



PIMART – An Innovative Solution for Enhancing HIV Healthcare and Supporting National HIV Initiatives in South Africa

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Abstract

Pharmacist-Initiated Management of Antiretroviral Therapy (PIMART), if implemented, could be a beneficial and complimentary strategy to expand HIV care in South Africa. This is especially so in underserved communities. With the comprehensive PIMART curriculum and training, along with policy support from regulators, pharmacists can enhance access to PEP, PrEP, and first-line ARVs. The objectives of PIMART also align with South Africa's National Strategic Plan (NSP) 2023–2028 for HIV, Tuberculosis (TB), and Sexually Transmitted Infections (STIs). Both programmes support decentralised, integrated, and equitable care. Resolving the legal case between the Independent Practitioners Association Foundation (IPAF) and the South African Pharmacy Council (SAPC), strengthening regulatory support, and leveraging digital tools to scale up PIMART, are key factors to ensure full implementation. Key implementation strategies like policy reforms, continuous pharmacist training, digital health integration, community engagement, financial support, and strong monitoring systems, are necessary to ensure the rollout of PIMART is maximised. This will support service delivery and improve clinical effectiveness. A coordinated, multisectoral approach will enable pharmacists to contribute even further to South Africa's HIV response and the achievement of the UNAIDS 95-95-95 targets.

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Introduction

PIMART is a transformative approach to expanding Human Immunodeficiency Virus (HIV) healthcare access, particularly in resource-limited settings. PIMART-trained pharmacists can contribute and play a crucial role in bridging the gap in HIV healthcare access. With their training, and policy support from stakeholders, pharmacists can significantly enhance access to key medications for Post Exposure Prophylaxis (PEP), Pre Exposure Prophylaxis (PrEP), and first-line (Anti-Retroviral) ARVs. This document outlines the strategies for expanding PIMART services in communities, including additional services like virtual consultations, and the use of digital tools. The collaborative efforts of PIMART and the National Strategic Plan (NSP) 2023–2028 for HIV, Tuberculosis (TB), and Sexually Transmitted Infections (STIs), which share similar objectives, could contribute significantly to South Africa reaching the UNAIDS target of 95-95-95. Furthermore, it is proposed that by implementing PIMART, there are potential direct and indirect benefits in the fight against HIV, like increased diagnosis and early ART initiation, and reduced state facility healthcare congestion.¹¹

About PIMART

PIMART is an expanded scope of practice for pharmacists in South Africa, approved by the South African Pharmacy Council (SAPC). The course was designed as such that PIMART trained pharmacists, who have completed the required supplementary training, and registered with the South African Department of Health, may start PrEP, PEP and first line ART, as well as the initiation of Tuberculosis Preventative

Therapy (TPT). Upon successful completion of the PIMART course, the Director General (DG) of Health would issue a Section 22A (15) permit, which would then be recorded with the SAPC, allowing PIMART trained pharmacist to practice. A primary qualifying criterion for the treatment of HIV with first line ART is that PIMART trained pharmacists may only treat uncomplicated non-immunocompromised HIV positive people, 15 years and older. This is to ensure that PIMART trained pharmacists operate within their scope of practice.

However, a recent court battle between a group of private medical doctors (IPAF) and the SAPC, has put the implementation of PIMART on hold.^{1,2,3}

Some HIV statistics from the Western Cape Department of Health

Regions of South Africa face unique challenges in delivering effective HIV services. At the end of March 2023, it was estimated that approximately 531 021 people in the Western Cape are living with HIV, with around 500 263 knowing their HIV status (94%) and approximately 340 058 (68%) currently on treatment according to the Western Cape Department of Health's (WCDOH) Provincial Implementation (PIP) plan for HIV, TB and STI's for the NSP 2023 – 2028.

For 2024, the Western Cape, with a population of 7,4 million had just over 500,000 people living with HIV (PLHIV), and just over 54,000 diagnosed with Tuberculosis (TB). The 95-95-95 cascade as at 2024 was 73.4% on ART and 89% virally suppressed. This means that the Western

Cape has achieved the first target, with 95% of PLHIV aware of their status. However, only 73.4% of those diagnosed are on ART, falling short of the second target. Among those on ART, 89% have achieved viral suppression, which is close to the third target. The data shows that the province has made notable progress in awareness and viral suppression. However, there is a need to enhance linkage to care and retention in treatment to achieve the 95-95-95 goals.

While government initiatives are being implemented to enhance the accessibility and efficacy of PEP, PrEP, and first-line ART in South Africa, persistent challenges pertaining to healthcare infrastructure, patient education, and adherence support will need be addressed to improve HIV prevention and treatment outcomes within these communities.¹⁴

PIMART and the National Strategic Plan (NSP) 2023- 2028 for HIV, TB and STIs

The PIMART program and South Africa’s National Strategic Plan (NSP) 2023–2028 for HIV, Tuberculosis (TB), and Sexually Transmitted Infections (STIs), share several key similarities, reflecting a unified approach to combating these epidemics.

The NSP 2023-2028, serves as South Africa’s comprehensive framework to eliminate HIV, TB and STIs, as public health threats by 2030. One of its core objectives is to maximize equitable and equal access to services and solutions for HIV, TB, and STIs. The NSP 2023-2028, and the PIMART initiative, are integrally connected through their objectives to broaden access to HIV treatment and enhance the delivery of healthcare services.

A key goal of the NSP is to break down barriers to achieving solutions for HIV, TB and STIs, with the objective of strengthen community-led responses. The PIMART initiative aligns with this objective by enabling trained pharmacists to initiate and manage ART, including PrEP and PEP in their communities. This approach decentralizes HIV services, making them more accessible, especially in underserved areas.¹²

Some of the key connections between the NSP and PIMART

The NSP 2023-2028 aims to ensure universal access to HIV prevention and treatment services to achieve the UNAIDS 95-95-95 targets. PIMART supports this goal by allowing trained pharmacists to initiate ART for eligible patients.

The NSP 2023-2028 underscores the importance of expanding task-shifting and integrating HIV services into primary healthcare to alleviate the burden on other healthcare professionals and clinics. PIMART can contribute to this effort by enabling pharmacists to administer ART, PrEP, and PEP in their pharmacies, thereby decreasing pressure on conventional healthcare facilities.

The NSP 2023-2028 promotes community-based service delivery models to make HIV and TB care more accessible. PIMART can contribute by allowing pharmacies to serve as additional points of care, providing HIV testing and treatment closer to where people live and work.

The NSP 2023-2028 aims to improve early diagnosis and prompt treatment for HIV patients. PIMART can enable pharmacists to start

Aspect	PIMART	NSP 2023-2028
Objective	Expands the role of trained pharmacists to initiate and manage ART, including PrEP and PEP.	Aims to eliminate HIV, TB, and STIs as public health threats by 2030 through comprehensive prevention, treatment, and care strategies.
Equitable Access to Treatment	Decentralises HIV treatment by allowing pharmacists to initiate ART without requiring a doctor’s referral, increasing access in underserved areas.	Seeks to ensure universal and equitable access to prevention, treatment, care, and support for HIV, TB, and STIs.
Task-Shifting & Workforce Efficiency	Reduces the burden on doctors and clinics by enabling pharmacists to provide ART, PrEP, and PEP, addressing healthcare worker shortage concerns.	Promotes task-shifting by allowing non-physician healthcare providers to take on more responsibilities, increasing service delivery.
Community-Based Care	Brings HIV prevention and treatment services closer to communities by allowing pharmacies to serve as access points.	Supports community-led HIV, TB, and STI responses by strengthening decentralised service delivery models.
Early Diagnosis & Prompt Treatment	Pharmacists can diagnose HIV and initiate ART immediately, reducing delays in treatment initiation and improving health outcomes.	Prioritises early diagnosis and immediate treatment initiation to improve health outcomes and prevent disease progression.
Reducing Stigma & Discrimination	Offers a discreet and accessible, environment for HIV services in pharmacies, helping to reduce stigma associated with seeking care in public clinics.	Aims to address stigma and discrimination as barriers to healthcare access, particularly for key populations.
Public-Private Partnerships & Collaboration	Represents an association between the private pharmacy sector and public health initiatives to expand ART coverage and enhance HIV care accessibility.	Encourages multi-sectoral collaboration, including private sector involvement, to strengthen healthcare service delivery.
Alignment with UNAIDS 95-95-95 Targets	Contributes to achieving the 95-95-95 targets by increasing ART access through pharmacies, improving early diagnosis, and ensuring treatment adherence.	Directly aligns with the UNAIDS 95-95-95 strategy by emphasising universal access to HIV prevention, treatment, and support services.
Scalability & Sustainability	Can be expanded nationwide in pharmacies, to improve ART coverage, especially in rural and underserved areas.	Focuses on sustainable HIV, TB, and STI prevention and treatment programs nationally, to ensure long-term impact.
Alignment with National Health Goals	By expanding access to ART and integrating services, PIMART supports South Africa’s national strategy.	Contributes to South Africa’s broader health objectives, which includes eliminating HIV, TB, and STIs as public health threats by 2030.

Figure 1: Comparison between PIMART and NSP

ART without a doctor's referral, speeding up treatment and reducing delays.

The NSP 2023-2028 aims to reduce stigma as a barrier to HIV care. PIMART can provide discreet and accessible HIV services at pharmacies, which may be less intimidating than clinics.

The NSP advocates for multi-sectoral collaboration, which includes the involvement of private healthcare providers. PIMART is in essence a public-private partnership where pharmacists collaborate with government health programs to enhance ART coverage. Both initiatives acknowledge the significance of service integration and collaboration across multiple sectors to tackle the complex factors affecting HIV, TB, and STIs. PIMART integrates HIV treatment into pharmacy-based care, while the NSP 2023-2028, presents a broad, multi-sectoral strategy with stakeholders to eliminate HIV, and TB as public health threats by 2030.

In terms of decentralised care, both PIMART and the NSP 2023-2028 emphasise bringing healthcare services closer to communities. PIMART enables trained pharmacists to initiate and manage ART, thereby decentralising HIV treatment and increasing accessibility, especially in underserved areas. Similarly, the NSP 2023-2028 focuses on community-centred interventions to reduce barriers and enhance access to care and treatment services.¹²

It can therefore be presumed that PIMART and the NSP 2023-2028 are aligned in their goals to decentralise care, optimise human resources, integrate services, promote equity, and achieve national health targets. Their collaborative efforts could be pivotal in advancing South Africa's response to HIV, TB, and STIs.

Expected Outcomes of Expanding PIMART Services in Communities

Expanding PIMART services to all underserved areas improves healthcare access, and would assist by addressing issues such as limited infrastructure, reducing long travel distances for patients, and alleviating health worker shortages. Providing pharmacy-led HIV services, including testing, early ART initiation, and access to PrEP and PEP, ensures timely, decentralised care. The outcomes include increased HIV diagnoses, better treatment adherence, reduced clinic congestion, and enhanced disease detection. Lower HIV transmission rates improve patient outcomes and contribute to a more resilient healthcare system. It is proposed that by implementing the rollout of PIMART, there would be potential direct and indirect benefits.

Expected Direct Outcomes

Increased HIV Diagnosis and Early ART Initiation

Expanding PIMART services will improve access to HIV testing, ensuring that individuals in remote communities receive timely diagnosis. Early identification of HIV-positive individuals will facilitate prompt initiation of antiretroviral therapy (ART), improving health outcomes and reducing disease progression. This can be done through work with community health workers to distribute test kits door-to-door, set up mobile pharmacy units to reach remote areas, and by offering testing

days at local churches and schools to improve access. By expanding the availability of HIV testing, PEP, and PrEP in pharmacies, individuals at risk will have increased access to preventative measures. This will result in a decline in new infections, particularly among key populations such as young adults, pregnant women, and high-risk groups.

Improved Adherence to ART and PrEP, Reducing HIV Transmission Rates

Pharmacist-led interventions can provide continuous support, counselling, and adherence monitoring for patients on ART and pre-exposure prophylaxis (PrEP). This pro-active approach will enhance patient compliance, leading to reduced viral loads and lower transmission rates within communities. This can be done through PIMART-trained pharmacists initiating and dispensing PEP, PrEP, and first-line ART, providing adherence counselling and follow-up services to ensure treatment success. Establishing rapid response PEP centres for sexual assault and occupational exposure cases would also contribute to reducing infection and transmission rates. Although no statistics are available in this regard, further investigation into this proposal would be of benefit to studies.

Increased ART Adherence Due to Pharmacist-Led Support and Counselling

Integrating pharmacists into HIV care improves patient education, dispels misconceptions about ART, and personalises treatment. Pharmacist-led adherence programs reduce treatment interruptions and enhance patient health. Developing telehealth platforms that allow pharmacists to offer virtual support, and counselling could improve ART adherence, PrEP, PEP and STI management. To further strengthen access to pharmacist-led telehealth services, pharmaceutical associations can collaborate with mobile network providers to offer free or subsidised data access for healthcare consultations. This initiative would remove financial barriers to digital healthcare access, ensuring that underserved populations can benefit from remote pharmacist support. Such partnerships could also facilitate the development of mobile applications that integrate medication reminders, educational resources, and direct communication with pharmacists, enhancing patient engagement and long-term adherence.

Expected Indirect Outcomes

Greater Uptake of Self-Testing Kits, Leading to Early Detection of HIV and STIs

Increased awareness and availability of self-testing kits at community pharmacies will encourage individuals to assess for HIV and sexually transmitted infections (STIs) in private settings. Early detection will enable timely medical intervention, reducing the spread of infections.

Reduced Healthcare Facility Congestion Through Decentralised Pharmacy-Led Services

By adding services like HIV testing, ART initiation, and PrEP distribution to pharmacies, the burden on overburdened clinics and hospitals will decrease. This will allow healthcare facilities to focus on critical and complex cases, optimising resource allocation.

Enhanced Digital Healthcare Access, Bridging Gaps in Health Infrastructure

The adoption of digital health tools, including electronic health records and mobile applications, will enhance communication between pharmacists and other healthcare providers. This will enable seamless patient follow-ups, improve remote monitoring, and optimise overall healthcare delivery. Telehealth consultations can be implemented to support individuals unable to visit clinics, while pharmacies can serve as telehealth hubs where patients access virtual doctor consultations and confidential counselling and support for HIV, STIs, PrEP, and ART adherence. Incorporating Digital solutions into PIMART services will allow patients easier access to care

Additionally, accessible online platforms can be developed for self-screening of HIV, TB, STIs, and common mental health conditions, with pharmacists trained to guide patients in using these tools and interpreting results. Integrating referral systems within digital platforms can help connect high-risk individuals to appropriate healthcare services. Moreover, digital solutions such as medication adherence apps and virtual counselling will enhance patient engagement and ensure continuity of care.

Improved Early Detection of STIs, TB, and Pregnancy, Reducing Complications

Pharmacies will serve as key access points for rapid diagnostic tests, enabling the early identification of STIs, TB infections, and pregnancy. Early intervention will lead to better health outcomes, reduced transmission, and improved maternal and child health.

Figures 2 and 3 summarises the expected direct and indirect outcomes of providing PIMART services in communities.

The implementation and enhancement of PIMART services is anticipated to result in significant improvements in healthcare accessibility, a reduction in disease burden, and an overall increase in the quality of life for underserved populations. Integrating PIMART into the healthcare system will allow for enhanced service delivery, reduced pressure on traditional healthcare facilities, and ensure that a greater number of individuals receive timely HIV prevention and treatment services. This will also contribute directly to the objectives of the NSP 2023-2028.^{7,8,9}

Implementation Strategies to increase support for PIMART

Implementing PIMART in South Africa can enhance ART access, particularly in underserved areas. The success of this implementation relies on progressive policy reforms, continuous pharmacist training, digital health integration, community engagement, financial support, and strong monitoring systems. Addressing these key areas could strengthen South Africa’s HIV response and contribute to achieving the UNAIDS 95-95-95 targets. South Africa has a high HIV prevalence rate, with approximately 7.8 million individuals living with HIV in 2023/2024. The following are proposed implementation strategies:

Policy and Regulatory Support

Updating regulations to officially authorise PIMART-trained pharmacists for ART services and establish standard procedures for HIV management as proposed by BN 101 of 2021. This board notice stipulates the scope of practice, competency standards and

Increased HIV Diagnosis and Early ART Initiation	Expanding PIMART services increases HIV testing access in remote areas. Early diagnosis leads to prompt ART initiation, improving health outcomes. Community health workers distribute test kits; mobile pharmacy units reach remote locations. Testing at local churches and schools improves accessibility. Increased access to PEP and PrEP lowers new HIV infections, particularly among key populations.
Improved Adherence to ART and PrEP, Reducing HIV Transmission Rates	Pharmacist-led interventions provide adherence support and monitoring. Lower viral loads lead to reduced HIV transmission. PIMART-trained pharmacists initiate and dispense ART, PrEP and PEP. Rapid response PEP centres can address sexual assault and occupational exposure cases.
Increased ART Adherence Due to Pharmacist-Led Support and Counselling	Pharmacist involvement improves patient education and dispels ART misconceptions. Telehealth platforms enable virtual pharmacist support for ART, PrEP and PEP. Collaborations with mobile networks offer subsidised data access for healthcare consultations. Mobile apps integrate medication reminders, educational resources and direct pharmacist communication.

Figure 2: Expected DIRECT outcomes of PIMART rollout - summary

Greater Uptake of Self-Testing Kits, Leading to Early Detection of HIV and STIs	Increased awareness and availability of self-testing kits promote private HIV and STI assessments. Early detection enables timely medical intervention and reduces infection spread.
Reduced Healthcare Facility Congestion Through Decentralised Pharmacy-Led Services	Pharmacy-based HIV testing, ART initiation, and PrEP distribution reduce strain on clinics. Allows hospitals to focus on critical and complex cases.
Enhanced Digital Healthcare Access, Bridging Gaps in Health Infrastructure	Digital tools (electronic health records, mobile apps) improve pharmacist-provider communication. Telehealth consultations support patients unable to visit clinics. Pharmacies serve as telehealth hubs for virtual doctor consultations and counselling. Online platforms enable self-screening for HIV, TB, STIs, and mental health conditions. Digital referral systems connect high-risk individuals to healthcare services.
Improved Early Detection of STIs, TB, and Pregnancy, Reducing Complications	Pharmacies provide rapid diagnostic tests for STI, TB, and pregnancy screening. Early intervention improves health outcomes, reduces transmission, and enhances maternal-child health.

Figure 3: Expected INDIRECT outcomes of PIMART rollout - summary

Strategy	Details
1. Policy and Regulatory Support	Update regulations to authorise PIMART-trained pharmacists for ART services. Implement BN 101 of 2021, outlining scope, competency standards, and accreditation criteria.
2. Capacity Building and Training	Pharmacists need to include self-testing, ART initiation, and virtual care. Provide ongoing training on updated ART/STI protocols (PHC STG & EML). Develop digital systems for data recording and integration. Use mobile health apps, telemedicine, and e-prescription tools for better patient management.
3. Provide Digital Support	Advanced digital systems, mobile health apps, telemedicine services, and electronic prescription tools can enhance pharmacist data sharing, patient follow-ups, adherence monitoring, and ART dispensing efficiency.
4. Supply Chain Management	Strengthen ART procurement and distribution to avoid stockouts. Use demand forecasting tools to predict medication needs in pharmacies.
5. Community Engagement and Awareness	Promote pharmacy-led HIV services through public campaigns and media outreach (e.g., SMS, radio). Involve community leaders and train CHWs to refer patients to PIMART-participating pharmacies.
6. Financial Support	Secure funding from government and international donors by emphasising the alignment of PIMART with South Africa's HIV targets. Establish financial and professional incentives for pharmacists, although formal structures are currently lacking.
7. Monitoring and Evaluation	Implement systems for data tracking, periodic reviews, and assessments of pharmacist performance to measure the impact and effectiveness of PIMART services.

Figure 4: Implementation strategies to increase support for PIMART - summary

the criteria for accreditation of a PIMART course. Although initial approvals were granted, ongoing legal challenges have postponed the implementation of PIMART. The Independent Practitioners Association Foundation (IPAF) appealed a High Court decision in favour of PIMART, emphasising the continuing legal deliberations.¹⁰

Capacity Building, and Training

Capacity building and training are essential to ensure that pharmacists are clinically competent and confident in initiating and managing antiretroviral therapy. Training improves the quality and safety of care, promotes consistent service delivery. Whilst the curriculum is comprehensive, tools such as self-testing, virtual care, and ongoing training on updated ART and STI management protocols based on the PHC STG and EML will be beneficial for implementation.¹³

Provide digital support

Develop newer and advanced digital systems that allow pharmacists to record patient data and share it with government health, and other third-party role players' information systems. Use existing mobile apps and implement new mobile health apps and support for telemedicine services will further enhance implementation strategies. These services could also assist in patient follow-ups and adherence monitoring. Another useful tool can be to use electronic prescription systems to track ART dispensing and prevent duplication or misuse.

Supply Chain Management

To support supply chain management, strengthening ART procurement and distribution systems to prevent stockouts, and implementing demand forecasting tools will assist in predicting ART medication needs in pharmacies. Precise forecasting of ART medication demand is necessary for ensuring sufficient stock levels and preventing shortages or wastage. This includes creating reliable supply chains to community pharmacies, improving communication with central stock systems, and maintaining consistent, timely transportation methods.

Community Engagement and Awareness

Promote pharmacy-led services through public campaigns, involve community leaders, and use SMS/radio outreach to educate outlying populations. Train Community Health Workers (CHWs) to refer patients to PIMART pharmacies.

Financial support

Securing funding from government and international donors is vital for sustaining PIMART services. PIMART will align with South Africa's commitment to global HIV targets and can potentially attract international support. Providing financial and professional incentives can encourage pharmacist participation in PIMART, though specific incentive structures do not yet exist.

Monitoring and Evaluation

Implement data tracking, periodic reviews, and pharmacist performance assessments to ensure the effectiveness of PIMART services.¹⁰

Conclusion

The implementation of PIMART services, provides a new approach that will significantly enhance access to HIV prevention, diagnosis, and treatment. By allowing PIMART-trained pharmacists to contribute, we can develop a more inclusive, efficient, and patient-centred healthcare system within our resource-constrained health landscape. It aligns with South Africa's National Strategic Plan (2023–2028) and the UNAIDS 95-95-95 goals, suggesting it could serve as a model for decentralised healthcare. Stakeholders, including government health departments, regulatory bodies, pharmaceutical associations, and community organisations, should collaborate to implement and scale up PIMART services nationwide. A co-ordinated effort will ensure that all populations receive the life-saving care they require and contribute to the fight against HIV, TB and STIs.

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