an HIV test within the last 12 months and know the results	55%	10%
% TG that received an HIV test within the last 12 months and know the results	55%	16%
% FSW that received an HIV test within the last 12 months and know the results	35%	2%

Table above demonstrates that the testing coverage targets set in 2017-21 strategy for increasing coverage have been significantly underachieved. The UNAIDS Global AIDS Update 2019 judged KP prevention programmes in Pakistan to be "faltering"²⁰ on account of the fact that prevention programme coverage is at less than 10% for more than one KP.²¹ The extremely low testing coverage for MSM and MSW is of particular concern given their combined estimated population size (346,665), which is 63% of all KPs size estimate in the province, and their projected proportion of disease burden as the epidemic progresses.²²

2017-21 strategy short-listed 20 priority cities for KPs in Punjab, based on where the available evidence (IBBS mapping) suggested that most PLHIV were likely to be found. Except for PWID programming, which is currently present in 18 out of 19 priority cities, priority city coverage for other KPs has largely failed to materialise. Only 3 out of 11 priority cities for MSM, 4 out of 12 for TG/HSW, and one out of 4 for FSW, currently have any prevention programmes, and where they do exist, they are small in scale.

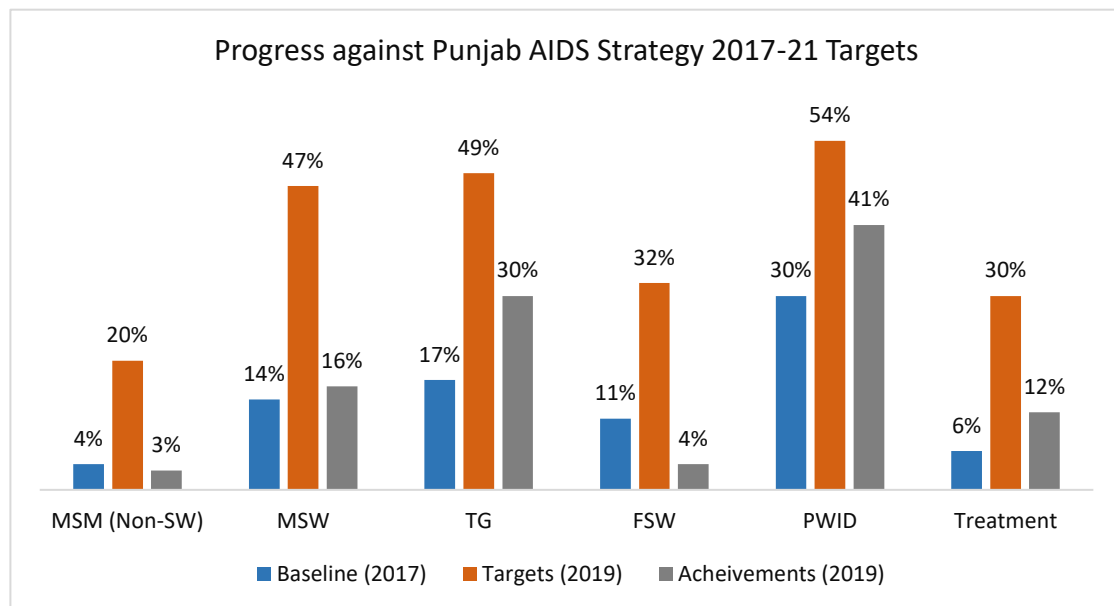
¹⁸ Annex 4: Baseline Data

¹⁹ Annex 4: Baseline Data

²⁰ p216, UNAIDS Global AIDS Update 2019, <https://www.unaids.org/en/resources/documents/2019/2019-global-AIDS-update>

²¹ p38, UNAIDS Global AIDS Update 2019, <https://www.unaids.org/en/resources/documents/2019/2019-global-AIDS-update>

²² p18 Punjab AIDS Strategy 2017-21

Graph 1: Punjab Key Population Programme Coverage²³

The KP programme coverage that does exist appears to have been almost wholly supported by the Global Fund. Domestically funded Punjab PC-1 programme has been largely inactive and significantly underspent.²⁴ Domestic funds are not being used to fill the gaps between Global Fund KP programme coverage and the overall strategy targets.

Critical Issue 2: The continued existence of barriers to treatment access and initiation.

Table 4

Punjab AIDS Strategy (2017-21) Indicator	2016 Baseline	2019 Target	2019 Result ²⁵
# People living with HIV initiating treatment within the last year	942	9,901	5,927

2017-21 strategy identified 3 types of constraints that were affecting treatment access/initiation: the CD4 count eligibility requirement, insufficient treatment preparedness services for PWID, and treatment service model issues. The first has been effectively dealt with by the implementation of treatment for all regardless of CD4 count.

The problem of long travel distances to ART Centres has been addressed to some extent by the addition of 14 new centres since 2017, bringing the total to 25 in Punjab. However, despite this, the recent programme review notes that distance to travel is a main barrier for KPs²⁶, travel distances to ART centres also came out as one of the barriers to access treatment in community consultations.

²³ Annex 4: Baseline Data

²⁴ National HIV Programme Review 2019

²⁵ Results data from NACP, June 2020

²⁶ National HIV Programme Review 2019.

There is some evidence that treatment uptake is improving with cumulative ART Centre registrations increasing 139% from 2016 to 2019, and people on treatment increasing 199% in the same period.²⁷

Positive developments aside it should be noted that the programme has still fallen well short of its treatment initiation targets. The number of people newly initiating ART in 2019 was 60% of the target set for this indicator in 2017-21 strategy. One possible reason for this is the long list of long-standing treatment access barriers that have failed to be addressed.

The recent programme review notes that “barriers to access to treatment and treatment adherence have not changed much” before going on to cite examples such as long travel distance and associated costs, restricted opening hours, long-drawn registration and baseline testing procedures requiring multiple visits to different facilities, and stigma and discrimination among health care workers.²⁸ None of this is new; these issues have come up repeatedly in community consultations during the current and previous strategy development processes, and are also well documented in APLHIV’s research on community access to treatment.²⁹

The consequence of inadequately addressing critical issues 1 and 2 is that the 10,990 people currently on treatment in Punjab represent only 12% of the estimated number of PLHIV in the province. For key population PLHIV (who are estimated to account for 46% of the total number of PLHIV in the province), the treatment coverage also stands at 12%, which is low. Of concern, from the point of view of epidemic control, is the extremely low treatment coverage for MSM PLHIV. This group is currently estimated to account for 16% of the total number of PLHIV in Punjab; a proportion that is projected to rise exponentially in the absence of effective prevention programming. At this level of coverage there is unlikely to be any prevention benefit from the treatment programme.³⁰

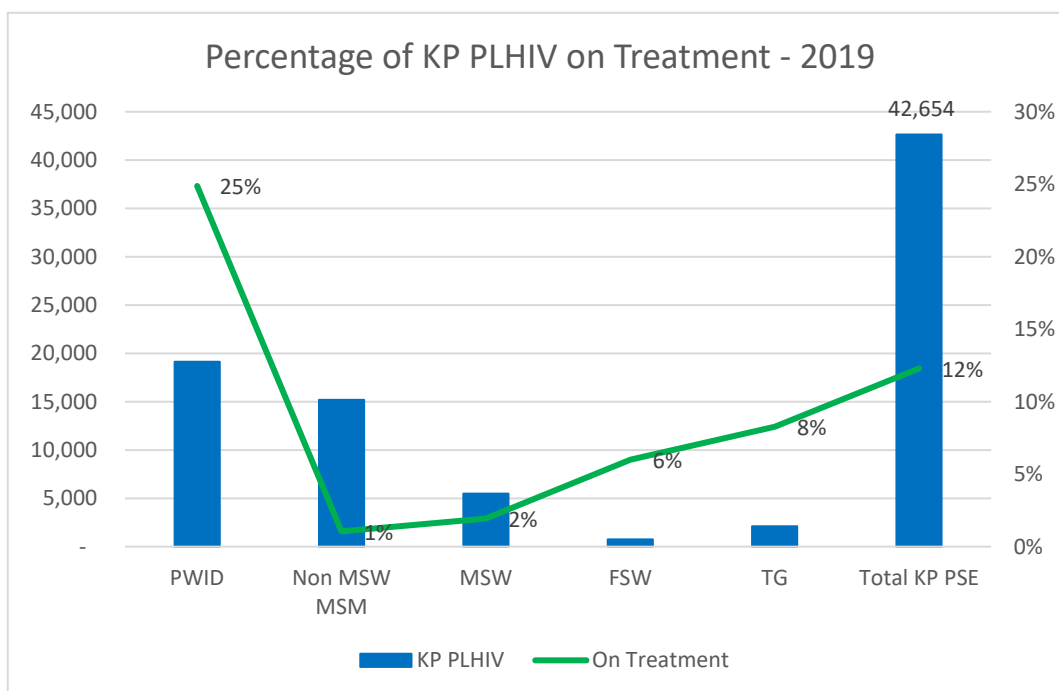
²⁷ Data provided by NACP, March 2020.

²⁸ National HIV Programme Review 2019

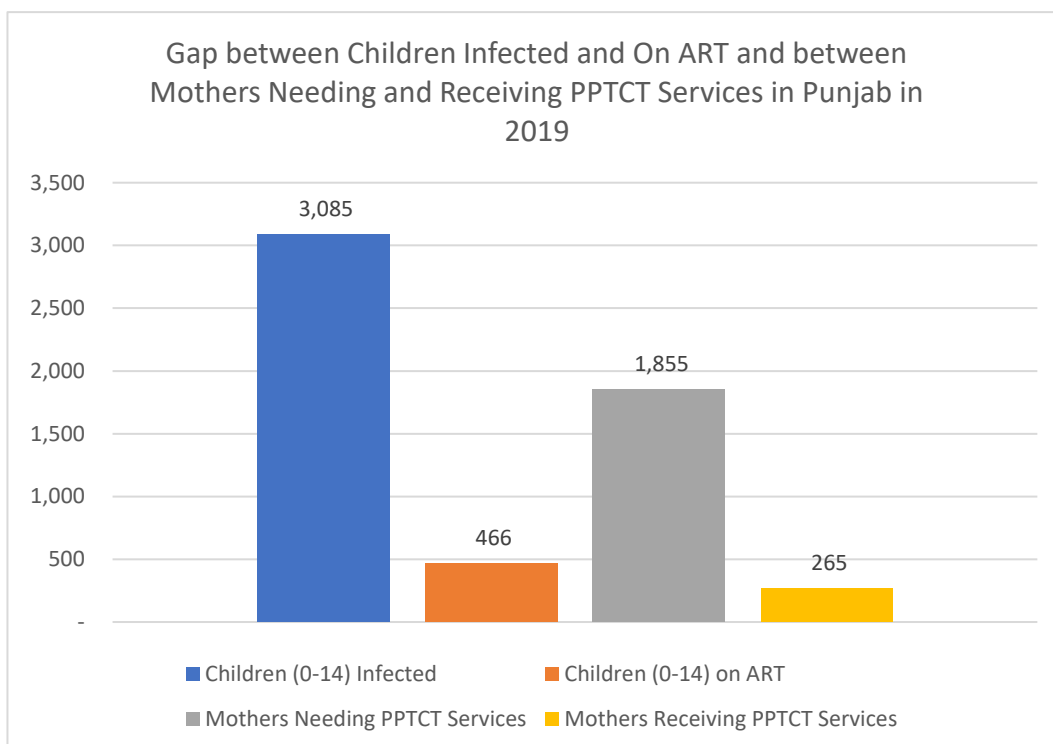
²⁹ Country Research on Community Access to treatment, Care and Support Services (Phase II), APLHIV, January 2019

³⁰ Treatment coverage data from NACP MIS 2019, KP PLHA PSEs derived from IBBS 2017 data.

Graph 2 – Key Populations on Treatment in Punjab³¹



Graph 3: Paediatric AIDS Treatment and PPTCT³²



Another consequence of non-addressal of issues 1 and 2 is that vulnerable populations like children of KPs and wives of KPs are not being captured by the system and not being linked to testing and treatment services. The result is that only 15% of children living with HIV

³¹ Annex 4: Baseline Data

³² Annex 4: Baseline Data

received treatment, and only 14% pregnant women living with HIV received PPTCT services in Punjab in 2019.

Critical Issue 3: High treatment attrition rates

In 2019, with Global Fund support, NACP conducted a retrospective cohort study to assess patient retention. By analysing data from two patient cohorts, one 12-month cohort, and one 24-month cohort, a clear picture of just how serious the treatment programme's retention problem is, has emerged:

- In both cohorts more than one third of patients initiating treatment in month one did not return in month two.
- Only 30% of patients in Punjab were retained at the end of the 12-month cohort, and only 11% (nationally) at the end of the 24-month cohort. In both cohorts the number of fully retained patients declined every month that was tracked.
- PWID patients were retained at generally the same rate as other patients.

The study concludes that “while there was an improvement in retention among the patients who started treatment in 2018, the overall loss factor in both cohorts was massive.”³³

Output Strategy 2.2.1 in 2017-21 Punjab AIDS Strategy specified that the programme would “implement intensified case management models, tailored to particular KPs, which provide adherence support across the clinic-community divide.” Currently none of the 25 ART Centres in Punjab has any Case Manager, a position that was created in response to the strategy, with funding support under the current Global Fund grant. From consultations conducted for the development of this strategy it appears that some of these positions have not been filled with appropriately qualified individuals.

Critical Issue 4: Weak monitoring and evaluation system

The need to capacitate the provincial monitoring and evaluation system was a key strategic action proposed in 2017-21 strategy. As with the treatment access barriers, the strategy noted that this was not a new issue. Systems fragmentation, parallel systems, lack of interconnectivity between systems, and uncoordinated data flows are all historical issues.

The results of the 2019 Programme Review suggest that, insofar as there have been any efforts to address this critical issue, they have been largely unsuccessful. The review notes that there is a “lack of a reliable interconnected MIS across HIV programme streams” with parallel systems run by “federal (NACP), provincial (PACP), and non- governmental (NZA, GSM, APLHIV), without interfaces connecting them.”³⁴ In meeting with Punjab AIDS Control Programme it was disclosed that the programme was moving towards integrating PACP with NACP MIS, that background work for this had already been done.

The existing gap between various MIS' results in discrepancies in data between the various systems and mutual suspicions about the accuracy of data from systems owned by other parties. This leads to minimal reliance on data for real-time programme management.

Both the Programme Review and the ART Outcomes Study make key recommendations around the need to improve HIV-related data systems. The outcomes study singles out the

³³ Pakistan ART Outcome Study, NACP, February 2020

³⁴ National HIV Programme Review 2019

issues of data quality in ART centres, the integration of the national MIS and the provincial MIS,³⁵ The Programme Review recommends that the MIS should be maintained and guided by a clear strategy and structure that ensures that data are correctly and timely captured, validated, reported upward and horizontally, analysed and used for feedback and planning.”³⁶

New Critical Issues

Above analysis clearly shows that the same set of critical issues that 2017-21 Punjab AIDS Strategy was designed to resolve, will need to inform the content of 2021-25 strategy. Unless these issues are urgently addressed the provincial AIDS programme in will continue to be ineffective in controlling the province’s epidemic.

It is also evident that only those aspects of the strategy tend to get implemented that fall within the remit of the Global Fund grants. Domestically funded AIDS control programme struggles to absorb the funds that have been allocated to it, and whatever funds it does absorb are spent on salaries rather than programmes. PACP was able to spend only 47% of its 2016-19 budget, which is better than most other provinces, but still low. The review identifies the “lack of results-based management that provides for accountability and transparency”³⁷ as a root cause of this.

In view of the above, this strategy has been to address an additional critical issue as follows:

Critical Issue 5. Lack of strategic programme oversight and effective implementation management

The strategy should be actively used to govern and manage the combined performance of domestically and internationally funded programme components towards the achievement of strategy targets. Unless this happens, long-standing systems and implementing model problems will continue to be unaddressed, domestically funded programmes will continue to underspend and fail to reach targets, and the epidemic will remain uncontrolled.

In particular, the following are currently lacking:

- Programme oversight mechanisms at provincial level to oversee progress towards achieving strategy targets
- Programme governance capacity at provincial level to regularly monitor progress towards achieving programme targets and do evidence informed course correction, if required
- Alignment between domestically and internationally funded programme plans to ensure optimisation of their respective coverage contributions towards achieving strategy targets
- Results-based management of domestically funded programmes to ensure proposed targets are achieved and unspent funds are used to address programmatic gaps
- Transparency and accountability-mechanisms to ensure that non-performing projects can be identified and improved in a timely manner, and for ensuring follow-through on the resolution of long-standing systems and programme model problems

³⁵ Pakistan ART Outcome Study, NACP, February 2020

³⁶ National HIV Programme Review 2019

³⁷ National HIV Programme Review 2019

- Standardisation of programme components across domestically and internationally funded programmes so that complementarity can be better planned and tracked
- Oversight of geographic allocation of different programme components to ensure optimal coverage of cities prioritised for each KP
- A common M&E framework and MIS for all programmes

To address these issues this current iteration of strategy has undergone significant reworking of Outcome 3³⁸ concerning the enabling of an environment for an effective AIDS response. Unless programme governance and management issues are properly addressed the rest of the strategy is unlikely to be adequately implemented.

Summary of Critical Issues

Based on the analysis presented in this section, the table below summarises the critical issues that this strategy has been designed to address and highlights the consequences of failing to address them.

	Critical Issue	Results in
1	Low prevention and testing programme coverage among KPs	<ul style="list-style-type: none"> • Most PLHIV not knowing their status or accessing treatment • Failure to reduce the occurrence of risk behaviours • Rising HIV incidence
2	Unaddressed barriers to treatment access and initiation	<ul style="list-style-type: none"> • Significant cascade leakage between testing and treatment • Poor treatment coverage
3	High treatment attrition rates	<ul style="list-style-type: none"> • Failure to achieve viral suppression • Failure to achieve prevention benefit of treatment
4	Weak monitoring and evaluation system	<ul style="list-style-type: none"> • Inability to effectively manage programme performance • Lack of coordination • Inefficient resource allocation and utilization • Limited understanding of service cascade weak points
5	Lack of strategic programme oversight and weak implementation management	<ul style="list-style-type: none"> • Significant underperformance of domestically funded programmes • Failure to resolve long-standing systems and implementation barriers • Failure to optimise the respective contribution of internationally and domestically funded programmes towards the achievement of strategy targets

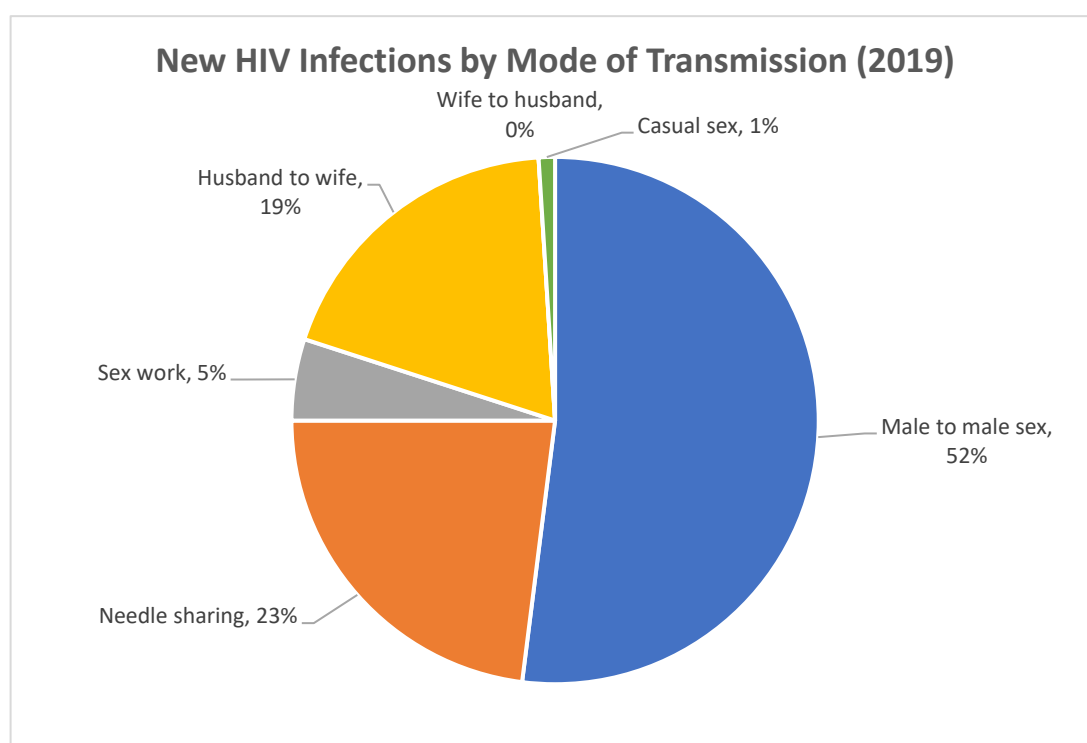
³⁸ Punjab AIDS Strategy 2017-21 had a three-pillar structure. Put simply these are 1. prevention/testing, 2. treatment and 3. enabling environment. 2017 strategy significantly rewrote 1. and 2. but only made minor modifications to 3. This strategy significantly rewrites 3.

4. Gaining Control of the Epidemic

This strategy aims to reverse the trends of rising incidence of HIV infections, and mortality from AIDS in Punjab. Previous sections have discussed our starting point; the current situation in 2020. This section looks forward to our end point; to the impact we want to have on the epidemic by the end of our strategy timeframe in 2025. Based on projections from AEM modelling, and using current programmatic data for baselines, two futures are considered; one where we continue programmes at the current level of coverage - “business as usual” - and one where we scale up our coverage to achieve targets that have been set through a consultative dialogue process with the province.

The targeting rationale of this strategy, and its emphasis on scaling up prevention programme coverage of KPs, is based on what the AEM model shows that how most new HIV transmissions are currently occurring. In 2019, 80% of new infections occurred through, male to male sex (52%), needle sharing among PWID (23%), and sex work (5%). This is why the programme targets MSM, PWID, and male, female and transgendered sex workers to try to influence their risk behaviours. A further 19% of new infections were likely transmitted from married MSM, PWID and clients of sex workers to their female spouses. This means in effect that according to the model: (a) currently 99% of transmissions are coming from KPs and sex worker clients; and (b) the majority of these transmissions are occurring in the context of needle-sharing for drug use and male to male sex.

Graph 4³⁹



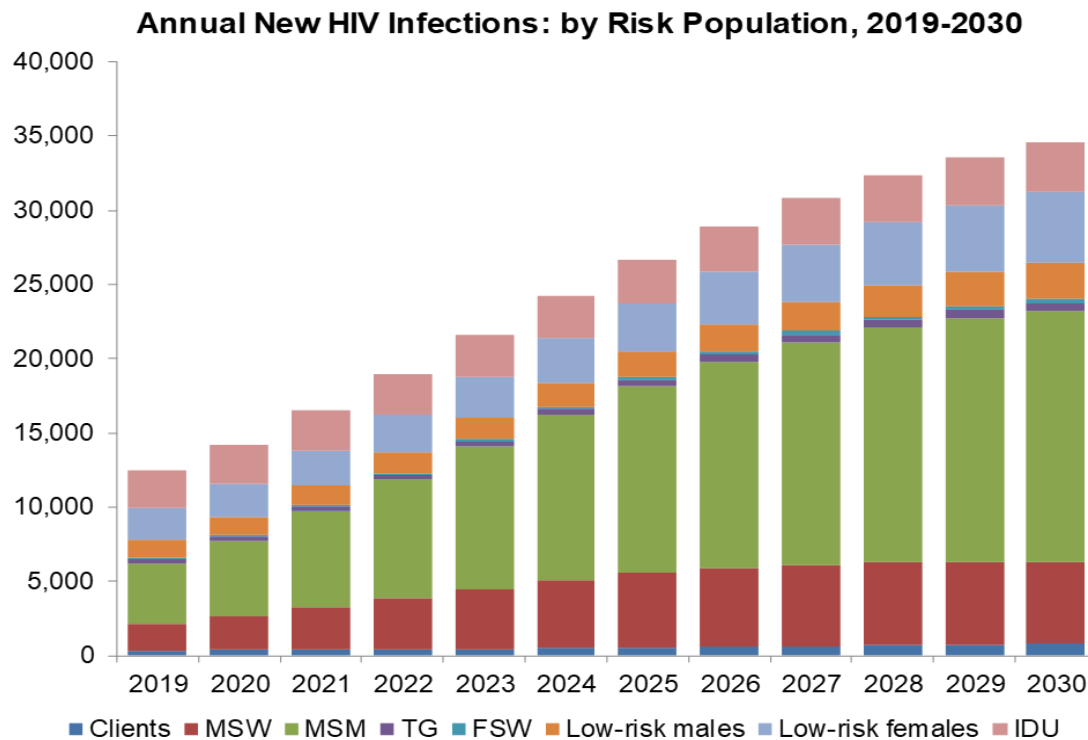
AEM modelling enables us to project how the epidemic would progress under a “business as usual” scenario (where prevention programme coverage remains at current levels). We know, based on

³⁹ AEM Modelling

programmatic data from 2019, that programme coverage levels for KPs are not meeting the scale up targets set in the 2017-21 strategy (Graph 1, Section 3).

Given this coverage, and without any new effort to achieve KP programme scale up, the model projects the distribution of new infections to increase as follows:

Graph 5



The portion of new infections accounted for by MSM increases significantly. Therefore, the extremely low coverage of this population is of such concern. Getting a better understanding of this population (its sub-groups, their risk behaviour frequencies and distributions, the best ways to reach them, and how to tailor intervention packages to their needs) is an intended outcome of a number of key outputs of this strategy.⁴⁰

To facilitate a target setting process at provincial level, AEM modelling was used to project the impact of a range of different intervention scenarios with differing levels of KP and treatment programme coverage. Three options were considered:

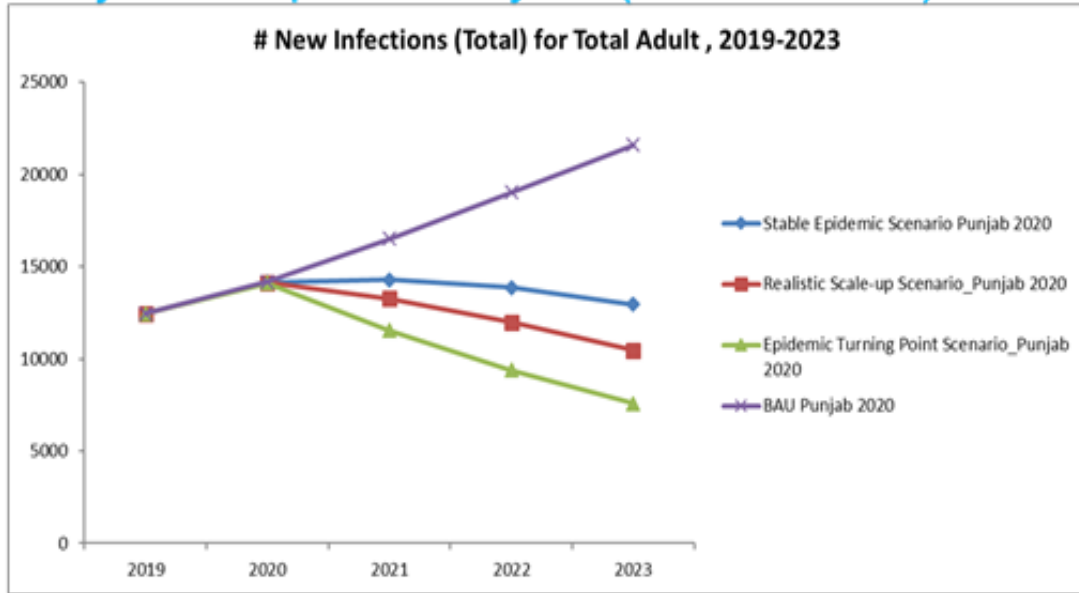
- A stable epidemic scenario (minimal impact)
- A realistic scale-up scenario (moderate impact)
- An epidemic turning point scenario (highest impact)

The scenarios are differentiated by the level of investment they require, and the level of coverage they achieve – the higher the investment, the greater the coverage and the bigger the impact. Each scenario was compared with a business as usual approach. The following graph illustrates various approaches and their outcomes:

⁴⁰ Outputs 1.1.3, 1.2.3, 3.1.1 and 3.5.2 in the following section all aim to inform a better evidenced and differentiated approach for MSM.

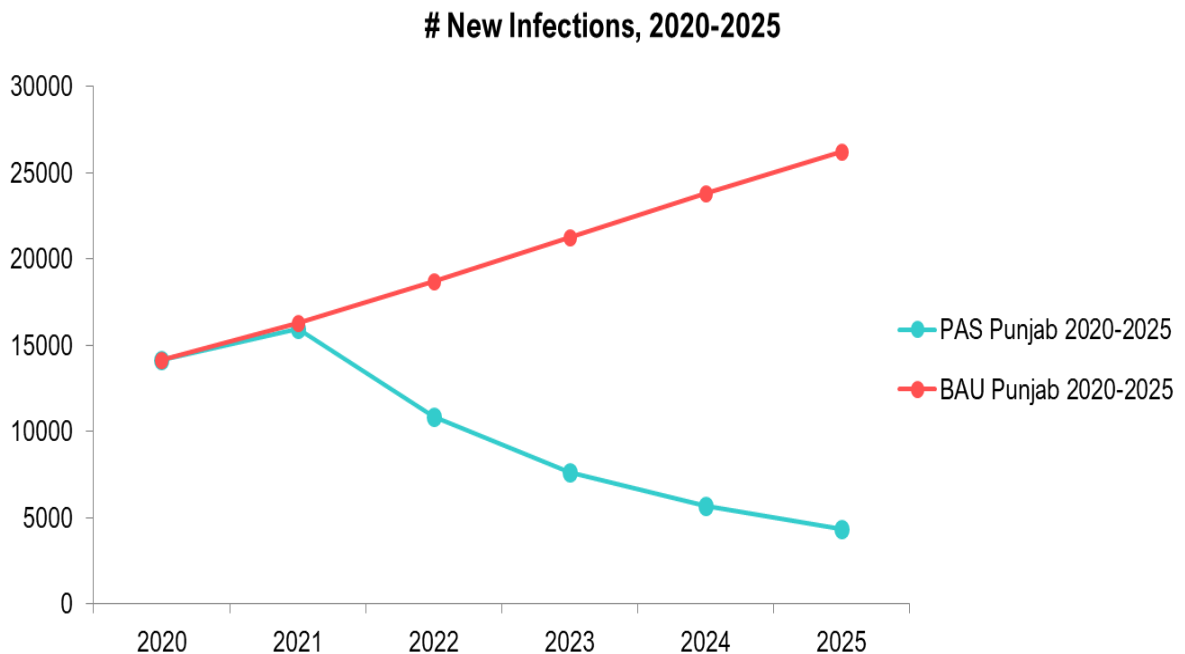
Graph 6

Punjab – Impact analysis (4 Scenarios)



Each scenario option and its associated set of annual coverage targets for prevention and treatment, were put through a consultation process with the province. Punjab province programme management selected epidemic turning point scenario, which has the highest impact for all prevention and treatment interventions.

Graph 7: Impact Analysis – Punjab AIDS Strategy vs Business as Usual Scenario



The model shows that the achieving the targets for this scenario would result in a 69% decline in new HIV infections in the country between 2020 and 2025.

The achievement of this impact is conditional on the achievement of the coverage targets that have been set for the Punjab AIDS strategy 2021-25. The table below summarises a core set of the coverage targets for 2025.

Table 5

Key Indicators	Baseline ⁴¹	2025 Target
% PID reached with HIV prevention	41%	90%
% MSM (High-Risk Non-SW) reached with HIV prevention	9% ⁴²	90%
% MSW reached with HIV prevention	16%	90%
% TG reached with HIV prevention	30%	90%
% FSW reached with HIV prevention	4%	90%
% People living with HIV currently receiving ART	12% ⁴³	81%

An important feature that was taken into consideration while deciding yearly targets was to allow for a lead time that was felt were necessary to bring KP programmes for MSM, male and female sex workers and transgendered sex workers to scale.⁴⁴

A significant difference between this strategy (2021-25) and previous (2017-21) strategy indicators is that for MSM (High-Risk Non-SW) a smaller denominator is being used in this strategy. The rationale for this assumes that risk behaviours and their frequencies are not distributed evenly across the entire population of non-SW MSM. The denominator for the targets for High-Risk Non-SW MSM has been calculated by the AEM team as 35% of the total Non-SW MSM in any given year. Evidence collected while implementing this strategy, both through programme implementation and the proposed surveys, should provide data to inform more accurate assessments of the risk-profiles of subsets of the non-SW MSM population.

⁴¹ Annex 4: Baseline Data

⁴² Since High-Risk Non-SW MSM is a new construct, we do not have any data on which to assess whether the Non-SW MSM the programmes are currently reaching have a higher risk profile than the rest of the Non-SW MSM population. For convenience only, we have assumed that all those reached fell into this category. This is clearly a generous assumption. More evidence is required to ensure programmes track and target sub-groups with higher risk behavioural profiles. Outputs 1.1.3, 1.2.3, 3.1.1 and 3.5.2 in the following section all aim to inform a better evidenced and differentiated approach for MSM.

⁴³ Previous (2017-21) strategy clumped all PLHIV (adults + children) together, while for this (2021-25) strategy PLHIV have been disaggregated by age. This indicator is for Adult PLHIV (15 and above). There is a separate baseline and target for Children (0-14) receiving ART in this (2021-25) strategy.

⁴⁴ This is discussed further in the next section. When programming in new cities, CBOs for key populations have to be created, organised and capacitated. Key population involvement in HIV prevention and testing programming is in its nascent stages in Pakistan.

5. The Strategy

Previous sections analysed the current situation and selected an intervention scenario, with programme targets, based on a decision about the impact we want to have on the epidemic by 2025. We now know where we are, and where we want to get to. This section answers the question “How do we get there?”

As with the previous strategy, this is designed in a framework with three pillars each with a different target outcome. The pillars group thematically into (1) prevention and testing, (2) treatment and care, and (3) enabling environment and sustainability. The three outcomes they aim at are as follows:

Outcome 1: Increased testing coverage and reduced risk behaviours among key populations and their partners

Outcome 2: Increased ART initiation and retention, with key populations and their spouses/partners and children proportionally covered

Outcome 3: Environment is enabled for an effective and sustainable AIDS response

Each of these outcomes aims to address at least one of the critical issues identified in Section 3. Together the three Outcomes aim at achieving the impact selected in Section 4.

Under each Outcome is a set of Outputs that detail what will be done to achieve the Outcome. More specifics about the implementation of these Outputs can be found in the Implementation Plan that accompanies this strategy. A summary table of the overall framework of this strategy is annexed.

Outcome 1: Increased testing coverage and reduced risk behaviours among key populations and their partners

Rationale: This outcome is designed to address the critical issue of low prevention and testing programme coverage among KPs. The current programs are limited to few of the selected cities in Punjab and where they exist, they lack scale. Prevention aims to change the risk behaviours among KPs. In recent years Punjab has seen few epidemic outbreaks in areas like Chiniot and Kot Momin, it is here that the strategy aims to have an impact on Punjab’s increasing incidence rates. Testing aims to ensure that those with HIV are aware of their status, have access to treatment and therefore, less likely to spread the virus, so that such outbreaks, do not happen in future. The strategy aims to increase prevention coverage to the following levels by 2025:

Table 6

Key Population	2019 Coverage ⁴⁵	2025 Coverage
PWID	41%	90%
MSM (Non-SW)	9%	90%
MSW	16%	90%
TG	30%	90%
FSW	4%	90%

There are three key Outputs for Outcome 1. These outputs cover: (1.1) key population testing scale up; (1.2) high-impact key population prevention roll-out; and (1.3) interventions for

⁴⁵ Annex 4: Baseline Data

other vulnerable populations and pregnant women, respectively. Each output breaks further into sub-outputs, described below.

Output 1.1 Accelerated scale-up of community-based HTS for all key populations (coverage aligned with epidemic burden)

Punjab, like other provinces has a well-established community-based service delivery model for HIV testing services for PWID, while community-based service delivery model for other KPs (MSM, MSW, TG and FSW) is evolving and requires support to get established, before it can be scaled-up. The key challenge in this case is the mobilisation, organisation, capacitation, and supervision of key population CBOs, especially in cities where such groups currently do not exist. This scale-up is critical to restrict Chiniot or Jalalpur type outbreaks in future.

1.1.1 Initiation of community-based outreach testing programmes for key populations in all priority cities not yet covered

In the absence of new IBBS data this strategy is using the same list of priority cities used in the Punjab AIDS Strategy 2017-21. Based on IBBS Round V and AEM analysis, each KP has its own set of priority cities (prioritisation was based on estimated PLHIV among the KPs in each city – the aim was to maximise the yield of testing services). There were 20 priority cities selected for Punjab, list of cities is annexed. Only PWID programmes are currently present in 18 out of 19 priority cities (for PWID), while only 3 out of 11 for MSM, 4 out of 12 for TG, and 1 out of 4 for FSW, priority cities, currently have any prevention programmes.

Scaling up CBO model to the remaining cities prioritised for KP will require substantial technical support to effectively manage intervention models, which require the creation, capacitation, and supervision of organisations among marginalised communities. The management capacity and technical support dimensions of this output are addressed under Outcome 3 below.

The current PWID programme already has the experience of establishing new interventions in cities previously not covered. A portfolio optimisation process in 2019 added 6 major urban centres in Punjab and Considering that there are already PWID interventions in all priority cities, the key issues for PWID testing scale up are:

- Whether more PWID can be reached with testing services in existing programmes sites.
- Whether there are potentially new programme sites within cities where more PWID can be reached with existing interventions.
- Whether there are additional cities not on the prioritized list where significant numbers of PWID are likely to be found.

These questions can be answered through mapping activities with programming adjusted according to the results.

1.1.2 Scale up and precision targeting of existing community-based testing programmes for key populations in priority cities where such programmes already exist

Objective here is to optimise the testing coverage of the interventions that have already been established. Two aspects will need attention; one is the capacity of the existing intervention set-up; ensuring it is sufficiently well-resourced (number and type of staff, and their technical capacity) to reach more people. The other is the methods deployed for expanding geographic and virtual reach.

Intervention set-up should ensure:

- that CBOs delivering programmes are scaled in relation to the estimated target population in their city (no one-size fits all approach)
- frontline workers have the requisite technical capacity for their roles (knowledge and skills)
- key organisational support functions are staffed and performing (M&E, finance and administration, management, and supervision)
- the intervention models are tailored to the particular groups or sub-groups they serve

Geographic programme reach will likely be specific to particular populations in particular cities and will need to be highly flexible based on community intelligence about where people can be best accessed at any given point in time. Likewise, service delivery time schedules need to be adapted to accommodate the social and professional lives of the targeted population (e.g. sex worker working hours). Whether physical or virtual, the use of social-network-based HIV testing approaches to expanding coverage will be a key dimension of the service strategy for KPs.⁴⁶ Technical support⁴⁷ and capacity building will be required on the use of particular approaches to online outreach.⁴⁸

Delivering this output will require a strategic approach if KP testing yield is to be optimised. There will be a managed sequence approach to scale up existing interventions (1.1.2) versus the establishment of new interventions in additional cities (1.1.1). These sequencing choices will be guided initially by the available data from IBBS Round V (estimated population size for a given KP in a particular city and estimated number of PLHIV among that population). The guiding question will be “where are more cases likely to be found?” As programmes become more established, as with the PWID programme, programmatic data can be triangulated with IBBS data to make more informed choices about where to locate and how to expand existing and initiate new interventions.

Particular attention will be given to programme scale in relation to the MSM population where a significant number of cases are expected to be found. The modelling conducted for this strategy (Section 6) has highlighted the need to precision target subsections of the non-SW MSM population where high-risk behaviours are occurring at a higher level of frequency. The evidence on where to find, and how to reach, these subsections will come first through programmatic experience. Online approaches may prove particularly productive here, but this will first be tested. The critical next step for the MSM (non-SW) and MSW programmes will be to develop differentiated interventions for these two populations and for subsets within them. The current model treats them as a single population and does not disaggregate its coverage between them. Outputs 1.1.3, 1.2.3, 3.1.1 and 3.5.2 all aim to inform a better evidenced and differentiated approach for MSW and MSM (non-SW). This is essential to increase the efficiency and impact of the respective interventions.

1.1.3 Pilot promotion of HIV self-test kits for MSM in high burden cities

⁴⁶ Policy Brief, WHO recommends social network-based HIV testing approaches for key populations as part of partner services package, November 2019

⁴⁷ PAS IV, Outcome 3.3.3

⁴⁸ Resources such as Going Online to Accelerate the Impact of HIV Programs could be used: <https://www.fhi360.org/resource/going-online-accelerate-impact-hiv-programs>

Low testing and need to explore various options for HIV testing demand generation among hard to reach KPs provides an opportunity to explore HIV self-testing (HIVST) approach. Where there is a significantly under-diagnosed HIV epidemic among MSM, HIVST may prove a game changer, which comes with a strong recommendation from the WHO⁴⁹ and was also endorsed in a national consultation.⁵⁰

Key steps will include the establishment of a technical working group to oversee the pilot, the securing of regulatory approval for the use of the kits, the development of a pilot project monitoring and evaluation framework, the selection of cities for the pilot (guided by IBBS data and technical support unit (TSU)⁵¹, pilot will be initiated in two high burden cities in the country), implementation and evaluation. The monitoring and evaluation framework will be designed so as to enable the pilot to distinguish between MSW and non-SW MSM participating in the programme. Social network-based approaches can be considered for self-test kit distribution as per recent WHO guidance.⁵² Scale up plans will be developed on the basis of the pilot outcomes.

Considering the urgency of the need for testing scale-up, the pilot will need to be effectively managed and technically supported. Full use should be made of WHO guidance on self-testing. Results of the pilot and plans for scale up should be available by the strategic framework's mid-point.

1.1.4 Integration of partner notification and HTS for key population partners/spouses/family members into targeted key population programming where consent can be obtained

An evaluation of PPTCT in Pakistan conducted by UNICEF in 2016 concluded that there is an “urgent need” to integrate PPTCT skills and services in outreach and service delivery programmes for PWID, SWs and other bridging populations rather than the general population.”⁵³ The integration of partner notification and HTS for KP partners and spouses is an important step towards achieving this. It is also important for increasing the uptake of HTS and case finding.

The existing prevention and testing service model for PWID includes spousal services, which include voluntary assisted partner notification. The model has demonstrated the viability of securing consent from PWID for partner notification services. This programme will continue to be scaled as an integral part of the PWID testing/prevention service model, and will include testing for children where risks are obvious (e.g., spouse of PWID/mother of children is found positive).

For other KPs, especially MSM, where the bulk of KP female spouses are to be found, partner notification services for those testing HIV positive may face challenges around people's willingness to identify partners. WHO guidance stresses that HIV partner notification is a “voluntary process” that can only take place “with the consent of the HIV-positive client.”

⁴⁹ Guidelines on HIV Self-Testing and Partner Notification, WHO December 2016

⁵⁰ National Consultation on HIV Self Testing (HIVST) and Pre-Exposure Prophylaxis (PrEP) among Key Populations in Pakistan, 10-11 May 2018

⁵¹ PAS IV, Output 3.3.3

⁵² Policy Brief, WHO recommends social network-based HIV testing approaches for key populations as part of partner services package, November 2019

⁵³ Evaluation of the Prevention of Parent to Child Transmission (PPTCT) of HIV Programme in Pakistan, March 2016, UNICEF

The viability of different methods of partner notification is not yet known in relation to particular KPs in the provincial context. During this strategy period the various methods⁵⁴ need to be trialled within established KP programmes and the results documented so that higher yield models can be taken to scale. Trials will be conducted in the first year of the strategy with successful models being scale up across the programme in the remaining strategy period.

Output 1.2 High-Impact, age-tailored, HIV prevention services for key populations taken to scale

Three of the five prevention pillars⁵⁵ in the Global HIV Prevention Roadmap are relevant to the Punjab context:

- Combination prevention with KPs
- Comprehensive condom programmes
- Rapid introduction of pre-exposure prophylaxis

Prevention services for KPs in Punjab are delivered through the same models as the testing services in 1.1. Therefore, the strategic approach to scale-up is largely the same; for non-PWID KPs the aim is to: (a) bring existing programmes to scale with a focus on cities with higher estimated numbers KP PLHIV, (b) secure a programming presence in all priority cities currently without programme presence, and (c) evolve the MSM programme so that it is able to develop differentiated intervention models for MSW and non-SW MSM. For PWID the aim is to: (a) scale the newer city programmes to saturation and (b) reach out to surrounding districts to assess the potential to reach more PWID.

1.2.1 Expansion and fine-tuning of coverage of community-based combination harm reduction/HIV prevention for PWID in accordance with validated programmatic data about where unreached PWID with high prevalence can be found

Scale up of prevention programmes for PWID can be guided by the evidence coming up from an already well-established programme. The combination prevention package will continue to include NSEP as a critical component for this population. Issues around the low return rate of syringes need to be investigated and programme adjustments made accordingly.⁵⁶ More emphasis can be placed on condom promotion and STI screening for PWID.

OST, which has a well-documented impact on reducing risk behaviours among PWID is a critical missing prevention programme component in the country. There is a risk to the programme that the continued absence of this drug dependence treatment results in significant drop-outs between prevention/testing services and treatment services. This will undermine the efficiency and effectiveness of efforts to scale up prevention and testing programmes for this PWID.

This strategy proposes that OST be urgently implemented. It is dealt with further under 2.1.2 below because it also has a significant role to play in improving ART initiation and adherence for PWID.

⁵⁴ Guidelines on HIV Self-Testing and Partner Notification, WHO December 2016

⁵⁵ pp14-15, HIV Prevention 2020 Roadmap, UNAIDS

⁵⁶ p26, National HIV Programme Review, 2019

1.2.2 Ambitious expansion of coverage of community-based prevention programmes for MSM/MSW/HSW/FSW making full use of social media to expand programme reach

To date prevention programmes for these KPs have been very small in scale and of limited impact. The practicalities of taking the model to scale have been referred to under Output 1.1 and are discussed further below under Outcome 3.

Members of KPs should be able to experience full, pleasurable sexual lives and have access to a range of sexual and reproductive health (SRH) options. For many women from KPs, their main concerns often are not just HIV and STIs, but also other reproductive health issues. Women from KPs should enjoy the same reproductive health rights as all other women; it is important that they have access to family planning and other reproductive health services, including STI screening and treatment.⁵⁷

Therefore, two critical components of the package should include condom availability/promotion and STI screening and treatment. Reducing the frequency of unprotected intercourse and the prevalence of untreated STIs are critical outcomes for the success of the prevention initiative for these populations.

The condom component of KP programmes should include behavioural change communication and demand creation, and free distribution of adequate supplies of condoms and lubricant. Commodities distribution will need to be tailored (volume and type) to the specific needs of particular KP groups based on their particular sexual practices.

Using the 2019 National STI Case Management Guidelines, STI screening and syndromic management services need to be brought to the fore as a core prevention programme component for KPs with specific tailoring to the needs of the three genders of the target populations. There is ample guidance available on how to design comprehensive programmes to the particular needs of each KP group.⁵⁸ Programme monitoring and evaluation frameworks should be tracking the prevalence and type of STIs found among clients so that services can be developed to address emerging needs.

Age and gender dimensions relevant to particular KPs will be an important consideration for this output. Higher numbers of youth are likely to be found in the male and female sex worker populations in particular. Therefore, outreach workers will need to be sufficiently skilled to support younger sex workers to build skills in negotiating safer sex in the context of the power imbalances inherent in intergenerational transactional sex.

As with 1.1.2 above, social network-based approaches and the strategic use of online outreach will be critical to expanding programme coverage. Technical support (see Outcome 3) may be required to ensure that these approaches are developed in a methodical way and that evidence of their impact on expanding programme coverage is captured and analysed for further programme development.

1.2.3 Roll-out of PrEP for MSM, TG and sero-discordant couples in high burden cities

⁵⁷ Consolidated Guidelines HIV Prevention, Diagnosis Treatment and Care for Key Populations, WHO, July 2014

⁵⁸ *Implementing comprehensive HIV and STI programmes with sex workers: practical guidance from collaborative interventions* (WHO, 2013) – informally known as the SWIT; *Implementing comprehensive HIV and STI programmes with men who have sex with men: practical guidance for collaborative interventions* (UNFPA, 2015) – the MSMIT; *Implementing comprehensive HIV and STI programmes with transgender people: practical guidance for collaborative interventions* (UNDP, 2016) – the TRANSIT

The HIV Prevention Roadmap 2020 calls for **rapid** roll out of PrEP. PrEP is currently being informally provided through a couple of treatment centres to sero-discordant couples and possibly some MSM and TG referred through social networks. The failure to formalise this service prevents strategic scale up and systematic monitoring to guide its development. The absence of leadership and effective programme management appear to be key missing ingredients (see Outcome 3).

PrEP offers a significant strategic opportunity to precision target prevention programmes for MSM. For the administering of PrEP to sero-discordant couples formal links should be established between the ART Centres and the spousal outreach component of the current PWID programme. When the planned partner-notification services for other KP programmes become established, these should be linked in too.

Responsibility for formal PrEP implementation needs to be clearly established within the programme structure. TSU⁵⁹ established at national level will provide technical assistance for roll out of PrEP for MSM, TG and sero-discordant couples initially in two high burden cities in the country. A monitoring and evaluation framework and a technical working group for oversight will be required. The framework will enable the monitoring of the PrEP programme's coverage of both sero-discordant couples MSM and TG, with the latter being disaggregated into MSW and MSM (Non-SW). Targets and deadlines will be agreed upon and tracked. PrEP roll-out for TG and MSM will be implemented in partnership with local CBOs with full engagement of members of the target communities.

1.2.4 Integrate prevention programme coverage of partners/spouses/family members into targeted key population programming where consent can be obtained

This output links directly to Output 1.1.4. Spousal/family-member coverage is well-established in the PWID programme but not yet initiated within the other KP programmes. These latter programmes will trial different approaches to securing referral to family members, all of which will be non-coercive and with voluntary client consent. As with testing services, social network-based approaches will be utilised for reaching non-family sexual partners of KPs.⁶⁰

Output 1.3 Selective prevention and testing programme coverage of pregnant women and vulnerable populations

Epidemic modelling shows that most HIV infections in 2019 in Punjab were to be found among KPs (80%) and their intimate partners (19%). Punjab also has several vulnerable populations whose vulnerability is determined by their association with KPs or by circumstances and environment beyond their control, like prison settings and migration for work. It makes strategic sense to expand the HTS programmes for the KPs where the epidemic is concentrated to reach vulnerable populations.

⁵⁹ PAS IV, Output 3.3.3

⁶⁰ Policy Brief, WHO recommends social network-based HIV testing approaches for key populations as part of partner services package, November 2019

1.3.1 Targeted HTS for at-risk pregnant women and pilot PITC (routine HIV testing) in selected cities

Provider-initiated testing and counselling (PITC)⁶¹ denotes an HIV testing service (HTS) that is routinely offered in a health facility. It includes providing pre-test information and obtaining consent, with the option for individuals to decline testing. This is contrary to the general (yet false) perception that PITC is only offered based on the healthcare provider's selection criteria to selected persons. Although PITC involves the routine offering of HTS, it should not develop into mandatory testing or testing people without first informing them that they can decline.

WHO considers that in low prevalence settings routine PITC will most likely not be cost-effective. However, HIV testing should still be made available for people who request testing or who exhibit clinical signs and symptoms indicative of HIV.⁶²

HTS as early as possible during pregnancy enables pregnant women with HIV to obtain and benefit most from prevention, treatment, and care and to reduce the risk of HIV transmission to their infants. According to WHO, in low prevalence settings, such as Pakistan's, PITC can be considered but the primary recommendation for such epidemic contexts is for HIV testing for all pregnant women from key populations or who have partners with HIV or from a key population group.⁶³

Recent WHO guidelines on HIV testing recommend that all pregnant women should be tested for HIV, syphilis and hepatitis B surface antigen (HBsAg) at least once and as early as possible.⁶⁴ However, the same guidelines point out that in some resource-limited settings, particularly those with low HIV burden, programmes may need to prioritize resources by focusing HTS in pregnancy on geographical areas with higher prevalence or among women with high ongoing risk such as members of key populations.

Therefore, under this strategy Punjab will take a two pronged approach: (a) at designated ANC sites, in 17 (out of 20) priority cities, pregnant women from key populations or who have partners with HIV or from a key population group or who request testing or who exhibit clinical signs and symptoms indicative of HIV will be offered HTS; (b) while in three selected priority cities with a relatively high HIV burden among KP (Rawalpindi, Lahore and Dera Ghazi Khan), PITC, i.e., routine HIV testing, will be offered to all pregnant women, as a pilot. This will allow the province to plan and roll out this approach, review the results after one year and make an informed decision whether to scale-up PITC (routine HIV testing) for all pregnant women to the entire province.

The effectiveness and efficiency of this strategy will depend upon its ability to reach pregnant women from among KP such as FSW, female spouses of male key population members, and especially also female spouses of returning migrant workers and link them to HTS.

For the successful implementation of this output, collaboration with the maternal, neonatal and child health (MNCH) programme will be ensured. Standard Operating Procedures (SOP) and training guidelines will be developed (with the support of UNICEF and WHO) and ANC staff at all government facilities will be trained to offer HTS. SOPs will include guidelines and arrangements for assisted referral to the nearest PPTCT/Treatment centre will be ensured.

⁶¹ p46 WHO Consolidated Guidelines on HTS, July 2015

⁶² p46 WHO Consolidated Guidelines on HTS, July 2015

⁶³ p68 WHO Consolidated Guidelines on HTS, July 2015

⁶⁴ p7, Policy Brief, Consolidated Guidelines on HIV Testing Services for a Changing epidemic, Nov 2019

The TSU⁶⁵ will assist with the required SOPs and arrangement of trainings. As per WHO guidelines all HIV testing, including PITC must be voluntary, confidential, and undertaken with the patient's consent.

1.3.2 Ensure Early Infant Diagnosis (EID) for all infants born to HIV positive mothers

WHO recommends virological testing for HIV for all HIV-exposed infants (born to HIV+ mothers) at 4 to 6 weeks of age, or as soon as possible thereafter, so that ART can be started immediately, and morbidity and mortality prevented.⁶⁶

Punjab has only one laboratory in public sector at PACP office premises, which has the capacity to conduct virological test for early infant diagnosis (EID). At the moment (HIV-1) Quantitative RNA assay is being conducted on whole blood samples, at PACP lab for EID, while the WHO recommends HIV-1 DNA or HIV-1 Total Nucleic Acids with a WHO pre-qualified qualitative reagent kit or cartridge on samples of whole blood or dried blood spots for EID. This allows detection of infection even when viral load is low, which can sometimes be the case in infants infected around the time of birth.¹¹

PACP has the option of using either: (a) dried blood spot (DBS) samples on GeneXpert machine, which is WHO prequalified for HIV-1 qualitative test. For this specific cartridges will need to be procured, or (b) it can use infant whole blood on the same PCR machine that programme is using for viral load testing in adults, by procuring and using specific reagent kits for qualitative HIV-1 tests for infants.⁶⁷

PACP has a good system in place where the blood of infant is drawn at one of the paediatric treatment centres (in the field) and transported to PACP and results are conveyed to the respective treatment centre electronically, using PACP MIS. At the moment not enough tests for EID are being conducted because not enough women living with HIV are being identified and linked to PPTCT. Once prevention programme coverage of partners/spouses/family members is integrated into targeted KP programming (1.2.4) the demand for EID is expected to increase.

1.3.3 Consistent screening for HIV for all persons admitted to prisons with links to treatment for those testing positive

KP behaviours, such as sex work, men having sex with men, and drug use are criminalised, with the result that prisons represent an additional entry point where a range of KP members can be found.⁶⁸ There is also evidence of risk behaviours taking place within prisons.⁶⁹ HIV prevalence rates in prisons are higher than among the general public.⁷⁰ The prison programming in this strategy, therefore, aims to both identify positive prisoners, and link them to treatment, and also to reduce onward transmission within prisons.

⁶⁵ Output 3.3.3

⁶⁶ Consolidated Guidelines on HIV Testing Services, WHO, July 2017

⁶⁷ Opportunities for strengthening and expanding availability of early infant diagnosis (EID) of HIV infection in Pakistan, UNICEF 2016

⁶⁸ 28% of prisoners surveyed in Sindh and KPK prisons had been arrested at least once for a drug related offence, Integrated Biological & Behavioural Surveillance among Prisoners in Prisons of Sindh and Khyber Pakhtunkhwa Provinces, February 2020.

⁶⁹ *ibid.*

⁷⁰ The same survey among prisoners in Sindh and KPK found an overall prevalence rate of 2%, with some prisons having rates as high as 6%.

The first step will be to ensure consistent screening for all people entering prisons.⁷¹ This requires adjustments in both policy and practice, and would require training to ensure prison medical staff are equipped with the skills they need and are then themselves involved in routine screening of prisoners. This also needs defined linkages to treatment to ensure that all prisoners testing positive have continued access to it. Co-infection is a particularly important issue for treatment services to be capacitated to address. The recent prison surveillance study found 10.3% prevalence of HCV and 1.2% were co-infected with HIV and HCV. TB coinfection is also highly likely to be an issue.

Effective prison testing and treatment services will require strong intersectoral coordination between the health and prison departments. This is especially important to ensure that: (a) people already on treatment who are subsequently given prisons sentences are not lost to follow up when incarcerated, and (b) prisoners put on treatment whilst in prison are not lost to follow up upon discharge. The strengthened management and governance systems (under Output 3.2) of this strategy have an important role to play in making this coordination and service linking work.⁷²

1.3.4 Develop pre-departure prevention education for intending migrant workers, and a referral system to HTC, ART and PPTCT for returning migrants and their families

Most migrants are young unskilled males, and their potential vulnerability arises from their increased engagement in risk taking behaviours such as purchasing commercial sex, when they are away from homes for longer periods of time.⁷³ Prevention will focus on intended migrants and testing those on returning. Coverage efficiency will be achieved by integrating services into systems, services and venues through which the outflowing and inflowing migrants would already be obliged to pass. This will require strengthening the partnership with the immigration and other authorities (see 3.2.3). For returning migrants testing positive assisted partner notification services will be established to facilitate spousal testing. Where needed (i.e., when pregnant spouses also test positive) PPTCT services will be linked in. For Sero-discordant couples PrEP will be offered in accordance with the roll-out of Output 1.2.3 above.

The PLHIV community and/or the Association of People Living with PLHIV can play an important role here as peer educators and supporters, especially for returning migrants who have been diagnosed as living with HIV. Collaborative interventions, such as help desks/referral points promoting HIV awareness, education and information sharing for returning migrants, will be trialled with the support of ILO/IOM, relevant government offices and airport management.

Outcome 2: Increased ART initiation and retention, with key populations and their spouses/partners and children proportionally covered

Rationale: This second outcome is designed to address the critical issues of unaddressed barriers to treatment access and initiation and high treatment attrition rates both of which result in poor treatment coverage. The strategy aims to increase treatment coverage from 12% in 2019 to 81% in 2025.

⁷¹ The IBBS in prisons found that only 25% of prisoners interviewed had been tested for HIV.

⁷² Strengthened coordination between health and prisons services is a key recommendation of the recent prison IBBS report.

⁷³ p22 Health Vulnerabilities of Migrants from Pakistan, Baseline Assessment, IOM, August 2015.

Broadly speaking there are three key strategic approaches to boosting treatment coverage rates:

- Identifying new positive cases
- Ensuring that all those who have tested positive are started on treatment
- Ensuring that those who initiate treatment are retained in the treatment programme

The first approach has already been addressed under Outcome 1. The remaining two are the concern of Outcome 2.

There are three key outputs for Outcome 2. These outputs cover the removal of barriers to treatment initiation (2.1), the intensification of treatment adherence support (2.2), and the scaling up of viral load testing (2.3) respectively. Each output breaks down into a cluster of sub-outputs which are detailed in the narrative below.

Output 2.1 Removal of key treatment initiation barriers for key populations and their partners/spouses and children

There is still significant cascade leakage between testing and treatment. The UNAIDS country scorecard for Pakistan 2019 shows almost a third of those testing positive not being on treatment.⁷⁴ Effectively addressing treatment initiation barriers, therefore, offers a strategic “quick-win” in terms of increasing numbers on treatment by up to a third.

2.1.1 Reconfiguration of ART Centre model to one-stop-shop model, inclusive of PPTCT and paediatric services, to address long-standing barriers to treatment access

Pakistan’s HIV programme review concluded that fragmented and non-integrated health care infrastructure hampers effective HIV control measures and recommended a one-stop-shop approach at ART centres.⁷⁵ The WHO also recommends three overarching strategies that can improve service delivery: 1) integration, 2) decentralization and 3) task shifting. These strategies, separately or in combination, can improve the accessibility of care.⁷⁶

Barriers to accessing treatment due to the fragmentation of services was a recurring theme in provincial consultations with communities and civil society. An integrated, one-stop-shop model has been tried successfully at the Family Care Center at Hayatabad Medical Complex Peshawar, where adult, PPTCT, paediatric and diagnostic services are provided at the same set up. This model has already been replicated at Ratodero, Sindh. This integrated, one-stop-shop approach will be replicated in Punjab, to the extent possible, in existing ART centre locations and at new locations. Roll-out of the new model should begin at centres serving cities with larger numbers of estimated PLHIV as per the priority cities list.

A key aspect to the reconfiguration of the ART Centre model will be the simplification of the patient pathway and related processes for testing and ART initiation. This will include simplifying testing algorithms to allow for same-day diagnosis and ART initiation, multi-month dispensing of ART (especially for those with long distance to travel,) and patient literacy support with active involvement of PLHIV. Issues with the limited physical space of the treatment centres will be addressed to guarantee privacy and confidentiality. Registration procedures will be simplified. The community-facility interface will be enhanced to ensure full

⁷⁴ Snapshot 2019, Pakistan, UNAIDS

⁷⁵ National HIV Programme Pakistan, Review 2019

⁷⁶ WHO Consolidated guidelines on HIV prevention, treatment and care for key populations, July 2014.

accountability for patients across the community and facility divide – with clear specifications of the respective roles of clinic staff, key population CBOs, NGOs and PLHIV-led adherence support groups.

Another critical step to ensure patient satisfaction and retention is to configure human resources at the ART centres according to patient load. Centres serving larger numbers of PLHIV should have additional staff (both for treatment and for follow-up support).

2.1.2 Implementation of an OST programme specifically designed to generate evidence of its impact on ART initiation and adherence for PWID

The challenges of getting PWID who have tested positive into treatment have been well documented.⁷⁷ A key factor is the motivation of the positive PWID to pursue treatment in the absence of any effective treatment for his opioid dependency. There is strong scientific evidence that OST would be a game changer for addressing the problems of PWID recruitment into treatment.⁷⁸ Moreover, there is also strong scientific evidence that OST significantly increases treatment adherence and viral suppression, and significantly decreases ART discontinuation among PWID.⁷⁹ A third, and equally important scientifically evidenced benefit of OST is its impacts on reducing risk for HIV and HCV infection and mortality from overdose.⁸⁰

Actions to be taken to implement an OST programme under this strategy include securing regulatory approval for the requisite doses of opioid substitute drugs, securing policy commitment to the approach, establishment of a technical/advisory committee to oversee implementation, selection for sites for initial implementation, development of a monitoring and evaluation framework, identification and capacitation of the implementor(s), and sourcing of technical support to design systems and train programme managers/clinic staff. Further detailed activities to implement OST are part of the implementation plan.

Since OST is a sensitive subject all the aforementioned actions will be led by the public sector, federal government in collaboration with the provincial government. The strategies/policies will be developed at the federal level with meaningful involvement of provincial stakeholders.

2.1.3 Continue to scale up comprehensive treatment preparedness services for PWID

In the absence of OST detoxification and rehabilitation support services are clearly needed to address the treatment initiation problem for PWID. For the purposes of this strategy ‘treatment preparedness support’ for PWID is defined as opioid dependent treatment services that stabilise an HIV positive PWID’s lifestyle to the extent that (a) that individual is

⁷⁷ pp51-52 PAS III (2017)

⁷⁸ A systematic review and meta-analysis of evidence of the effect of OST on ART outcomes among PWID living with HIV found strong evidence that OST increased recruitment onto ART by 87%. See “Impact of Opioid Substitution Therapy on Antiretroviral Therapy Outcomes: A Systematic review and Meta-Analysis”, AJ Low et al., *Clin Infect Dis* (2016) 63 (8): 1094-1104. June 2016.

⁷⁹ There is strong evidence that OST increases “ART adherence 2-fold, viral suppression by 45%, and reduces ART discontinuation by 23%.” See “Impact of Opioid Substitution Therapy on Antiretroviral Therapy Outcomes: A Systematic review and Meta-Analysis”, AJ Low et al., *Clin Infect Dis* (2016) 63 (8): 1094-1104. June 2016.

⁸⁰ MacArthur GJ, Minozzi S, Martin N, Vickerman P, Deren S, Bruneau J et al. Opiate substitution treatment and HIV transmission in people who inject drugs: systematic review and meta-analysis. *BMJ*. 2012;345:e5945. Platt L, Minozzi S, Reed J, Vickerman P, Hagan H, French C et al. Needle and syringe programmes and opioid substitution therapy for preventing HCV transmission among people who inject drugs: findings from a Cochrane Review and meta-analysis. *Addiction*. 2018;113(3):545–63. Ma J, Bao YP, Wang RJ, Su MF, Liu MX, Li JQ et al. Effects of medication-assisted treatment on mortality among opioids users: a systematic review and meta-analysis. *Mol Psychiatry*. 2018 Jun 22. Epub ahead of print (<https://www.nature.com/articles/s41380-018-0094-5>, accessed 4 March 2019).

motivated to pursue treatment for HIV and (b) clinicians at treatment centres feel confident of the possibility of successful treatment outcomes with respect to that patient.

Currently the only tailored service model available is the ART Adherence Units run with support from the Global Fund.⁸¹ The service model integrates drug detoxification support with ART initiation and adherence support. In order to prevent a treatment access bottleneck for PWID these services will be scaled up in relation to the scale up of the testing programme. Scale up includes the expansion of bed capacity of the existing service units and the expansion of the model into new sites where large numbers of new positive PWID are being found. The role of the service in the programme will be reassessed once OST services come online.

2.1.4 Proactive case finding to enable equitable access to and uptake of PPTCT services by vulnerable and marginalized women.

The success of this Output is directly related to Output 1.1.4 (Integration of partner notification and HTS for KP partners/spouses/family members into targeted KP programming where consent can be obtained) discussed earlier.

All the prevention programmes for KPs will integrate partner notification and HTS for KP partners and spouses. This step will increase the uptake of HTS among pregnant women who are most vulnerable and marginalized, and lead to increased case finding, the cases will then be linked to the PPTCT programme.

Community-based or home-based HTS services will be trialled for spouses of HIV+ KP, with their consent. This proactive case finding approach has already been successfully demonstrated among PWID in Punjab.⁸²

Output 2.2 Intensified treatment adherence support differentiated by key population

Cascade leakage after treatment initiation is having a major impact on the overall effectiveness of the treatment programme. It also represents a significant strategic opportunity to boost treatment coverage by better retaining those that initiate. This output is designed to bring about the systematic and better professionalized treatment centre service model that is required to resolve this long-standing problem.

2.2.1 Immediate initiation of proactive case management for people newly initiating treatment

The evidence shows us that the largest drop off of patients after treatment initiation occurs within the first month.⁸³ To address this proactive case management will commence immediately upon patient registration. A designated staff member/group of staff members within the ART Centre will be responsible for proactively maintaining the communication link

⁸¹ PAS III (2017) notes that for other drug rehabilitation services in Pakistan “service quality is highly variable and can, at the worse extreme, involve involuntary incarceration and other inhumane approaches. Private services predominate and are beyond the means of most drug users. A small number of government facilities are available without charge for enrolment though they do require payment for drugs and other incidentals. The demand (among PWID and their family members) for affordable quality drug rehabilitation significantly outstrips the supply. Clinicians in HIV treatment centres have also cited the lack of availability of such services as a problem.” p51.

⁸² Expanding access to HIV testing and counselling and exploring vulnerabilities among spouses of HIV-positive men who inject drugs in Pakistan. https://journals.lww.com/co-hivandaids/FullText/2016/03001/Expanding_access_to_HIV_testing_and_counseling_and.2.aspx

⁸³ Pakistan ART Outcome Study, NACP, February 2020

the patient in the first months.⁸⁴ ART Centres resourced to do this in relation to their patient load.

Service protocols for this support will be drawn up inclusive of guidance on frequency of follow-up, communications with family members and/or members of CBOs/NGOs bringing the patient in, involvement of PLHIV, logging of interactions, on-going updating of records of contact numbers and addresses for each patient and their key support persons, and reasonable actions to be taken if the patient becomes uncontactable for any reason.

There will be a regular case review process at clinic level whereby documented decisions are made about which cases are no longer to be considered active and in need of continued proactive follow up.

2.2.2 Rethinking/consolidation and capacitation of existing case management/adherence counselling model.

The introduction of the Case Manager position to a small number of ART Centres does not appear to have been a success. Going forward three things will be changed:

1. Scale: each treatment centre with a significant number of patients will have at least one designated staff member responsible for proactive patient follow up between appointments.
2. Case load distribution: centres with a very high number of cases and/or a higher proportion of cases coming from populations with lifestyles and circumstances that make it more challenging for them to stay in the treatment programme, will have more resources for patient follow up.
3. Recruitment: Persons responsible for case follow up will be appointed based on having an appropriate skill set inclusive of the counselling skills needed to interact with marginalised populations from diverse backgrounds.

Proactive case management will be developed as an integral part of the ART Centre service model. It will be managed by the head of the Centre and accountable to them for performance. It will be professionalised with adequate training, supervision and support provided to the individuals appointed. A standard SOP for the function will be developed as per 2.2.1. The role is not only the main link between the clinic and the patient but also with the patient's support network in the communities they come from whether that be their families or the CBOs/NGOs that have linked them to the treatment centres.

2.2.3 Decentralization of ART supply for stable HIV patients down to district level.

“Decentralization aims to deliver all HIV services closer to the individual. In many settings transport costs and long waiting times in central hospitals are significant barriers to access to services and retention in care. Particularly in rural areas, decentralization can reduce the difficulty and cost of travel and shorten waiting times. For KPs decentralizing HIV care and treatment can further strengthen community engagement, can link community-based interventions with health facilities, and may improve access to services, care-seeking behaviour and retention in care.”⁸⁵

⁸⁴ Frequency of contact can be tailored according to the patients' circumstances and their evolving compliance. It should be born in mind that current evidence shows that PLHIV on treatment in Pakistan are not reaching a stabilization point within the first 24 months.

⁸⁵ Consolidated Guidelines on HIV prevention, diagnosis, treatment and care for key populations, WHO 2014

The option that the WHO recommends for the decentralization for ART that best suits the Pakistan context is the initiation of ART in hospitals, with maintenance of ART in peripheral health facilities.⁸

The establishment of a differentiated service delivery (DSD) model for ART came out as a strong recommendation during consultations held for this strategy with healthcare professionals and communities. DSD is a client-centred approach, simplifying and adapting services to better meet the needs of people living with HIV and reducing unnecessary burdens on the health care system.⁸⁶

Features of the DSD model in Punjab will include: (a) initiation of ART at the main/established ART centre; (b) shifting of stable patients to a satellite clinic near his home, where the patient will receive refills of ARVs; (c) the patient will check-in at the main clinic every 6 months.

The satellite clinic can be either a private clinic/hospital (in cities) or Basic Health Unit (BHU) in rural areas. The Punjab AIDS Control Programme will have to undertake an extensive mapping exercise to identify the most suitable clinics and BHUs and enter into public-private partnership arrangements as required for the implementation of this model.

Private practitioners or hospitals already engaged in the provision of TB services can be engaged to provide ART refills PLHIV facilitating better management and increasing access to treatment at the decentralised level. DOTS Centres can be used to dispense ARV drugs to stable cases of HIV and while also providing TB treatment. There will be efficiency gains from the utilization of staff who are trained in counselling and treatment of TB to manage PLHIV on ART as well as provide counselling services.

Decentralization model can also be implemented through a CSO/CBO (partner organization selected through a process) serving any key population. A clear SOP (with specified operational scope and scale) will be developed and agreed between the provincial AIDS Control Programme, the treating physicians, and the organization for this to proceed efficiently.

2.2.4 Re-design of care and support package, its allocation and delivery mechanism, to ensure adequate patient access and equitable distribution

The recent National HIV Programme Review found the existing mechanism for distribution of support packages to PLHIV to be “few and not cost effective” with “systems failures” leading to inadequate distribution.⁸⁷

This Output takes place in conjunction with 2.1.1 (one-stop-shop reconfiguration) above and is largely based on recommendations in the National Programme Review. The physician in charge of the ART Centre will have the nutritional support, emergency medicines support and travel charges funds readily available for disbursement to clients through a committee as per an agreed set of eligibility criteria. Disbursement will take place when ARTs are collected from the centre. The CBOs working in the jurisdiction of the ART Centre will be members of the committee that approves the list of PLHIV for living support. The Centre’s Case Managers (or equivalent) will act as secretary for the committee under the supervision of the physician in

⁸⁶ Children Surviving Working Group – Policy Brief: Providing differentiated delivery to children and adolescents.

<http://childrenandaids.org/node/565>

⁸⁷ p50, National HIV Programme Pakistan, Review 2019

charge. The aim is to ensure that more PLHIV benefit and the support packages are distributed more frequently.

2.2.5 Scale-up of paediatric AIDS treatment coverage in proportion to growing case numbers

The success of this output depends upon how well prevention programme coverage of partners/spouses/family members is integrated into targeted KP programming (1.2.4) and the effectiveness of EID (1.3.2). It will also be ensured that children of adult patients enrolled in ART are not missed; patients will be actively counselled to bring their children for HIV testing and counselling, and children testing positive will be linked to treatment.

The scale-up of paediatric AIDS treatment coverage has so far been challenging because of the small scale of prevention programmes for KPs other than PWID. Where such programmes do exist, they have yet to develop a viable and systematic approach to assisted partner notification services.

A family-centred approach is vital, and all KP prevention programs must build models that are inclusive of their children and partners/spouses.⁸⁸ Where a child is identified to be living with HIV, the child must be put on treatment immediately.

Outbreaks such as those in Chiniot and Kot Momin, should be treated as exceptions. As HIV prevention programmes for KPs with family centred approach are scaled up, such outbreaks should become limited, if not non-existent. However, as outlined in 2.1.1 the one-stop-shop treatment model must be implemented to cater to the needs of increasing adult and children PLHIV identified through the routine scale-up of HTS.

Output 2.3 Reconfiguration of viral load testing mechanism to remove barriers

Viral load testing is critical for assessing progress towards the 3rd 90: the percentage of people receiving ART who have achieved viral suppression. Current guidelines in Pakistan require an initial viral load test three months after initiating treatment with follow up tests every 6 months. Though Punjab has introduced a system that facilitates patients in accessing viral load tests, which includes collection of their blood samples at treatment centres and reporting of results directly to centres, there are still barriers that appear to be discouraging patients for returning to centres for viral load tests. The outcome of this is that “the number and percentage of patients ...with a viral load test record at the ART Centre is very low.”⁸⁹ With no more than 4.4% of patients having a baseline viral load test result Punjab is unable to properly assess progress towards the 3rd 90.

2.3.1 Removal of patient perspective barriers from viral load (VL) testing process

On paper PACP has a good system in place for viral load testing, where the patients’ blood samples are drawn at one of the 25 treatment centres (in the field) and transported to PACP and results are conveyed to the respective treatment centre electronically, using PACP’s MIS. This system theoretically should overcome, at least the distance and cost barrier to access viral load tests. But the finding that only 4.4% patients in Punjab had a baseline viral load done shows that the model requires rethinking. It came out during discussions with PLHIV that sometimes the delivery of viral load (VL) result can take up to 2 months in Punjab, which is

⁸⁸ Children Surviving Working Group – Policy Brief: Addressing service delivery needs of children of key populations

<http://childrenandaids.org/node/562>

⁸⁹ p17, Pakistan ART Outcome Study, February 2019.

concerning. To overcome these operational issues PACP will develop standard SOPs for all treatment centres about days and times of collection of samples with the expected delivery dates for results. There are reports of other parties providing VL testing in Punjab, PACP SOPs should also be adhered to by all other parties providing VL testing in the province. Or these parties should share their SOPs with PACP for concurrence so that a common understanding of VL strategy is developed in the province and conveyed to the treating physicians and patients. This will encourage the patients to undergo VL testing, when they know that the result will be delivered within a given timeframe and it will help tailor their treatment. Patient counselling either by the treating physician or a specialized counsellor will be important in this scale-up. Effective implementation of Outputs 2.2.1 and 2.2.2 will be critical in removing these barriers to VL testing.

2.3.2 Removal of data-flow obstacles from viral load test result reporting process

The viral load test result data-flow issue will be addressed in conjunction with 2.3.1. Direct transfer of results from the laboratory to the ART Centres is already happening in Punjab. The online-data is entered into PACP MIS as soon as the results are generated, while ART Centres in Punjab have the responsibility of entering the result into the patient's paper-based record. The link to the MIS of National AIDS Control Programme is missing so far, which is in the process of being established, once established regular reporting to the national level will commence from Punjab.

Outcome 3: Environment is enabled for an effective and sustainable AIDS response

Rationale: This third Outcome is designed to address the critical issues of lack of strategic programme oversight, weak implementation management, and fragmented monitoring and evaluation systems. Effective delivery of the Outputs for Outcomes 1 and 2 in this strategy will be to a large extent dependent on successful implementation of the activities in this section. They are critical programme performance enablers.

There are seven key Outputs for Outcome 3. These Outputs cover the capacitation of critical service delivery models, which to date have struggled to perform effectively (3.1), the enhancement of programme governance (3.2), strengthening programme management (3.3), addressing stigma and discrimination (3.4), institutionalising surveillance and filling critical data gaps on key and vulnerable populations (3.5), integrating monitoring and evaluation systems (3.6), and building a sustainable response (3.7).

Each output breaks down into a cluster of sub-outputs, which are detailed in the narrative below.

Output 3.1 Capacitation of critical service delivery models to ensure adequate coverage, quality and effectiveness

Both the treatment programme and the community-based prevention programme for non-PWID KPs are struggling to perform effectively.⁹⁰ For the treatment the capacity issues are particularly acute around effective case management. For the latter there was a steep learning curve when these programmes were initiated under the current Global Fund grant. Achieving the prevention and treatment coverage targets agreed for this strategy will require a significant investment in capacity building for these two critical service delivery models.

⁹⁰ National HIV Programme Review, 2019, Pakistan ART Outcome Study, NACP, February 2020

3.1.1 Capacitation of community-based key population prevention/testing model

The key capacities required to achieve effective implementation of these programmes at scale include:

- Expertise on establishing CBOs within marginalised communities, where such organisations do not exist – this includes both community mobilisation and organisational development
- Expertise on specific KPs and their issues: male and female sex workers, transgendered people, men who have sex with men, clients of sex workers, and young people within these populations
- Service-specific skills and knowledge; testing, counselling, outreach, safer sex and condom/lube promotion, STI screening and management, online intervention techniques
- Expertise on results-based programme management and the organisational systems and capacities required (management, finance, monitoring and evaluation) to make it work

The approach assumed by this strategy is that of optimal and empowered involvement of members of the community whom the programmes are intended to reach. This is to ensure, among other things, the acceptability and appropriateness of the interventions to their target audience. In addition to community know-how the strategy will deliver additional capacity building technical support by the following means:

- Through full capitalisation and sharing of knowledge and lessons learned in establishing the programmes thus far
- Through sharing of intervention protocols, systems and experience between the newer programme models and the more established intervention model for PWID
- Through adequate and consistent supervision arrangements
- Through on-going dialogue with the targeted communities including community-based monitoring mechanisms
- Through programme coordination meetings
- Through the TSU⁹¹ established at national level

Specific outputs of the capacitation process will include:

- A standard CBO-start-up support package inclusive of guidance on how to address registration issues, and how to establish interim operational arrangements whilst registration is pending
- Adequate frontline staffing, training, and supervision support (both service-delivery and organisational development)
- Standardised mechanisms for ensuring cooperation of law enforcement
- The development of differentiated service delivery models tailored to target populations
- Differentiated intervention models for MSW and MSM (non-SW)

⁹¹ PAS IV, Output 3.3.3

- Programme monitoring and evaluation frameworks that enable coverage to be disaggregated between MSM (non-SW) and MSW.
- Training to integrate sexual and reproductive health services into HIV prevention services
- Youth-specific prevention service protocols for KPs with higher numbers of youth at risk, inclusive of sexual and reproductive health
- Defined referral processes and linkages between community-based testing and ART centres
- Cross-programme training sessions covering critical technical and management areas

The AIDS Control Programme, implementing organisations, and TSU⁹² will collaborate to design and implement the capacity building agenda, and related training materials, for this service model.

3.1.2 Capacitation of treatment model

The evolving of the treatment centres into a one-stop shop model will require a significant programme of capacity building to ensure that the existing weaknesses in the service are properly address. Capacity-building for the treatment programme will focus on ensuring:

- The development of expertise on treating people with opioid dependency
- The provision of training and support on working with KPs⁹³
- The re-conceptualisation of the case-management role to make it work (adequate patient counselling skills, proactive and aggressive⁹⁴ follow-up, strong collaboration with CBOs bringing clients in). This will be inclusive of a revision of the technical specification of the case-management role to ensure appropriately qualified individuals are appointed
- Regular and adequate supervisory and training support to ensure the patient follow up system is being adhered to and efforts to reach patients are properly logged
- The effective implementation of a reconfigured mechanism for implementing viral load testing and early infant diagnosis
- Proper adherence to confidentiality protocols and adequate physical space to achieve this
- Training to integrate paediatric care into new one-stop-shop model
- The availability and functionality of skills and systems for adequate data capture and reporting
- The effective delivery and equitable distribution of patient support packages
- The strengthening of community-based monitoring of patient treatment and support services

As with 3.1.1 the AIDS Control Programme, implementing organisations and technical support⁹⁵ unit will collaborate to design and implement the capacity building agenda, and related training materials, for this service model.

⁹² PAS IV, Output 3.3.3

⁹³ The recent ART Outcomes study, p21, makes this recommendation for all ART Centre frontline staff.

⁹⁴ "Aggressive patient-tracing" is a key recommendation of the recent ART Outcomes Study, p 21.

⁹⁵ PAS IV, Output 3.3.3

3.1.3 Protocols and standards for screening and treatment in prisons and provision of training to prison doctors

In consultation with the provinces the National AIDS Control Programme will develop service guidelines/protocols/standards for prisons to ensure consistent screening and linkages to treatment for infected prisoners. Based on these standard guidelines, the provincial AIDS control programme will either itself provide or arrange trainings for the prison healthcare staff, so that regular screenings of prisoners are conducted, infected prisoners are linked to treatment, and continuous follow-up is ensured. Particular attention will be paid to treatment continuity as the patient moves in and out of the justice system.

Output 3.2 Enhanced strategic governance of programmes

Two key governance issues addressed in this strategy are the need for strategic programme oversight and the need to develop strong linkages between AIDS programme, the broader health portfolio and beyond. Effective oversight is critical to ensure that the provincial strategy is actively used in real-time to guide programmes toward the achievement of targets. In this way risks and bottlenecks can be identified and addressed in a timely manner. Linkages are critical to address the more complex and broader systemic issues that inhibit effective programming; the need for coordination between public health and law-enforcement, between different disease programmes to address co-infections, and between HIV and sexual and reproductive health, the blood safety programme, and the infection prevention and control programme, for example.

3.2.1 Use of provincial AIDS strategy to develop targets and budgets for domestically funded AIDS control programme

The provincial AIDS Control strategy will be used to ensure that PC-1 programme targets are set with reference to strategy targets to ensure optimal coverage of KP prevention programmes and the implementation of the “treatment for all” policy. The strategy will serve as a reference point to ensure complementarity between the parts of the overall programme funded from different sources. AIDS Control Programme management will be aware of the portion of the strategy targets and budgets being covered by both domestically funded and internationally funded programmes. Strategy will be proactively used by the AIDS Control programme to track and address programmatic gaps (i.e. where the combines totals of internationally and domestically funded programme targets fall short of strategy targets).

3.2.2 Expertise-based oversight committee established to monitor progress towards achieving strategy targets

AIDS programme oversight committee will be established to conduct quarterly reviews of progress towards achieving strategy targets. The committees will be lean and composed of an appropriate spread of technical expertise (programme management, financial management, monitoring and evaluation, KP programming, harm reduction programming, procurement and supply management). Conflict of interest will be avoided by not having programme implementers as members of the committee. The key role of the committee will be to review progress against targets, identify programme bottlenecks and make recommendations about how the programmes can effectively address those bottlenecks. Implementers (of both internationally and domestically funded programmes) will be required to present quarterly progress reports to these committees against their allocated targets.

In support of this Output a results-focused culture will be introduced whereby real-time data collection mechanisms are used to track progress. Regular stock-takes will be conducted to identify bottlenecks and take corrective measures.⁹⁶ Ideally the Health Minister will chair the oversight committee or stock-taking meetings that will be held quarterly to take stock of progress against agreed priority areas of the HIV response/strategy, e.g., HIV testing coverage of prevention programmes for KPs, and PLHIV put on treatment every quarter. Where the Health Minister is unavailable, a designated focal person or the Secretary Primary and Secondary Healthcare Department (PSHD) will chair this meeting. Director General (DG) Health will also be a member of this committee.

This Output will ensure regular review of programme result data to steer programmes towards achieving strategy targets.

3.2.3 Establishment of intersectoral/interdepartmental coordination mechanisms to advocate for adequate programme support

The WHO recommends the setting up and strengthening of a coordinating body for collaborative TB/HIV activities that is functional at regional, district, local and facility levels (sensitive to country-specific factors).⁹⁷ Like the country coordinating mechanism (CCM) at the federal/national level, a coordinating mechanism will be introduced at the provincial level, led by the Department of Health (or Planning & Development department) with involvement of AIDS, TB and Malaria programmes, and membership from key stakeholders, including civil society, PLHIV, KP representatives, SRH, MNCH, nutrition, blood safety, hepatitis programmes, law enforcement and prison departments. The coordinating body will have clear and consensus-based terms of reference. The important areas of responsibility will include:

- Governance and coordination at provincial – inter-sectoral, inter-departmental and district levels
- Resource mobilization
- Provision of general policy and programme direction for the management of activities
- Capacity-building needs identification
- Ensuring coherence of communications about HIV, TB, SRH, MNCH, blood safety and hepatitis
- Ensuring the involvement of civil society non-governmental and community-based organizations, and individuals

This is not the same entity as the oversight committee in 3.2.2, which has a much leaner expertise-based membership and a very specific programme performance oversight function.

⁹⁶ Project Completion Review, Provincial Health & Nutrition Programme, DFID, April 2019. Health roadmap stock-takings were high level meetings chaired by the Chief Minister in Punjab and the Health Minister in KPK to take stock of progress against agreed priority areas of reforms. These meetings took place every quarter and were attended by senior government officials. Focusing on specific targets using a system of traffic lights. As a result of these stock-takings there was evidence of strengthened information systems and strengthened government systems and capacity– ranging from changes in HR and supply chain policies needed to support functional 24/7 BHUs and RHCs, referral systems and ambulance services, to increased reporting into MIS databases, and more rational deployment of human resource.

⁹⁷ WHO policy on collaborative TB/HIV activities guidelines for national programmes and other stakeholders, 2012. https://www.who.int/tb/publications/2012/tb_hiv_policy_9789241503006/en/

The oversight committee could, however, report into the coordinating body if that makes structural sense in a particular provincial context.⁹⁸

Output 3.3 Strengthened programme management

This strategy addresses the need for programme management strengthening in three key ways; identifying and addressing management capacity building needs, ensuring that the data flows essential for effective programme management are in place, and taking advantage from the establishment of a TSU⁹⁹ at national level, to manage the provision of technical assistance across the various systems development activities that will take place under the strategy.

3.3.1 Management audit of provincial AIDS programmes to identify capacity building needs around results-based management and procurement management

One of the findings of the National HIV Programme Review was that AIDS control programmes have low capacity to absorb and spend resources, and that the structure, capacity, operational efficiency, and effectiveness of the provincial AIDS programmes are also weak.¹⁰⁰

Improving institutional capacity and efficiency is critical to scale-up the HIV response in the province. To address this, a management audit of the provincial AIDS control programme will be conducted. The audit will map the critical gaps in capacities and recommend contextualized capacity building measures. Based on the findings and needs identified, tailored capacity building of the AIDS control programme staff will be conducted, which will include trainings on results-based management and procurement. If found effective management audits will be made a regular, periodic feature for the principal recipient(s) (PR), sub-recipient(s) (SR), sub-sub-recipient(s) (SSR) and other implementing partners. The TSU¹⁰¹ will help with sourcing and fielding expertise to address specific capacity building needs.

3.3.2 Reconfiguration of reporting processes to ensure that data essential for effective provincial AIDS programme management is systematically available

The integration of HIV MIS systems is covered more extensively under Output 3.6 below. Here the point is to ensure that the provincial AIDS control programme has access to the data it needs to manage programme towards the achievement of the provincial strategy targets.

All programmatic data (treatment and prevention) from both internationally and domestically funded programmes, will report into the provincial AIDS control programme so that there can be effective oversight of progress towards achieving provincial strategy targets. National and provincial level reporting mechanisms will be configured to ensure complementarity (see also 3.7.1). Quarterly programme reports into the provinces will be reviewed by the oversight committees established under 3.2.2. This will enable the adjustment of programme to address shortfalls, and the identification of risks and bottlenecks so that solutions can be devised to address them.

⁹⁸ The distinction is similar to that between the CCM and its oversight committee at national level. It is important that the Oversight Committee membership does not become bloated, remains technically focused and devoid of conflict of interest. The Global Fund defines oversight in relation to grants: https://www.theglobalfund.org/media/5412/ccm_ccmoversightguidance_paper_en.pdf?u=637233411520000000. In this context it is being defined in relation to the whole AIDS programme at provincial level. The principles would be broadly the same.

⁹⁹ PAS IV, Output 3.3.3

¹⁰⁰ National HIV Programme Pakistan Review, 2019

¹⁰¹ PAS IV, Output 3.3.3

Output 3.4 Critical stigma and discrimination issues addressed

Stigma and discrimination are a recurring theme in all the key documents reviewed for this strategy. There is clear evidence of stigma and discrimination affecting PLHIV's access to healthcare.¹⁰² Several of the documents reviewed make recommendations for more comprehensive stigma reduction programmes. This strategy takes a two-pronged approach due to the complex and widespread nature of the problem. The first prong (3.4.1) is designed to be targeted at two specific points where stigma and discrimination are known to directly impact programme performance. The second prong (3.4.2) has a much broader purview of the social context and addresses stigma across the whole spectrum.

3.4.1 Targeted sensitivity trainings where service access and programme effectiveness are being directly impacted

This output addresses two specific points where stigma and discrimination have a very direct impact on the prevention and treatment programming this strategy is designed to deliver. These are the attitudes and behaviours of healthcare workers in the healthcare facilities most frequently used by PLHIV (ART and PPTCT Centres) and the attitudes and behaviours within law enforcement departments that interact with/come into contact with KP outreach prevention and testing programmes. There will be a more intense effort to address stigma and discrimination within these setups inclusive of:

- Regular trainings/refreshers for ART/PPTCT centre staff (including those involved in paediatric HIV care) and other healthcare workers as appropriate
- Sensitivity trainings for law enforcement officials and judiciary
- The development of outreach worker protection protocols to ensure KP CBO staff can deliver programmes without interruption from police

Governance mechanisms such as the coordination mechanism in 3.2.3 above will be used to strengthen the coordination between the AIDS programme and the law enforcement system. The TSU¹⁰³ will be used as needed to assist with the design and delivery of the stigma and discrimination/KP sensitivity training programmes.

3.4.2 Nationally-led communication and advocacy programme

In Pakistan only 32% of women and 67% of men have heard of HIV/AIDS. Comprehensive knowledge about HIV is not widespread among either women (4%) or men (10%), and 60% of women and 61% of men have discriminatory attitudes towards people living with HIV.¹⁰⁴ This lack of knowledge, and high level of stigma and discrimination hampers prevention efforts for KPs and also acts as a barrier for PLHIV accessing treatment. The recent national AIDS programme review recommended stigma reduction in "society, in families, at workplaces, in schools, in hospitals, in police and justice departments and in the social media."¹⁰⁵

To address these stigma related challenges a targeted communication and advocacy programme will be developed, that will include, anti-stigma and discrimination/myth-busting campaigns for various audiences such as religious scholars/leaders, media practitioners, parliamentarians, healthcare professionals (hospital staff particularly those providing surgical

¹⁰² Country Research on Community Access to treatment, Care and Support Services (Phase II), APLHIV, January 2019.

¹⁰³ PAS IV, Output 3.3.3

¹⁰⁴ Pakistan Demographic & Health Survey (PDHS) 2017-18

¹⁰⁵ p50, National HIV Programme Review, 2019, Pakistan ART Outcome Study, NACP, February 2020

and obstetrics services) and the general public. Campaigns will include, but will not be limited to, special seminars with parliamentarians and religious leaders, women's groups, youth leaders, and social media campaigns targeted at healthcare professionals and the general public.

Given the ubiquity of the stigma and discrimination issues across the country, the communication and advocacy programme will be designed and led at national level, with full collaboration from, and consultation with, the provinces.

Output 3.5 Institutionalised surveillance with more accurate key and vulnerable population data to facilitate precision targeting

The possession of quality data about the populations, and subsets of populations, engaging in high-risk behaviour is essential for a precision-targeted approach in a concentrated epidemic scenario. This is especially so where a KP is large and diverse. Resources will be used more effectively if prevention and testing programmes are targeted to where they are most likely to identify new cases and/or reduce the prevalence of high-risk behaviours. This output aims at strengthening surveillance systems and approaches to enable precision-targeting.

3.5.1 A new round of nationally led IBBS with quality issues of previous round properly addressed

The most recent round of IBBS was conducted in 2016. This strategy aims to institutionalise surveillance so that it takes place according to a fixed schedule and evolves its methodology based on lessons learned from previous rounds. The next round will take place before the mid-point of this current strategy. The following issues will be addressed:

- All key data points (such as prevalence levels for specific populations) weighted at provincial as well as national level
- IBBS will be designed at the national level and implemented at the provincial level. For reliable and effective data collection, a third party (public or private) will be engaged for IBBS, and to avoid conflict of interest it will be ensured that no implementing partner is involved in the IBBS.
- This is to ensure standardization and comparability of methodology and results across the country.
- Consistency in mapping sites to allow comparability between rounds
- Improved methodologies for arriving at city-level PSEs
- Adequate sampling of non-SW MSM to better understand behavioural risk and prevalence, and inform revision of PSE

Consensus building around methodologies and results will be an integral part of the process. AEM projections will be revised based on the results.

3.5.2 Qualitative (pre-IBBS) field-assessments conducted of migrants, refugees, truckers, mine-workers and Non-SW MSM

This output is designed to address two persistent data gaps. One pertains to the MSM KP, the other pertains to populations that have an assumed but poorly evidenced vulnerability to HIV.

MSM are a large and diverse population and we do not currently have an accurate picture of the distribution of risk behaviours that would facilitate precision targeting. Nor do we understand how various subsets of the MSM population overlap or interact with each other. The MSM data gap is highly significant because the epidemic models we have, project this group becoming a key driver of the epidemic. Current data on this population from Round V IBBS is extrapolated from samples of MSM that were predominantly engaged in sex work. There is an urgent need for more concrete data on the population of MSM who are engaging in non-commercial sex with other men. This includes better evidenced population size estimates, behavioural data (inclusive of data on use of social media for sexual networking) and HIV prevalence data.

MSM programmes need to evolve so that they are using different service models and approaches for different for MSW and non-SW MSM. The field assessments will be designed to provide data that would inform this differentiation.

Several vulnerable populations (migrants, truckers, mine-workers) were frequently referred to in consultations held to develop the strategies. It has also been proposed that refugees be taken into consideration. There is no concrete data about the nature and extent of their behavioural vulnerability, their HIV prevalence rates, or their links and/or overlaps with the established set of KPs.

For both of these data gaps (non-SW MSM and other vulnerable populations) qualitative field assessments will be conducted to confirm whether the selected subpopulations are engaging in high-risk behaviour, and whether they exist in sufficient numbers to merit inclusion in the next round of IBBS. The assessments will explore the feasibility of collecting data among these populations by determining how and where they can be accessed and sampled systematically and their general willingness to participate in surveillance surveys.¹⁰⁶

For non-SW MSM the data collected will be used to inform their inclusion in IBBS Round VI. For the various vulnerable populations, the data will be used to decide whether to include them in IBBS VI, or to conduct more specific follow on research. The TSU¹⁰⁷ will be involved in sourcing expert support for these assessments.

3.5.3 Independent PWID programme saturation surveys in select cities

The PWID programme is reporting programme saturation in some cities, where the last round of IBBS estimated that a significant number of PWID still remain to be reached. Investing in scale up in these cities would not be cost effective if indeed saturation point has been reached. A new round of mapping for IBBS Round VI can address this issue, but decisions about where to scale up PWID programmes need to be taken in the short term. Programme saturation surveys in select cities (where the discrepancies between estimated numbers of PWID and numbers reached by programmes reporting saturation are particularly large) will be conducted by independent academic institutions not involved in programme implementation. These will take place in the first year of the strategy to inform scale up decisions.

¹⁰⁶ The approach can be guided by *The Pre-Surveillance Assessment*, UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance, WHO 2005, <https://www.who.int/hiv/pub/surveillance/sti/en/>

¹⁰⁷ PAS IV, Output 3.3.3

Output 3.6 Integration of HIV M&E systems

UNAIDS recommends one national HIV monitoring and evaluation system as part of the ‘Three Ones’ principle.¹⁰⁸ The National HIV Programme Review noted the absence of a reliable interconnected MIS across the HIV programme streams. Parallel monitoring systems exist – federal (NACP), provincial (PACP), non-governmental (NZA, GSM, APLHIV), without interfaces that connect them, with the result that required information is not being generated in a timely manner for efficient decisions and programme management. The review recommended the creation of an accountability and reporting system that is transparent, up to date and reliable.¹⁰⁹

The enhancement of HIV programme governance and management systems in this strategy is dependent on the resolution of long-standing monitoring and evaluation systems fragmentation. More effective governance and management decisions can only be made if the data to inform them is available (at the point in the system where the decision is to be taken), current, and accurate.

3.6.1 National and Provincial MIS reorganized to capture and report critical information for timely decision making

Here the objective is to reorganize the existing provincial and national MIS so that they are guided by a common and clear strategy that ensures timely collection, validation, analysis and reporting (upward, downward and horizontally), of data for planning and management (see also Outputs 3.2.2 and 3.3.2). To address this critical, longstanding issue, following steps will be taken:

- a) National and Provincial AIDS Control Programmes, along with partners, will be convened to agree on a core set of indicators with agreed definitions that all parts of the integrated system will track
- b) An integrated system data-flow map (with directionality and lag times) will be developed and endorsed at all levels
- c) Common interfaces will be developed to enable two-way data flow between provincial and national MIS, and ~~also~~ between implementing partners (PRs) and PACP/NACP
- d) The resulting integrated MIS will allow patient tracking from outreach testing into treatment and between treatment centres across provinces. This will include tracking and reporting of HIV positive pregnant women receiving PPTCT services and reporting of people on PrEP

This is a significant systems development initiative that will need a resource commitment, and an accompanying consultative consensus-building process. It is important that integrated platforms allow data to be visualized at the provincial level, which means access to all parties, to facilitate the results-based management aimed at in 3.3 above. Technical support will be sourced through the TSU¹¹⁰ inclusive of capacity building around effective data use.

¹⁰⁸ Organizing Framework for a Functional National HIV Monitoring and Evaluation System, UNAIDS 2006

¹⁰⁹ National HIV Programme Pakistan Review, 2019

¹¹⁰ PAS IV, Output 3.3.3

Output 3.7 Increased sustainability of the response

Sustainability has many dimensions and is not just a question of the financial sustainability of HIV programmes as countries transition from international to domestic funding.¹¹¹ This strategy addresses sustainability at multiple points in the above framework. For example, moving towards epidemiological sustainability is addressed in the strategy's goal to turn an increasing incidence into a declining incidence, and many of the Outputs under Outcome 3 (Enabling Environment) have important implications for structural, political and programmatic sustainability. In addition to the sustainability-promoting outputs above the following two outputs are critical.

3.7.1 Strengthened coordination systems between national and provincial levels

The Outputs under Outcome 3 entail a strengthening of programme governance and management responsibility at provincial level. This is to ensure better ownership of the strategies and accountability towards delivering on the outputs. It is also better adapted to the devolved structure of Pakistan's health system. It is important, however, that the country still retains a national level overview of the epidemic and its response. This will be achieved by producing clear definitions of the roles and responsibilities of the national and provincial levels (especially with respect to programme supervision), the establishment of better coordination mechanisms and systems between national and provincial levels, and the integration of MIS systems under Output 3.6.

3.7.2 Improved mobilisation and absorption of the domestic resource allocation

Outputs 3.2. and 3.3 above, are intended to have an impact on the absorption issues with domestic funding. Strengthened management and governance should result in more efficient use of resources and effective implementation. The strategy also sets a framework and targets that will be used in the design of PC-1 programmes for the current funding application round.

The outstanding issue is the efficiency of the PC-1 approval process, which has historically led to significant programme implementation delays. There is a risk that the current COVID-19 pandemic could divert attention and resources and lead to further delays. This can be addressed by sustained advocacy efforts from national and provincial stakeholders to keep the PC-1 application process on track.

One potential hinderance for the alignment of PC-1 budgets with strategy budgets is the historical underspend of the domestically funded programmes. Domestic funding allocation is typically based on historical spend-rate. Inactive programmes lead to underfunded programmes. To facilitate better evidenced funding allocation an allocative efficiency analysis will be conducted to inform programme prioritization and scale up.

3.7.3 Integrating HIV services into the national UHC program and social welfare program

The WHO defines Universal Health Coverage (UHC) as ensuring that all people in need have access to needed health services (including prevention, promotion, treatment, rehabilitation and palliation) of sufficient quality to be effective while also ensuring that use of these services does not expose the user to financial hardship. The federal and provincial

¹¹¹ Oberth and Whiteside, What does sustainability mean in the HIV and AIDS response, AJAR 2016, 15: 1-9
<https://www.globalfundadvocatesnetwork.org/wp-content/uploads/2016/04/Oberth-Whiteside-2016-What-Does-Sustainability-Mean-in-the-HIV-and-AIDS-Response.pdf>

governments are advancing UHC as part of their commitment to achieving the SDGs by 2030. An essential package of services has been identified and is now being costed. HIV treatment and prevention services are part of it. Once this has been approved and to closely monitor progress on this the provincial intersectoral coordination mechanisms in this strategy (3.2.3) and CCM will have a key advocacy role in this regard, and key activities to implement this will be part of the Implementation Plan.

On the social welfare front the federal government has established a Division of Poverty Alleviation and Social Safety. Its purpose is to implement the umbrella initiative, Ehsaas (meaning empathy), launched in early 2019. The objective of Ehsaas is to reduce inequality and invest in people. It is meant to leverage the latest tools and approaches, such as the use of data and technology to create precision safety nets; promoting financial inclusion and access to digital services; supporting the economic empowerment of women; focusing on human capital formation; overcoming financial barriers to accessing health and education; and tackling malnutrition in all its forms.

It is critical that members of KPs, particularly FSW and TG (who are most marginalized), benefit from various programmes being offered by Ehsaas. The provincial AIDS Control programmes, with the involvement of APLHIV and the CBOs, will support KPs to get computerized national ID cards (CNIC), this is a requirement for registration with Ehsaas programmes, and will facilitate KPs with the registration process so that these marginalized communities can benefit from government initiatives to address inequality.

6. Monitoring and Evaluation Framework

The monitoring and evaluation framework comprises of two tiers:

1. A set of core indicators that use programme data to measure annual progress towards achieving prevention, testing and treatment targets.
2. A set of programme milestones that track key strategy outputs

The denominators for the tier 1 targets change annually in accordance with population growth estimates from the AEM and spectrum models. A complete set of denominators and numerators for the targets is annexed.

Table 7

	Indicator	2025
Impact	# New HIV infections among adults	69% reduction from 2020

Tier 1: Core indicators with annual targets measured by programmatic data

Table 8

	Indicator	Base line 2019	2021	2022	2023	2024	2025
Outcome 1	% PWID reached with HIV prevention programmes in the last 12 months	41%	51%	61%	70%	80%	90%
	% PWID that received an HIV test within the last 12 months and who know the results	19%	28%	39%	53%	68%	81%
	% MSM (High-Risk Non-SW) reached with HIV prevention programmes in the last 12 months	9%	22%	39%	56%	73%	90%
	% MSM (High-Risk Non-SW) MSM that received an HIV test within the last 12 months and who know the results	6%	15%	29%	45%	62%	81%
	% MSW reached with HIV prevention programmes in the last 12 months	16%	29%	44%	60%	75%	90%
	% MSW that received an HIV test within the last 12 months and who know the results	10%	20%	33%	48%	64%	81%
	% TG reached with HIV prevention programmes in the last 12 months	30%	39%	46%	61%	75%	90%
	% TG that received an HIV test within the last 12 months and who know the results	16%	23%	32%	49%	64%	81%
	% FSW reached with HIV prevention programmes in the last 12 months	4%	22%	39%	56%	73%	90%
	% FSW that received an HIV test within the last 12 months and who know the results	2%	13%	27%	45%	62%	81%

	Indicator	Base line (2019)	2021	2022	2023	2024	2025
Outcome 2	% Adults living with HIV currently receiving ARV therapy	12%	27%	40%	54%	67%	81%
	% Children (0-14) living with HIV currently receiving ARV therapy	15%	28%	41%	55%	68%	81%
	% HIV-positive pregnant women who received ARVs to reduce the risk of mother-to-child transmission	14%	30%	47%	63%	79%	81%

Tier 2: Critical strategy milestones to be tracked in accordance with implementation plans

Table 9

	Milestone	Deadline
Outcome 1	KP programme presence in all priority cities	2022
	HIV self-test Kit pilot launch	2021
	PrEP programme launch	2021
	OST programme launch	2021
Outcome 2	ART centre one-stop-shop model launch	2021
	Commencement of decentralized treatment	2021
	Deployment of case managers across treatment centres	2021
Outcome 3	Establishment of provincial oversight committees	2021
	Establishment of provincial intersectoral coordination mechanism	2021
	Commencement of communication and advocacy programme	2021
	Qualitative pre-IBBS field assessments & PWID programme saturation surveys	2021
	Mid-term review of the strategy	2023

7. Budget

Below is an indicative budget for the implementation of this strategy. Costs for specific activities, such as capacity building, have been built into the unit costs of the intervention packages. Unit costs for intervention packages for KP are based on the existing service packages.

Punjab Strategy Costs (US\$)						
	2021	2022	2023	2024	2025	TOTAL
FSW	3,935,862	4,460,573	10,450,288	13,906,379	17,496,145	50,249,246
PWID	6,134,437	7,478,963	8,876,580	10,328,222	11,834,194	44,652,397
MSM (High-Risk Non-SW)	1,771,211	4,123,336	4,707,645	6,267,813	7,890,127	24,760,132
MSW	869,133	1,735,403	1,852,126	2,373,991	2,916,360	9,747,012
TG	946,170	1,471,907	1,540,178	1,950,810	2,377,552	8,286,617
Treatment Adults	6,636,915	11,547,614	17,793,885	25,600,801	35,153,838	96,733,053
Treatment Children	211,801	336,085	483,278	638,340	810,240	2,479,745
Programme Cost	200,000	250,000	300,000	350,000	400,000	1,500,000
TOTAL	20,705,529	31,403,882	46,003,979	61,416,356	78,878,456	238,408,202
Punjab Strategy Costs (%)						
	2021	2022	2023	2024	2025	TOTAL
FSW	19.01	14.20	22.72	22.64	22.18	21.08
PWID	29.63	23.82	19.30	16.82	15.00	18.73
MSM (High-Risk Non-SW)	8.55	13.13	10.23	10.21	10.00	10.39
MSW	4.20	5.53	4.03	3.87	3.70	4.09
TG	4.57	4.69	3.35	3.18	3.01	3.48
Treatment Adults	32.05	36.77	38.68	41.68	44.57	40.57
Treatment Children	1.02	1.07	1.05	1.04	1.03	1.04
Programme Cost	0.97	0.80	0.65	0.57	0.51	0.63

Annex 1: Strategic Framework for Punjab AIDS Strategy

Outcome 1: Increased testing coverage and reduced risk behaviours among key populations and their partners	
Output 1.1 Accelerated scale-up of community-based HTS for all key populations (coverage aligned with epidemic burden)	1.1.1 Initiation of community-based outreach testing programmes for key populations in all priority cities not yet covered
	1.1.2 Scale up and precision targeting of existing community-based testing programmes for key populations in priority cities where such programmes already exist
	1.1.3 Pilot promotion of HIV self-test kits for MSM in high burden cities
	1.1.4 Integration of partner notification and HTS for key population partners/spouses/family members into targeted key population programming where consent can be obtained
Output 1.2 High-impact, age-group tailored, HIV prevention services for key populations taken to scale	1.2.1 Expansion and fine-tuning of coverage of community-based combination harm reduction/HIV prevention for PWID in accordance with validated programmatic data about where unreached PWID with high prevalence can be found
	1.2.2 Ambitious expansion of coverage of community-based prevention programmes for MSM (High-Risk Non-SW)/MSW/HSW/FSW making full use of social media to optimise programme reach
	1.2.3 Roll-out of PrEP for MSM, TG and sero-discordant couples in high burden cities
	1.2.4 Integrate prevention programme coverage of partners/spouses/family members into targeted key population programming where consent can be obtained
Output 1.3 Selective prevention and testing programme coverage of pregnant women and vulnerable populations	1.3.1 Targeted HTS for at-risk pregnant women and pilot PITC (routine HIV testing) in selected cities
	1.3.2 Ensure Early Infant Diagnosis for all infants born to HIV positive mothers
	1.3.3 Consistent screening for HIV for all persons admitted to prisons with links to treatment for those testing positive
	1.3.4 Pre-departure prevention education for intending migrant workers, and a referral system to HTC, ART and PPTCT for returning migrants and their families

Outcome 2: Increased ART initiation and retention, with key populations and their spouses/partners and children proportionally covered	
Output 2.1 Removal of key treatment initiation barriers for key populations and their partners/spouses and children	2.1.1 Reconfiguration of ART Centre model to one-stop-shop model, inclusive of PPTCT and paediatric services, to address long-standing barriers to treatment access.
	2.1.2 Implementation of an OST programme specifically designed to generate evidence of its impact on ART initiation and adherence for PWID
	2.1.3 Continue to scale up comprehensive treatment preparedness services for PWID
	2.1.4 Proactive case finding to enable equitable access to and uptake of PPTCT services by vulnerable and marginalized women.
Output 2.2 Intensified treatment adherence support differentiated by key population	2.2.1 Immediate initiation of proactive case management for people newly initiating treatment
	2.2.2 Rethinking/consolidation and capacitation of existing case management/adherence counselling model
	2.2.3 Decentralization of ART supply for stable HIV patients down to district level
	2.2.4 Re-design of care and support package, its allocation and delivery mechanism, to ensure adequate patient access and equitable distribution
	2.2.5 Scale-up of paediatric AIDS treatment coverage in proportion to growing case numbers
Output 2.3 Reconfiguration of viral load testing mechanism to remove barriers	2.3.1 Removal of patient perspective barriers from viral load testing process
	2.3.2 Removal of data-flow obstacles from viral load test result reporting process
Outcome 3: Environment is enabled for an effective and sustainable AIDS response	
Output 3.1 Capacitation of critical service delivery models to ensure adequate coverage, quality and effectiveness	3.1.1 Capacitation of community-based key population prevention/testing model
	3.1.2 Capacitation of treatment model
	3.1.3 Protocols and standards for screening and treatment in prisons and provision of training to prison doctors
Output 3.2 Enhanced strategic governance of programmes	3.2.1 Use of provincial AIDS strategy to develop targets and budgets for domestically funded AIDS control programme
	3.2.2 Expertise-based oversight committees established to monitor progress towards achieving strategy targets

	3.2.3 Establishment of intersectoral/interdepartmental coordination mechanisms to advocate for adequate programme support
Output 3.3 Strengthened programme management	3.3.1 Management audit of provincial AIDS programmes to identify capacity building needs around results-based management and procurement management
	3.3.2 Reconfiguration of reporting processes to ensure that data essential for effective provincial AIDS programme management is systematically available
Output 3.4 Critical stigma and discrimination issues addressed	3.4.1 Targeted sensitivity trainings where service access and programme effectiveness are being directly impacted
	3.4.2 Nationally-led communication and advocacy programme
Output 3.5 Institutionalised surveillance with more accurate key and vulnerable population data to facilitate precision targeting	3.5.1 A new round of IBBS with quality issues of previous round properly addressed
	3.5.2 Qualitative (pre-IBBS) field-assessments conducted of migrants, truckers, refugees, mine-workers and Non-SW MSM
	3.5.3 Independent PWID programme saturation surveys in select cities
Output 3.6 Integration of HIV M&E systems	3.6.1 National and Provincial MIS reorganized to capture and report critical information for timely decision making
Output 3.7 Increased sustainability of the response.	Output Strategy 3.7.1 Strengthened coordination systems between national and provincial levels
	Output Strategy 3.7.2 Improved mobilisation and absorption of the domestic resource allocation
	3.7.3 HIV services integrated into the national UHC and social welfare programmes

Annex 2: Priority Cities

2017 strategy revision proposed priority cities for rapid scale up of interventions based on IBBS/AEM analysis. Each KP had its own set of priority cities (prioritisation was based on estimated PLHIV among the KP in each city – the aim was to maximise yield of testing services. Below is an update on how programme presence is aligned with prioritised cities.

PWID			TG		
City	Programme		City	Programme	
	Yes	No		Yes	No
1. Faisalabad	X		1. Faisalabad	X	
2. Lahore	X		2. Lahore	X	
3. Gujranwala	X		3. Gujranwala		X
4. Sialkot	X		4. Okara		X
5. Bahawalpur	X		5. Bahawalpur		X
6. Sargodha	X		6. Sargodha		X
7. Muzaffargarh	X		7. Muzaffargarh		X
8. Mandi Bahauddin	X		8. Mandi Bahauddin		X
9. Mianwali		X	9. Mianwali		X
10. Kasur	X		10. Rahimyar Khan		X
11. Sheikhpura	X		11. Sheikhpura		X
12. Multan	X		12. Multan	X	
13. Jhang	X		13. Rawalpindi	X	
14. Dera Ghazi Khan	X				
15. Rawalpindi	X				
16. Lodhran	X				
17. Okara	X				
18. Toba Tek Singh	X				
19. Khanewal	X				
20. Bahawalnagar*	X				
21. Gujrat*	X				
22. Jehlum*	X				
23. Rahimyar Khan*	X				
24. Sahiwal*	X				
MSM			FSW		
City	Programme		City	Programme	
	Yes	No		Yes	No
1. Lahore	X		1. Lahore	X	
2. Sargodha	X	X	2. Sheikhpura		X
3. Rahim Yar Khan		X	3. Faisalabad		X
4. Rawalpindi		X	4. Multan		X
5. Kasur		X			
6. Multan	X				
7. Muzaffargarh		X			
8. Sheikhpura		X			
9. Mandi Bahauddin		X			
10. Okara		X			
11. Faisalabad		X			
12. Bahawalpur		X			

* These cities were not in original (2017) priority city list but were added later (2018), for PWID prevention programme scale-up through GFATM's portfolio optimization funds.

Annex 3: Strategy Targets

Strategy Targets

	Punjab							Punjab					
	2019 baseline	2021	2022	2023	2024	2025		2019 baseline	2021	2022	2023	2024	2025
Prevention FSW	4%	22%	39%	56%	73%	90%	Prevention FSW	4,758	26,775	48,484	71,090	94,601	119,021
Testing FSW	2%	13%	27%	45%	62%	81%	Testing FSW	2,354	16,065	33,939	56,872	80,411	107,119
Prevention PWID	41%	51%	61%	70%	80%	90%	Prevention PWID	21,903	28,140	34,307	40,718	47,377	54,285
Testing PWID	19%	28%	39%	53%	68%	81%	Testing PWID	9,877	15,477	22,300	30,539	40,271	48,857
Prevention MSM (High-Risk Non-SW)	9%	22%	39%	56%	73%	90%	Prevention MSM (High-Risk Non-SW)	9,404	24,738	44,819	65,749	87,539	110,197
Testing MSM (High-Risk Non-SW)	6%	15%	29%	45%	62%	81%	Testing MSM (High-Risk Non-SW)	6,214	17,316	33,614	52,599	74,408	99,178
Prevention MSW	16%	29%	44%	60%	75%	90%	Prevention MSW	6,269	12,139	18,863	25,868	33,156	40,731
Testing MSW	10%	20%	33%	48%	64%	81%	Testing MSW	4,143	8,497	14,147	20,694	28,183	36,658
Prevention TG	30%	39%	46%	61%	75%	90%	Prevention TG	9,578	13,215	15,999	21,511	27,246	33,206
Testing TG	16%	23%	32%	49%	64%	81%	Testing TG	5,056	7,929	11,199	17,209	23,159	29,885
Treatment (Adults)	12%	27%	40%	54%	67%	81%	Treatment (Adults)	10,524	30,726	53,461	82,379	118,522	162,749
Treatment (Children)	15%	28%	41%	55%	68%	81%	Treatment (Children)	466	981	1,556	2,237	2,955	3,751
Treatment (PPTCT)	14%	30%	47%	63%	79%	81%	Treatment (PPTCT)	265	833	1,468	2,169	2,994	3,366

Population Size Estimates (Denominators for Strategy Targets)

Population	Punjab					
	2019	2021	2022	2023	2024	2025
FSW	116,420	121,703	124,319	126,947	129,591	132,246
PWID	52,924	55,393	56,612	57,838	59,074	60,317
MSM (non-SW)	306,944	321,267	328,343	335,455	342,620	349,833
MSM (High-Risk non-SW)	107,430	112,444	114,920	117,409	119,917	122,441
MSW	39,721	41,571	42,484	43,402	44,327	45,257
TG	32,373	33,884	34,630	35,380	36,135	36,896
KP PLHIV	42,654	62,014	75,240	90,598	107,934	126,947
PLHIV - KP Intimate Partners/Clients	46,371	53,499	57,748	62,523	67,915	73,978
Total Adult PLHIV	89,025	115,513	132,988	153,121	175,849	200,925
Children PLHIV	3,085	3,502	3,795	4,068	4,346	4,631
Mothers needing PPTCT	1,855	2,778	3,124	3,444	3,790	4,156

Notes

- Prevention and treatment targets were developed using AEM modelling with support from the UNAIDS Regional Support Team for Asia and the Pacific
- Targets (and the intervention scenarios on which they are based) were agreed at provincial
- Testing targets for each KP have been set in relation to the programmatic baseline % of those who receive prevention who get tested. The proportions are then progressed to 90% (of those reached with prevention) by 2025.
- PLHIV PSEs are based on Spectrum modelling
- KP PSEs are based on AEM modelling; the original source data is from IBBS Round V, 2017
- MSM (Non-SW) is not used as a denominator in the strategies; it is the PSE from which MSM (High-Risk Non-SW) is derived. The modellers have calculated MSM (High-Risk Non-SW) as 35% of MSM (non-SW)

Annex 4: Baseline Data

Punjab	KP	PSE	Prevention Coverage	Testing Coverage	PLHIV PSE	Prevalence	ART Coverage			
	PWID	52,924	21,903	41%	9,877	19%	19,133	36%	4,760	25%
	MSM (non-SW)	306,944	9,404	3%	6,214	2%	15,185	5%	160	1%
	MSM (higher risk non-SW)	107,430	9,404	9%	6,214	6%				
	MSW	39,721	6,269	16%	4,143	10%	5,486	14%	106	2%
	FSW	116,420	4,758	4%	2,354	2%	749	1%	45	6%
	TG	32,373	9,578	30%	5,056	16%	2,101	6%	174	8%
	Total Adult PLHIV						89,025		10,524	12%
	Children PLHIV						3,085		466	15%
	Total PLHIV						92,110		10,990	12%
	Mothers Needing PPTCT						1,855		265	14%

Notes

- All PLHIV PSEs based on Spectrum data
- All KP PSEs based on AEM data
- ART coverage data from NACP
- Prevention programme coverage data from NACP and Nai Zindagi
- Current treatment and prevention programmes do not bifurcate MSM data between non-SW MSM and MSW. Bifurcation has been done on a 60/40 allocation based on rough estimates from programme implementers. Considering the programme's historical challenge with reaching non-SW MSM there may be an overestimate of the numbers of non-SW MSM reached with a proportionate underestimate of the numbers of MSW reached
- KP PLHIV treatment coverage data is dependent on PLHIV revealing their KP status. Considering stigma and discrimination there is likely to be an underestimate of coverage of KPs whose identity is not apparent from appearance
- The AEM and Spectrum models have different methods for modelling disease progression and mortality rates. They, therefore, produce different PLHIV PSEs. The Spectrum estimates were used because their scientific methods represent the global standard. This has necessitated some proportional adjustment to the KP PLHIV PSE figures to ensure that the totals are aligned
- “MSM (High-Risk non-SW)” is a new construct being introduced in the strategy. It is based on the assumption that risk behaviours (type and frequency) are not evenly distributed across the entire population of non-SW MSM. Programmes need to target sub-groups engaged in higher risk behaviours. Non-SW MSM prevention targets for the strategy have been set with High-Risk MSM as the denominator. It has been assumed by the modellers that 35% of non-SW MSM are high-risk MSM. To derive a baseline for this sub-group of non-SW MSM it has been assumed that all non-SW MSM reached in 2019 were high-risk. The baseline highlighted in dark blue in the table is, therefore, the same coverage referenced in the line above it and is not included in the total KP coverage sum.
- Mothers needing PPTCT are not an additional group of PLHIV; they are subsets of KP PLHIV and non-KP PLHIV
- The strategy has separate treatment targets for Adults and children, so a baseline has been included for adult PLHIV treatment. Adults = Total PLHIV - Children PLHIV

Meetings and Consultations

The following meetings were held in support of the strategy development process.

Date	Type	Location	Participants
Mar 3, 2020	National community consultation	Islamabad	APCASO, UNAIDS, Key Populations
Mar 4 - 6, 2020	AEM workshop	Islamabad	UNAIDS, Implementers, KP CBOs, NACP, PACP*
Mar 5, 2020	TWG meeting	Islamabad	TWG members
Mar 8, 2020	KP community consultation	Balochistan	KPs, UNAIDS, BACP**
Mar 9 - 13, 2020	Meetings and consultations	Karachi	Multiple stakeholders (Sindh and Balochistan)
Mar 11, 2020	KP community consultation	Karachi	KPs (Sindh and Balochistan) UNAIDS, SACP***
Mar 12, 2020	Provincial stakeholders' consultation	Karachi	Multiple stakeholders (Sindh and Balochistan)
Mar 16 - 20, 2020	Meetings and consultations	Lahore	Multiple stakeholders
Mar 18, 2020	Provincial stakeholders' consultation	Lahore	Multiple stakeholders (Punjab)
Mar 19, 2020	KP Community consultation	Lahore	KPs (Punjab and Khyber Pakhtunkhwa) UNAIDS, PACP
Mar 30, 2020	Provincial stakeholders' consultation	Khyber Pakhtunkhwa (virtual)	Multiple stakeholders
Apr 13, 2020	Target setting consultation	Sindh and Punjab (virtual)	SACP, PACP, NACP, UNAIDS
Apr 17, 2020	Target setting consultation	Khyber Pakhtunkhwa (virtual)	Khyber Pakhtunkhwa AIDS Control Programme, NACP, UNAIDS
Apr 21, 2020	Small working group meeting on targets and scenarios	Virtual	UNAIDS, NACP
Apr 22, 2020	Target setting consultation	Balochistan (virtual)	BACP, NACP, UNAIDS
May 7, 2020	TWG meeting; progress update	Islamabad (Virtual)	Multiple stakeholders
Jun 16, 2020	Draft Punjab AIDS Strategy 2021-25 review meeting	Islamabad (virtual)	PACP, NACP, UNAIDS

Jun 17, 2020	Separate Draft Khyber Pakhtunkhwa AIDS Strategy 2021-25 and Sindh AIDS Strategy 2021-25 review meetings	Islamabad (virtual)	SACP, Khyber Pakhtunkhwa AIDS Control Programme, NACP, UNAIDS
June 18, 2020	Draft PAS IV (2012-25) review meeting	Islamabad (virtual)	NACP, UNAIDS, provincial programmes

*PACP = Punjab AIDS Control Programme

**BACP = Balochistan AIDS Control Programme

***SACP = Sindh AIDS Control Programme