

HIV NURSING MATTERS



A publication of the Southern African HIV Clinicians Society

UPDATED
2022 Paediatric
Dosing Chart
inside!

Focus on addressing inequalities and ending AIDS

New, improved HIV treatment: Now you can switch from TEE to TLD, even with a high viral load

Implementing differentiated drug delivery methods to improve access to chronic medicines in Primary Health Care clinics

POP INN: A key population led safe space for men-who-have-sex-with-men (MSM) and the trans-community

Gender-affirming healthcare (GAHC): Key terms

PAVE: Paving the way to remission and cure

New methods of screening and testing for tuberculosis in South Africa

Free healthcare services in South Africa: A case for all mothers and children

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HIV Nursing Matters focuses on addressing inequalities and ending AIDS



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We are excited to present another edition of *HIV Nursing Matters*. This edition comes as we celebrate World AIDS Day (WAD) 2022. This WAD, 1 December 2022, UNAIDS is urging each of us to address the inequalities which are holding back progress in ending AIDS.

The "Equalize" slogan is a call to action. It is a prompt for all of us to implement the proven practical actions needed to address inequalities and help end AIDS. These include:

- Increase availability, quality and suitability of services, for HIV treatment, testing and prevention, so that everyone is well-served.
- Reform laws, policies and practices to tackle the stigma and exclusion faced by people living with HIV and by key and marginalised populations, so that everyone is shown respect and is welcomed.
- Ensure the sharing of technology to

enable equal access to the best HIV science, between communities and between the Global South and North.

- Communities will be able to make use of and adapt the "Equalize" message to highlight the particular inequalities they face and to press for the actions needed to address them.

This edition of *HIV Nursing Matters* provides some interesting insight into various issues including the TLD switch update, the Differentiated Model of Care (DMOC), POP INN clinics (key population led safe spaces for men-who-have-sex-with-men (MSM) and the trans-community, healthcare workers' current understanding around key HIV CURE concepts and the free healthcare services in South Africa. In some way, all these articles talk to addressing inequalities and ending AIDS.

South Africa has been relentlessly committed in its mission to turn the HIV, AIDS, and TB epidemics around and there



are notable achievements to celebrate.

There have been many scientific advances in HIV treatment. The article on TLD switching highlights the NADIA trial which suggests that we can now switch from TEE to TLD, even with an unsuppressed viral load.

South Africa has adopted and contextualised the Differentiated Model of Care (DMOC). DMOC simplifies and adapts HIV services across the cascade of HIV care to reflect the preferences and expectations of various groups of people living with HIV (PLHIV) while reducing unnecessary burdens on the health system. Noting the importance of DMOC, Rofhiwa Mulibana shares with us the implementation of differentiated drug delivery methods to improve access to chronic medicines in public Primary Health Care clinics.

The POP INN article enlightens us on the specialised and comprehensive

sexual, psychosocial, and physical health services provided to MSM and transgender women (TGW) across South Africa. Aurum`s POP INN project was founded to bring sexual health services to key populations who often face stigma and discrimination at general health facilities.

The Southern African HIV Clinician`s Society (SAHCS) is working with the Pediatric Adolescent Virus Elimination (PAVE) Collaboratory to check if health care workers are able to translate key HIV CURE concepts to patients, and their parents and/or guardians. In this edition, you will find an article on the baseline data collected by SAHCS to gain insight into healthcare workers` understanding around key HIV CURE concepts.

Last but not least, Mbali Baduza, legal researcher in the Health Rights Programme at SECTION27, presents to us migrant health rights and the challenges facing the public healthcare

system and the need for free healthcare services for for all mothers and children.

SAHCS is also very excited to share that membership in 2023 will be free! Another way SAHCS is committed to ensuring that all healthcare workers have equal access to their quality capacity-building materials as a move towards ending AIDS.

Enjoy reading all about these in this December 2022 edition of HIV Nursing Matters!



New, improved HIV treatment: Now you can switch from TEE to TLD, even with a high viral load

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Exciting new evidence has changed the way we manage our HIV positive patients

In HIV medicine, we know that if you treat a patient with only 1 anti-retroviral (ARV) (monotherapy), they will soon develop HIV resistance,^{1,2} so it is much better to

give 3 ARVs together (triple therapy). However, resistance can still develop if the patient does not take their ARVs regularly as prescribed. When resistance develops, they develop a high viral load (VL) and we say they have “treatment failure”. When a patient develops treatment failure, we used to teach that you should

never change only one drug in a failing regimen,³ as it would be the equivalent of monotherapy (only one active ARV and 2 resistant ARVs). We were taught to always change at least two drugs when changing an ARV regimen, so that at least 2 fully active (non-resistant) ARVs remain in the regimen.

For example, 2019 ART guidelines recommended the following for patients with treatment failure:

tenofovir + emtricitabine* + efavirenz (TEE) → zidovudine + lamivudine* + dolutegravir (ZLD)
(resistant) (resistant) (resistant) (active) (resistant) (active)

*Emtricitabine and lamivudine have the same resistance profile, so if one develops resistance, so does the other.

However, recent studies are teaching us that this is not always necessary.

EARNEST trial

The EARNEST trial⁴ was published 8 years ago, and showed that patients who were failing a regimen consisting of two nucleoside reverse transcriptase inhibitors (NRTIs) and a non-nucleoside reverse transcriptase inhibitor (NNRTI), who were changed to a protease inhibitor (PI) - lopinavir/ritonavir (LPV/r) as well as two resistant NRTIs - did as well virologically as patients who were changed to a regimen consisting of two fully active drugs - LPV/r and raltegravir.

For example, this allows us to switch from:

tenofovir + emtricitabine + efavirenz (TEE) ➔ tenofovir + lamivudine + lopinavir/ritonavir
 (resistant) (resistant) (resistant) (resistant) (resistant) (active)

Instead of

tenofovir + emtricitabine + efavirenz (TEE) ➔ zidovudine + lamivudine + lopinavir/ritonavir
 (resistant) (resistant) (resistant) (active) (resistant) (active)

We have been relying on the EARNEST trial for many years now, when using PI-based regimens, with good results.

Dolutegravir

In 2019, we started switching patients to dolutegravir (DTG) because it is very effective, has few side effects and drug interactions, comes in a fixed dose combination (TLD) which can be taken once daily, and has a high genetic barrier to resistance.⁵

High genetic barrier to resistance means that it is very difficult for HIV to develop resistance to that particular ARV (e.g. DTG and LPV/r).

Low genetic barrier to resistance means that HIV can very quickly and easily develop resistance to that particular ARV (e.g. ABC, 3TC and EFV).

While DTG has a similarly high genetic barrier to resistance as LPV/r, we did not know if it would work the same as LPV/r did in the EARNEST trial. To play it safe, the 2019 and 2020 National and SAHCS ART Guidelines recommended that one could only switch TEE to TLD if there was viral suppression (VL<50 copies/mL) and, that if a patient was failing TEE, they must rather be switched to 2 fully active ARVs such as ZLD.⁵

However, we now have the results of a new trial called NADIA.

Nucleosides And Darunavir/Dolutegravir In Africa (NADIA) Trial

The NADIA trial⁶ took place in 7 sites in sub-Saharan Africa and included 464 patients with virological failure on a TDF/3TC/NNRTI regimen. There was extensive baseline resistance: 50% had tenofovir resistance and 87% had 3TC resistance.⁶

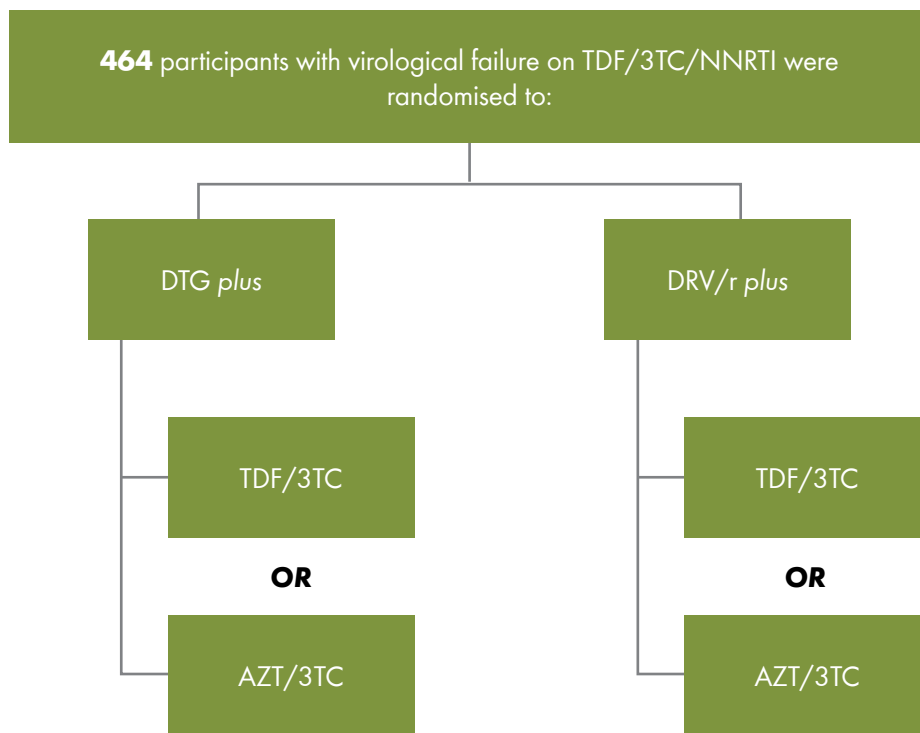
Participants were firstly randomised to receive either DTG or darunavir/ritonavir (DRV/r), and then randomised to either continue with tenofovir/lamivudine (TDF/3TC) or switch to zidovudine/lamivudine (AZT/3TC).⁶ Those who switched to TLD were essentially only changing one drug in a failing regimen (i.e. switching from the NNRTI to DTG and remaining on TDF and 3TC).

The 96-week results showed that DTG was non-inferior to (i.e. as good as) boosted darunavir (DRV/r) and, interestingly, also showed that recycling TDF/3TC was superior to switching to AZT/3TC.⁶ More patients on AZT/3TC had a VL >1000 copies/mL than those on TDF/3TC (14.3 vs 5.6%, $p = 0.0002$).⁶ An important point is that there were nine patients in the DTG arm who developed DTG resistance, whereas no patients developed DRV/r resistance.⁶ This suggests that, although DTG has a high genetic barrier to resistance, it is not as robust as DRV/r. Interestingly, although the numbers were small, there were fewer patients on TLD who developed DTG resistance than those on AZT/3TC/DTG (3 vs 6 cases).⁶

Two other trials (VISEND and ARTIST) produced results in keeping with the NADIA trial.^{7,8}

What does this all mean?

The NADIA trial, supported by the VISEND and ARTIST trials, has changed the way that we look at treatment failure. NADIA tells us that in certain situations we only need to change one drug in a failing regimen (i.e. when failing TEE we can switch to TLD) which is essentially only changing EFV to DTG while keeping both NRTIs the same.



NADIA 96-week results	
DTG non-inferior to DRV/r	
Recycled TDF was superior to AZT	
TDF: 5.6% virological failure	AZT: 14.3% virological failure
TLD	AZT/3TC/DTG
3 with DTG resistance	6 with DTG resistance

It is now safe to make the following switch, even with an unsuppressed VL:

tenofovir + emtricitabine + efavirenz (TEE) ➔ tenofovir + lamivudine + dolutegravir (TLD)
 (resistant) (resistant) (resistant) (resistant) (resistant) (active)

This has major benefits because our current second line regimen after TEE is AZT/3TC/DTG (ZLD)⁵ which is a twice daily regimen consisting of three tablets a day, whereas now we can change to a simple one tablet a day TLD regimen. This is going to make good adherence much easier for our patients and the NADIA study shows us that the virological suppression from TLD will be superior to that of our existing ZLD regimen.

As a result, both the South African National Department of Health (NDoH) and the Southern African HIV Clinicians Society (SAHCS) are in the process of updating their ART guidelines to align with the results of the NADIA trial. However, since guidelines take a few months before they are published and definitive guidelines are published, SAHCS released an interim clinical update to guide clinicians in applying the findings from NADIA.⁹ This clinical update focuses on the less controversial applications of the NADIA trial, leaving the more controversial ones to be discussed by the full guideline committees. This clinical update can be found

on the SAHCS website.⁹ Clinicians in the private sector can already apply these recommendations, whereas clinicians in the public sector should seek guidance from their province as to whether they may apply these interim measures or not.

What about children and adults not on TDF?

While the NADIA trial clearly applies when switching from TEE to TLD (TDF-based regimens), can we say the same for patients on ABC or AZT plus 3TC, EFV? We don't know because none of the three studies looked at these regimens. However, we do know that ABC is very different to TDF. So, until we have more data, we should not apply the principles of the NADIA trial to a patient switching from ABC/3TC/EFV to ABC/3TC/DTG. This is why, in the guidance from the SAHCS,⁹ paediatric patients (less than 10 years old and 30kg) who are failing an ABC/3TC/EFV regimen are not yet eligible for TLD and should rather receive an AZT/3TC/DTG regimen.

NOTE: We do not yet know if NADIA applies to ABC or AZT.

What about patients who are failing a PI regimen?

In the SAHCS clinical update,⁹ adult patients who are suppressed on a PI regimen are advised to switch to TLD but the question of patients failing a PI regimen was deferred to the full Adult ART guideline committee for discussion because there is currently insufficient data to provide clear advice. The full SAHCS Adult ART 2023 update will be published early in 2023 and will include recommendations for this situation. The recommendation both for adults and paediatrics currently is, therefore, to manage the patient as

per the existing guidelines. However, for the individual patient there may be some value in discussing with an expert or contacting the Right to Care HIV Helpline on 082 352 6642.

In summary

The findings from the NADIA trial, as well as the VISEND and ARTIST trials, have shown that we can switch patients on TEE to TLD irrespective of the viral load result.^{6,7,8} Also, adult patients who are suppressed on a PI

regimen can be switched to TLD. This is going to make a major difference in terms of improving viral suppression and adherence, reducing costs, and streamlining our ART programs. We look forward to the updated guidelines incorporating these changes and, in the meantime, clinicians are encouraged to utilise the interim clinical update put forward by SAHCS⁹ while still making sure that those in the public sector align themselves with their provincial programs or call the Right to Care HIV Helpline to discuss individual patients.

Take Home Messages

- Previously it has been taught to never change one ARV in a failing ART regimen but new studies are showing that this may be allowable with certain regimens.
- The NADIA trial showed better virological suppression in patients switched from a failing TDF/3TC/NNRTI regimen to TDF/3TC/DTG, than to AZT/3TC/DTG.
- NDoH and SAHCS Guidelines are currently being updated based on this new data.
- SAHCS has released an interim clinical update recommending the following:
 - Patients on a TDF/3TC/NNRTI regimen can be switched to TLD irrespective of their viral load.
 - Patients who interrupt a TDF/3TC/NNRTI regimen can be restarted on TLD.
 - Adult patients who are virally suppressed on a PI regimen can be switched to TLD.
 - Patients who are failing a PI regimen should follow National Guidelines at this stage.

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Implementing differentiated drug delivery methods to improve access to chronic medicines in Primary Health Care clinics

Rofhiwa Mulibana,

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Introduction

Prior to the introduction of antiretroviral therapy (ART), the HIV/AIDS epidemic had a profound impact on the healthcare system and reversed many prior improvements in health. A wide range of priorities, including primary health care (PHC) re-engineering, non-communicable disease (NCD) prevention and South Africa's method of achieving universal health coverage (UHC) and National Health Insurance (NHI) began to shift health policy towards longer-term strategies and goals. Concerted efforts and a

variety of reforms and initiatives have been implemented by successive administrations, supported by international aid and donors.¹ Millions of lives have been spared and the path of the epidemic has been altered by the development of antiretroviral medication. Since 1996, complex therapy regimens have been available, helping to turn HIV infection into a chronic illness that can be managed. The regimens have been optimised and the adverse effects have decreased thanks to new classes of efficacious antiretrovirals and their combinations, including "once daily" treatment.^{2,3}

During the initial period of rapid scale up of the ART program, HIV care and treatment services were delivered using a "one-size-fits-all" clinic-based strategy that was mostly undifferentiated for individual requirements. To fully implement the test and treat-all strategy, ART dispensing, and delivery modalities must be differentiated for people living with HIV (PLHIV). Differentiated models have arisen as client-centred adaptations of HIV services to better suit the requirements of individual clients and lessen the strain on the healthcare system because there is no one-size-fits-all approach to delivering ART to PLHIV.⁴

Differentiated drug delivery

Globally, there were 38.4 million people living with HIV in 2021 and 28.7 million people were accessing antiretroviral therapy.⁵ South Africa has the largest HIV epidemic globally, with close to 8 million people living with HIV. 5.5 million of those are on ART, which makes up 74% of all PLHIV.⁶ ART has had a significant therapeutic effect and impact, changing the course of the disease and making HIV/AIDS a chronically manageable condition.² The life expectancy of an HIV-positive individual who is initiated on ART as early as possible will be the same as that of an HIV-negative person of the same age. When ART is initiated as soon as possible after HIV infection is diagnosed, rather than waiting until symptoms appear, greater results are achieved. Antiretroviral therapy

both saves lives and prevents HIV-related disease and disability. Since 2003, AIDS-related mortality has decreased 43% worldwide. Another advantage of antiretroviral therapy is prevention. There is now overwhelming evidence that HIV-positive individuals with undetectable viral loads cannot sexually transmit the virus.⁷

As national guidelines have evolved toward initiating ART for all people living with HIV, regardless of their clinical or immunological condition, HIV programs have been challenged to address an increasingly diverse range of patients' requirements. The South African National Department of Health (NDoH) has implemented community-based and clinic-based differentiated care models to reduce the frequency of clinic visits, allow stable patients to receive their ART medication in larger

Patient outcomes are greatly improved when the right medicine is given to the right patient at the right time.

quantities, and make medications more readily accessible where clients live or work in response to the sheer number of people who require HIV treatment.⁴ Differentiated models of service delivery were implemented and scaled up in an effort to transition patients from conventional HIV clinic-based care to more patient-centred methods of providing the medication. The Centralised Chronic Medicines Dispensing and Distribution (CCMDD) programme was developed with the aim to increase patient access to medicines, particularly for patients on chronic medication, and to help decongest public clinics. The CCMDD programme is implemented as an NHI initiative where pharmaceutical services contracting is done to facilitate and improve access to chronic medicines for stable patients.⁸ The program uses a centralised dispensing operation that gets prescriptions from health facilities for stable chronic patients and dispenses a package of medications to each patient, which they can then pick up from a health facility via a fast lane (Facility Pick-up point) or another convenient pick-up point identified in the community (external PuP), including other retail pharmacies, corporate businesses or general practitioners (GPs). The CCMDD programme also afforded an opportunity for Community-Based Organisations (CBOs) such as home-based care organisations, workplace sites for occupational health, churches, and tribal authorities to provide drug delivery services as



contracted external pick-up point service providers. The CCMDD programme has been re-branded to create an amplified awareness of the programme, make it more relatable to a larger audience and ultimately increase the number of patients that access the services. The programme is branded as “DABLAPMEDS” which is a colloquial term for referring to CCMDD as a shortcut to their chronic medication collection.⁹

Patient outcomes are greatly improved when the right medicine is given to the right patient at the right time. However, with the increasing disease burden, a substantial number of patients visiting public health facilities require chronic medicines. This increases the workload in the facilities as these patients require frequent supply of medicines. The process of dispensing medicines can be repetitive and at times practically hard to achieve without errors. The development in technology and advances in artificial intelligence and machine learning has enabled pharmacy processes to be automated without compromising dispensing principles.¹⁰

Right to Care (RTC), through its Subsidiary Right ePharmacy (REP) developed an innovative, strategic solution for the dispensing, distribution and collection of medicines aimed at spearheading disruptive innovation and to enhance differentiated models of pharmaceutical care in South Africa. REP has also contributed to the expansion of PUPs with their latest innovation for using Smart Lockers as CCMDD pick-up points, the Patient Collection Unit (PCU), branded Collect & Go™. There are 86 smart locker sites implemented in 5 provinces. Eleven sites in Ehlanzeni district in Mpumalanga, 40 sites in the City of Johannesburg in Gauteng, 13 sites in Thabo Mofutsanyana district in the Free State, 11 sites in Limpopo and 11 sites in the City of Cape Town in Western Cape. These lockers are COVID-19 friendly in that patients do not have to queue or wait to collect their medicine parcels. Pre-packaged medication is delivered and stored in lockers, opened by the patient using a One-Time Password (OTP). An electronic system sends patients an OTP when their medication

is placed in the locker. When the OTP is punched into the PCU console, the correct locker door containing their prescribed medication opens. Figure 1 provides an example of a Collect and go! site.

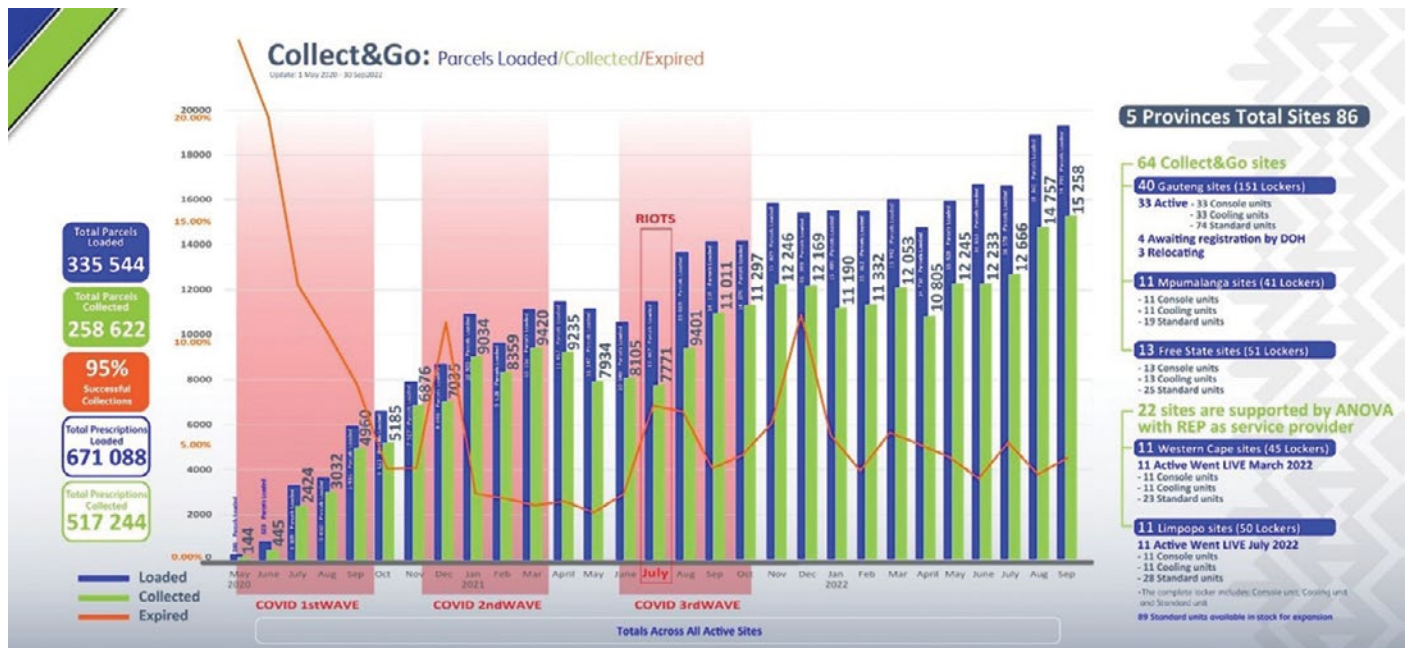
A study conducted in the City of Johannesburg to evaluate adherence outcomes for PCU patients focused on patients’ adherence to their medication regimen and whether adherence outcomes for PCU patients are like those of patients using other external PuP models. The adherence analysis compared factors that inhibit or enhance adherence (such as waiting times and travel costs) with more direct indicators of adherence (missed collections and undetectable VLs). Overall, the results of the survey implied that the PCU performs similarly to Corporate Pharmacy PUPs in terms of adherence. On the other hand, the PCU outperforms the other PUPs. These findings are not surprising given the context of the study, which compared chronic stable patients who are virally suppressed.¹¹

Figure 1: PCU - Right ePharmacy’s Smart Locker, Collect&go!



The adherence analysis compared factors that inhibit or enhance adherence (such as waiting times and travel costs) with more direct indicators of adherence (missed collections and undetectable VLs).

Figure 2 indicates REPs smart lockers contribution to the CCMDD programme. There are 86 sites in 5 provinces. This model has achieved 95% collection rates, which shows that it is a convenient PuP model.



Conclusion

The CCMDD programme provides a paradigm shift to differentiated service delivery. Some of the benefits includes improved access to chronic medicines, improved service delivery and patient experience. The CCMDD programme also provides a case for a business model for private sector involvement in the provision of health care services in the public sector.

The development and monitoring of Standard Operating Procedures (SOPs), alignment of SOPs with Standard Treatment Guidelines (STGs), policies, and applicable legislation, strengthened clinical governance, improved record keeping, and data management through an electronic system (SyNCH) that enables automated reporting are just a few of the factors that have contributed to the programme’s success. With the adoption of CCMDD, several of the obstacles that

prevented patients from getting chronic medications, such as lengthy waiting periods, rigid policies, and inflexible services, have been removed.

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POP INN: A key population led safe space for men-who-have-sex-with-men (MSM) and the trans-community

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Background

The Aurum Institute

The Aurum Institute is an African Public Benefit Organisation that was established in 1998. Its mission is to improve the health of people and communities through innovation in global health research, systems strengthening, and service delivery specifically in the fields of HIV and TB.¹ Men-who-have-sex-with-men (MSM) and transgender women (TGW) are a

key population at increased risk of HIV infection.² The HIV prevalence rates of MSM and TGW in South Africa range from 13-43%.³⁻⁵ To support key population groups, programmes such as Project Boithato, OUT Wellbeing, TB HIV Care, and Chapter Two have been started in South Africa. These programmes use peer-led clinic and outreach-based approaches to provide key populations with comprehensive healthcare. The Aurum Institute, supported by CDC-SA, implemented

a comprehensive HIV prevention and treatment programme since 2017, across five districts namely Ehlanzeni, eThekweni, uMgungundlovu, Tshwane, and Ekurhuleni dedicated to key populations named POP INN clinics.⁶

POP INN Clinics

Aurum's POP INN clinics were launched in October 2019. They offer specialised and comprehensive sexual, psychosocial, and physical health services to MSM and TGW

across the five districts mentioned above. The mission of the POP INN programme is ‘To impact Global Health through Innovation, Evidence, Implementation, and Integration’.⁶ This is achieved through the provision of a safe space for clients to receive specialised services including HIV self-screening, recency testing, and participation in Mpowerment groups. Mpowerment groups are the cornerstone of the programme. These are peer-led meetings of 8-10 MSM and trans-community members where participants talk about their general and health related experiences and challenges within safe spaces.⁷ Mpowerment groups comprise MSM and TGW community members who link clinic activities to their respective communities and create awareness about various services offered at the clinics. Furthermore, MSM and TGW are provided with mental health support services and hormonal therapy for the TGW. POP INN clinics are unique as they are operated and managed by key population community members, creating a more welcoming environment for these clients to access healthcare services.

POP INN service delivery model – a one stop shop

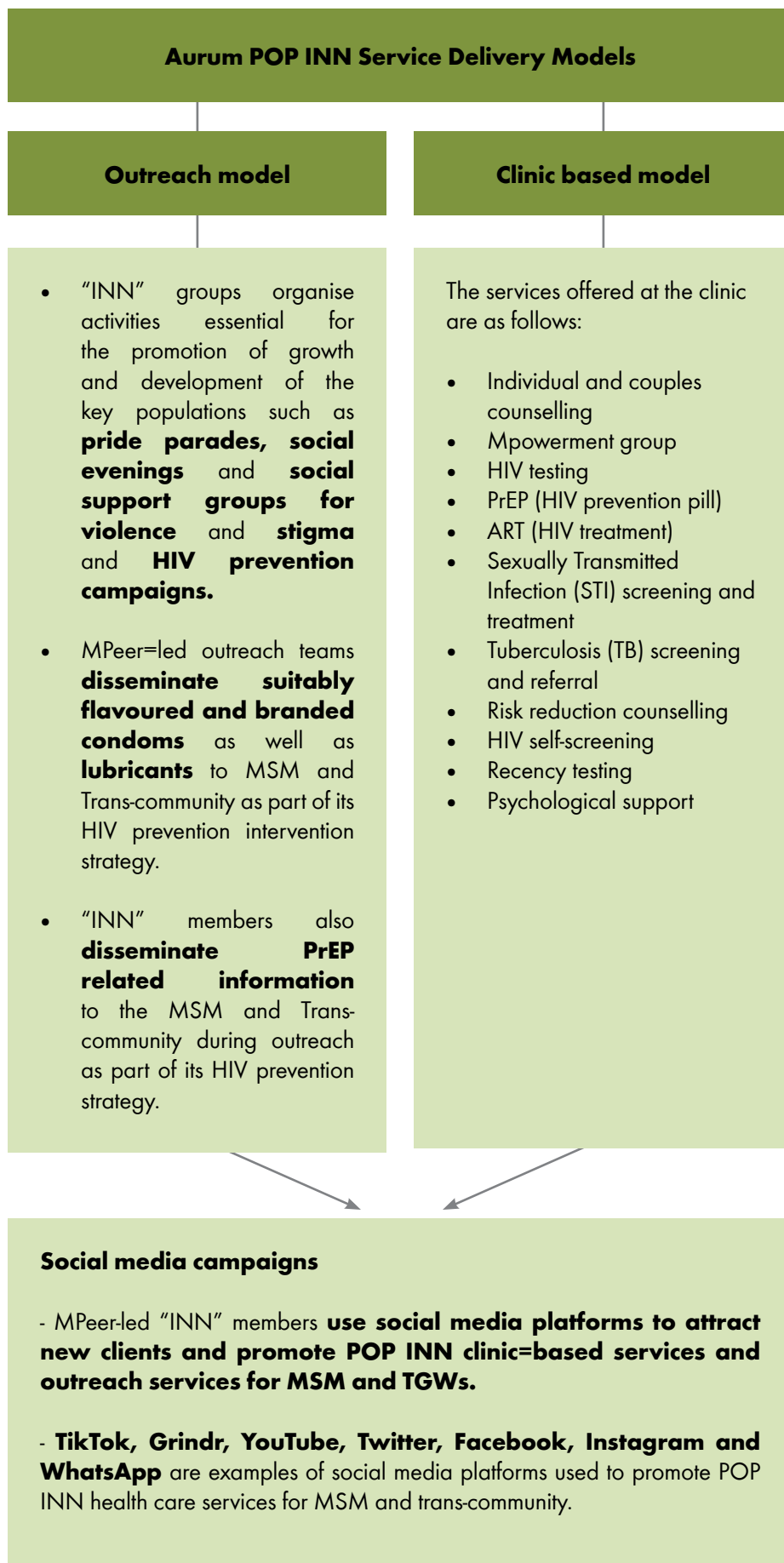
POP INN clinics use a peer-led service delivery model to provide services which is illustrated in Figure 1 adjacent. They cover HIV management and care, STI and TB screening, psychosocial support, hormonal therapy, and peer led groups (core and Mgroups).

This model allows clients to access a range of services and has expanded since POP INN was established. Five innovations are detailed below.

Risk reduction, HIV prevention and comprehensive universal healthcare innovations

POP INN clinics comprise various innovations implemented across the five sites to render a multi-pronged approach that simultaneously

Figure 1: POP INN clinics service delivery model



addresses risk, prevention, and comprehensive healthcare.

Event driven PrEP (ED-PrEP)

Aurum POP INN clinics launched ED-PrEP across South Africa as an additional or alternative option to daily PrEP in April 2022. The inclusion of the ED PrEP regimen is novel and a first for South Africa. With the success of daily PrEP at the POP INN clinics with 10 350 users, ED-PrEP is a game changing drug regimen for men who have infrequent and planned sexual encounters. There are currently 946 ED PrEP users across the POP INN clinics.

ED-PrEP is highly effective when taken as prescribed and reduces the risk of contracting HIV.^{8,9} ED-PrEP only protects against HIV, so condom use is still important for the protection against other Sexually Transmitted Infections (STIs). ED-PrEP presents a novel solution to MSM and TGW not on hormones for HIV prevention. It enables the clients to take PrEP on demand based on high-risk sex acts and fluctuating risk profiles.

ePharmacy

Another innovation that has been adopted at the POP INN clinics is ePharmacy since April 2022. This model is designed to mitigate challenges related to dispensing, distribution, and collection of medicines by using online services and platforms, combined with a courier system. This model also aims to increase access and reduce barriers related to privacy, confidentiality, access, and continuity of care. This is especially important for HIV prevention and treatment where these factors affect adherence to treatment regimens. There are 203 clients across the five clinics that are using ePharmacy services. Most of these clients are in eThekweni. This model promises insight into access and adherence to medication that will be evaluated by the program as the initiative expands.

Future plans across the clinics include the expansion of ePharmacy. This will be through a partnership with Audere, a Seattle-based digital health non-profit that develops software to improve

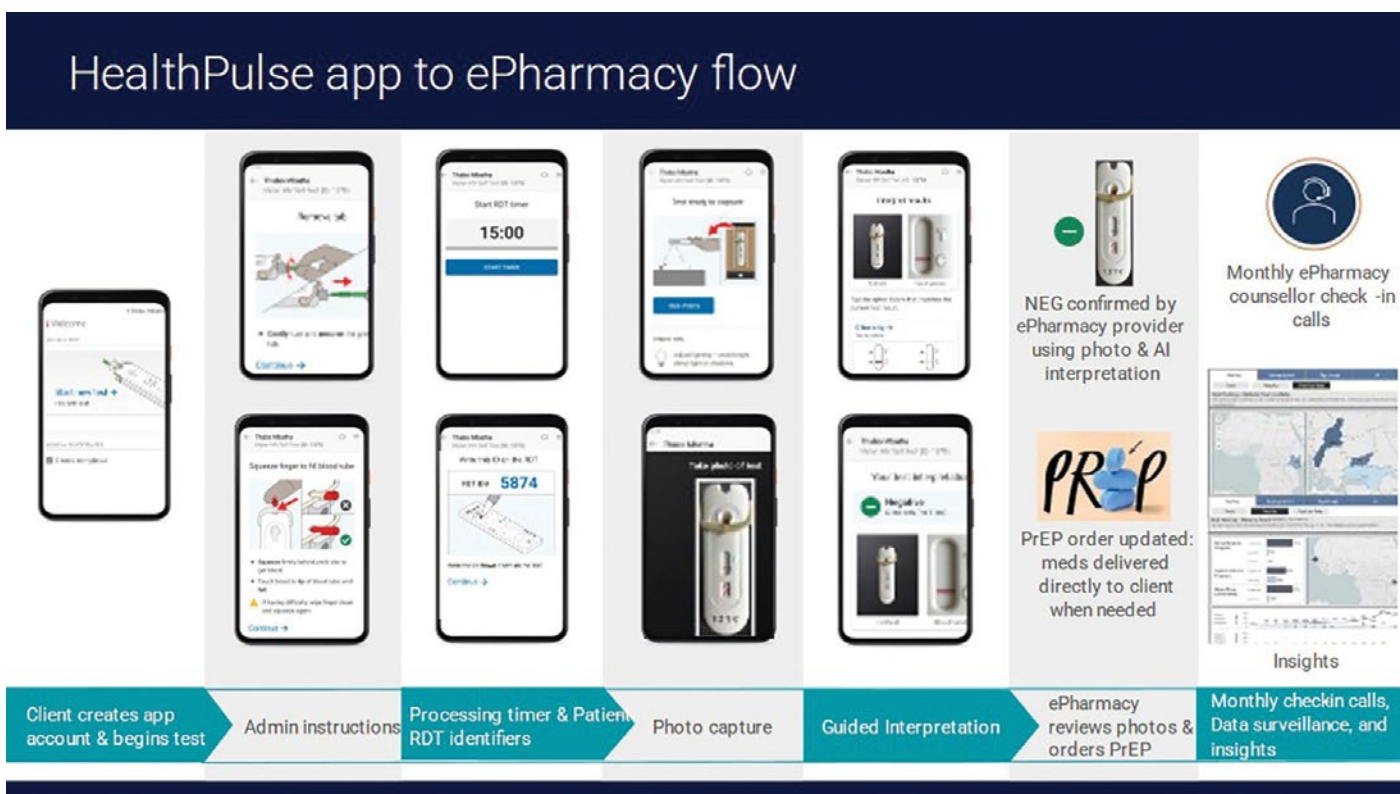
global health¹⁰ and CareWorks - an online virtual ePharmacy that provides Antiretroviral Treatment (ART), and HIV self-testing (HIVST) for hard-to-reach and key population clients.¹¹ This will be conducted in a study in 2023 called ePrEP. The process flow for ePrEP is detailed in Figure 2 below.

Through ePrEP, participants will be provided with a mobile app, which will support accurate HIVST administration, increased interpretation accuracy of the HIVST result, and the ability to connect with a counsellor throughout the process and delivery of PrEP using a courier system. The ePrEP platform will then securely shares relevant risk assessment and test result information with the ePharmacy system and the POP INN health care system, ensuring the continued monitoring of the client's health, seamless dispensing, and distribution of PrEP, and overall retention on the programme.

Social Network Strategy

The Social Network Strategy (SNS)

FIGURE 2: ePrEP process flow (Source: Audere)



draws from the expansive social and sexual networks of target populations, to support HIV case finding.¹² Like the other approaches used at POP INN this method is a wide-ranging approach for recruitment of MSM and TGW for HIV testing and counselling, HIV prevention interventions, and optimizing HIV medical care and medication adherence.¹² With SNS, peers are trained to disseminate risk reduction information and resources to their social network members. Furthermore, they recruit their peers to access health services via peer groups, outreach clinic or drop-in clinic. POP INN clinics deploy this model using vouchers as an incentive for recruitment. Clients that have recruited other clients are paid with a R50 grocery voucher if the recruited client reports to the clinic and receives services. This approach, coupled with HIV recency testing, has bolstered HIV case finding and improved HIV treatment literacy across the communities in which we operate. SNS HIV positive yield is between 6-16% of the total number of clients recruited and tested in the clinics. HIV Testing Services by comparison account for 4-7% of clients tested.

Expanding care through engagement with traditional healers

Over the three years, the uMgungundlovu POP INN clinic experienced challenges of HIV positive clients that did not want to be initiated on ART because they strongly believed in traditional medicine. The POP INN team engaged with traditional healers in the local areas and invited them to the clinic for discussions in December 2020. The outcome of the meeting was that traditional healers be trained on HIV, offer condom distribution at their practises and be a strong referral system to the POP INN clinic. Four traditional healers with HTS knowledge have since been integrated with the POP INN clinics and provide HTS, condom distribution and referrals between their practices and the clinics. The initiative

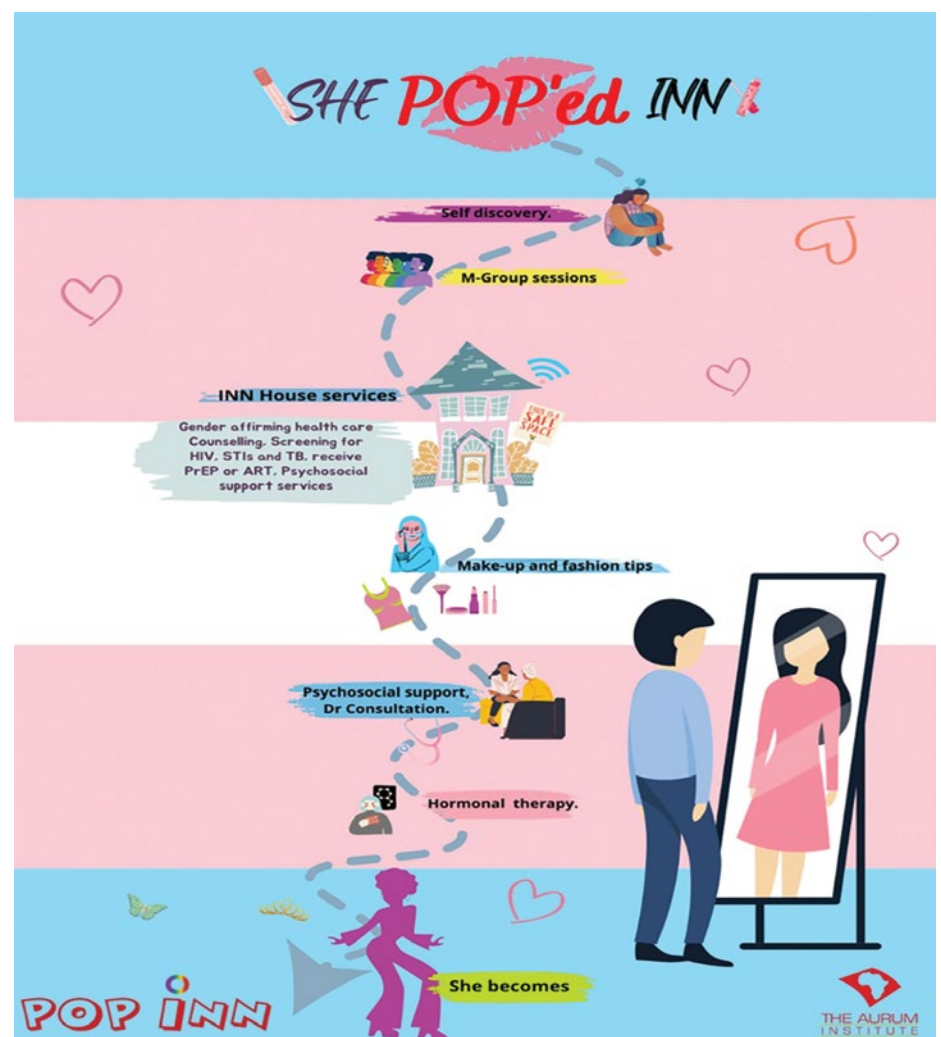
consists of regular meetings with the traditional healers and program staff. Engaging with communities and traditional healers has yielded 27 clients being referred to the clinics by traditional healers, five clients testing HIV positive and were initiated on ART and eight clients were initiated on PrEP.

Gender Affirming Health Care (GAHC)

POP INN clinics are committed to the provision of universal care for the transcommunity. Transgender women are disproportionately affected by HIV compared to other key populations.⁴ This puts them at risk of HIV-related stigma coupled with gender and sexuality related stigma. POP INN takes a holistic approach to GAHC by providing physical and psychosocial care for persons who do not identify

with the gender they were born with. Another innovation that POP INN clinics have included therefore is the gender affirming health care model. Since August 2022 to date the programme has initiated 39 TGW on hormonal therapy. The hormonal therapy includes the daily use of estrofem (which provides estrogen) and spironolactone (which suppresses testosterone). In future this model will be expanded sequentially by accessing hormonal therapy from the Department of Health, appointing medical officers to manage the hormone therapy and appointing psychologists to support GAHC steps and to establish a GAHC advisory board. At the POP INN clinics this is in the works with 'She POP'ed INN' an initiative that supports transgender women through their journey of transition with support groups, physical,

Figure 3: Psychosocial support for TGW: She POP'ed INN



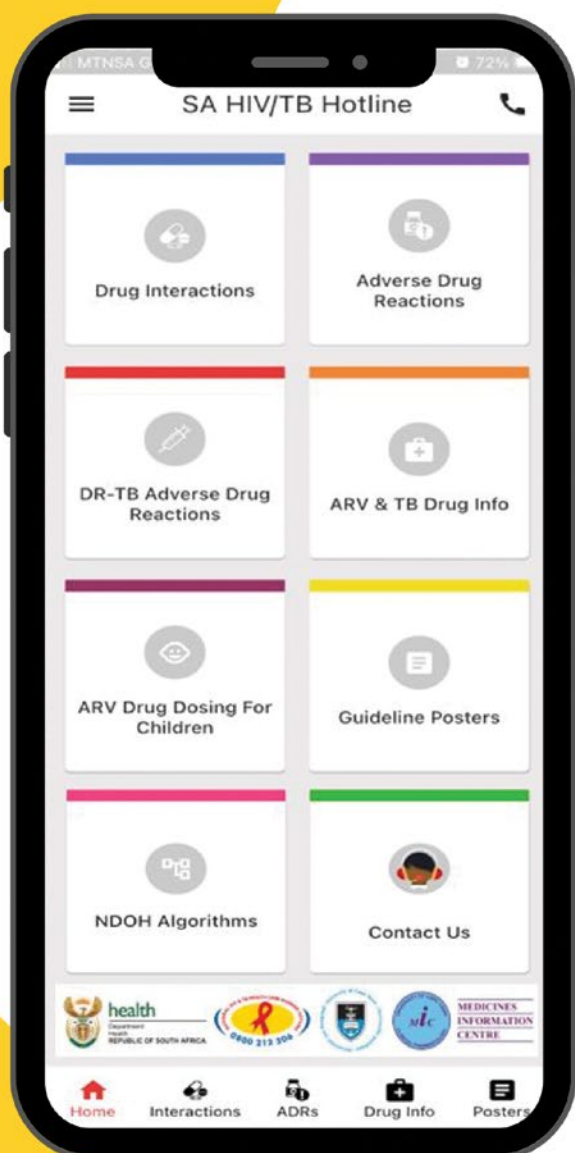
medical, and psychosocial support. Figure 3 shows the She POP'ed INN initiative.

Conclusion

POP INN clinics have only been in existence for three years but through the Mpowerment model, comprehensive universal healthcare, and community engagement the facilities have reached tens of thousands of clients. With new innovations in the works and more to come the programme aims to further its reach and accomplish their mission - 'To impact Global Health through Innovation, Evidence, Implementation, and Integration'.

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2 | AHD Hospital AHD Guidelines 2022

Gender-affirming healthcare (GAHC): Key terms

Using appropriate language and understanding key terms in the field is an important part of providing GAHC. Table 1 lists the key terms that are laid out in the Southern African HIV Clinicians (SAHCS) 2022 GAHC guidelines. Definitions of important key terms from within the field of GAHC were drawn from a variety of academic sources but were adapted through consultation with members of the transgender and gender diverse (TGD) community in South Africa. Please note that the list of key terms provided is not exhaustive, and that the usage of terms and associated meanings may change over time. It is important to allow TGD persons to self-identify and not impose the use of terminology on them. It is also useful to listen to the experiences described by clients, rather than expecting them to use specific terminology.

The full SAHCS GAHC expanded guideline can be found here: [SAHCS GAHC guidelines-expanded version Oct 2021\(3\).pdf \(sahivsoc.org\)](#) and the condensed guideline can be accessed here: [Southern African HIV Clinicians Society gender-affirming healthcare guideline for South Africa | Tomson | Southern African Journal of HIV Medicine \(sajhivmed.org.za\)](#)

Table 1: Key terms

Term	Explanation
Cisgender	Abbreviated as 'cis', describes a person whose gender identity and expression matches their sex assigned at birth.
Gender	'An institutionalised system of social practices for constituting people as two significantly different categories, men and women; and organising social relations of inequality on the basis of that difference.' Gender is based on social norms and expectations. In many cultures, people are divided into a gender binary of either men or women, but there are also cultures that recognise other genders, sometimes as a third gender category, or as a range of non-binary identities, for example genderqueer, gender fluid, bigender or agender. Most societies have a history of systemic gender inequality, with men occupying a privileged position and women being subjected to socioeconomic disadvantage, discrimination and violence. In addition, in South Africa, colonisation has meant that the binary Western perspective has been entrenched within our society.
Gender dysphoria	The psychological and/or physical distress caused by the incongruence between sex assigned at birth and gender identity. Not all TGD persons experience gender dysphoria, but it can be debilitating for some. Although gender dysphoria is a medical diagnostic classification in the DSM-5, TGD persons' experiences of it are diverse and may affect their lives in various ways.
Gender expression	Aspects of a person's physical appearance and behaviour, defined culturally or socially to be either masculine or feminine. Every society has its own normative assumptions and prescriptions about how women and men should feel, dress, act, and work. Gender expression can also be fluid or non-conforming.
Gender identity	Defined by the Yogyakarta Principles (South Africa is a signatory to these Principles), as 'each person's deeply felt internal and individual experience of gender, which may or may not correspond with the sex assigned at birth, including the personal sense of the body (which may involve, if freely chosen, modification of bodily appearance or function by medical, surgical or other means) and other expressions of gender, including dress, speech and mannerisms'.

Cis-heteronormativity	Refers to the hierarchical system of power, prejudice and discrimination in which cisgender and heterosexual individuals are privileged above sexual and gender diverse (or perceived sexual and gender diverse) persons.
Intersex	Refers to persons born with sex characteristics, such as chromosomes, gonads or genitals that do not fit typical binary notions of male or female bodies. Intersex is an umbrella term used to describe a wide range of natural bodily variations. Some persons with intersex traits self-identify as intersex, and some do not. Some prefer the term differences of sex development or diversity of sex development (DSD) . The medical term 'disorder of sex development' is often considered derogatory by intersex persons as difference or diversity should not automatically be pathologised.
LGBTQIA+	An umbrella term for communities who, for different reasons, have a shared experience of marginalisation and discrimination in society, and who have shared goals of improving access to human rights and basic freedoms. L stands for lesbian, G for gay, B for bisexual, T for transgender, Q for queer or questioning, I for intersex, A for asexual or agender, and + indicating developing language and the inclusion of other diverse gender identities and sexual orientations.
Misgendering	Intentionally or unintentionally using an inaccurate pronoun or description in a way that undermines a person's gender identity. Similarly, deadnaming (necronym) refers to using a TGD person's previous given name, despite them having changed their name, or asked to be addressed by a name that reflects their gender identity.
Non-binary	A range of gender identities that do not fall into the traditional binary categories of male or female. It is important to recognise that this gender binary does not describe the identity of many people. Persons with non-binary gender identities may identify as gender fluid, gender diverse, agender, genderqueer, gender non-conforming, transmasculine, transfeminine or various other non-binary identities.
Sex	A complex interplay of multiple physical characteristics (including hormones, internal reproductive organs, gonadal tissue, genitalia and chromosomes) that cannot be categorised into a binary of male or female. When a child is born, they are usually assigned as either female – assigned female at birth (AFAB) – or male – assigned male at birth (AMAB) – based solely on the observed external genitalia at birth. This does not account for intersex individuals, or for DSD, which is problematic.
Sexual orientation	Describes who one is intimately attracted to, and with whom one has emotional and/or sexual relationships and the sexuality with which one may identify. Sexual orientation is not the same as gender identity. Gender identity refers to a person's experience of their own gender, and sexual orientation refers to their attraction to others. A person's gender identity does not in any way predict their sexual orientation.
Transgender	A term that describes a person who does not identify (wholly or partially) with their sex assigned at birth. A transgender woman (TGW) is someone who was AMAB but who identifies as a woman. The previous term MTF (male-to-female) is no longer considered widely acceptable or accurate. A transgender man (TGM) is someone who was AFAB but who identifies as a man. The previous term FTM (female-to-male) is no longer considered widely acceptable or accurate.
Transphobia	An irrational and systemic hostility towards persons who are transgender, gender diverse, or who otherwise do not fall into traditional gender categories and norms.

AFAB, assigned female at birth; AMAB, assigned male at birth; DSD, diversity of sex development; DSM-5, Diagnostic and Statistical Manual Version 5; TGD, transgender and gender diverse.



PAVE: Paving the way to remission and cure

The Southern African HIV Clinicians Society Team

The issue

Globally, an estimated 16.8 million children, adolescents, and young people under the age of 25 years live with HIV.¹ Despite current prevention efforts of mother-to-child transmission, there are approximately 150,000 new paediatric infections HIV annually.² These children and young adolescents are required to take lifelong, daily antiretroviral therapy (ART) to maintain their health and wellbeing. While preclinical models informed the direction of novel HIV-1 therapeutics for adults, there is a sizeable

gap in safety and efficacy data for cure strategies in preclinical paediatric models.² The Paediatric Adolescent Virus Elimination (PAVE) Collaboratory seeks to fill this gap.

The Southern African HIV Clinician's Society (SAHCS) is working with the PAVE Collaboratory Community Group to facilitate the translation of scientific findings in such a way that the complexity of the science is easy to understand by doctors, nurses, and other healthcare workers working with HIV-infected adolescents and children.

Addressing the issue

During February 2022, SAHCS collected baseline data to gain insight into healthcare worker understanding around key HIV CURE concepts. The baseline was implemented to identify healthcare worker cadre-specific knowledge gaps for different cadres of healthcare workers, and to access healthcare workers levels of knowledge, confidence and comfort to explain key CURE concepts and translate scientific information to HIV-infected patients.

The Southern African HIV Clinician's Society (SAHCS) is working with the PAVE Collaboratory Community Group to facilitate the translation of scientific findings in such a way that the complexity of the science is easy to understand by doctors, nurses, and other healthcare workers working with HIV-infected adolescents and children.

Key interventions aimed at addressing knowledge gaps and improving comfort and confidence levels with key CURE terminology information will be developed based on the findings at baseline.

Methodology

Using the SAHCS membership database, approximately 8000 South African SAHCS members received an email invitation to complete the PAVE Key Concepts Survey using an online survey tool, Survey Monkey. Approximately 116 healthcare workers completed the anonymous survey. Despite the low response rate, the baseline findings provide some insight into healthcare worker levels of knowledge, comfort, and confidence around key CURE concepts.

Respondent profile description

Most of the respondents were doctors (60%); followed by nurses (27%). Other healthcare worker cadres that completed the survey included pharmacists and auxiliary health workers. Survey respondents were

predominantly female (61%) and resided mostly in either Gauteng (34%), Western Cape (20%) or KwaZulu Natal (15%).

Sample limitations

The respondent sample was not representative of the South African healthcare worker population. However, it does provide information from healthcare workers predominately in the 3 big provinces Gauteng, Western Cape and KwaZulu Natal. We did not collect information on whether healthcare workers were working in the public or private sector and whether they were working specifically with HIV-infected populations or not. However, SAHCS membership base includes both private and public members and comprises healthcare workers interested in HIV and related diseases.

The low response rate, and the low number of responses from cadres other than doctors makes it difficult to identify knowledge gaps by healthcare worker cadre. However, the sample does provide insight into knowledge gaps for both doctors and nurses. However, anecdotal evidence indicates that the low response rate was a result of lack of confidence

and understanding of the subject matter. Healthcare workers indicated that they choose not to respond to the survey because they were unfamiliar with the CURE terminology.

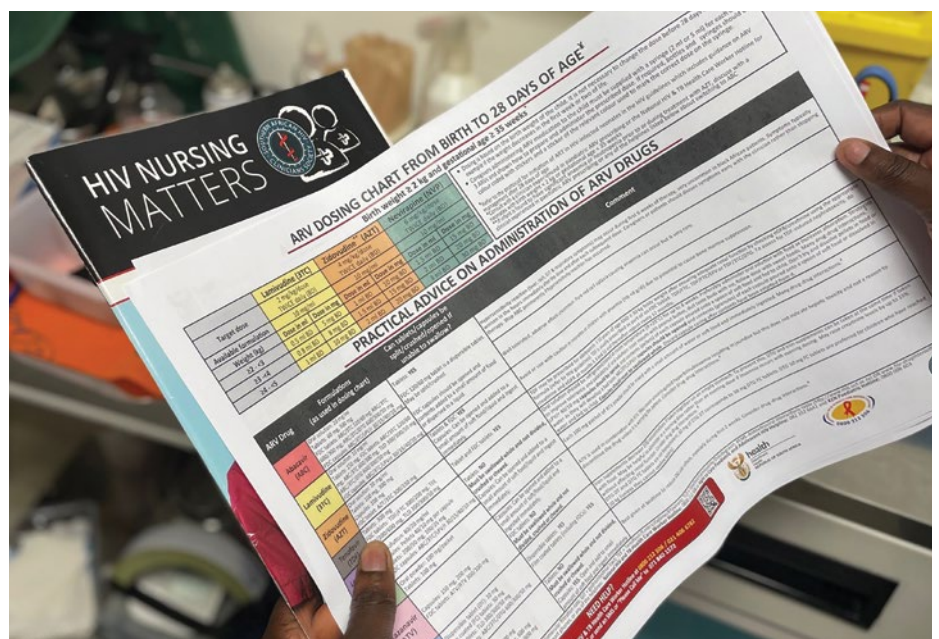
Key findings

Responses from the survey indicated that only 50% -55% of the respondent sample had some understanding of key CURE terminology. Levels of familiarity with specific CURE terminology varied by key concept with respondents being moderately or extremely familiar with the following key concepts:

- *Remission* - 60% were moderately or extremely familiar
- *Elite controller* - 56% Moderately to extremely familiar
- *Reservoir* - 50% were moderately or extremely familiar
- *Long-term non-progressor* - 55% moderately or extremely familiar
- *Viral control* - majority extremely familiar (55%)
- *Viral vector* - 50% were slightly or extremely familiar

Respondents were less familiar with key CURE concepts such as:

- *Recency assay* - 70% not familiar
- *Clade* - 60% slightly or not at all familiar
- *Sanctuary sites* - 55% slightly or not



Specific interventions are needed that will address both knowledge and provide skills with respect to translating scientific CURE information by healthcare workers.

at all familiar

- *Post-treatment controller* - 53% slightly or not at all familiar

In terms of feeling confident to describe or discuss key concepts with patients, the respondent sample felt less confident and less comfortable with explaining the terminology that they were less familiar with. This included the following CURE concepts:

- *Deep latency*
- *Therapeutic vaccine*
- *Broadly neutralizing antibodies*
- *Clade*
- *Post treatment controller*

Further to this, respondents found it difficult to describe key CURE concepts using their own words. An example of this, is evident from the range of responses to the question "What is HIV CURE?"

Responses included:

- "I don't know"
- "A person who doesn't have virus in is body after being treated by antiretroviral drugs"
- "HIV cure is the drugs that cures HIV disease"
- "The term seems as if there is a cure for HIV however I have not come across this. We were taught that it us incurable. Therefore, I will say, I don't know"
- "It refers to different types of Art treatments available which cures adverse effects from HIV infection"

Healthcare worker cadre-specific differences

Doctors were more likely to understand and be comfortable with CURE

terminology; however, this was not statistically significant due to the small number of nurses in the sample and small sample size. Nurses felt less comfortable with CURE terminology and felt less comfortable being able to explain the terminology. Healthcare workers in the more rural provinces were also less comfortable with CURE terminology compared to their counterparts in the more urban provinces. Again, this was not significantly significant as more responses were received from the more urban provinces than the rural ones.

Conclusion

Based on the findings above, it is clear that healthcare workers are unable to adequately translate key CURE concepts to patients, and their parents and/or guardians. This highlights difficulties faced by healthcare workers when it comes to translating scientific information to patient groups. Specific interventions are needed that will address both knowledge and provide skills with respect to translating scientific CURE information by healthcare workers.

Next steps based on baseline findings

Using the baseline information, SAHCS will be implementing a number of key activities. These include:

1. Annual CURE Continuing Medical Education (CME) webinars that provide an opportunity for Southern African healthcare workers to engage with PAVE scientific information, and begin to understand the research.
2. Specific CMEs targeting nurses that

focus on nurse-specific knowledge gaps and provide nurse-specific skills and capacity building around CURE concepts.

3. Development of job-aids and clinical tips for the provision of improved clinical care of paediatric and adolescent HIV-infected patients
4. A Glossary of Terminology of key CURE concepts that will be published in the next edition of HIV Nursing Matters.
5. Journal articles focused on the latest scientific research published in the South African Journal of HIV Medicine (SAJHIVMED) and in HIV Nursing Matters.

For more information about the PAVE Collaboratory, see their website: <https://www.pave-collaboratory.org/>

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New methods of screening and testing for tuberculosis in South Africa

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Why do we need to improve tuberculosis (TB) screening and testing in South Africa?

The World Health Organization (WHO) estimates that 304 000 people (513 per 100 000) fell ill with TB in South Africa in 2021, yet only 181864 were notified, meaning 122 136 people with TB (PWTB) were 'missed' by the health system (either not diagnosed or not reported).¹ This means that we are well below the target of finding 90% of

PWTB and placing 100% on treatment, a milestone crucial to 'End TB' by 2035.² We urgently need to improve our strategies to find PWTB and to start them on treatment to reduce suffering, economic burden, and death in PWTB, as well as reduce onward transmission of TB. Finding PWTB starts with optimal screening at health facilities and in targeted communities. To this end, the South African National Department of Health (NDoH) released a new standard operating procedure (SOP)

for TB screening and testing in June 2022.³ For the sake of space, this article does not cover the SOP in its entirety but focusses on only a few aspects of TB screening and testing. Please see the SOP for full details on the topic. The SOP can be found at your DOH sub-district office if not yet with the facility/unit Operations Manager. Additionally, we have included some information on urine LF-LAM testing, which is targeted at improving TB diagnosis in persons with Advanced HIV Disease (AHD).

TB screening

The SOP recommends the continued use of the WHO 4 symptom screen (W4SS) for TB, in combination with newer methods of screening as described below, in clinics and hospitals.³ Symptom screening must be performed on all health facility attendees, at all patient visits, and at all entry points. Clients should be offered **self-screening**, either by completing the screening form themselves, or using the TBCheck platform on their mobile phones.

- For clients who opt for self-screening:
 - The screening tool should be made available in local languages for clients who prefer self-screening.
 - The self-screening form must be provided to the health care provider.
 - The health care provider must go through the responses, ask clarity seeking questions where required, communicate the results based on the patient's responses and advise on the follow up action.
- For clients who opt for screening by the health care provider:
 - The health care provider should administer the questionnaire in the client's preferred language and complete the form.
 - The health care provider must communicate the results based on the client's responses and advise on the follow up action.

Persons with any of these four

Clients should be offered self-screening, either by completing the screening form themselves, or using the TBCheck platform on their mobile phones.

symptoms (shown below) should be considered TB-presumptive and undergo TB testing:

- Persons 5 years and older³:
 - Cough of any duration
 - Fever of more than 2 weeks
 - Loss of weight (>1.5kg in a month in adults and adolescents) / documented weight loss in children or
 - Drenching night sweats
- Children less than 5 years old³:
 - Cough of any duration
 - Fever of more than 2 weeks
 - Documented weight loss/failure to thrive or
 - Fatigue

If a person is found to have symptoms of TB, the following safety precautions must be taken:

Anyone in a clinic with TB symptoms should be educated on cough hygiene, given a surgical mask, and ideally moved to a separate well-ventilated waiting area³ Patients in a hospital ward with TB symptoms should be isolated in a side ward or provided with a surgical mask where separation is not feasible.³ Healthcare workers should be wearing respirators (N95/FFP2) in facilities whether caring for people with TB symptoms or not.

New methods of finding people with TB

A recent study called "Targeted Universal TB Testing" (TUTT) was conducted in South Africa to look at whether more people with TB could be diagnosed by testing patients at high risk for TB using Xpert Ultra (Xpert) and culture regardless of whether they have TB symptoms or not.³ Persons at 'high risk' include being HIV positive, having a TB contact or having had previous TB in the last two years.³ It was found that 6% of the people identified as 'high risk' had TB based on TB Xpert or culture, regardless of whether they had TB symptoms or not, 10% of those who were symptomatic, and 4.5% of those who were asymptomatic, had TB.³ This resulted in a 17% increase in TB diagnoses.

Definitions of TB contacts

The SOP provides the following definitions³:

Household contact: "A person who shared the same enclosed living space for one or more nights or for frequent or extended periods of up to 8 hours during the day with the index patient, during the 3 months before the start of current treatment episode."

Close contact: "A person who shared an enclosed space, such as a social gathering place, workplace or congregate setting, more than 15 minutes over a period of 24 hours with the index patient, during the 3 months before commencement of the current treatment episode."

Figure 1 summarises the findings of the TUTT study.

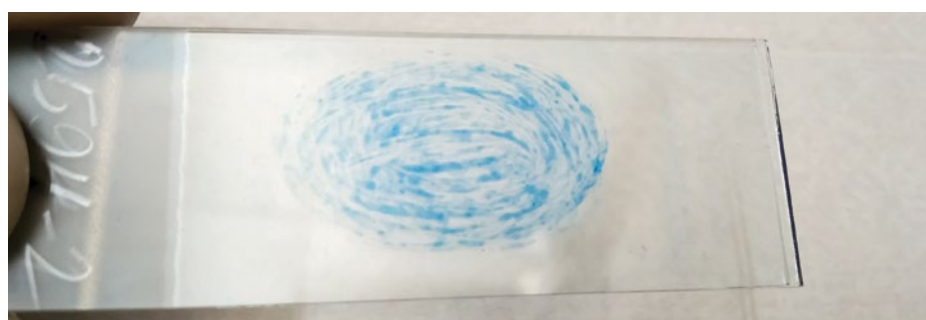
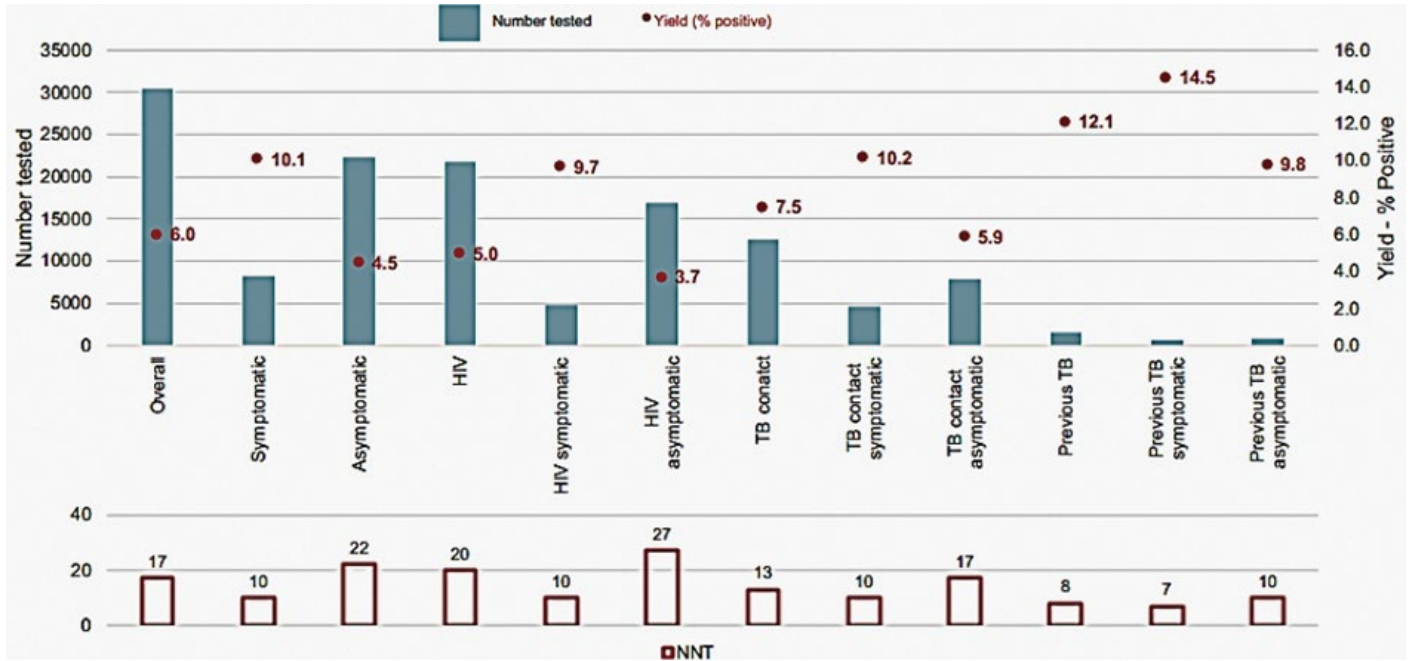
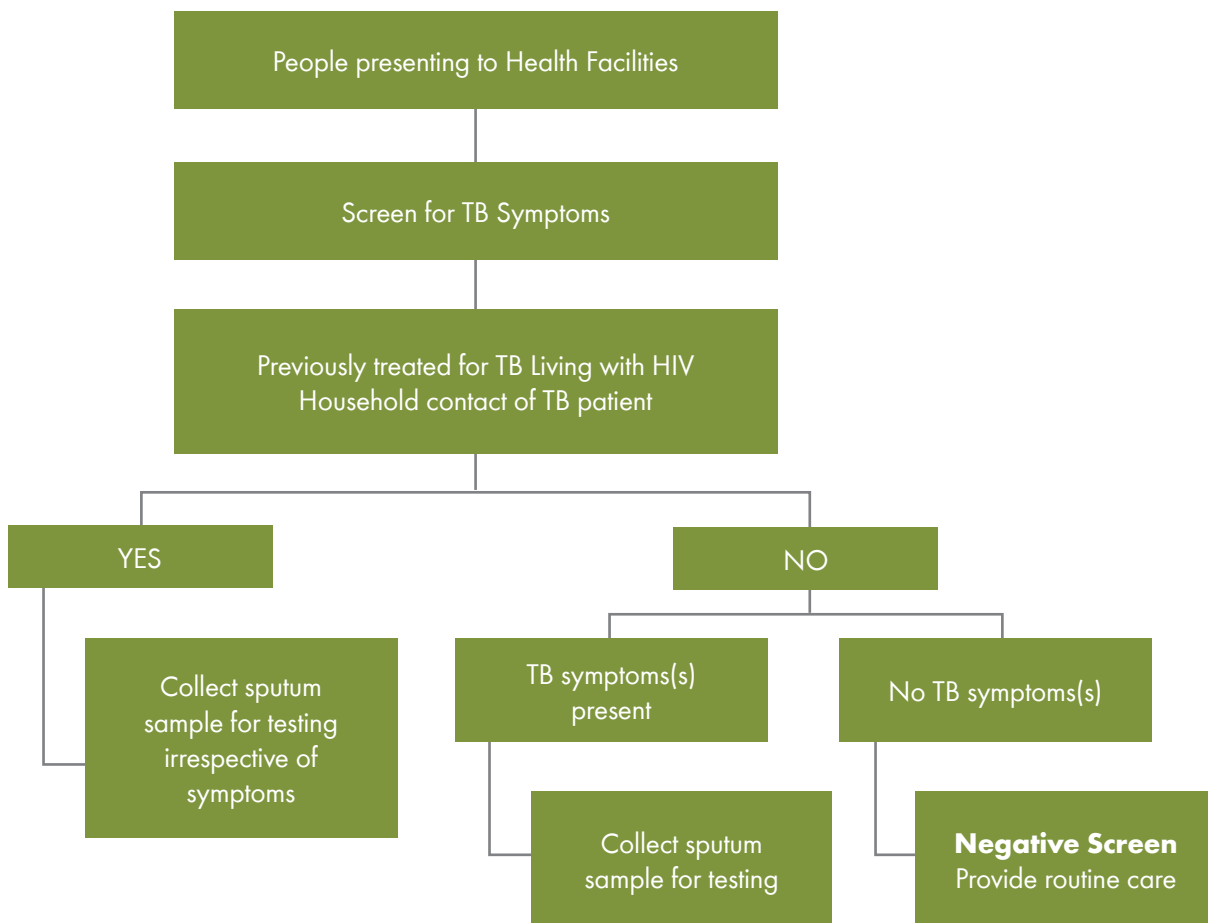


Figure 1: TB yield and number needed to test (NNT) by risk factor and symptoms.³



These findings led to the development of the new TB screening algorithm to be implemented within health facilities, as depicted in Figure 2 below.

Figure 2: Health facility TB screening algorithm.³



How often should these high-risk groups be tested for TB?

The following groups of people should be routinely tested for TB at the following intervals:³

- General population:
 - Only when they present with any TB symptom or chest x-ray changes suggestive of TB
- People living with HIV (PLHIV):
 - At the time of HIV diagnosis
 - On enrolment in antenatal care for pregnant women
 - Annually for PLHIV on treatment at the same time as VL monitoring follow up visits
- Household contacts of people diagnosed with TB:
 - After each exposure to a person with a confirmed TB diagnosis
- People previously treated for TB:
 - Annually for a period of two years

In addition, it is recommended that in-between the annual testing, PLHIV and people previously treated for TB must be screened for TB symptoms and tested only if symptomatic.”³

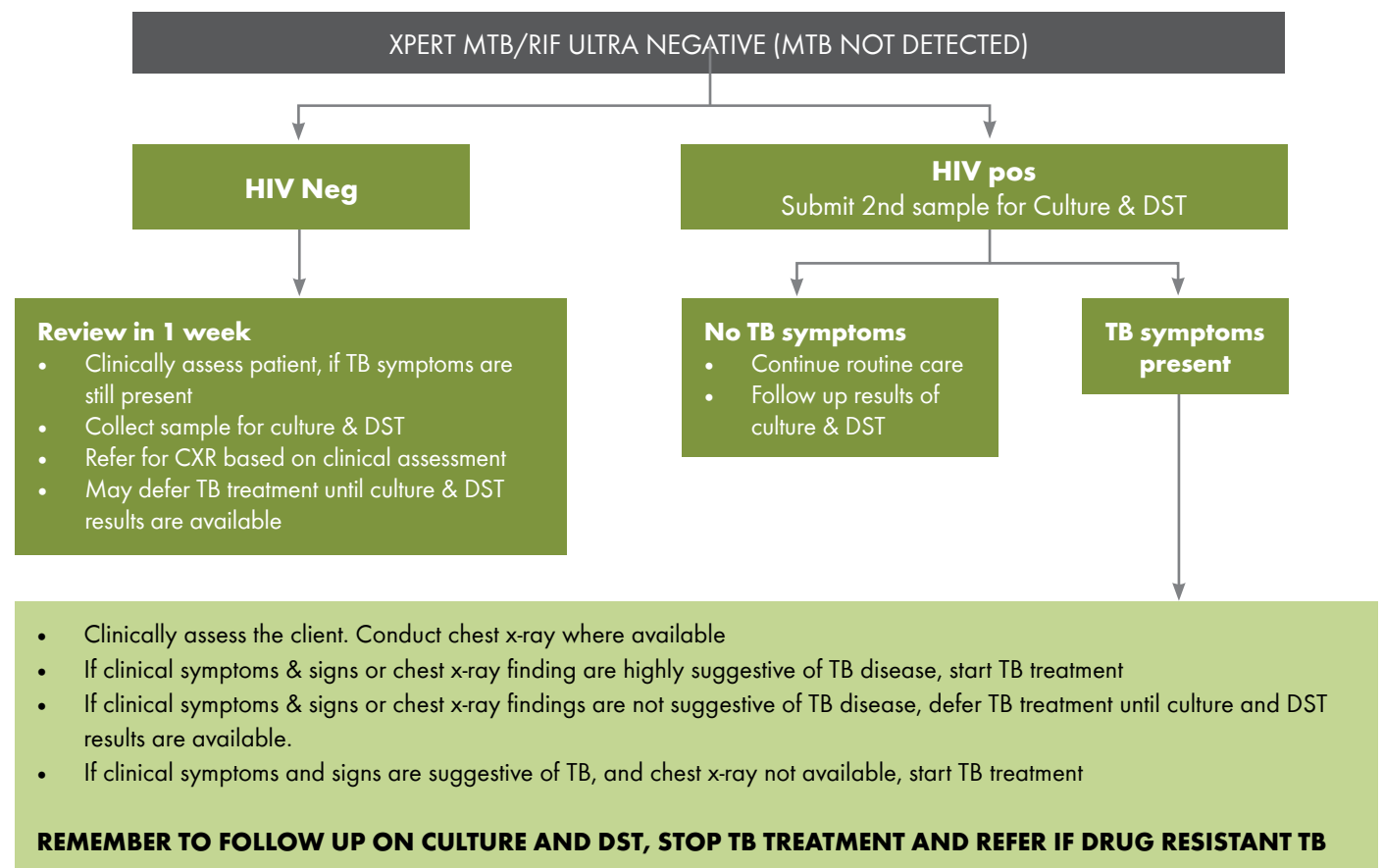
How to test for TB

Persons identified as TB-presumptive by TB screening, as well those at high risk of TB, should undergo TB testing on sputum, and other samples as indicated by clinical assessment. Sample collection should be supervised. Attempt to obtain at least 5ml of sputum per sample. Sputum induction through nebulisation with 3% saline solution is recommended where the person being investigated is not coughing, or they are struggling to produce sputum. Ensure that the sample bottles are tightly closed, and request forms are completed properly. Make sure to record the client’s correct mobile phone

number on the request form. This will assist the National Health Laboratory Services (NHLS), in certain districts, to also alert the client via sms on when to urgently return to the clinic.

The Xpert MTB/Rif Ultra (Xpert) is used as a first line test for all populations. Those who are diagnosed with rifampicin-susceptible TB (RS-TB) on Xpert should have smear microscopy as a baseline test and as a monitoring test at week 7 and 23 of TB treatment. TB Culture should be performed if the rifampicin susceptibility testing on Xpert is unsuccessful, as well as in PLHIV with a negative result, and when DST is required. People diagnosed with RR-TB must be tested for first and second-line DST through the DR-TB Reflex test. Previously treated patients with a positive Xpert result must be tested using TB Culture and DST/1st Line LPA.

Figure 3: Diagnostic Algorithm for Xpert MTB/Rif Ultra Negative result.³



What if the Xpert Ultra test comes back negative?

It is very important to note that if an Xpert Ultra test comes back negative they should not be assumed TB negative immediately but should be further investigated as per the algorithm in Figure 3 below.³ **PLHIV who test negative on Xpert should proceed to TB culture and DST, regardless of the presence of TB symptoms at the time of Xpert testing.**

What is a U-LAM test?

Urine-lipoarabinomannan (U-LAM) testing complements Xpert testing in patients with advanced HIV disease, in whom extra-pulmonary TB is common and pulmonary TB is often paucibacillary, with false negative Xpert results. U-LAM can be used to detect pulmonary and extrapulmonary TB, but it cannot determine whether the TB is rifampicin susceptible or resistant and it cannot differentiate between TB and other types of mycobacteria.⁴ For these reasons, when U-LAM is taken, an Xpert test should be ordered on sputum or other sample (e.g. lymph node aspirate) at the same time. (4) First-line TB treatment should be initiated immediately if the U-LAM is positive, and treatment should be adjusted once rifampicin susceptibility is known. TB Culture and DST should be collected should Xpert return negative, or rifampicin susceptibility testing be unsuccessful.

When should U-LAM tests be used?

U-LAM tests should be performed on all PLHIV who are admitted to hospital for an illness, as well as outpatients in the following setting:

- PLHIV with TB symptoms, who also have either:
 - CD4 count <200 within the last 6 months
 - Or, advanced HIV disease or current serious illness.⁴



Now you can also use digital chest x-rays to screen for TB

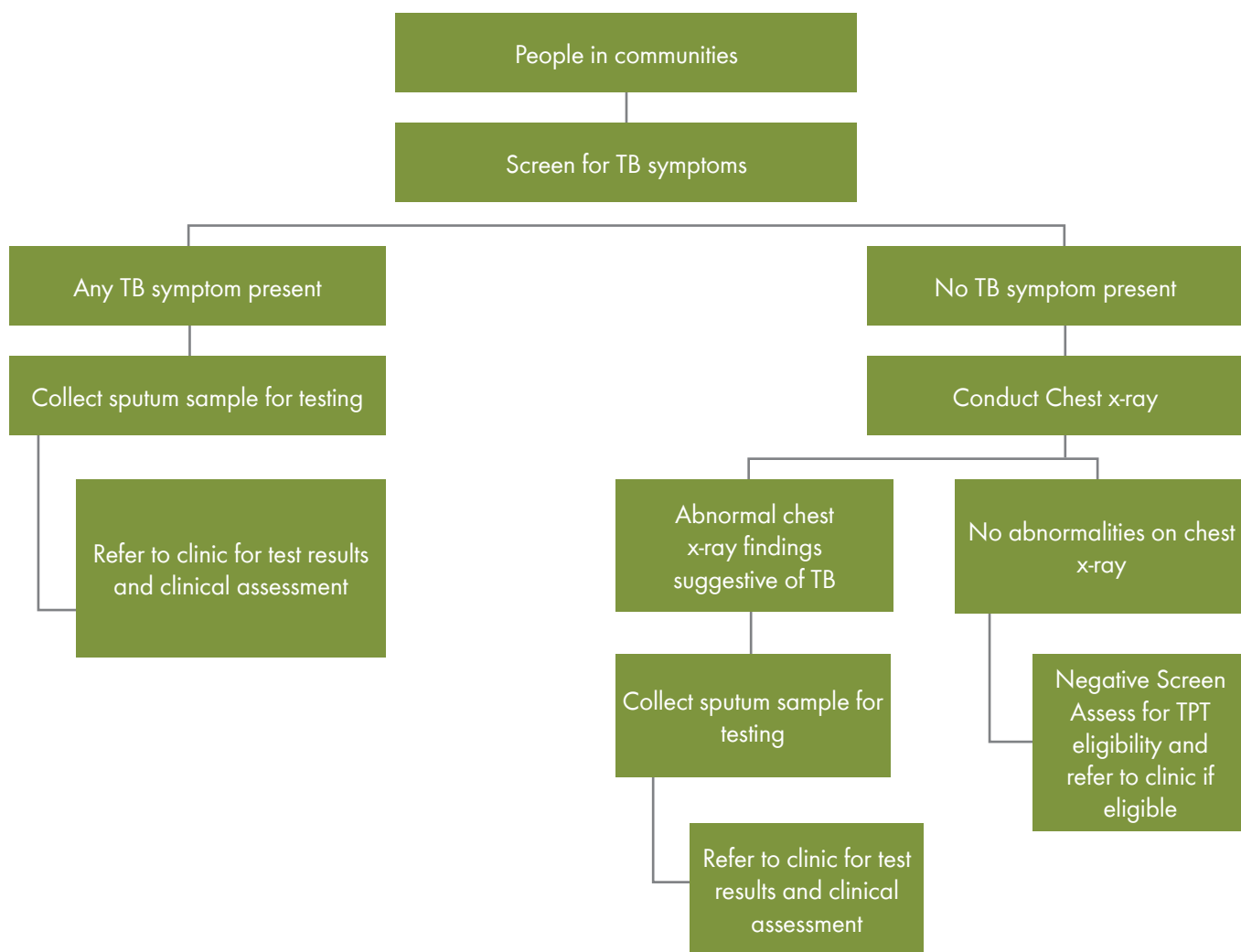
The first SA National TB Prevalence Survey (NTPS) found that 58% of 234 people found to have bacteriologically confirmed TB had abnormal digital chest X-rays (DCXRs) with computer-aided detection (CAD), and no symptoms, showing the potential of DCXR screening to improve case finding.⁵ This is in alignment with the WHO recommendations which state that CXR is a useful TB screening tool with a sensitivity of 85%.⁶ The survey also revealed that two-thirds of people who reported classic TB symptoms had not sought care for these symptoms.⁵ This means that we need to also look for PWTB outside of health facilities, and the survey identified demographic groups, such as younger men and HIV negative individuals, that the TB programme fails to reach. It is therefore now recommended in South Africa that DCXR screening be utilised in targeted community settings in the following

groups of people (where available), irrespective of HIV status:

- People who do not have TB symptoms especially in high TB settings, i.e. in communities known to have a prevalence above 0.5% e.g. household contacts of people with bacteriologically confirmed TB, healthcare workers, prisoners etc.
- People with TB symptoms other than cough (and therefore struggle to produce a sputum sample, even after sputum induction),
- Symptomatic clients with a dry cough and cannot produce a sputum specimen, even after sputum induction
- Current and former mineworkers with silica exposures, and
- Symptomatic clients with a history of chronic lung disease³

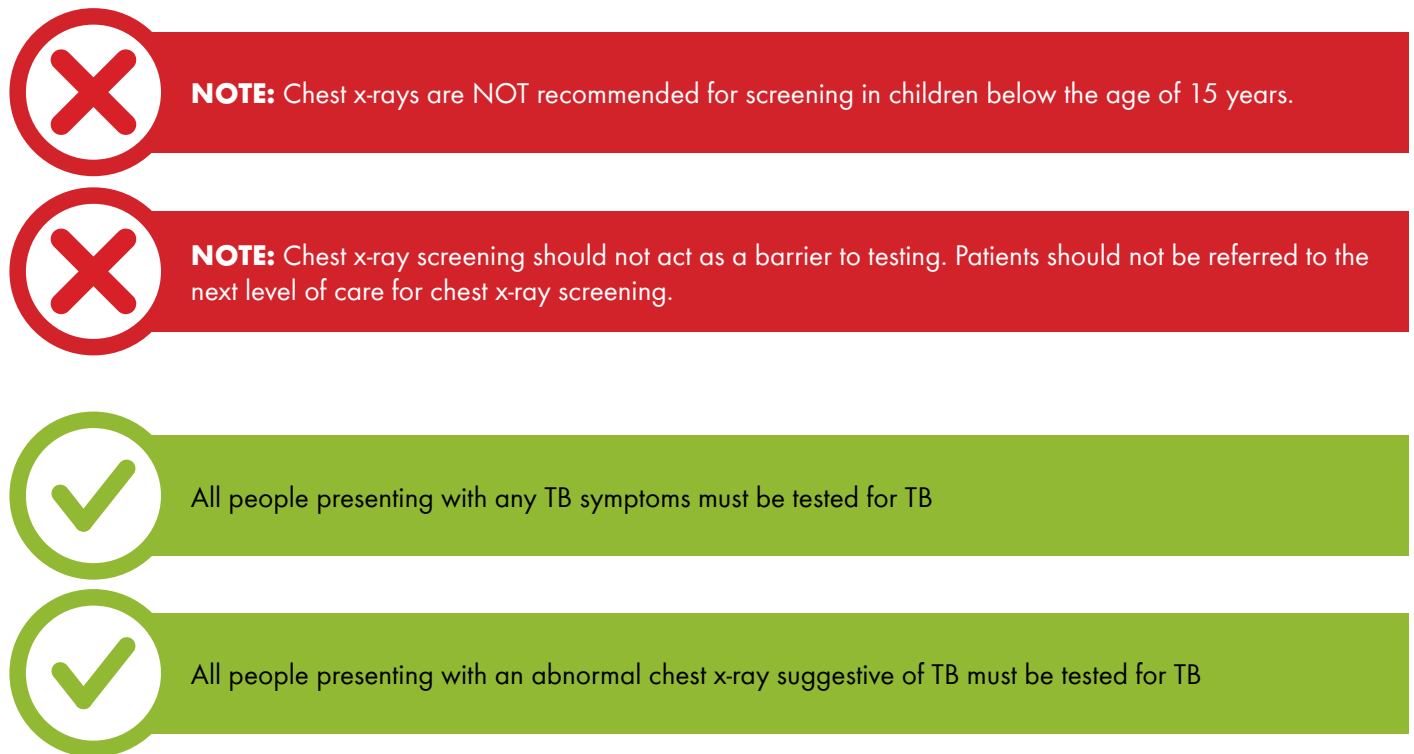
Where digital chest x-rays are available in the community setting, the following screening algorithm is recommended as in Figure 4 below.³

Figure 4: Community TB screening algorithm.³ *TPT: TB prevention therapy



The SOP also notes the some important points as detailed in Figure 5 below.

Figure 5: Use of CXR for TB screening³



Take Home Messages

- We are missing people who have TB and therefore need to improve TB screening and testing.
- All clients entering the health facility must be screened for symptoms of TB and COVID-19.
- Where available, a chest x-ray may be conducted for people without TB symptoms to screen for TB.
- People who present with any of the TB symptoms or who have an abnormal chest x-ray suggestive of TB must have a sputum sample collected for Xpert MTB/Rif Ultra testing.
- TB testing is now recommended in high-risk people even if they don't have any TB symptoms. "High risk" people include: people living with HIV, those who have had previous TB and those who have household contacts with TB.
- PLHIV who are either admitted in hospital or who have TB symptoms and AHD or CD4<200 should have a U-LAM test simultaneously with their Xpert MTB RIF Ultra.
- PLHIV with a negative Xpert MTB RIF Ultra result should not be assumed to be TB negative but require further investigation regardless of symptoms.
- If you have any queries you can call the Right to Care TB Helpline on 063 698 6543 to discuss further.

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Free healthcare services in South Africa: A case for all mothers and children

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¹Legal researcher in the Health Rights Programme at SECTION27

Introduction

Section 27(1)(a) of the Constitution grants everyone the right to access healthcare services, including reproductive health. This means that everyone who resides within the borders of South Africa, whether documented or otherwise, should benefit from this right. Section 4(3) of the National Health Act 61 of 2003 goes to further provide all pregnant women and children under six with the right to free health services. This entitlement includes asylum seekers,

refugees, undocumented persons, and persons affected by statelessness.¹

Over the past decade, South Africa has made significant strides in improving maternal and child health outcomes, in large part due to transformative law and policy that seek to prioritize the health needs of vulnerable groups.

According to *“The Status of Women’s Health in South Africa: Evidence from selected indicators (2022)”*, a report released by Statistics South Africa, the

national maternal mortality in facility ratio (MMFR)² decreased from 105,9 deaths per 100,000 live births in 2019 to 88,0 in 2020.

There has also been progress around infant health, with neonatal death rates dropping to 12,1 deaths per 1,000 live births in 2020. Notably, the HIV transmission rate from mother to child dropped from 32% in 2000 to under 3% in 2021.³

These indicators are an important

¹Section 4(1) of the National Health Act empowers the Minister to prescribe any conditions on who is eligible for free health services. As of October 2002, the Minister has not determined those conditions and therefore there are no restrictions on the list of people eligible for free health services or free primary health services.

²MMFR refers to death occurring during pregnancy, childbirth, and the puerperium of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and side of pregnancy and irrespective of the cause of death (obstetric and non-obstetric) per 100,000 live births in facility.

The denial of healthcare services affects pregnant women and children in different ways. For pregnant women, lack of access to healthcare services is a leading cause of maternal mortality and morbidity.

measure of human and social development in the country and reveal the value of a responsive healthcare system in providing access and meeting the needs of mothers and children.

However, a worrying discriminatory law, policy and practice has emerged in hospitals in Gauteng, that jeopardises the hard-fought victories to safe-guard maternal and child health, and places healthcare professionals in a difficult ethical conundrum.

Impact of exclusions on health users and workers

On 11 May 2020, the GDoH issued the *Policy Implementation Guidelines on Patient Administration and Revenue Management* ('the 2020 Policy'). The 2020 Policy has enabled hospitals to interpret its provisions to deny pregnant women and children access to free services if they are asylum seekers, undocumented persons or persons affected by statelessness. Only pregnant women and children under six who are refugees and have valid documents are permitted to access free health services.

The denial of healthcare services affects pregnant women and children in different ways. For pregnant women, lack of access to healthcare services is a leading cause of maternal mortality and morbidity. Pregnant women are often referred to hospitals for antenatal care when their pregnancies are high risk (for instance, if they are living with HIV or have gestational hypertension).⁴

Patients with high-risk pregnancies are prone to miscarriages, and maternal death in pregnancy or during childbirth. For such patients it is critical that they have access to timely, routine tertiary follow-up.

In the case of children, the first few years of life are critical stages of development. In the neonatal period, infants born of a mother who is living with HIV require the administration of nevirapine within the first few hours of birth (between 48 to 72 hours). In the case of some childhood health problems, such as cerebral palsy, the type of treatment that is necessary requires input from specialist allied medical professionals, which if lacking can further complicate early childhood development. Often, these types of allied services can only be found in a hospital setting; thus, a failure to allow such patients access to a hospital is tantamount to a denial of the necessary care.

In June 2022, SECTION27 – a public interest law organisation that works on the rights to health and basic education – launched court proceedings against the Department of Health and Charlotte

Maxeke Johannesburg Academic Hospital to challenge the current state of affairs that places the lives and health of mothers and children at risk. Amongst others, the Southern African HIV Clinicians Society (SAHCS) have provided evidence in support of the application, based on their experiences with pregnant women being denied healthcare services.

In its evidence, SAHCS not only makes visible how the 2020 Policy negatively impacts health users, but also how the inability to provide healthcare services to their patients is a cause of great distress to SAHCS members. Former SAHCS Chief Executive Officer, Dr Lauren Jankelowitz testified that: "[Healthcare professionals] are consistently being put in a difficult position where, on the one hand they are bound to provide assistance by their professional ethics and the Hippocratic Oath, and on the other hand, they are required to adhere to occupational policies determined by their employer that discriminates against health users based on nationality and fail to meet their basic and urgent health needs."





The ability of healthcare workers to perform their medical duties and to treat patients regardless of nationality, age, gender, race or any other characteristic is a central tenet of medical ethics. Jankelowitz goes on to describe how SAHCS members have often felt complicit in the violation of human rights in the work environment, despite their own professional and personal commitments to human rights. Further she describes how the stress of this dual loyalty⁵ - an ethical dilemma where there is a conflict between one's professional duties to a patient and the obligations one has to their employer - is exacerbated by the refusal of the Department of Health to adequately respond, guide and support health professions who report medical xenophobia against migrant persons in the public healthcare system.

Medical xenophobia is a term used by scholars to describe the negative attitudes, perceptions, and practices of healthcare providers towards

people based on their nationality.⁶ Healthcare providers include nurses, doctors, administrative clerks, security personnel, and others working in a healthcare setting.

However, it is important that the current framing of medical xenophobia consider the various challenges facing the health system. These include the general shortages of nurses and doctors, high workload, the burden of the HIV pandemic and low morale among nurses working at public health facilities.⁷ On the other hand, it is equally important to bust the myths and factual inaccuracies about how migrant person interact with the public health system, fueling xenophobic sentiments, which can find expression in the denial of healthcare provision.

Factors associated with medical xenophobia:

Firstly, there is a general misunderstanding that paints all migrant people with the

Medical xenophobia is a term used by scholars to describe the negative attitudes, perceptions, and practices of healthcare providers towards people based on their nationality⁶

same brush on their reasons for being in the country. However, migration is a complex phenomenon because the reasons people move are varied, and subject to change.⁸ Some flee persecution, conflict, or war in their country of origin, while others want to reunite with family, or seek self-development through opportunities for employment and education. The categories of migrant persons include:

- A. An **asylum seeker** is a person who (a) has fled their country of origin, (b) is seeking recognition and protection as a refugee in the Republic of South Africa, and (c) whose application is being considered by the Refugee Reception Office located in the Department of Home Affairs.
- B. A **refugee** is a person whose asylum-seeker application has been accepted and who has been granted refugee status and protection by the Republic of South Africa. This is because their claim has been found to meet the grounds for the conferral of refugee status as set out in section 3 of the Refugees Act.
- C. An **undocumented person** either:
- Entered the country without any proof of immigration status or
 - Entered the country with the necessary proof of immigration, but their document has been lost or has expired and the person has not applied for renewal or
 - The person is subjected to maladministration and other systemic challenges at the level of the Department of Home Affairs, which results in an inability to follow proper processes or in delays in the issuance of their document. These persons may be South African citizens.
- D. A **person affected by statelessness** is one who is not considered a national under the laws of any country. In other words, they do not have nationality of any country. Some people are born stateless, but others become stateless, and there are several historical and current structural barriers that may cause this.⁹ Most stateless people live in the country of their birth.
- E. An **economic migrant** is a person who moves outside of their country of origin in search of education, employment, or other opportunities. The Immigration Act 13 of 2002 provides for the issuing of visas

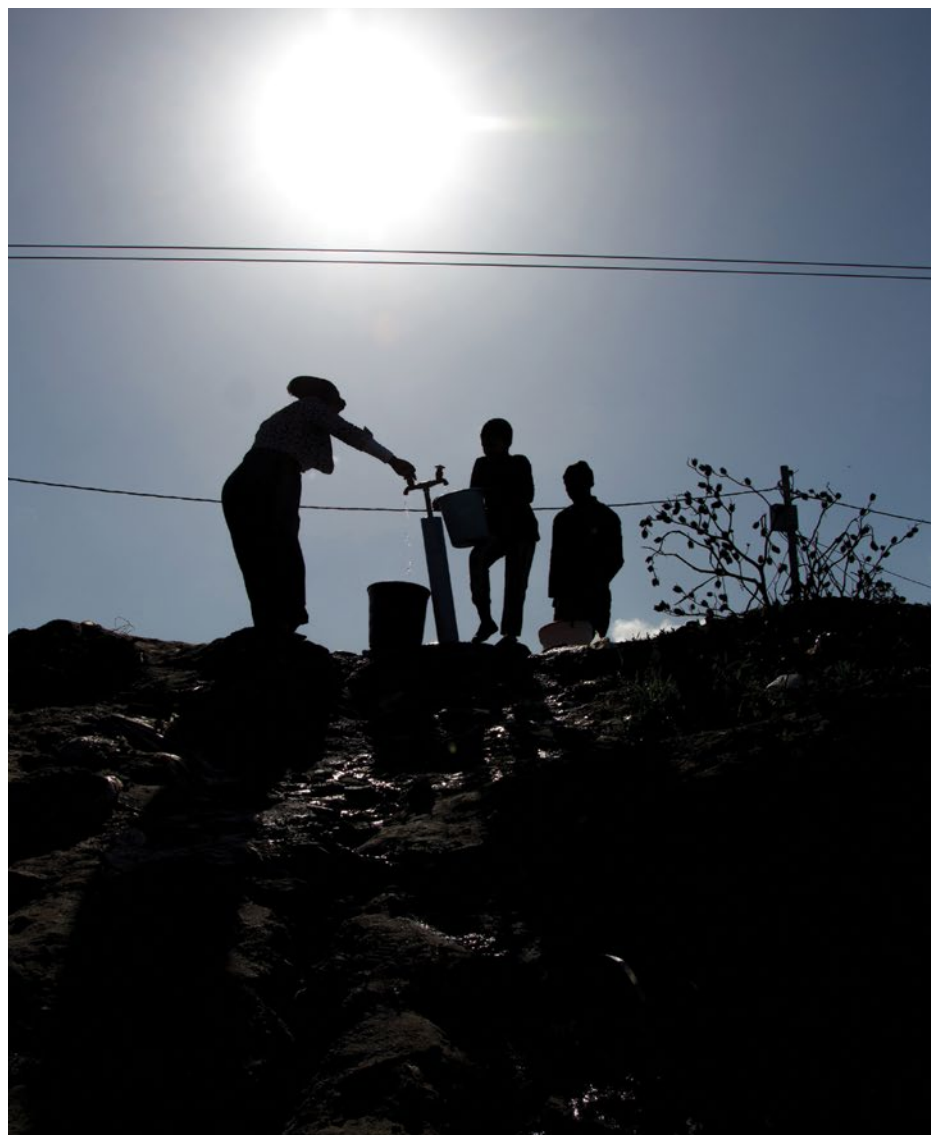
for work, study and for medical purposes, among others.

With the different classifications of migrant persons, South African law therefore confers different rights for each group. However, regardless of one's classification, all pregnant and lactating women, and children under six are entitled to free healthcare services.

A second factor that fuels xenophobic sentiments in the healthcare system is the belief that migrant persons are overburdening the public healthcare system. There is no evidence that migrants are placing an undue burden on the public healthcare system. The number of migrants in South Africa has been grossly exaggerated over the years.¹⁰ The best available data by Statistics South Africa

from the mid-year population estimates of 2021 shows that there are about 3.95 million migrants in South Africa. This figure includes all migrants, irrespective of legal status, country of origin and socio-economic standing.¹¹ The number of migrants in the country amounts to 6.5% of the country's population of over 60 million people. Statistically, it is highly improbable that such a small percentage of people is responsible for overwhelming the entire public healthcare system of the country.

Ultimately, we need to see serious and sustained investment in the healthcare system for the benefit of everyone, and migrant persons should not be scapegoated for underfunding and inefficient allocation of resources.



Conclusion

This is by no means a comprehensive discussion on migrant health rights and the challenges facing the public healthcare system. However, in November 2022, SECTION27 launched an online resource, which can be found here <https://section27.org.za/wp-content/uploads/2022/11/Free-Healthcare-Final-2.pdf>, that unpacks the degree to which South Africa is allowed to treat migrant person differently from citizens in the healthcare context, with particular focus on pregnant and lactating women, and children under six.

Should you encounter instances of medical xenophobia, or if you have any questions about your duties as a health worker related to migrants, please contact the following institutions for assistance:

SECTION27	www.section27.org.za	Email: info@section27.org.za Tel: 011 356 4100 Advice office (cell/WhatsApp): 060 754 0751 / 067 419 6841
Centre for Child Law	www.centreforchildlaw.co.za	Email: centreforchildlaw@up.ac.za Tel: 012 420 4502 Twitter: @UPChildLaw
Lawyers for Human Rights	www.lhr.org.za	Email: info@lhr.org.za Tel: 012 320 2943 (Pretoria) 011 339 1960 (Johannesburg) 015 534 2203 (Musina) 031 301 0531 (Durban) WhatsApp: 066 076 8845
Office of the Health Ombud	www.healthombud.org.za	Email: ljiyane@ohsc.org.za Tel: 012 942 7810 / 7700
Health Professions Council of South Africa	www.hpcsa.co.za	Complaints about practitioners: legalmed@hpcsa.co.za Tel: 012 338 9300/01

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DOLUTEGRAVIR INTERACTIONS INFORMATION SHEET

POTENTIAL INTERACTIONS WITH DOLUTEGRAVIR (DTG)

Interacting drug	Effect of co-administration	Recommendation
Rifampicin	↓ DTG	Double DTG dose to 50 mg 12-hourly. If on TLD FDC, add DTG 50 mg 12 hours after TLD dose
Anticonvulsants: Carbamazepine Phenobarbital Phenytoin	↓ DTG	Avoid coadministration if possible. Alternative agents that do not interact with DTG include valproate, lamotrigine, levetiracetam, and topiramate. Remember that valproate is contra-indicated during pregnancy. Double DTG dose to 50 mg 12-hourly for carbamazepine if an alternative anticonvulsant cannot be used
Metformin	↑ Metformin	DTG increases metformin levels. Maximum metformin dose 500 mg 12-hourly
Polyvalent cations (Mg²⁺, Fe²⁺, Ca²⁺, Al³⁺, Zn²⁺) e.g. antacids, sucralfate, multivitamin and nutritional supplements		
Calcium	↓ DTG	Interaction occurs if taken together on empty stomach. To prevent this, take at the same time, with food. Without food, take the calcium supplement a minimum of 2 hours after or 6 hours before DTG
Iron	↓ DTG	Interaction occurs if taken together on empty stomach. To prevent this, take at the same time, with food. Without food, take the iron supplement a minimum of 2 hours after or 6 hours before DTG Remember: Take calcium and iron at least 4 hours apart
Magnesium/ aluminium containing antacids	↓ DTG	We do not know if food intake eliminates this interaction. Antacids should be taken a minimum of 2 hours after or 6 hours before DTG
Sucralfate/Zinc	↓ DTG	We do not know if food intake eliminates this interaction. Sucralfate/zinc should be taken a minimum of 2 hours after or 6 hours before DTG



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Alternatively "WhatsApp" or send an SMS or "Please Call Me" to 071 840 1572
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Download our free App: SA HIV/TB Hotline



Published October 2020, Version 1

IF YOU TAKE DOLUTEGRAVIR (e.g. TLD) AND NEED TO TAKE CALCIUM AND IRON SUPPLEMENTATION (e.g. DURING PREGNANCY) DO IT LIKE THIS:

WITH FOOD



08:00 TLD + Calcium + FOOD



13:00 Iron supplement



20:00 Calcium

Antacid can be taken after 10h00 and before 02h00, but not at the same time as iron. Try to separate the dosing of iron and antacids as much as possible

WITHOUT FOOD



06:00 TLD
08:00 Calcium



13:00 Iron supplement



20:00 Calcium

Antacid can be taken after 8h00 and before 24h00, but not at the same time as iron. Try to separate dosing of iron and antacids as much as possible



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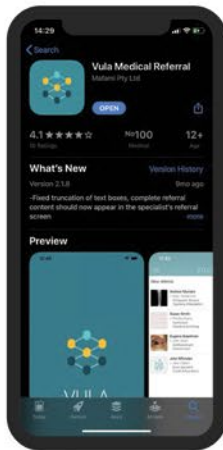


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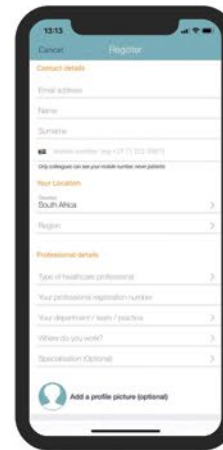
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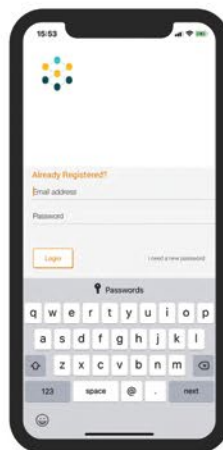


4

Look out for an email from us with your password.

We verify all registrations so this may take up to 24hours. If you have not received a password after that please reach out to us on:
support@vulamobile.com

5 Login using your email & password



6 Start sending & receiving referrals



VULA
Secure medical chat & referral

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CONFERENCE 2023**

Wednesday, 8 November to Friday,
10 November 2023
Century City Conference Centre,
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The Southern African HIV Clinicians Society conference will provide the latest in evidence-based medicine to keep healthcare workers informed of new therapeutics on the horizon, new strategies for management, and sessions on improving skills.

THE CPD-ACCREDITED CONFERENCE PROGRAMME FOCUS AREAS INCLUDE:

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- Paediatric and Adolescent
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- Opportunistic Infections and Malignancies
- HIV Treatment Failure and Drug Resistance
- Operations Research
- Tuberculosis
- Non-Communicable Diseases
- Clinical Skills Building

WHO SHOULD ATTEND?

Infectious diseases physicians, NIMART-trained (or interested) nurses, general practitioners, HIV specialists, pharmacists, academics and other health care professionals.

CALL FOR ABSTRACTS

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REGISTRATION

Register to attend
via the website
sahcsconference.co.za



+27 (0) 11 728 7365



janice@sahivcs.org



sahcsconference.co.za



Professor Yunus Moosa
President of the
SAHCS



Dr Ndiviwe Mphothulo
Chair of the 2023
SAHCS Conference

National HIV & TB Health Care Worker Hotline

This is a free service for all health care workers



What questions can you ask?

The National HIV & TB Health Care Worker Hotline provides information on queries relating to:

- Pre-exposure prophylaxis (PrEP)
- Post exposure prophylaxis (PEP)
- HIV testing
- Management of HIV in pregnancy
- PMTCT
- Drug interactions
- Treatment/prophylaxis of opportunistic infections
- Drug availability
- Adherence support
- Management of DS and DR tuberculosis
- Antiretroviral Therapy (ART):
 - When to initiate
 - Treatment selection
 - Recommendations for laboratory and clinical monitoring
 - How to interpret and respond to laboratory results
 - Management of adverse events

We are available Monday to Friday 08:30 - 16:30



PHONE

0800 212 506
021 406 6782



E-MAIL

pha-mic@uct.ac.za



SMS/PLEASE CALL ME/WHATSAPP

071 840 1572



WEBSITE

www.mic.uct.ac.za



FACEBOOK

[HIV & TB Health Care Worker Hotline, South Africa](https://www.facebook.com/HIV-TB-Health-Care-Worker-Hotline-South-Africa)



FREE ANDROID & APPLE APP
[SA HIV/TB Hotline](#)



MEDICINES
INFORMATION
CENTRE



health

Department:
Health
REPUBLIC OF SOUTH AFRICA



JOIN OUR COMMUNITY OF HEALTHCARE PROVIDERS WHO SEEK TO DELIVER **HIGH QUALITY, BEST-PRACTICE, PATIENT-CENTRED HIV HEALTHCARE**

The Southern African HIV Clinicians Society (SAHCS) is a community of healthcare professionals that work in a variety of spaces, including public, private, and allied healthcare organisations. Our community is united in providing quality, best-practice, patient-centred care that is evidence-based and up to date.

SAHCS is committed to reaching the UNAIDS 95-95-95 targets by 2030 - together we can achieve this!

Since our inception, SAHCS has been trusted to deliver the latest evidence-based HIV healthcare through our clinical guidelines and job aids, training courses, conferences, the SAJHIVMED scientific journal, regular Continuous Medical Education meetings and webinars, and the HIV Nursing Matters publication. We remain passionate about collaborating across cadres and borders to improve the lives of all those affected by HIV.

As we work together to educate and build the capacity of healthcare professionals across Southern Africa, we aim to enable more healthcare professionals to enhance their clinical practice. To achieve this, SAHCS will be offering all healthcare providers interested in HIV and related diseases **free membership for 2023!**

As a member of the SAHCS community you will have unlimited access to trusted clinical knowledge, enabling you to enhance your clinical practice and provide high quality HIV prevention, treatment, and care.

SAHCS MEMBERSHIP BENEFITS INCLUDE:

- Free access to CME meetings and webinars
- CPD certificates for courses and webinars completed
- Free access to previous webinars to enable you to learn when it suits you
- Preferential registration to SAHCS workshops and conferences
- 10% discount on SAHCS on-line courses
- The opportunity to network and collaborate with other healthcare providers who are passionate about treating and preventing HIV
- Free access to:
 - the PubMed® accredited Southern African Journal of HIV Medicine (SAJHIVMED)
 - SAHCS HIV Nursing Matters
 - HIV and related diseases clinical updates and articles
 - Evidence-based SAHCS and NDoH clinical guidelines

JOIN THE SAHCS COMMUNITY FOR FREE!

Go to www.sahivcs.org
or send an email to mirriam@sahivcs.org

CONTACT US

Tel: +27 (0) 11 728 7365
Email: sahivcs@sahivcs.org
Web: www.sahivcs.org



PASSIONATE AND SKILLED | UNITED IN EXCELLENCE | TOGETHER TO END HIV