SOUTH AFRICA INVESTMENT CASE

Proposed Interventions and Technical Efficiency Factors *(Version: 16 July 2014)*

INSTRUCTIONS

Purpose of the document

This document gives an overview of the data required for the South African HIV/ TB Investment Case. The document starts with an overview of the basic programme activities (or programme areas) and example critical enablers and development synergies that will be included in the Investment Case. The second section lists the interventions and technical efficiency factors as well as critical enablers that will be included under each programme area. This list is the result of discussions within the programme-area-specific sub-working groups, the Technical Task Team and the Steering Committee. It will be finalised during the two-day stakeholder workshop on July 30/31, 2014. This section starts with a worked example of one intervention and one TE factor, with values included for illustrative purposes only.

Note that throughout the document we refer to the main *interventions* that comprise the programme areas (such as ART under different thresholds for eligibility under “Care and Treatment”, or different testing modalities under “HCT”) as well as *technical efficiency (TE) factors* that are thought to be ways of improving the delivery of these interventions. (In other words, an intervention can be thought of as the “what” of delivering this service, and the TE factor as the “how”). The distinction between what is an intervention and what is a TE factor will not always be clear, but it is hoped that it will still help in assuring the completeness of the Investment Case and in particular in gathering data.

Critical enablers are defined as activities that are necessary to support the effectiveness and efficiency of basic programme activities, often increasing the uptake, equitable coverage, rights-based delivery and quality of basic programme activities. They tend to apply to more than one programme area, which means care has to be taken to avoid double-counting the resources required for them. Critical enablers are defined in two categories- social enablers such as community mobilisation, changing laws and stigma reduction. The second category of critical enablers are programme enablers, or efforts to make programmes work, such as community centred design and delivery, communication, management, procurement and research and innovation. Again, the distinction between critical enablers and TE factors is somewhat arbitrary. Critical enablers are mentioned twice

in this document, under each of the programme areas as well as summarised in Table 10 in Section 2B. If you want to add a critical enabler it would suffice to do so under the relevant programme area. *Development synergies* are investments in other sectors that can have a positive effect on HIV and TB outcomes. The Investment approach identifies a few key development sectors that present opportunities for synergies in multiple contexts: social protection, education, legal reform, gender equality, poverty reduction, gender-based violence, health systems (including blood safety), community systems and employment practices. Although development synergies can have a profound impact on HIV and TB outcomes, they tend to be less HIV-specific than critical enablers and tend to have a broader range of impacts across health and development sectors. Development synergies are summarised in Table 11 in Section 2B.

The objective of the Investment Case is to give priority to interventions for which impact data is available, and for which this data shows a positive impact. This means that if you want to add an intervention or a TE factor that is not currently on the list, we urge you to also indicate whether there is available evidence on its effectiveness that you are aware of and, where possible, what the exact estimate is. In some of the scenarios we will furthermore include any intervention that is current or planned government policy, regardless of the evidence base. We envisage that even after the workshop there will be a small number of interventions for which no clear case has been made; for these, the final decision regarding inclusion into the Investment Case rests with the Investment Case Steering Committee.

What to add

In preparation for this workshop we ask all participants to do the following for the table in Section 2B that is relevant for the programme area they've been assigned to:

1. **review the list** and add interventions or TE factors where necessary
2. where possible, add information on available data with regards to intervention **effectiveness**. This effectiveness data can take one of the following formats:
    a. impact on survival
    b. impact on HIV and/ or TB transmission/ incidence

c. any other impact measure. Depending on the intervention, these could include outcomes such as number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, or any other programme or intermediary outcome parameter. Category c. would in particular be useful for estimates of technical efficiency that don't fit into the first two effectiveness categories.

3. If available, please also add any available information on **unit costs and/ or cost ingredients** (such as number of visits, type and quantity of tests, etc) **and/ or human resource requirements** (such as staff type and amount of time required for the intervention) that your organisation might hold. This should come from a cost analysis rather than budgets or expenditure records and should be specific to South Africa wherever possible. If you only hold expenditure or budget data however, please indicate this as well.
4. Whenever you add data into the relevant table in section 2B, ***please also note the source*** (eg, name of the first author and year of the publication; short version of the title of the report) ***and bring this source along to the workshop***. This will facilitate discussion and weighing of the evidence during the workshop.

What data to look for

Please note that for all effectiveness and cost data there is a strong preference for data collected in South Africa over evidence from other countries or international or regional averages. In some cases, in particular with new interventions or TE factors that are not yet standard of care in South Africa, data from other settings is suitable as well, but please indicate it if this is the case.

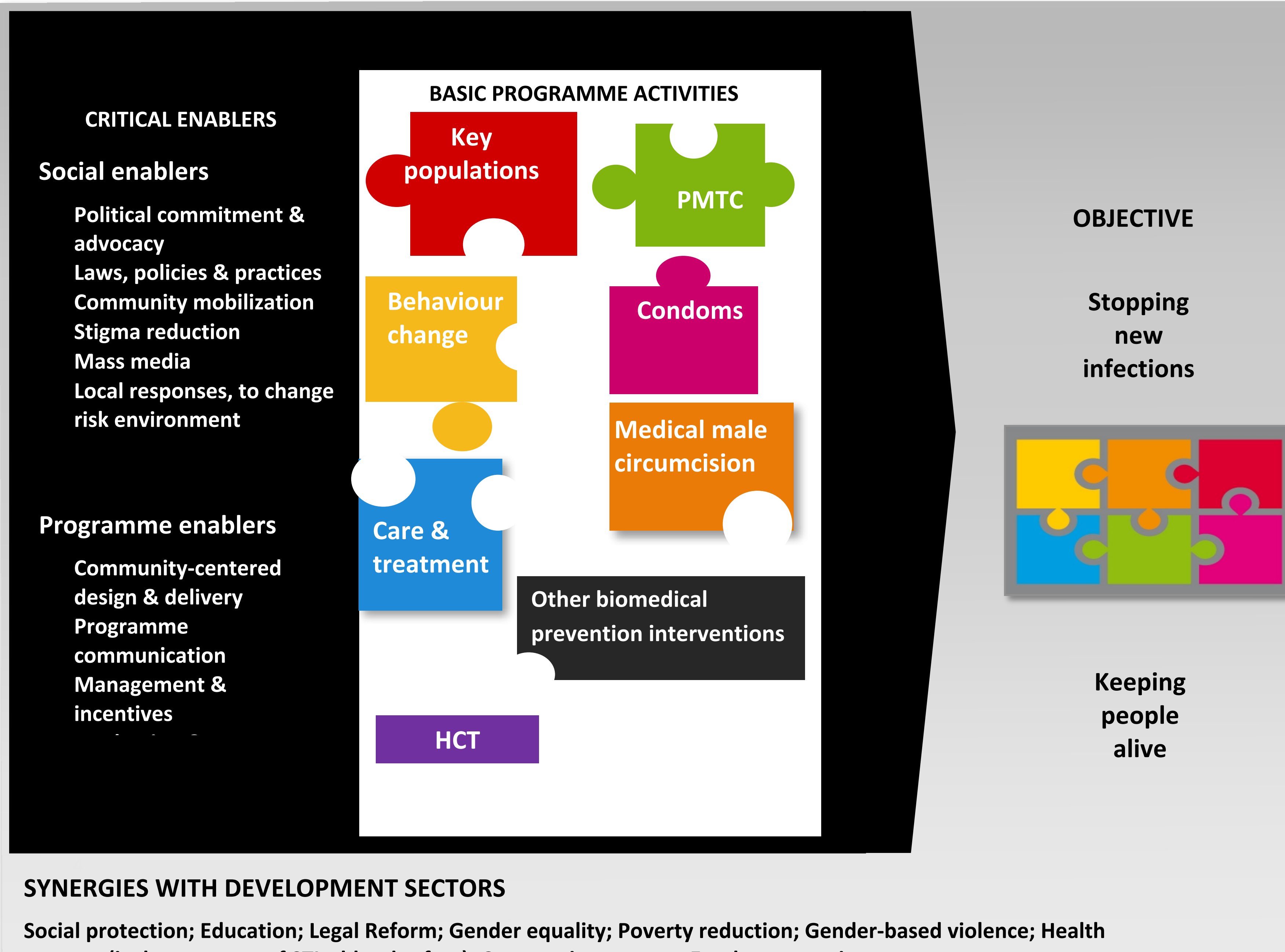
This exercise is intended to be broad in spectrum, so please do consider data from all sources (published/ unpublished literature, project evaluations, etc). The weighing of different data sources will happen during the workshop.

Once you are done

Once you have entered your organisation's additions, please either bring a print-out of the relevant table for your programme area with you to the workshop, or email it to the convener for your programme area. Please remember to either bring or attach the relevant source documents for the data you entered.

5.

1. OVERVIEW OF INVESTMENT CASE ELEMENTS



2. DATA REQUIRED

2A. Worked example

This is a worked example of how to note whether data is available, what the data source is, the type of data, and the value of the estimate. *Please note that the example values are for illustration purposes only; they are not based on any existing data but are completely made up.*

	Effectiveness: **A) Impact on survival** **B) Impact on HIV or TB infections averted** **C) Any other impact measure** *(NB, use this category in particular for estimates of technical efficiency that don't fit into the first two effectiveness categories. Depending on the intervention, these could include outcomes such as number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, or any other programme or intermediary outcome parameter.)*	**Unit cost(s) OR ingredients**	**Human resource requirements**
Intervention: PMTCT Option B+	**Impact on infections averted:** **Data available?** Yes **Source**: Clever A et al, 2013 **Type of source** *(trial, cohort, observational study, etc.?)*: Trial **Unit**: Reduction in incidence **Estimate**: 0.93 **Range**: 0.88-0.95 **Impact on survival:** **Data available?** No **Data source**: **Type of source** (trial, cohort, observational study, etc.?): **Unit**: **Estimate**: **Range**: **Any other impact:** **Data available?** **Data source:** **Type of source** *(trial, cohort, observational study, etc.?):* **Unit**:	**Unit cost:** **Data available? (If no, go to ingredients):** Yes **Data source:** NACM **Setting** *(clinic, hospital, community, mobile, etc.?)*: hospital **Estimate:** 500 **Range:** NA **Currency:** ZAR **Cost year:** 2013 **Ingredients (only if a full unit cost is not available)** **Data available?** **Data source?** **Setting** *(clinic, hospital, community, mobile, etc.?):*	**Data available?** Yes **Data source**: Clever A et al, 2013

	Estimate: **Range**:		
Factors for technical efficiency of intervention: Adherence clubs for ART	<u>**Impact on infections averted:**</u> **Data available?** **Data source:** **Type of source** *(trial, cohort, observational study, etc.?):* <u>**Impact on Survival**</u> **Data available?** **Data source:** **Type of source** *(trial, cohort, observational study, etc.?):* <u>**Any other impact**</u> **Data available?** **Data source:** **Type of source** *(trial, cohort, observational study, etc.?):*	**Data available? (If no, go to ingredients):** Yes **Data source:** Smart W et al, 2014 **Setting** *(clinic, hospital, community, mobile?):* Clinic **Estimate:** 12 **Range:** NA **Currency:** USD **Cost year:** 2013 <u>**Ingredients (only if a full unit cost is not available)**</u> **Data available?** **Data source?** **Setting:** *(clinic, hospital, community, mobile, etc.?):*	**Data available?** Yes **Data source**: Smart W et al, 2014

2B. Data required by programme area

In this section, please indicate whether you are aware of available data, the source, and, where possible, the exact value. For more details please refer to the instructions on page 1.

1. Care and Treatment

	INTERVENTION/MODALITY	**Effectiveness:** **A) survival** **B) HIV or TB infections averted** **C) any other impact measure** (eg, number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
	Pre-ART care (post-test to ART initiation)			
	ART for…			
	Current guidelines			
	Eligibility at 500			
	Discordant couples			
	PMTCT Option B+			
	Early Paediatric Treatment for all <15 yrs			
	Universal Testing and Treatment			
	Third line treatment			
	Demand creation			
	Increase coverage of children and adolescents			
	Increase coverage of men			

	FACTORS FOR TECHNICAL EFFICIENCY OF INTERVENTION	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
	NIMART			
	NIMART by staff nurses			
	Improved mentorship			
	Improved training and mentorship for paediatric NIMART			
	Incentives for patients			
	Adherence interventions			
	Adherence clubs (i-ART/ paediatric i-ART)			
	SMS reminders			
	3-month scripts			
	MEMS caps			
	Hair analysis for drug levels			
	Pharmacy automation			
	Point-of-care labs			
	CD4			
	VL			
	creatinine clearance			
	Increase use of VL monitoring			
	Drug resistance surveillance (incl. genotyping after 1L resistance)			

	Pharmacovigilance			
	Chronic care dispensing units (CCMDD)			
	Unique patient identifier			
	Critical enablers			
	Integration with PHC re-engineering			
	Family-centred clinics			
	Quality workplaces			
	Better staffing levels			
	Improved infrastructure			
	Improved information systems (incl. DHIS module, standardised paediatric stationery)			
	Improved supply-chain management			
	Integration with NHI			
	Integration with TB care			
	Integration with ICDM			

2. Male Medical Circumcision

	INTERVENTION/MODALITY	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
1.	Current guidelines			
2.	EIMC			
3.	Fixed sites			
4.	Outreach sites			
5.	Mobile sites			
6.	High intensity campaign (vs. routine service delivery)			
	FACTORS FOR TECHNICAL EFFICIENCY OF INTERVENTION	**Effectiveness:** **A) survival** **B) HIV or TB infections averted** **C) any other impact measure** (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
1.	Doctor-driven model			
2.	Nurse-driven model			
3.	Integration with essential package of services			
4.	High volume sites			
5.	Planning for seasonal fluctuation			
6.	Collaboration with Traditional Male Circumcision			
7.	Age group targeting			

8.	Geographical targeting			
9.	Demand creation			
10	PrePEX			
	CRITICAL ENABLERS			
1				
2				
3				
4				

3. Comprehensive Condom Programming

	INTERVENTION/MODALITY	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
1.	Current Guidelines			
2.	Current distribution channels/outlets			
3.	Current coverage			
4.	Demand creation: Mass media etc.			
5.	Condoms:			
	Male condoms			
	Female condoms			
6.	Logistics Management Info System (LMIS)			
7.	Lubricants			
	FACTORS FOR TECHNICAL EFFICIENCY OF INTERVENTION	**Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure** (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
1.	Non-traditional outlets for distribution			
2.	Community Health Worker interventions (link to PHC)			
3.	Geographic & sub-pop targeting			
4.	Condom branding – rebranding Choice			
5.				

6.				
	CRITICAL ENABLERS			
	Integration with ART			
	Integration with HCT			
	Integration with Key Population programmes			
	Integration with ANC/Post natal care			
	Integration with MMC			
	Integration with SBCC			
	Integration with Family Planning			
	Improved supply chain management			

4. Key Populations

	INTERVENTION/MODALITY	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
1.	Targeted condom and lubricant promotion and distribution			
2.	HIV counseling and testing (especially mobile and home-based services)			
3.	Peer education and outreach			
4.	Linkages to other services (e.g., psychosocial, legal and human rights)			
5.	Link to care: HIV care and treatment			
6.	Link to TB: Prevention, screening, diagnosis and treatment of tuberculosis			
7.	Targeted communication and mobilization campaigns (e.g., Red umbrella days)			
8.	STI screening and treatment services (part of comprehensive HIV prevention and care interventions)			
9.	Mainstreaming and sensitization training: Capacity building of health providers (e.g., clinical and sensitization training, breaking down stigma and improving access to health services)			
10.	Post-exposure prophylaxis (PEP)			
11.	Pre-Exposure Prophylaxis (PreP)			
12.	Targeted MMC programmes			

13.	Sex Worker Specific:			
	- Targeted programmes for SW, their partners and clients			
	- Reproductive health planning			
	- Programmes on Gender Based Violence			
	- Microbiocides			
14.	People who inject Drugs			
	- Needle & Syringe programmes			
	- Opioid (oral) substitution therapy (OST)			
	FACTORS FOR TECHNICAL EFFICIENCY OF INTERVENTION	**Effectiveness:** **A) survival** **B) HIV or TB infections averted** **C) any other impact measure** (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
1.	NIMART for Key Populations			
2.	Integration with essential package of services			
3.	Outreach at hot spots / high volume sites			
4.				
	CRITICAL ENABLERS			

PMTCT

	INTERVENTION/MODALITY	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
1.	Demand creation			
2.	Early ANC registration and BANC			
3.	SMS reminders and m-Health program			
4.	Testing at ANC			
5.	PMTCT Option B			
6.	TB Screening in pregnancy			
7.	ART during pregnancy			
8.	ART during breastfeeding			
9.	NVP to baby for 6 weeks			
10.				
	FACTORS FOR TECHNICAL EFFICIENCY OF INTERVENTION	**Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure** (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
1.	M-Health SMS Reminders			
2.	Linking Maternal Postnatal Care; EPI and FP			
3.	Birth PCR			
4.	Strengthening 18 month follow-up testing through linkages with support grants; ECD			

5.	Mother-baby Clinic			
6.	Integration of TB, HIV and PMTCT/MCH in community based activities			
7.	Linking FP and Fertility planning			
8.	Management of pregnant and post natal women on HAART – WHERE			
	CRITICAL ENABLERS			

5.

6. **HCT**

	INTERVENTION/MODALITY	**Effectiveness:** **A) survival** **B) HIV or TB infections averted** **C) any other impact measure** **(e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)**	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
	Rapid Test			
	Confirmatory Testing			
	CICT			
	pre-test counselling			
	Individual			
	Couple			
	Group information sessions including condom demonstration			
	PICT			
	Multi disease testing & screening: STI, Alcohol & substance use, Diabetes, hypertension, bleeding disorders			
	Post testing counselling prevention package			
	PHDP			
	Special Populations:			
	Pregnant women & Family Planning clients			
	Couples			
	Men			
	Survivors of rape & domestic violence			
	Abandoned babies/children			
	High Transmission Areas (HTA): farms			

	Closed Settings: inmates, detention centres			
	Learning Institutions: Universities, FETs			
	Communication and social mobilisation			
	Mass media: websites, twitter, print, mobile, TV, radio			
	IEC materials: Health facility			
	Peer education programmes, workplace outreach			
	Community mobilisation			
	Call centres			
	FACTORS FOR TECHNICAL EFFICIENCY	**Effectiveness:** **A) survival** **B) HIV or TB infections averted** **C) any other impact measure** (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
1	Health Facility			
	inpatient			
	outpatient			
	Standalone facilities			
	Mobile services			
	Household testing			
	Workplace			
2	Task Shifting			
	Trained HCW			
	Enrolled nurse and Auxillary nurses			
	Peer/Lay counsellor			
	Community Health Workers (PHC)			

	Time spent on Group information session			
	Settings: Self-testing (Pre- and post-test counselling support)			
	Target populations: community, men, adolescents, Young women			
	Expanded workplace programmes: mines, informal sector			
3	**Integration with**			
	PMTCT			
	IMCI – Active case finding e.g. immunization visit			
	PrEP			
	Family Planning – preconception counseling; family approach to HCT			
	Professionalizing existing peer education and outreach programmes			
	Strengthening public-private partnerships			
4	**Strengthen referral:**			
	Unique patient identifier			
	HCT Module Tier.net			
	peer support groups (Psychosocial support)			
	referral to protective services & substance abuse counselling			
	CRITICAL ENABLERS			
	Outreach programmes			
	Task shifting			
	Mentorship and CB			
	Quality assurance and improvement			
	MIS			

7. Other Biomedical Prevention Interventions (PEP, PrEP, STI treatment, microbicides)

	INTERVENTION/MODALITY	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
I	**Post-Exposure Prophylaxis (PEP)**			
	Screening			
	Counselling services for providing consent to PEP			
	HCT (for both the exposed person and the source person)			
	Follow-up HIV testing at three and six months after completion of PEP			
	Treatment			
	PEP medication which includes the initial dose (as soon as possible following exposure and preferably within 72 hours) and the full course (28 days of treatment)			
	Medication to manage side effects			
	Adherence support			
	Monitoring of adherence (completion of a 28-day PEP course)			
	Support services:			
	additional in-person clinical follow-up or 24-hour on-call advice from a provider with expertise in HIV PEP hepatitis B and C testing hepatitis B PEP and vaccination pregnancy testing at baseline and follow-up (for all women of childbearing age)			

	in case of exposure through sexual assault: forensic examination; trauma counselling and management including psychosocial support prophylaxis and management of sexually transmitted infections; emergency contraception			
	Target population: Sexual assault victims, discordant couples			
	Geographic target: Learning Institutions: Universities, FETs			
II	**Oral PrEP** (CDC guidelines)			
1.	**HIV Risk Assessment**			
	Counseling: education about PrEP, adherence counseling			
2.	**Clinical eligibility:** HIV Testing , renal function, Hep B individual education and counseling			
3.	**Prescription:** regimen: daily dosing, ≤90 day supply			
4.	**Programmatic:** Educating health workers			
5.	**Target risk groups:** Heterosexual women and men, Sex workers, pregnant women, adolescents (high number of partners, inconsistent condom use)			
6.	**Geographic target:** High Transmission Areas (HTA)			
III	**Syndromic Management of STIs**			
1	Identification of the syndrome: syndromic or laboratory based diagnosis			
2	Antimicrobial treatment for the syndrome: curative or palliative therapy			

3	Education & counselling of the patient			
4	Condom supply			
5	Notification and management of sexual partners.			
6	Monitoring, surveillance and research			
7	Geographic Target: Closed Settings: inmates, detention centres			
IV	**Microbicides (**Vaginal/Rectal gels), vaginal rings)			
	FACTORS FOR TECHNICAL EFFICIENCY OF INTERVENTION	**Effectiveness:** **A) survival** **B) HIV or TB infections averted** **C) any other impact measure** (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
1	Follow-up visits at least every 3 months:			
	HIV test			
	Medication adherence: education & counselling, MEMS, side effect assessment, dosing routines, reminder systems			
	Behaviour risk reduction support			
	STI symptom assessment			
	Drug resistance surveillance pharmacovigilance			
	Assess renal function			
	Test for bacterial STIs			
2	Integration: HCT, PMTCT, Family Planning			

3	Strengthening public-private partnerships			
4	Improved supply-chain management			
	CRITICAL ENABLERS			

8. Social and Behaviour Change Communication (SBCC)

	INTERVENTION/MODALITY	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
1.	Target: Individual, interpersonal (couples, families), community and institutional levels			
	Strategies:			
2.	Behaviour change communication			
3.	Social mobilisation			
4.	Advocacy: resources mobilisation & social & political commitment of opinion leaders, decision makers and influencers (e.g. PLHIV, traditional & religious leaders, politicians, sport personalities)			
	Models:			
5.	Mass Media			
6.	Radio: Community radio stations: e.g. Sonke Gender Justice's Community Radio Project			
7.	Print: Poster, pamphlets			
8.	Mass Communication Campaign			
9.	TV: Entertainment			
10.	Education: Door to door campaigns			
11.	Internet			
12.	Phones: SMS			
13.	Outreach: Peer educators/mentors			

14.	Life skills Education Programme			
15.	Community outreach: community dialogue & empowerment			
16.	Capacity Building: media training, dialogue			
17.	Partnerships and networking: social networks			
	Settings:			
18.	Schools			
19.	Community: out-of-school youth			
20.	Health facilities: service providers			
21.	Private Sector Approaches: MTV, Coca cola etc.			
	FACTORS FOR TECHNICAL EFFICIENCY OF INTERVENTION	**Effectiveness:** **A) survival** **B) HIV or TB infections averted** **C) any other impact measure** (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
1.	Consistent messages (content, quality, intensity) delay sex, increased HCT, consistent condom use)			
2.	Innovative communication: e.g. m-health			
3.	Target: sexually active adolescent girls			
4.	Capacity building: adolescents' agency (choosing partners, within age disparate r/ship; understanding of the risk)			
5.	Multi-level entertainment-education communication			
	CRITICAL ENABLERS			

9. Tuberculosis

	INTERVENTION/MODALITY	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
1.	**Prevention**			
2.	Infection control in households, community buildings, public shared space, e.g. taxis & buses			
3.	IPT for child contacts of infectious TB cases			
4.	Improved infection control in health care and other congregate settings			
5.	**Screening**			
6.	Intensive Case Finding in high transmission areas (peri-mining communities, correctional services, schools, informal settlements, inner city slums)			
7.	Screening as part of integrated school health programme; screening of health care workers; & screening all women attending ANC and MNCH services at every visit			
8.	Screening of household contacts for TB			
9.	**Diagnosis – improved more rapid access to quality tests**			
10.	GeneXpert			
11.	Paediatric TB			
12.	Extrapulmonary TB			
13.	**Treatment**			

14.	Supply chain management (sputum cups, drugs, GXP)			
15.	DS-TB			
16.	MDR-TB			
17.	Centralised (inpatient/specialist unit)			
18.	Decentralised (PHC/community)			
19.	Bedaquiline			
20.	XDR-TB			
	FACTORS FOR TECHNICAL EFFICIENCY OF INTERVENTION	**Effectiveness:** **A) survival** **B) HIV or TB infections averted** **C) any other impact measure** (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	**Unit cost(s) or ingredients (if a full unit cost is not available)**	**Human resource requirements**
1	Supply chain management (sputum cups, drugs, GXP)			
2	Adherence support and retention in care mechanisms			
	Mechanism (mHealth) for rapid detection of TB cases and linkage to care			
	Mechanism (mHealth) for tracking of loss to follow up?			
	Mechanism (mHealth for tracking of household contacts?			
	DOTS			
	Adherence clubs			
	Tracer teams for patients loss to follow up			
	Treatment monitoring			

	Regular sputum to monitor progress			
	CRITICAL ENABLERS			
1	Programme communication: Kick TB/HIV activations in high burden settings			
2	Management & incentives: Service providers			
3	Research & innovation:			
	TB surveillance			
	National prevalence survey			
4	Monitoring:			
	Recording, reporting and analysis of programme data			
	Provincial, district & facility supervision visits			
	Surveillance in health care workers, prisoners & prison officials			
5	Laws, policies & practices:			
	Smoking cessation			
	Alcohol control			
	Accelerated justice & alternative sentencing to reduce overcrowding in correctional services			
	Adequate infection control in the design of public buildings			
6	Community mobilization			
	Better case finding			
	Earlier presentation with possible TB symptoms			

	Adherence support for friends and family			

10. Critical Enablers

	CRITICAL ENABLERS	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
	SOCIAL ENABLERS			
	Political commitment and Advocacy			
	FBO 'We Will Speak out' Campaign			
	Laws, policies & practices			
	Policy on alcohol, spousal separation			
	Training of law enforcement			
	Access to justice and legal support for key populations: AIDS Legal Clinic			
	Community mobilization			
	Establishing & supporting networks of people living with HIV and other key populations			
	Community empowerment and violence reduction strategies			
	Outreach education Partnering-reduction programmes			
	Stigma reduction			
	Engaging community, religious and political leaders to challenge stereotypes and norms, values and culture that fuel stigma			
	Mass media			
	Notification and education of patients' rights and			

	service access opportunities			
	Human interest stories to promote treatment service and acceptance and involving role models to raise awareness about safer sexual behaviours, HCT uptake and risk reduction methods			
	PROGRAMME ENABLERS			
	Community-centered design & delivery			
	Management of feedback loops and data on service coverage and quality			
	Leveraging informal systems to ensure patients receive their ARV drugs in a way that decreases the cost for the health system and the patient e.g. Group support schemes - transport pooling			
	Programme Communication			
	Strategic information about programme achievements and impact: Data about local HIV prevalence; mapping of local HIV service providers; routine use of cascade analysis at all levels			
	Sharing information about the impact through brochures, radio, TV and local community meetings			
	Use of eHealth (electronic health) and mHealth (mobile health) interventions: Health Care Worker Hotline (Dept Medicine, UCT) , LABS			
	Management & incentives			
	Laboratory services with an efficient courier system			
	Incentivize service providers' behavior – e.g. pay-for-performance schemes to improve use and quality of services			
	Optimize staffing models, staffing level benchmarks to standardize norms for various facility types, and			

	rationalize human resource capacity across facilities			
	Production & distribution			
	Sustained supply; manufacturing & Supply chain: Optimizing tenders and purchasing processes for medicines and other supplies ; diversifying potential suppliers, including local producers; joint procurement, forecasting and other ways of using volume to reduce prices			
	Research & innovation			
	Surveillance systems (Pop surveys, ANC, DHS,)			

11. Development Synergies

	DEVELOPMENT SYNERGIES	Effectiveness: A) survival B) HIV or TB infections averted C) any other impact measure (e.g., number of sex acts protected, increase in adherence, decrease in LTFU, increase in cases diagnosed, etc.)	Unit cost(s) or ingredients (if a full unit cost is not available)	Human resource requirements
	Social Protection			
1	**Direct cash transfers to households and individuals (social assistance):** cash transfers (universal, targeted (e.g. child focused), conditional); social pensions; child grants; food transfer programmes			
2	**Social insurance:** pensions; health insurance; unemployment benefits			
3	HCT/TB Growth monitoring: ECD Centres; Isibindi centres			
4	Including HIV sensitivity in social protection programmes : e.g. HIV sensitive cash-transfers			
	Village Savings and Lending Schemes			
2	Education			
2.1	Information, Awareness and Access: Gender empowerment of at risk school girl (GEM/BEM Clubs; AKGIS; Techno Girls); Alcohol and Drug Use Prevention and Management Programme			
2.2	Integrated School Health Policy and Programming:school based support teams; referrals to clinics or other medical or social service professionals			
2.3	Targeted SRH services: Senior and FET			

	learners			
2.4	Curriculum Development: age-appropriate Life Skills			
2.5	Educator Training and Support			
2.6	Safe Educational Environment: free of discrimination, exploitation, sexual harassment, bullying, abuse and / or any form of gender-based or other violence.			
2.7	Psychological Support Services			
2.8	ISHP referral services: SRH Information; PEP, HCT, ART, screening and testing, MMC, grief & bereavement counselling, counselling for positive living & HBC services			
2.9	OVC: access and retention in schools			
2.10	Curriculum support programmes for learners with learning barriers			
2.11	Social support services & nutritional support			
2.12	Workplace Issues: Information & awareness: materials, programmes; universal access to HIV & TB screening, diagnosis, care & treatment; support and referral services			
3	**Legal Reform**			
3.1	Reforming intellectual property and patent laws to reduce the costs of critical diagnostics and medicines;			
3.2	Changing alcohol regulations			
3.3	**Criminal justice and prison reforms:** Prison management programmes aiming at reducing violence, stigma and discrimination; improve prison conditions (nutrition, ventilation, natural light); reduce overcrowding; establish			

	mechanism to ensure continuity of treatment			
4	**Gender equality /GBV**			
4.1	Empowerment of women through gender equality and HIV training: e.g. Siyakha Nentsha ("Building with Young People"), IMAGE (Intervention with Microfinance for AIDS and Gender Equity) **,** Laphum' Ilanga (Sunrise), Shosholoza AIDS Project, Stepping Stones			
4.2	Community mobilization E.g. Prevention in Action (PIA) c ommunity-based programme in Khayelitsha - community activists who are actively involved in intervening and preventing GBV			
4.3	Government Women's Justice and Empowerment Initiative (WJEI) programme rollout *Thuthuzela Care Centre* model and the Increasing Services to Survivors of Sexual Assault in SA programme			
4.4	Peer-based participatory education challenging harmful gender norms Interventions that target masculine norms: promoting equitable norms and attitudes among men			
5	**Poverty reduction**			
	Economic strengthening and livelihoods support households affected by AIDS			
6	**Health systems (incl. treatment of STIs, blood safety)**			
6.1	Integration with PHC re-engineering			
6.2	Integration with NHI			
6.3	Integration with TB care			

6.4	PPPs: ART supply chain; patient management			
7	**Employer practices:**			
	HIV &TB Wellness workplace Programmes			