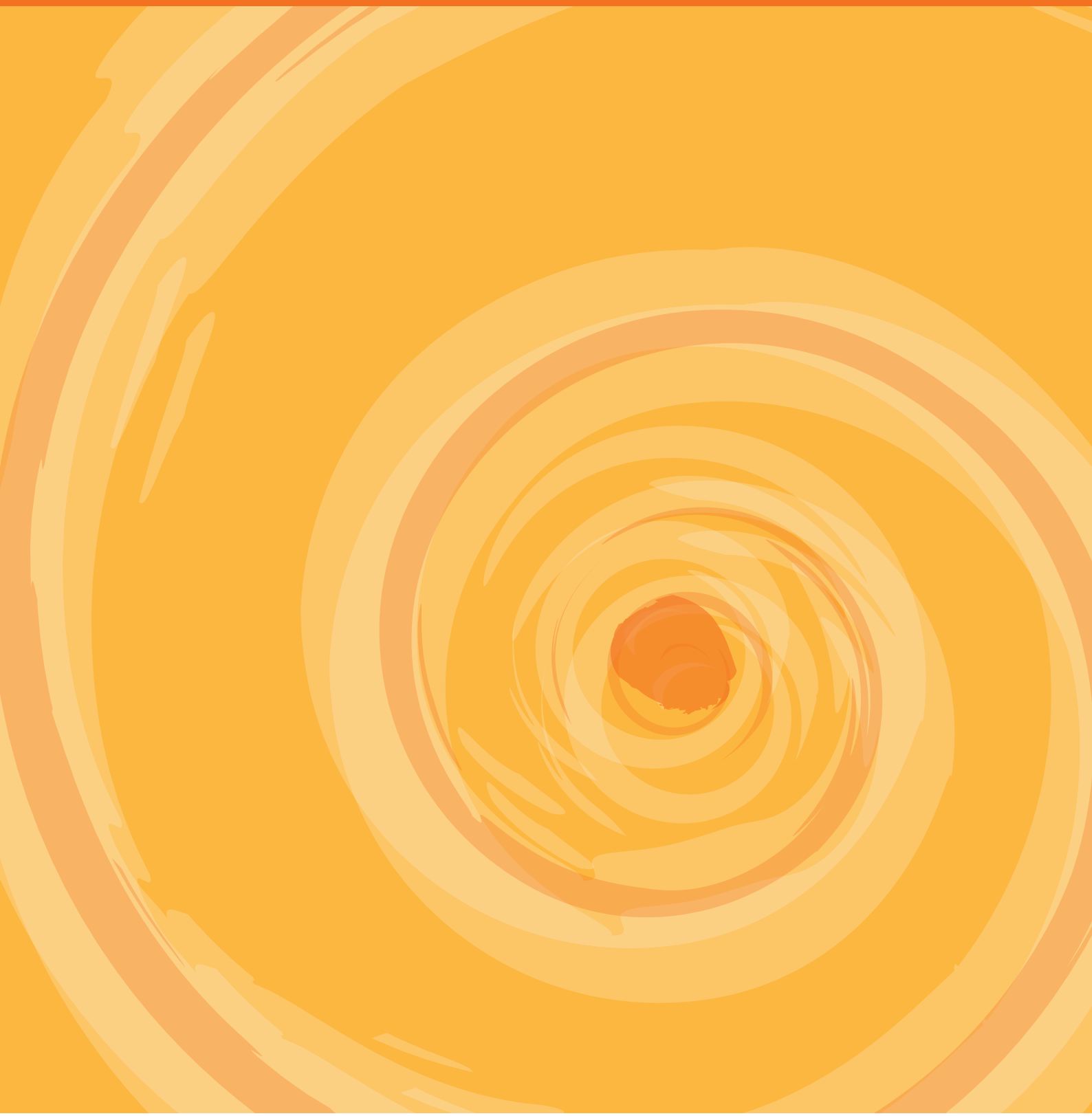
Situational Analysis of TB, HIV and STI Services in the Department of Correctional Services

—

Kwa Zulu Natal & Limpopo, Mpumalanga & North West Regions • 2015



PEPFAR

I-TECH
International
Training & Education
Center for Health

correctional services
Department:
Correctional Services
REPUBLIC OF SOUTH AFRICA

ACKNOWLEDGEMENTS

Approval for publication of this 'Situational Analysis of TB, HIV and STI Services in the Department of Correctional Services' was granted by the Acting National Commissioner of the Department of Correctional Services on the 24th of April 2015.

I-TECH would like to thank the South Africa National Department of Correctional Services under the leadership of Maria Mabena, Deputy Commissioner of Health Care Services; Geraldine Pienaar, Director HIV & AIDS; Roeleen Booi, Deputy Director: Design and Development; Samuel Mohuba, Deputy Director: Primary Health Care; Nomvuyo Mashibini, Assistant Manager: Mother, Child and Youth Health; Cathrine Masote, Assistant Director: Research and Development; and Kosie Ferreira, Assistant Director: Monitoring and Evaluation for their support, direction and collaboration throughout this process. We would like to thank the Department of Correctional Services: Kwa Zulu Natal (KZN) Region, specifically King Kumalo, Acting Regional Director: Development and Care as well as the Department of Correctional Services Limpopo, Mpumalanga and North West (LMN) Region, specifically Stefnie Müller, Deputy Director, Regional Coordinator: HIV/AIDS and Francina Sehume, Deputy Director, Regional Coordinator: Health Services for facilitating all the steps in this process. We would like to thank the Limpopo, Mpumalanga and North West Departments of Health (DOH) and Regional Training Centres (RTCs), as well as the partner representatives from the Aurum Institute, Shout it Now, International Center for AIDS Care and Treatment Program (ICAP) and Right to Care for their participation in the stakeholder meetings prior to and following the assessment process. We would also like to thank Sibusiso Hlatjwako and Rehmeth Fakroodeen from the U.S. Centers for Disease Control and Prevention (CDC). Finally, we would like to especially thank the DCS correctional centre staff as well as other DOH staff from the KZN region who participated in the interviews and assessment process.

The data was analysed and this report was written and compiled through a collaborative process:

I-TECH South Africa
Julia DeKadt, Research Manager
Sharlene Govender, DCS Program Manager
Jessica Grignon, Deputy Director
Suzanne Jed, Senior Clinical Technical Advisor

I-TECH University of Washington, Seattle
Sean Galagan, Research Coordinator
Jay Gilvydis, Research and Evaluation Advisor
Amy Hagopian, Associate Professor, Department of Global Health

University of California San Francisco
Valerie Kirby, Qualitative Analyst
Andres Maiorana, Academic Specialist
Jessica Morris, Consultant
Janet Myers, Associate Professor of Medicine

Funding
This information/content and conclusions are those of the author(s) and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

TABLE OF CONTENTS

Acknowledgments 2
Table of Contents 3
Abbreviations 4
Background 5
Methods 6
  Laying the Foundation 6
  Preparing for Field Work 6
  Field Work 7
  Data Analysis 8
Findings 9
Discussion 55
Recommendations 61
Summary 77
Appendix A: Participants in Stakeholder and Data Collection Activities 93
Appendix B: Data Collection Tools 94

ABBREVIATIONS

ABC	Abacavir
AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal Care
ART	Antiretroviral treatment/therapy
AZT	Zidovudine (also known as ZDV)
CDC	U.S. Centres for Disease Control and Prevention
CHC	Community Health Centre
Cr	Creatinine
CPT	Cotrimoxazole preventive therapy
CTX	Cotrimoxazole
DCS	Department of Correctional Services
DOH	Department of Health
DOTS	Directly observed treatment, short-course
DPSA	Department of Public Service and Administration
DST	Drug sensitivity testing
EFV	Efavirenz
FBC	Full blood count
FPD	Foundation for Professional Development
GXP	GeneXpert
HCT	HIV counselling and testing
HCW	Healthcare worker
HSRC	Human Sciences Research Council
HIV	Human immunodeficiency virus
INH	Isoniazid
IPC	Infection prevention and control
INH	Isoniazid
IPT	Isoniazid preventive treatment
I-TECH	International Training and Education Center for Health
KZN	Kwa Zulu Natal
M&E	Monitoring and Evaluation
MDR-TB	Multidrug-resistant tuberculosis
MDT	Multidisciplinary team
MMC	Medical Male Circumcision
MOU	Memorandum of understanding
NDOH	National Department of Health
NGO	Non-governmental organisation(s)
NIMART	Nurse Initiated and Managed ART
NSP	National Strategic Plan
NVP	Nevirapine
OIs	Opportunistic infections
PCR	Polymerase chain reaction
PDOH	Provincial Departments of Health
PHCs	Primary healthcare centres
PICT	Provider-initiated testing and counselling
PLHIV	Person/people living with HIV and AIDS
PMTCT	Prevention of mother-to-child transmission of HIV
RNA	Ribonucleic acid
RTC	Regional Training Centre
SANAC	South African National AIDS Council
SAPS	South Africa Police Service
STI	Sexually Transmitted Infection
TB	Tuberculosis
VL	Viral Load
WHO	World Health Organisation
XDR	Extremely drug resistant

BACKGROUND

The Republic of South Africa (RSA) is currently experiencing a combined epidemic of human immunodeficiency virus (HIV) and tuberculosis (TB), a situation made worse by the high prevalence of sexually transmitted infections (STIs). The Department of Correctional Services (DCS) in South Africa operates correctional centres that house the largest proportion of offenders to general population in Southern Africa (413/100,000).[1] DCS administers 243 adult correctional centres and 13 youth detention centres. Managing the dual epidemics of HIV and TB across a large number of centres remains a priority of the DCS, where HIV prevalence is estimated at 34.6%[2] and TB prevalence rates may be up to 100 times higher than in the civilian population.[3] Because of the high disease burden and infection control challenges, and because offenders eventually re-enter their communities, DCS is a key setting for improving HIV, TB, and STI prevention efforts through comprehensive and integrated services and treatment. The continuous cycle of incarceration and community re-entry present an opportunity for HIV testing, linkage to care, and reducing HIV transmission risk behaviours that benefit all concerned.[4] Comprehensive STI, HIV, and TB health education and social reintegration programmes for detainees have been found to reduce sexual and drug-related risk behaviour and increase uptake of community resources following release.[5] These targeted programs in DCS, when linked with programs through Provincial Departments of Health (PDOHs), decrease rates of infection in the community and improve health outcomes.[6]

In an effort to strengthen the DCS health system and its linkages to National and Provincial DOH, with the goal to sustain stronger health services over time, the DCS requested the International Training and Education Center for Health (I-TECH) to work in partnership with key stakeholders to conduct a situational analysis. This analysis was designed to characterize three primary aspects of programme planning: service delivery systems in the DCS; social and structural factors related to services in correctional centres related to the HIV, TB, and STI epidemics; and, resources available for offenders and those newly released into the community. This report presents the outcomes of the situational analysis conducted in DCS centres in two regions, the Limpopo, Mpumalanga & North West (LMN) Region and the Kwa Zulu Natal (KZN) Region.

METHODS

A situational analysis is essential to focus limited resources for maximum programme success within a local context. A situational analysis is a process that includes assessing and using available information, collecting new information based on research or study questions, and analysing information from diverse stakeholders. It is important to understand what is contributing to the HIV and TB epidemic in the study area in order to shape a response tailored to the context. The premise for the situational analysis for the KZN and LMN Regions was that our programme design would benefit from an assessment of the perspectives of local stakeholders, DCS staff, and community health facilities. This situational analysis focused almost exclusively on HIV, TB, and STI services within the healthcare system of the KZN and LMN regions of the DCS.

The situational analysis had four basic steps: 1) laying the foundation; 2) preparing for fieldwork; 3) fieldwork; and, 4) report-back. This report represents the beginning of the final stage of the process, reporting back.

Laying the Foundation

Initial meetings with National and Provincial DCS took place in early 2013 to identify priority areas for support and to map a collaborative agreement for subsequent work. The concept for a situational analysis, as well as identifying focus areas for the assessment to ensure relevancy and accuracy, stemmed from these initial meetings. I-TECH South Africa and the National DCS developed and signed a memorandum of understanding (MOU) in April 2013 to document the collaborative agreement. The study team reviewed existing DCS data and literature of other health-related situational analyses conducted both locally and internationally to identify existing tools and methods.

Preparing for Field Work

Instrument Development

Qualitative and quantitative structured interview guides and corresponding consent forms were created and submitted to ethics committees for review at the South African Human Sciences Research Council (HSRC), University of Washington, and University of California, San Francisco. Six separate tools were adapted to the South African context from the United Nations' HIV in Correctional Centres Situation and Needs Assessment Toolkit, Office of Drugs and Crime[7]. Instruments included questions on correctional centre and health centre characteristics, health challenges, TB- and HIV-related services, HIV- and TB-related stigma, HIV and TB knowledge, characteristics of violence, sexual relationships, and cultural practices of offenders, and community linkages, particularly to the Department of Health.

Sample

A total of 32 correctional centres were included in the assessment sample, with 18 from KZN and 14 from LMN (five from Limpopo, four from Mpumalanga, and five from the North West, with one additional correctional centre where nurses are currently initiating antiretroviral therapy (ART) added to the sample). The sampling process utilised the list of all DCS correctional centres within the KZN and LMN Regions to ensure inclusion of all security levels, centres housing males and females, and centres housing juveniles.

Stakeholder Meetings

DCS identified key stakeholders to assist the team in defining priorities for the situational analysis. The goal of the stakeholder meeting was to inform the situational analysis, help identify gaps in knowledge, identify key points of entry, refine programme strategies, and help develop a plan for implementation that also included safety and security practices for the duration of the situational analysis.

Stakeholder meetings occurred August 13, 2013 in Pietermaritzburg, August 12, 2013 in Limpopo, August 14, 2013 in Mpumalanga, and August 16, 2013 in North West. See Appendix A for meeting attendees. A total of 10 DCS staff participated as part of the study team. Study team members participated in a training September 9 and 10, 2013 in KZN and August 19 and 20, 2013 in LMN on the purpose of the project, methods for data collection, and gaining informed consent.

Instrument Development
Qualitative and quantitative structured interview guides and corresponding consent forms were created and submitted to ethics committees for review at the South African Human Sciences Research Council (HSRC), University of Washington, and University of California, San Francisco. Six separate tools were adapted to the South African context from the United Nations' HIV in Correctional Centres Situation and Needs Assessment Toolkit, Office of Drugs and Crime7. Instruments included questions on correctional centre and health facility characteristics, health challenges, TB and HIV-related services, HIV and TB-related stigma, HIV and TB knowledge, characteristics of violence, sexual relationships and cultural practices of offenders, and community linkages, particularly to the Department of Health.

Field Work

Data Collection
A team of trained clinicians, social scientists, and program implementers from both the DCS and I-TECH conducted field work with in-depth interviews and facility assessments at 18 DCS correctional centres from September 11-26, 2013 in KZN and 14 DCS correctional centres from August 21-29, 2013 in LMN and the referring DOH facilities.

People and activities included in the interviews:

1. **Correctional Centre Assessment:** The Director or Acting Director at the correctional centre was interviewed to gather basic information including demographics and occupancy of the centre.

2. **Correctional Centre Clinic Assessment:** A health worker in the correctional centre was interviewed to complete a correctional centre clinic assessment instrument.

3. **Key Informant Interviews:** DCS officials and non-healthcare staff were interviewed to understand procedures and protocols within DCS settings, as well as knowledge of risk factors for HIV and TB, stigma, and context.

4. **DCS Healthcare Worker Interviews:** HCWs were interviewed to understand procedures and protocols within DCS settings, as well as knowledge of risk factors for HIV and TB, stigma, and context.

5. **Community Health Worker Interviews:** DOH clinical staff were interviewed about the services they offer to offenders, who are escorted to the healthcare facilities by the DCS guards for safety. These anchored DOH facilities provide important care not available in correctional centre clinics.

6. **Skills Audit:** DCS Nurses and other health staff completed clinical skills audits to identify competency and confidence in HIV-, TB-, and STI-related clinical care.

Participation was completely voluntary. All individuals participating as respondents provided their individual consent to the assessment, interview, and/or skills audit.

Table 1: An overview of the data collected in KZN and LMN

Data collection tool	KZN	LMN
Facility Assessments	18	12
Healthcare Facility Assessment	17	13
Key Informant Interviews	28	41
DCS Healthcare Worker Interviews	30	28
Community Health Worker Interviews	13	32
Skills Audit	14	38
Total	**120**	**164**

Data Analysis

Qualitative and quantitative data was initially analysed separately as two distinct data sets as described below. Subsequently, we compared qualitative and quantitative findings to inform, supplement, and complement each other. In this report, qualitative and quantitative findings are reported together under thematic headings.

Quantitative analyses

All quantitative assessments and interviews conducted were electronically entered and analysis was conducted using STATA. Median values, or centre point values, were selected as the best representation of the central tendencies since the data were not normally distributed. A range of the lowest and highest observation was also used to describe the spread or range of data. Frequencies and relative frequencies are presented throughout the results.

Statistically significant differences in HIV and TB knowledge, stigma, or perceptions of the correctional centre environment scores were calculated using either Mann-Whitney (for comparing two groups) or Kruskal-Wallis (for three or more groups) non-parametric tests to determine a difference in medians. Statistically significant differences in percentages were calculated using a Chi^2 test. Spearman's Rank Correlation Coefficients used a Bonferroni correction to adjust the p-value based on the number of comparisons. For all statistical tests, a p-value < 0.05 indicates a statistically significant difference.

Qualitative analyses

Qualitative analysis was conducted by analysts who also participated in data collection. Five interview tools were used during data collection:1) Correctional centre assessments; 2) Correctional centre clinic assessments; 3) Key informant interviews; 4) DCS healthcare worker interviews; and, 5) Community health worker interviews. Responses to qualitative questions in each were organized into major subject domains covered in interviews: intake and care coordination at entry; general health services and systems and access to care; sex and violence in correctional centre; staff supervision and training; HIV prevention, screening, and care during incarceration; TB prevention, screening, and care during incarceration; and release, transfer, and care coordination at exit. Each analyst first summarized interview responses in these domains per correctional centre. The analysts worked together to identify similarities and differences across domains among the different correctional centres, and to identify major challenges and recommendations. Differences and discrepancies in the findings noted by each analyst were resolved through discussion among the team.

During the fieldwork, study teams met at the end of each day to discuss findings, review any unanswered questions, ensure data quality, offer new leads or priorities for subsequent interviews, and securely upload data. A data quality checklist was used to ensure consistency of data collected at each correctional centre.

FINDINGS

Correctional Centre Characteristics

We visited a total of 32 correctional centres (18 in KZN region and 14 in LMN region). Data from the centre assessment was available for all 18 correctional centres. We categorized centres by total number of persons currently incarcerated. The three categories were 'small' (less than 200 people), 'medium' (between 200 and 1000 people), and 'large' (more than 1000 people). The number and percentage of correctional centres surveyed in each category was reported, and the medians and ranges were used to report the capacity and number of offenders at each correctional centre.

In KZN, seven were small, seven were medium, and four were large. One centre accommodated both females and males and one centre accommodated females only. In LMN, eight were medium security, one was maximum security, four were mixed security, and the security level was missing for one correctional centre. Six correctional centres had between 200–1000 offenders, and four correctional centres had more than 1000 offenders. Four correctional centres accommodated both female and male offenders. Table 2 lists the characteristics of surveyed correctional centres by province.

In KZN, correctional centre populations ranged from 27 to 4363 offenders, with a centre point of 385 offenders. Sixteen centres provided data on foreign nationals, reporting a range of 0 to 44 foreign national offenders, with a median of four foreigners in KZN correctional centres. In LMN, correctional centre populations ranged from fewer than 100 offenders to more than 1500. Capacity median ranged between 90 and 1661 people, with a centre point of 517 persons. Eight LMN correctional centres reported a range of four and 288 foreign nationals, with a median of 39 foreigners in LMN correctional centres.

Table 2. Characteristics of surveyed correctional centres by province.

Characteristic	Total N (%)	KZN N (%)	Limpopo[A] N (%)	Mpumalanga N (%)	North West[B] N (%)
Correctional centre size					
< 200 inmates	11 (34.4)	7 (38.9)	2 (40.0)	0 (0.0)	2 (40.0)
200-1000 inmates	13 (40.6)	7 (38.9)	2 (40.0)	3 (75.0)	1 (20.0)
> 1000 inmates	8 (25.0)	4 (22.2)	1 (20.0)	1 (25.0)	2 (40.0)
Correctional centre type					
Minimum security	2 (6.5)	2 (11.1)	0 (0.0)	0 (0.0)	0 (0.0)
Medium security	16 (51.6)	8 (44.4)	2 (50.0)	2 (50.0)	4 (80.0)
Maximum security	4 (12.9)	3 (16.7)	0 (0.0)	0 (0.0)	1 (20.0)
Mixed security	9 (29.0)	5 (22.8)	2 (50.0)	2 (50.0)	0 (0.0)
Types of inmates					
Males only	26 (81.3)	16 (88.9)	3 (60.0)	3 (75.0)	4 (80.0)
Females only	1 (3.1)	1 (5.6)	0 (0.0)	0 (0.0)	0 (0.0)
Both males and females	5 (15.6)	1 (5.6)	2 (40.0)	1 (25.0)	1 (20.0)
Total	30 (100.0)	18 (100.0)	5 (100.0)	4 (100.0)	5 (100.0)
Correctional centre population	*Median (Range)*	*Median (Range)*	*Median (Range)*	*Median (Range)*	*Median (Range)*
Men (n=31)	520 (27–4,363)	325 (27–4,363)	413 (57–1,210)	846 (520–1,527)	902 (131–1,495)
Women (n=6)[C]	57 (35–405)	223	43	63	63
< 18 years old (n=10)[C]	19 (1–428)	26	1	18	7
Total (n=30)	499 (27–4.363)	385 (27–4,363)	413 (57–1,245)	877 (520-1,527)	902 (131–1,467)

[A] One prison in Limpopo had missing data for the prison type.

[B] Missing data for 1 correctional centre in Limpopo.

[C] Only report the median for province-specific estimates due to low sample sizes.

Table 3. Number and percentage of surveyed correctional centres at, under, and above capacity by province.

Province	*>5% under capacity*	*+/- 5% capacity*	*5-50% over capacity*	*>50% over capacity*
KZN (n=16)[A]	3 (18.8)	3 (18.)	5 (25.0)	6 (37.5)
Limpopo (n=5)	1 (20.0)	1 (20.0)	1 (20.0)	2 (40.0)
Mpumalanga (n=4)	2 (50.0)	2 (50.0)	0 (0.0)	0 (0.0)
North West (n=3)A	0 (0.0)	0 (0.0)	2 (66.7)	1 (33.3)
Total (N=28)	6 (21.4)	6 (21.4)	7 (25.0)	8 (32.1)

[A] Missing data in 2 correctional centres in KZN and 2 correctional centres in North West.

Table 3 shows the number and percentage of surveyed centres at, under and above capacity by province. Of the sixteen correctional centres in KZN who reported their current capacity, five correctional centres were reported to be 5-50% over capacity and six reported over 50% capacity. Twelve correctional centres in LMN reported their current offender capacity. Three correctional centres were reported to be more than 50% over capacity and three were reported to be at least 5% below capacity.

Correctional Centre Clinic Characteristics

Correctional centre clinic data was aggregated and described using frequencies. The infrastructure of correctional centre clinics was described by reporting the number and percentage of centres that reported selected infrastructure compared to the centres that reported but could not verify or did not report infrastructure at all. The following health services were reported: HIV, TB, STI, and post-exposure prophylaxis (PEP) for HIV.

Service Delivery

In KZN, 17 correctional centre clinic assessments were conducted. Six correctional centres reported their clinics were open less than nine hours per day, while nine reported being open nine hours. Six clinics were reportedly open seven days a week, with seven open five days and one open only four days per week. Table 4 provides descriptions of the surveyed correctional centre clinics by province.

In LMN, 13 clinic assessments were conducted. Six correctional centres reported their clinics were open nine hours per day, while four reported fewer hours, and two reported more hours. Of the 13 clinics with complete data on days open per week, ten clinics were reportedly open seven days a week, with two open five days and one open only two days. The estimated number of monthly clients and the number of fulltime and part time staff were described using medians and ranges.

Table 4. Description of the surveyed correctional centre clinics in KZN[A] and LMN

Characteristic	*LMN N (%)*	*KZN N (%)*
Hours open per day[B]	4 (33.3)	
< 9 hours	6 (50.0)	6 (40.0)
9 hours	2 (16.7)	9 (60.0)
Days open per week[C]		
4 days	**1 (7.7)**	**1 (7.1)**
5 days	**2 (15.4)**	**7 (50.0)**
7 days	**10 (76.9)**	**6 (42.9)**
Total	13 (100.0)	17 (100.0)

[A] All information on the health care centre at one (large) correctional centre is missing

[B] Information on opening hours at 2 additional centres in KZN and one in LMN is missing

[C] One clinic is open 5 days a week and also every other weekend.

Correctional Centre Clinic Staffing

In KZN and LMN, the estimated number of full-time and part-time staff was described using medians and ranges. Between one and 42 healthcare staff were working at the correctional centre clinics in KZN, with a median of five staff. Nine out of 17 (53%) correctional centres assessed in KZN reported having full-time medical doctors on staff (ranging from one to three doctors), while one centre reported having one part-time medical doctor on staff. Unfilled positions were not assessed. Between one and 19 healthcare staff were working at the clinics in LMN with a median of six staff persons. Correctional centre staff in LMN reported a range of one to four vacant positions, with a total of six full-time positions and nine part-time positions vacant for all correctional centres in this study. Of the eleven correctional centre clinics in LMN with available staffing data, six (54.5%) reported having a physician on staff. Four clinics had one fulltime physician, one clinic had two full-time physicians, and one clinic had one part-time physician. Table 5 describes the staffing and client information among correctional centre clinics in KZN and LMN.

Qualitative data revealed that some onsite correctional centre clinics can provide only basic care, while others are able to provide more complex care. Offenders in at least eight centres in KZN have access to a dentist, and several other centres provide access to social workers, psychologists, and dieticians, although not all interviews clarified how often these services are offered. Understaffing is a concern at many correctional centre clinics.

In the vast majority of correctional centre clinics visited, qualitative responses revealed that shortages of both security and healthcare workers delay or impact care. Respondents noted that due to insufficient staffing, screening of new offenders may be delayed or limited to those with ailments; too few escorts may be available to transport offenders to the DOH clinic or hospital on time; too few nurses or doctors are available on site to see offenders quickly when they are sick; and care may be deferred to nearby hospitals, requiring more transport. One centre in KZN reported that when offenders are escorted to the hospital onsite, the ratio of offenders to escorts is often 20 to one. Another noted that correctional officers are left alone to judge whether an offender's reported needs warrant care. Due to human resource limitations, offenders were reported to frequently assist healthcare workers in clinics and with medication adherence, leading to confidentiality concerns related to access to offenders' referral forms, files, medications, and medical information.

Table 5. Health capacity of the surveyed correctional centres by province.

	Total	**KZN**	**Limpopo**	**Mpumalanga**	**North West**
Facility characteristics	*Median (Range)*	*Median (Range)*	*Median (Range)*	*Median (Range)*	*Median (Range)*
Total clients per month (N=29)[A]	40 (5 – 600)	45 (5 – 600)	70 (10 – 200)	40 (30 – 60)	40 (15 – 140)
Staffing (N=28)[B]					
Doctors	0.5 (0 – 10)	1 (0 – 3)	1 (0 – 2)	1 (0 – 1)	0 (0 – 10)
Professional nurses	2 (0 – 25)	2 (0 – 25)	2 (1 – 5)	8 (4 – 12)	2 (0 – 5)
Psychologists	0 (0 – 3)	0 (0 – 3)	0 (0 – 0)	0 (0 – 1)	0 (0 – 1)
Social workers	1 (0 – 14)	2 (0 – 14)	1 (0 – 3)	1 (0 – 6)	0 (0 – 1)
Other staff[C]	0 (0 – 13)	0 (0 – 13)	0 (0 – 2)	0 (0 – 3)	0 (0 – 1)
Unfilled positions	0 (0 – 4)	0 (0 – 2)	1 (0 – 1)	0 (0 – 4)	0 (0 – 4)
Part-time positions	0 (0 – 4)	0 (0 – 4)	0 (0 – 0)	0 (0 – 2)	1 (0 – 2)
Hours open per day[D]	*N (%)*	*N (%)*	*N (%)*	*N (%)*	*N (%)*
< 9 hours	10 (37.0)	6 (40.0)	2 (40.0)	1 (33.3)	1 (25.0)
9 hours	15 (55.6)	9 (60.0)	3 (60.0)	2 (66.7)	1 (25.0)
> 9 hours	2 (7.4)	0 (0.0)	0 (0.0)	0 (0.0)	2 (50.0)

Days open per week[D]					
2-4 days	2 (7.4)	1 (7.1)	0 (0.0)	0 (0.0)	1 (20.0)
5 days	9 (33.3)	7 (50.0)	1 (20.0)	1 (33.3)	0 (0.0)
7 days	16 (59.3)	6 (42.9)	4 (80.0)	2 (66.7)	4 (80.0)
Total	28 (100.0)	15 (100.0)	5 (100.0)	3 (100.0)	5 (100.0)

[A] Missing data from 3 clinics: 2 in KZN and 1 in Mpumalanga.
[B] Missing data from 4 clinics: 1 in KZN, 2 in Limpopo, and 1 in Mpumalanga.
[C] Includes nursing assistants, adherence counselors, mental health counselors, data managers & data clerks.
[D] Missing data from 4 clinics: 3 in KZN and 1 in Mpumalanga.

Additional challenges included high turnover, with many staff members expressing some type of job dissatisfaction, related to low salary, lack of growth opportunities, being overworked, stress, or a lack of occupational healthcare and support. One correctional centre clinic manager pointed out that the salary they can offer nurses is not compelling, and there is no retention strategy. He reported that his centre has had "an exodus of nurses." Another healthcare worker simply said, "Staff are neglected and DCS needs to support us." Another noted, "Even if the centre is in a rural area, nurses are not paid a rural allowance, so they quit." At the time of interview, a few centres were relying entirely on visiting healthcare workers. In one centre, four nurses had just resigned to go work for DOH for higher wages and a rural allowance. Promotional opportunities were described as "stagnant."

Respondents often requested that staffing levels be increased. Most requested additional nurses and security/escort workers, as well as full-time doctors, HIV counsellors, mental health professionals, ARV clinic workers, data managers, and pharmacists. Healthcare workers from nearby hospitals requested that DCS hire more nurses and doctors so that only complex cases would be referred to DOH facilities, and more transport workers so that offenders can be brought to the DOH facilities on time for appointments.

Staff Supervision and Training

In KZN, it was noted that regular meetings, including inter-departmental and management meetings, occur in at least seven centres, although it was not clear how often "regular" implies. A few centres report that health and healthcare issues are discussed in these meetings, and one noted that HIV is always on the agenda. A few centres' reports were mixed on whether or not meetings occur.

In LMN, more than half of the clinics reported that meetings are not held, or not held regularly, between healthcare workers and management or other staff (e.g., security staff, transportation staff, etc.). One clinic reported that internal health meetings are held, and another reported that meetings are only held to address offenders' complaints and debrief incidents.

Perhaps due to lack of multi-disciplinary meetings, managers may not be understanding and therefore unable to assist the healthcare workers. One healthcare worker noted, *"Managers need to be trained about this program because they seem to not understand our activities and they end up seeming like they undermine it."*

Correctional Centre Clinic Infrastructure and Clinic Supplies

Correctional Centre Clinic Infrastructure

In KZN, the vast majority of correctional centre clinics assessed (16 of 17; 94%) said their clinic offered visual privacy and auditory privacy for clients (see Table 9). In LMN, however, approximately 23% of correctional centres said their clinic offered no means of visual privacy and 30% reported no means of auditory privacy.

Several KZN centres reported concerns with access to water. Almost a quarter of the correctional centre clinics reported not having running water (24%). Two respondents reported that there is not always hot water or functioning heaters in the winter. A healthcare worker reported that there is no running water at reception, preventing healthcare workers from washing their hands, and another reported that running water and washing basins were needed. One respondent reported that

the centre has no water, presumably at all, and added, "We struggle with that, as it could affect the health of the offenders." The pipes burst three to four times each month in another centre, disrupting the water supply for two days or more.

Respondents noted that the clinics themselves are too old, too small, or not properly designed for infection control or care. For example, many healthcare workers described the clinics as poorly designed for healthcare provision in some way, such as having no space for private consultation or not designed to hold the number of offenders currently held. Showers, toilets, and sinks are sometimes broken in one centre, contributing to poor hygiene. One healthcare worker reported that there are no beds for offenders at her centre; offenders sleep on the floor, and it is reportedly very cold. One respondent in KZN reported that although the centre had been renovated, the healthcare section was not and it continues to be ill-suited for care provision.

One healthcare worker at a correctional centre clinic found conditions to be very poor, saying *"I've seen them sleeping on the floor, windows open, and drinking out of the toilets. I've observed this when I used to go there. They also have a lack of food or nutritional supplements (they told me they only get fed once a day). No cross-ventilation in the cells for infection control."*

In some centres, there is limited or no TB isolation space, or it is available but in poor condition. Ventilation was described as poor in the majority of centres. Windows are too high or too small in some cases, and in others, offenders are responsible for keeping them open—something they do not want to do in cold weather. Nearly all clinics reported that overcrowding impacts aspects of offenders' health, including privacy, risk of violence and sexual assault, risk of infection, timely access to and coordination of care, and access to regular screening for communicable diseases. Confidentiality in many clinics was reported as difficult to maintain due to infrastructure.

Table 6 describes the correctional centre clinic infrastructure and availability of supplies.

Table 6 describes the correctional centre clinic infrastructure and availability of supplies.

	KZN correctional centre clinics			*LMN correctional centre clinics*		
	Reported available, Visualized	*Reported available, not visualized*	*Reported not available*	*Reported available, not visualized*	*Reported available, not visualized*	*Reported not available*
Infrastructure/supplies	N (%)	N (%)	N (%)	N (%)	N (%)	**N (%)**
Means of visual privacy	11 (64.7)	5 (29.4)	1 (5.9)	10 (76.9)	0 (0.0)	**3 (23.1)**
Means of auditory privacy	12 (70.6)	4 (23.5)	1 (5.9)	8 (61.5)	1 (7.7)	**4 (30.1)**
Working thermometer	8 (47.1)	9 (52.9)	0 (0)	7 (53.9)	4 (30.1)	**2 (15.4)**
Working blood pressure cuff	7 (41.2)	8 (47.1)	2 (11.8)	8 (61.5)	4 (30.1)	**1 (7.7)**
Working scale	8 (47.1)	9 (52.9)	0 (0)	8 (61.5)	3 (23.1)	**2 (15.4)**
Gloves	8 (47.1)	9 (52.9)	0 (0)	11 (84.6)	0 (0.0)	**2 (15.4)**
Surgical masks	6 (35.3)	10 (58.8)	1 (5.9)	10 (76.9)	0 (0.0)	**3 (23.1)**
N95 masks	4 (23.5)	10 (58.8)	3 (17.7)	4 (30.1)	2 (15.4)	**7 (53.9)**
Running water	8 (47.1)	5 (29.4)	4 (23.5)	12 (92.3)	0 (0.0)	1 (7.7)
Sharps disposal container[A]	11 (64.7)	6 (35.3)	0 (0)	11 (91.7)	0 (0.0)	**1 (8.3)**
Hand washing items	9 (52.9)	6 (35.3)	2 (11.8)	11 (91.7)	0 (0.0)	**1 (8.3)**
Speculums[B]	1 (50.0)	1 (50.0)	0 (0)	1 (20.0)	1 (20.0)	**3 (60.0)**
Internet	0 (0)	3 (17.7)	14 (82.4)	2 (18.2)	0 (0.0)	9 (81.8)

[A] Missing data for one clinic in LMN. [B] Reported only from the centres housing females.

Table 6 also shows that the majority of centres (approximately 80% in both regions) reported not having internet capacity. From the interviews, one respondent reported that computers exist at their centre and some electronic systems have been developed, but that the computers and the system are often broken. Staff members at one centre have been trained on Tier.Net, but do not have a functioning computer system available to implement it. Others requested computers and fax machines. Furniture was also requested by staff, saying there are not enough chairs to have meetings. One centre also reported that it takes a long time for requests for stationary to be filled. Although the data in Table 6 shows that speculums are available at the centres that house female offenders, it does not reveal the inadequate supply. One respondent commented in an interview that they do not have access to enough speculums although they make requests for more each year.

Essential Medical Supplies

Two correctional centre clinics (12%) in KZN reported that no working blood pressure cuff was available, although all centres in KZN reported to have working thermometer, scales, and gloves available. One correctional centre clinic (6%) in KZN reported not having masks and three centres (18%) reported not having N95 masks (see Table 6). Interviews show that some staff (from three of the centres in KZN) reported good access to protective equipment and supplies, although another three respondents noted that their centre clinics run out of supplies, including gloves and masks.

In LMN, two clinics (15%) reported no gloves available, seven clinics (53.9%) reported no N95 masks, and one clinic (8.3%) reported no hand washing items. While the majority of clinics in LMN reported the availability of basic medical equipment and supplies, such as a sharps disposal container (91.7%) and hand washing items (91.7%), neither was visually observed. Nine clinics in LMN (82%) had no internet capacity. In qualitative responses, at least five healthcare workers in LMN reported that their respective clinics do not have enough medical equipment, or that it is inadequate or obsolete and the budget is too small to upgrade these items.

One respondent reported that basic health checks must be done in the hospital at the centre instead of at the smaller clinics in the centre's sections because they have too few working blood pressure monitors and other supplies, or supplies are too old and heavy to move. One respondent said *"More equipment is needed, [For] small things like draining an abscess, you have to transfer to DOH which is a minor thing that you could do in the hospital inside [the centre]."*

HIV and TB Lab Services

Most centres in KZN and all centres in LMN reported sending laboratory samples to offsite labs. Turn-around time for lab services was described by reporting the mean duration of time required for the return of test results to patients. The availability of services was described by listing the number and percentage of centres providing services. Not all centres reported the availability of routine laboratory tests for primary, HIV, TB, or STI care.

Table 7. Laboratory services available in correctional centre health facilities by province.

	Total	*KZN*	*Limpopo*	*Mpumalanga*	*North West*
Laboratory services available[A]	*N (%)*	*N (%)*	*N (%)*	*N (%)*	*N (%)*
HIV services					
CD4 testing[B]	23 (79.1)	10 (62.5)	5 (100.0)	3 (100.0)	5 (100.0)
Viral load testing[B]	18 (62.1)	10 (62.5)	3 (60.0)	3 (100.0)	2 (40.0)
Creatinine clearance	21 (75.0)	9 (60.0)	4 (80.0)	3 (100.0)	5 (100.0)
Cryptococcal antigen	10 (35.7)	4 (26.7)	1 (20.0)	2 (66.7)	3 (60.0)
Rapid HIV testing	**25 (89.3)**	**13 (86.7)**	**4 (80.0)**	**3 (100.0)**	**5 (100.0)**
HIV ELISA	**11 (78.6)**	**12 (80.0)**	**3 (60.0)**	**2 (66.7)**	**5 (100.0)**
TB services					

Sputum microscopy for AFB	23 (82.1)	11 (73.3)	4 (80.0)	3 (100.0)	5 (100.0)
Sputum culture for AFB	22 (78.6)	10 (66.7)	4 (80.0)	3 (100.0)	5 (100.0)
Sputum drug susceptibility	17 (60.7)	9 (60.0)	2 (40.0)	2 (66.7)	4 (80.0)
GeneXpert	20 (71.4)	7 (46.7)	5 (100.0)	3 (100.0)	5 (100.0)
TB skin test (TST)	3 (10/7)	2 (13.3)	0 (0.0)	1 (33.3)	0 (0.0)
Radiology services	17 (60.7)	7 (46.7)	3 (60.0)	2 (66.7)	5 (100.0)
Other services					
Full blood count (FBC)	26 (92.9)	13 (86.7)	5 (100.0)	3 (100.0)	5 (100.0)
Haemoglobin (Hb)	21 (75.0)	9 (60.0)	4 (80.0)	3 (100.0)	5 (100.0)
Glucose	24 (85.7)	11 (73.3)	5 (100.0)	3 (100.0)	5 (100.0)
Rapid Syphilis	7 (25.0)	3 (20.0)	1 (20.0)	0 (0.0)	3 (60.0)
RPR/VDRL (syphilis testing)	23 (82.1)	10 (66.7)	5 (100.0)	3 (100.0)	5 (100.0)
Total	**28 (100.0)**	**15 (100.0)**	**5 (100.0)**	**3 (100.0)**	**5 (100.0)**

[A] Missing data from 3 clinics in KZN and 1 clinic in Mpulamanga (N=28).
[B] Missing data from 2 clinics in KZN and 1 clinic in Mpulamanga (N=29).

Of the 16 centres visited in KZN, only 13(81.25%) had rapid HIV testing available and 12 (75.0%) reported the availability of HIV ELISA screening. Only 10 of 16 (62.5%) correctional centres in KZN reported the availability of CD4 or viral load testing through the correctional centre health clinic. Nine of 16 (56.3%) centres offered creatinine clearance testing, 11 (68.6%) offered sputum testing for AFB, seven (43.8%) had GeneXpert testing available, four (25.0%) had cryptococcal antigen testing available, and only two (12.5%) reported the availability of TST. When KZN laboratory services were analysed by correctional centre size, the large correctional centres had more testing services reported available compared to the smaller correctional centres. GeneXpert was the only laboratory service that had statistically significant availability patterns across correctional centres of different sizes.

In LMN, GeneXpert was reportedly available through all centres for diagnostic testing of TB, while sputum microscopy and culture were available through 12 of 13 centres (92.3%). Radiology services were available through 10 of 13 (76.9%) correctional centres in LMN. For other health services, full blood count, glucose, and syphilis testing were reportedly available in all 13 correctional centres, although rapid syphilis testing was available in only four of 13 correctional centres (30.8%), three of those in North West province. Table 7 further describes laboratory services available by province and Tables 8 and 9 describe turnaround times for tests by province.

Table 8. Turnaround time for lab services in KZN

		Total
Services available	*N*	*Median*
HIV services		
CD4 testing	9	1-2 days
Viral load testing	9	5-7 days
Creatinine clearance	9	1-2 days
HIV ELISA	10	3-4 days
TB services		
Sputum microscopy for AFB	*11*	*1-2 days*

Sputum culture for AFB	*10*	*Over 7 days*
Sputum drug susceptibility	5	Over 7 days
GeneXpert	4	Less than 24 hours
Radiology services	7	Less than 24 hours
Other services		
Full blood count (FBC)	11	1-2 days
Haemoglobin (Hb)	8	1-2 days
Glucose	10	Immediate
RPR/VDRL	6	1=2 days

Table 9. Turnaround times for selected health services by province in LMN.

	Limpopo		Mpumalanga		North West		Total	
Services available	*N*	*Mean (days)*	*N*	*Mean (days)*	*N*	*Mean (days)*	*N*	*Mean (days)*
HIV services								
CD4 testing	4	4.0	3	3.3	3	4.0	10	3.8
Viral load testing	1	3.0	2	4.5	2	4.0	5	4.0
Creatinine clearance	3	3.0	2	3.5	4	3.5	9	3.3
HIV ELISA	3	3.3	1	3.0	5	3.6	9	3.4
TB services								
Sputum microscopy for AFB	4	3.5	2	3.0	5	3.0	11	3.2
Sputum culture for AFB	4	5.5	3	6.0	5	6.0	12	5.8
Sputum drug susceptibility	2	5.0	2	6.0	3	6.0	7	5.7

In qualitative responses, nearly half of the LMN clinics noted difficulty obtaining lab results. In some cases, no reason was identified, but others noted that samples are damaged or lost, couriers or officials are delayed in picking up or delivering results, or clinics do not have a computer or fax machine. One DOH hospital employee noted that correctional centre clinic staff are deferring labs to be performed at the hospital to avoid reimbursement issues. One respondent noted that a centre in KZN used to have a lot of difficulty in obtaining lab results, but since it started working with a new vendor, it is much better. Most labs are sent to external facilities for processing, and some respondents reported that this causes delays. One healthcare worker requested that a system be established for fast-tracking lab results. This worker recalled that at DOH, sputum results took a day to come back, while in the correctional centre, they take around two weeks. A centre that houses women reported that at the time interviews were conducted in September, Pap smear results had not come back for July and, that sometimes labs are lost and must therefore be repeated.

All clinics in LMN reported they made CD4 testing available to offenders with an average turnaround time of 3.8 days for CD4 test results. Rapid HIV testing and creatinine clearance testing was available in 12 of 13 clinics. Average turnaround time for creatinine clearance test results in LMN was 3.3 days. HIV ELISA testing was available in 10 of 13 LMN clinics, with an average turnaround time of 3.4 days for test results. Viral load testing was only available in eight clinics with an average reported turnaround time of four days, and fewer than half of the clinics in LMN provided cryptococcal antigen testing.

Drug Availability

In KZN, medications were reported to generally be ordered from external pharmacy suppliers, although many centres separately acquire HIV or TB medications from different suppliers, including local clinics. Reports varied as to how long it takes for a medication order to be ready;

estimates ranged from two to 14 days. Centre staff members must pick up orders, and one respondent remarked that the supplier is so far away that the cost of travel to get the medication is greater than the cost of the medication itself. A few centres in KZN appear to have larger stocks or pharmacies on site but this was not entirely clear in qualitative reports. One centre has a pharmacy but no pharmacist.

Generally, medications are stored on site in KZN in some sort of locked space, including trollies, dispensaries, and storage rooms; there may be additional storage in each section in larger centres. Some climate control was reported to be in place for these storage areas, but in one centre health clinic, both the air conditioner and the refrigerator's thermometer are broken. One nurse reported that there is no locked space, so the nurse stores them at a different correctional centre and takes what is needed with her. In at least five correctional centre clinics in KZN, medications from the main supplier have run out, often while waiting for an order to be filled, leaving staff members to search for replacements from local pharmacies.

Adult and paediatric ART formulations were aggregated into single variables to report if any ART is available in health centres. For both STI and TB drugs, the number and percentage of centres with any drugs out of stock was reported. The number and percentage of centres with any STI or TB drugs out of stock in KZN is reported in Table 10. In addition to reporting lack of availability of drugs, stock outs of drugs, including STI and TB medications, were frequently reported. Of the centres reporting on drug availability (n=15), the data demonstrates that 25-27% of centres reported at least one drug stock out for TB or STI drugs.

Table 10. HIV, TB and STI medications available in correctional centre health facilities by province.

	Total	*KZN*	*Limpopo*	*Mpumalanga*	*North West*
Medications available	*N (%)*	*N (%)*	*N (%)*	*N (%)*	*N (%)*
ART dispensed on site[A]					
Yes	13 (46.4)	10 (66.7)	0 (0.0)	2 (66.7)	1 (20.0)
No	15 (53.6)	5 (33.3)	5 (100.0)	1 (33.3)	4 (80.0)
TB drugs[B]					
Isoniazid (100 or 300mg)	16 (72.7)	9 (75.0)	4 (80.0)	1 (50.0)	1 (33.3)
Isoniazid/Rifampicin/ Ethambutol/Pyrazinamid	16 (72.3)	9 (75.0)	2 (40.0)	2 (100.0)	3 (100.0)
Isoniazid/Rifampicin (30/60 or 60/60)	7 (31.8)	5 (41.7)	0 (0.0)	0 (0.0)	2 (66.7)
Streptomycin	9 (40.9)	5 (41.7)	1 (20.0)	2 (100.0)	1 (33.3)
Ethambutol	10 (45.5)	6 (50.0)	2 (40.0)	1 (50.0)	1 (33.3)
Any other TB drug	5 (22.7)	4 (33.3)	0 (0.0)	1 (50.0)	0 (0.0)
Total	22 (100.0)	12 (100.0)	5 (100.0)	2 (100.0)	3 (100.0)
STI drugs[C]					
Bactrim	21 (87.5)	11 (84.6)	4 (80.0)	2 (100.0)	4 (100.0)
Fluconazole	11 (45.8)	7 (53.9)	1 (20.0)	2 (100.0)	1 (25.0)
Doxycycline	22 (91.7)	12 (92.3)	4 (80.0)	2 (100.0)	4 (100.0)
Ciprofloxacin	18 (75.0)	9 (69.2)	3 (60.0)	2 (100.0)	4 (100.0)
Metronidazole	22 (91.7)	12 (92.3)	4 (80.0)	2 (100.0)	4 (100.0)
Acyclovir	18 (75.0)	11 (84.6)	3 (60.0)	2 (100.0)	2 (50.0)
Cefixime	18 (75.0)	9 (69.2)	3 (60.0)	2 (100.0)	4 (100.0)
Ceftriaxone	15 (62.5)	11 (84.6)	2 (40.0)	2 (100.0)	0 (0.00)
Benzathine-Penicillin	17 (70.8)	11 (84.6)	2 (40.0)	2 (100.0)	2 (50.0)

Amoxicillin	22 (91.7)	12 (92.3)	4 (80.0)	2 (100.0)	4 (100.0)
Total	**24 (100.0)**	**13 (100.0)**	**5 (100.0)**	**2 (100.0)**	**4 (100.0)**
Post-Exposure Prophylaxis (PEP) available[D]					
For occupational exposures (clinical staff)	12 (40.0)	9 (52.9)	0 (0.0)	1 (33.3)	2 (40.0)
For occupational exposures (prison staff)	6 (20.0)	3 (17.7)	0 (0.0)	1 (33.3)	2 (40.0)
For rape care (prisoners)	9 (30.0)	4 (23.5)	1 (20.0)	2 (66.7)	2 (40.0)
Total	30 (100.0)	17 (100.0)	5 (100.0)	3 (100.0)	5 (100.0)

[A] Missing data from 3 clinics in KZN and 1 clinic in Mpulamanga (N=28).
[B] Missing data from 6 clinics in KZN, 2 clinics in Mpumalanga, and 2 clinics in Northwest (N=22).
[C] Missing data from 5 clinics in KZN, 2 clinics in Mpumalanga, and 1 clinic in North West (N=24).
[D] Missing data from 1 clinic in KZN and 1 clinic in Mpumalanga (N=30).

In qualitative responses analysed for LMN, nearly all centres reported that medication is ordered and collected from external pharmacies, usually once a month. The majority of centres in LMN reported that this standard supply runs out, or difficulties are encountered in arranging transport to pick up medications. This forces the correctional centre to search for medications in local pharmacies, which can be slow in filling prescriptions and are also subject to shortages. In some cases, offenders' treatment is interrupted as a result of these issues. Many centres expressed the desire to have their own pharmacy in order to mitigate these challenges.

Only three correctional centres in LMN reported they were dispensing HIV drugs on site. Just over half the correctional centres (six of 10 clinics; 60%) reported they had all the required medications to initiate routine TB therapy. Stock outs of drugs, including STI medications, were most frequently reported in the Limpopo centres. The majority of Limpopo correctional centres and two correctional centres in North West Province reported at least one drug stock out for antibiotics and other STI drugs.

Offenders who receive treatment from nearby hospitals are given a prescription to fill there. The frequency of refills varied between centres. Most clinics reported that both directly observed therapy, short-course (DOTS) and self-administration of medications is used. In at least four cases in LMN, respondents from one clinic offered conflicting reports as to how medications are distributed. Offenders who self-administer medications are in some cases given watches or told to listen to the radio or television to remain on schedule with doses. Several noted that both security and adherence are difficult to monitor with self-administration. In a few cases in LMN, clinics reported that they were not able to offer DOTS due to healthcare staff shortages.

Health Services for Offenders

Intake: Screening and Continuity of Care

In most centres in both KZN and LMN, a medical file is opened, and a full intake assessment is completed prior to or soon after admission for all new offenders. A DCS form is used to cover baseline health information, current complaints, HIV, STIs, TB, substance use, medication history, and other chronic illnesses. For offenders who do not report a diagnosis, intakes also typically include an assessment of TB, HIV, and STI symptoms, as well as health education and voluntary testing. Some centre clinics open medical files for all new offenders, while others do so only for longer-term offenders and those with identified medical needs. Some centres offer some basic health education during intake, including HIV and TB information, and how to access healthcare. Typically, the process is the same for all types of offenders. One centre in KZN reported that repeat offenders are not screened as thoroughly, since the centre already has information on file for them. One centre that primarily receives newly-sentenced offenders in LMN or those transferred from other correctional centres does not do a full screening.

Workers at two centre clinics in LMN without consistent healthcare staffing reported that they were not sure whether all new offenders are assessed on time, if at all.

In KZN, it was reported that offenders may not always be housed near their respective homes. This is usually because they were arrested closer to another centre, or the centre near their home is overcrowded, or if a more local centre cannot meet their needs (e.g., need for a juvenile centre). It is also possible to be initially admitted to a centre near one's home, but later get transferred if that centre becomes overcrowded (especially true for admitting centres). As a result, continuity of care may be an issue of increased relevance.

If offenders arrive at night, they are usually kept in a holding unit and screened the next day. At least two healthcare workers from different centres reported that they are dependent on correctional officers to know whether new offenders arrived during the night; if they are not told, the assessment is delayed, or is not done. Although reports varied, it appears that at least two centres in KZN may perform intakes at night if they are needed. Lapses in assessments (and sometimes treatment default) of two or more days occurred at two centres when a new offender arrived late in the afternoon or during the night.

Another respondent in KZN stated that intake assessments are supposed to happen but, as a result of staff shortages, they do not always take place, or only verbal screening is performed. A shortage of healthcare staff in another centre has resulted in intake assessments only occurring upon offenders' request, or on the rare occasion that a nurse is visiting; it was reported that some offenders at this centre may never see a nurse on site during their incarceration. In some cases, offenders have not been seen at all by healthcare workers until they are brought to the clinic for an illness. In one centre, an electronic record was established to track new admissions but it is frequently off-line.

Two centres in KZN noted that if a new offender presents with bruises or wounds, officials might send him or her back with the police for external care. In another centre, if they present without medications they had when arrested, they are sent back with the police to get them. Most centres in KZN can refer new offenders to the visiting doctor if an immediate health need is presented at intake, or schedule a follow-up appointment with a nurse for less urgent issues. One centre reported that some offenders are transferred in very ill, without having been screened at other centres.

Ideally, a new offender comes in with a transfer letter from his or her previous provider, medication, or, if transferred, a medical file from another correctional centre. However, many do not have a transfer letter or it contains too little information, or is missing information such as ARV treatment. If a new offender reports a known, undocumented health diagnosis, centre healthcare workers follow up by telephone with the offender's most recent provider to obtain a transfer form or medical file, or ask an offender's family members to do this. A transfer letter is usually faxed in or, in order to adhere to confidentiality policies, correctional officers must bring the offender to his or her previous provider to collect this information. In some cases, correctional workers are sent to get this information, or community corrections officers are sent; two respondents in LMN reported asking the police to collect this information.

Two interviewees noted that offenders cannot go to retrieve medication from their homes when they are arrested; the correctional centre can have families do this for them after intake, but a few weeks may have passed since arrest by that point. Another interviewee stated, *"When they first arrive in correctional centre, they may have enough ARVs for only a few days and they end up missing doses because they do not have enough before they start receiving ARVs through correctional centre services."*

Two other repsondents in KZN agreed that default might happen at admission. One said, *"Sometimes offenders do not know what medications [they] are taking... the correctional centre needs to phone clinics to find out and that takes a while and offenders may run out of them."*

Another individual in KZN noted that, despite implementing a policy of refusing transfers who are actively receiving TB treatment, the centre

still receives offenders who are on TB treatment but do not have documentation or medication with them when they come. This respondent said, *"Because some of [the healthcare workers] don't have time to phone the correctional centres and don't have records... they just start them from scratch."*

A hospital worker in KZN noted that offenders are not given enough privacy at intake to disclose their status and request treatment. A healthcare worker at another centre reported that offenders sometimes admit to a known diagnosis a few months after being admitted, saying that they had been afraid to disclose during admission.

In many cases, information about the offender's health status cannot be found. Healthcare workers reassess the offender's health and treatment is re-initiated, particularly if the offender is able to provide the names of medications he or she was taking. While official policy states that offenders must be housed near their homes or families, capacity and security concerns have resulted in most centres housing at least some offenders from other provinces, which can make it more difficult to obtain medical history information. Treatment delays may occur when DOH facilities require in-person visits with offenders or officials before they will release medical history. Five respondents in LMN also noted that police handling of offenders can result in treatment delays, either through failing to collect treatment upon arrest, not assessing offenders' medical needs prior to transfer, or failing to bring medications with offenders when they are transferred. A centre that temporarily houses offenders awaiting sentencing also reported that lab results from screening done at intake sometimes come back after the offender has been sentenced and transferred.

Only one clinic in LMN reported that community contacts are traced for new offenders diagnosed with TB or HIV at intake.

HIV and STI Screening and Care during Incarceration

STI Screening for Offenders

In KZN and LMN, healthcare workers report that STI screening for offenders is usually done at admission as part of the intake process and then on a symptomatic basis. Offenders who are seen by healthcare workers for other reasons may also be screened. In several centres, offenders diagnosed with HIV or TB are screened for STIs, and vice versa. A few reported other instances of STI screening, including regular testing campaigns (led by external partners), upon release or transfer, and/or prior to medical male circumcision (MMC). Two hospitals and one correctional centre clinic reported that they conduct STI screening at every healthcare visit.

Respondents noted that newly-admitted offenders and younger offenders are more commonly found to have STIs. A few respondents to the healthcare worker interview noted that they have observed fewer STIs in those transferred in from other centres. In one centre, partner notification is reportedly done. Two respondents listed pubic lice and Human Papilloma Virus (HPV) as major health concerns. Several respondents reported that health education on STI prevention is offered at their respective centre clinics, although it was not clear how often.

HIV Testing for Offenders

In KZN, testing is typically offered at admission, and after admission it is generally conducted on a voluntary basis, although symptomatic or provider-initiated testing is also conducted. In most centres, offenders can also request and receive HIV testing. Outside of symptomatic and requested testing, planned testing is offered as frequently as every day in some centres, and as rarely as once a year in others. It should be noted that in centres that appear to offer more infrequent or irregular testing, answers between respondents often conflicted or information was unclear as to how often HIV testing is actually offered. A few centres offer no regular screening of any type because they only have visiting healthcare workers rather than on-site staff; these visiting staff may recommend HIV testing based on symptoms during their visits.

In the correctional centres, HIV testing is primarily offered by counsellors and nursing staff. In two centres in KZN, some correctional officers reportedly participate in HCT campaigns, or are trained to offer HCT. However, one of these also

noted that this was in addition to regular duties and may not provide compensation. One centre in KZN has an ARV clinic and a VCT clinic with a counsellor, who offers HCT every weekday. Despite this, the counsellor's workload is too heavy for offenders to be seen quickly, and there is a long wait list for testing.

At most centres in KZN, HCT is formally offered by both external parties (including DOH) and healthcare staff and counsellors at varying frequencies. NGOs, including Catholic Mission Board, Artic, Lifeline, New Start, and TB/HIV Care, provide testing at some centres. Offenders can sign up to be tested during campaigns, or agree to be tested when healthcare workers come around to the cells offering this service.

LMN-reported voluntary HIV testing, including rapid testing, is provided to offenders at all the centre clinics either by healthcare workers, NGO or DOH partners, or externally at associated hospitals or clinics. Most centres offer a mixture of testing options, although the majority of tests appear to be conducted on site by external partners. Testing is provided as part of regular campaigns of varying frequency; between campaigns, testing at most centres can be accessed by request or recommended based on symptoms.

Reports varied regarding the presence of security officials in the room during HIV testing. Offenders can be tested without the presence of a correctional officer in at least six centres in KZN. In one other centre, the official is on the other side of a glass wall. In another centre, testing is only offered at tables outside rather than private rooms due to space limitations. In yet another centre, healthcare workers have officials stand outside and leave the door ajar to comply with a regulation that requires the official to be in the room whilst trying to maintain confidentiality for the client. Approximately one-third of centres in LMN reported that HIV testing must be conducted with an official in the room; two centres reported that officials are not in the room during HIV testing; and respondents from the remainder of centres offered mixed or inconsistent responses with regard to test supervision.

Respondents reported that offenders were generally well-educated on HIV and willing to be tested. Respondents were asked to discuss reasons why offenders accept or decline testing. According to respondents, offenders may agree to test due to symptoms, health education or test counselling, or a history of risk behaviour. A few respondents also noted that offenders are motivated to test out of boredom or a desire to leave their cells, or in hopes of being identified positive and having access to increased food rations. Respondents reported that offenders not willing to test are unwilling to do so due to the following factors: fear of knowing their status; fear of learning their status while carrying out a sentence; the desire to continue to tell their families they are negative; concern over the presence of an official in the room during testing; fear of HIV as a death sentence; and fear of or experienced stigma. Healthcare workers generally reported that on-going health education from both staff and campaigns, as well as peer support is used to encourage offenders to test.

HIV Care and Management

In nearly all centres in KZN, HIV care and management is provided on site for offenders living with HIV. A few rely on external hospitals and DOH clinics providing ART. In KZN, blood work is conducted after testing to determine CD4 counts, and if needed, treatment is initiated on site in most centres; however, it is initiated exclusively off site in at least one centre. In two correctional centre clinics, only sessional doctors can initiate offenders on ART, and they are not on site every day. Pregnant women are sent to the DOH hospital to initiate ART.

At most LMN centres, offenders are referred to external hospitals for ART initiation and ARV refills. At one correctional centre in LMN that reported on-site initiation, an associated hospital employee relayed the impression that the hospital still initiates more offenders than seems necessary, since the centre clinic is able to initiate. External care sometimes is disrupted by logistical issues such as arranging transport, other hospital patients' complaints regarding offenders' presence in the waiting room, or their prioritization over the public. A few DOH hospital workers expressed fear of serving offenders.

In all centres, offenders who are eligible for treatment (CD4 count under 350 cells/mm^3),

receive repeat blood work and a check-up every one to six months. Offenders ineligible for treatment (CD4 count over 350 cells/mm^3) are, in most places, given prophylactic treatment for OIs, vitamins, and repeat blood work every six months to one year. HIV-positive offenders are given INH to prevent TB infection, but they reportedly dislike taking this treatment and often default. Many centres screen all HIV-positive offenders for STIs and TB at varying frequencies.

A healthcare worker from a correctional centre with an ARV clinic noted that the clinic is understaffed, and that their existing healthcare workers are overworked to the point of not being able to offer quality care. Respondents frequently noted that food and supplements given to offenders are not of sufficient quantity or quality to meet the standards needed for those living with HIV. Double rations or extra protein were perceived to be insufficient or reported as not delivered. Access to adequate portions of fruits and vegetables is limited. Offenders also have limited access to exercise. Other notable challenges to providing HIV care included medication side effects, medication shortages, insufficient supply of combination pills, lack of access to transport to the hospital, and having too few HIV counsellors and HIV-dedicated healthcare workers. One respondent reported that offenders hear advertisements on the radio for herbal HIV remedies and are upset when they learn that they cannot have them in the correctional centre. Another centre reported that privacy is insufficient for offenders to disclose their status, and that they do not have enough access to timekeeping devices to track their medication times. Despite the concerns described above, HIV care was still described as good or of fair quality by several respondents.

In LMN, several respondents reported that healthcare information is not adequately shared or coordinated between correctional centre clinics and external providers. In one case, healthcare workers at a referral hospital observed that offenders referred to the hospital by the DCS clinic to initiate ART sometimes report that they have previously been on ART, although this information is absent from the medical history provided to the hospital by the DCS clinic. Another DOH hospital worker stated they recommend that offenders speak with a social worker within the DCS regarding issues despite not knowing if social worker services are available within the DCS centres.

Almost half of the centres interviewed in LMN, as well as many of the DOH hospital workers, reported that they find it problematic, and even disruptive to care, to offer so much care off site. Many centre clinic healthcare workers expressed the desire to increase staff levels, training, and resources to provide more care on site.

DOTS and Adherence

Nearly all respondents in KZN and LMN agreed that all those in need of ART have access to it but adherence support was not consistent across all reports. A few centres bring offenders to external hospitals monthly to collect medication; others dispense it on site. Most centres reported that both DOTS and self-administration is used to assist with medication adherence but some centres use more of one method than the other. In some centres, DOTS is provided to many offenders. In a greater number of centres, DOTS is only provided for offenders on TB treatment, or for those taking pain or psychiatric medications, or for those in the hospital. In at least two centres in KZN, DOTS is not generally provided since staffing is so limited. One centre in KZN reportedly offers DOTS, but access to it is interrupted when there are too few correctional officers available to open cells on time, or to escort offenders to the clinic. A few centres administer medications to offenders directly in the morning but include doses to be taken later in the day; offenders take these to their cells and self-administer. In two centres, officials monitor DOTS in the sections, and in another, the Head of Centre monitors medications over the weekend. At least three centres in KZN reportedly ask select offenders to monitor the medication adherence of others, or to offer DOTS. In LMN, most respondents reported a mixture of DOTS and self-administered medications; some centre clinics do not have enough healthcare staff to offer DOTS to HIV-positive offenders, and, as a result, several respondents noted that other offenders will inform healthcare staff when an offender appears to have defaulted on treatment.

Other offenders take their medications to their cells with them in supplies ranging from four days to monthly. Reports varied as to how

many offenders on ARVs self-administer, and as to whether or not ARVs are stolen or traded, although this is reported as happening in several centres. One respondent reported that the lockers (where medications are kept) are not sufficient to prevent theft, and another noted that DCS staff members may spill or remove medications during searches. One centre encourages offenders to take their medications with them during cell searches so that searchers do not misplace them. A few respondents noted that it is difficult for those who self-administer to take their medications in private, should they not wish to reveal their HIV status.

At least three respondents at one centre in KZN reported that the centre healthcare clinic runs out of ARVs every month. Nurses reportedly try to follow up with them but, due to short staffing, are not able to follow up with all who default. Two healthcare workers reported that if offenders refuse to take their treatment, they must sign a declaration so that the centre does not bear responsibility. One respondent suggested DOTS supporters be trained to include ARVs in addition to TB medication support.

In other centres, adherence is supported with greater DOTS utilization, as well as a medication register and pill counts. Most centres offer some adherence counselling prior to initiation. Some centres have clocks on the walls in the sections to facilitate adherence, while others ask offenders to rely on radios, television, or other offenders who have watches to know what time it is. One respondent reported cancelling plans to buy wall clocks for the cells because "no offenders complained about not knowing what time it [was]." Some centres reported that offenders' access to any source of timekeeping is poor. One reported that healthcare workers check to see if offenders who self-administer medications other than ARVs have symptoms longer than they should, indicating that these offenders did not complete treatment. One reported using blood work to verify adherence.

Many respondents in LMN reported that while offenders are supposed to have access to watches and other timekeeping support, this is not occurring consistently in practice. Pill counts are performed at many centres or associated DOH hospitals. Challenges to adherence also included reports of medications being mistakenly confiscated by officials, as well as stolen from or traded by offenders who were self-administering their medications. In these cases, the medications were believed to be used recreationally.

Supportive Services

In KZN, support groups are available in many but not all centres. Some programs are running well but others struggle for adequate resources, and have been impeded by disputes over whether they should include HIV-negative offenders. Peer education programs are impacted by security concerns. A few respondents requested that support groups be increased for offenders. A minority of LMN centres reported that support groups are offered for HIV-positive offenders. NGOs, including Artic and LoveLife, support peer programs in some centres.

HIV and STI Prevention during Incarceration

In KZN, respondents mostly reported the main HIV transmission risk factors in their centres to be sex and violence between offenders.

Condoms

Respondents confirmed that condoms are available to offenders, and in most but not all centres, they are available in multiple locations. One female centre in LMN did report an unavailability of both male and female condoms. Often, condoms are available in the onsite hospital or clinic (in one case, in the middle of the waiting room). In LMN, more than ten respondents reported condom availability in containers in the centre clinic, or in the units. Condoms are also available on request, and condom boxes are placed in an assortment of locations including sections, centre ARV clinics, passages and gates, entry in reception, the dispatch area, near offenders' toilets, in members' areas, and in unspecific public locations. In some centres, respondents did not offer consistent descriptions of condom locations; for example, in one centre, one correctional officer reported they were only available at the clinic, while a healthcare worker reported they were also available in the cells. One centre reported that they removed condoms from the units (leaving them at the access gate), saying this was done *"...as offenders were having sex a lot, we could see that the condoms were getting finished.*

I think that since they are not there at the units, some are discouraged from having sex."

Reports varied but the majority of respondents confirmed that condoms are taken but they are not always being used for protection during sex. One respondent reported that offenders have admitted to using condoms as slingshots to send items out over the walls of the correctional centre, and a few respondents noted that offenders use condoms to smuggle items in their rectal cavities. One respondent reported that offenders used condom boxes as weapons, so the containers were moved to the entry where offenders can only get them when going in and out of the building. One centre reported that female offenders are only given female condoms upon release.

Other less common distribution sites and methods were (in order of most to least frequently reported by respondents): distributed by request; distributed by healthcare workers in the centre clinic; in the sections (no other detail); handed out by peer educators or support groups; accessible but in a location not known by respondents; in the corridors; at the entryway or reception area; handed out by nurses in the sections; distributed in a box to an offender for the whole cell's use; near the switchboard; given out by officials; in the courtyard; or, in officials' offices in the sections.

The majority of respondents were confident that condoms are being taken from distribution but were less sure how much they were being used, or if they were being used for their intended purpose. Several reported the impression that condoms were not used in cases of rape. One healthcare worker noted that offenders do not take the condoms because they do not want to be seen doing so and have others know that they plan to have sex with another male offender. Some of the respondents expressed doubt at whether condoms should be distributed since sex between offenders is not allowed and punishable. A respondent recalled that sometimes offenders ask the staff why they issue condoms if sex is not allowed and punishable.

HIV Education for Offenders

In two centres in KZN, healthcare workers provide education on HIV and other health issues in the sections daily while offenders are awaiting consultation. Other centres provide education at an unknown frequency. Education includes stigma reduction efforts. Some offenders have willingly and publicly disclosed their status and discuss HIV treatment and prevention with others. HIV awareness days are held at some centres. While the majority of respondents in LMN reported that HIV health education and counselling is provided to offenders at their centre, the frequency at which this occurs was not clear.

Post Exposure Prophylaxis (PEP)

In KZN, it was found that PEP is available to offenders at DOH hospitals, typically through crisis centres, and in the qualitative data, was reported available on site in at least two centres. Of 17 centres with available data, four centres (24%) reported the availability of PEP for offenders in the case of rape.

In the qualitative data for LMN, most respondents clearly articulated that offenders access PEP from nearby hospitals in cases of exposure. One reported that it is offered on site, and 10 respondents either reported that PEP is offered but did not say where, or stated that they did not know, or a response was not recorded. Notably, one official reported that rapes are dealt with *"immediately within 72 hours"*. The quantitative data shows that about 39% of respondents reported the availability of PEP for offenders in the case of rape.

Table 11 further describes PEP health services available by province.

Table 11. PEP for offenders available by province.

	Limpopo(N=5)	*Mpumalanga (N=3)*	*North West (N=5)*	*KZN (N=17)*
Services available	*N (%)*	*N (%)*	*N (%)*	*N (%)*
Is Post-Exposure Prophylaxis (PEP) available:				
For rape care (offenders)?	1 (20.0)	2 (66.7)	2 (40.0)	4 (23.5)

Male Medical Circumcision (MMC)

Four centres in KZN reported that MMC is provided but did not say how often or by whom; one of these centres reported that there is a waiting list for this service. One centre reported that MMC is offered on site weekly by external partners but did not say who performs this service. Offenders are asked about their interest in MMC at intake. The Centre Coordinator provides MMC at one centre and it is provided by SACTAWU (South African Clothing and Textile Workers Union) in two centres, with other centres receiving MMC services from New Start and Catholic Mission Board.

At least six local DOH hospitals in KZN provide MMC at the hospital and at the correctional centre but frequency of this service is unknown. One centre reported that offenders are taken to either the local hospital or another correctional centre for MMC, depending on how many offenders are to be circumcised. One centre indicated that DOH would halt MMC for the rest of the year once the annual quota was met.

While in LMN, a few centres reported that MMC is offered on site. Of the 20 healthcare workers reporting who and where MMC is provided (eight missing values), two centres (10%) reported MMC is available at the correctional centre clinic, 10 (50%) reported an NGO, CSO, or external entity provided MMC, and two (10%) responded that MMC was available through both the correctional centre clinic and external services. MMC was reported not available by eight respondents (40%).

MMC was reported as offered in LMN primarily by external parties, including Aurum, Right to Care, the local DOH, or another, unnamed NGO. Three respondents did not clearly state who provides MMC services on site; in general, it was not clear which centres offer MMC on-site using DCS healthcare workers. One respondent noted that healthcare workers have been trained to perform MMC but cannot do it because they do not have enough equipment. Respondents reported that following MMC, centres may not be able to provide offenders with some of the essential supplies for continued care, including the salt and containers needed to clean the wound and support healing.

Sharps

One centre reported that juveniles were found to have acquired new gang tattoos after admission. This centre also reported that offenders had to be taught not to share shaving equipment since disinfectant is not available. Three other centres reported tattooing activity, sometimes using wires taken out of offenders' bracelets or with needles procured from an unknown source.

TB Prevention, Screening and Care during Incarceration

TB Screening

In general, the burden of TB in KZN was reported to be relatively low, although there are still a number of cases occurring at varying frequencies in most centres. Several centres' interviews illustrated differences between the high perceived TB risk reported by key informants compared to the lower risk and incidents reported by healthcare workers. One respondent reported the quality of TB care and management to be very poor, while others said it was good or fair.

In KZN, it was reported that offenders are screened for TB at admission, upon release, and at varying frequencies in between. Nearly all centres reported that symptomatic screening is performed as well. One centre only offers symptomatic screening. One respondent noted that contacts should be traced but that they have not been able to do this; a few others report that they do trace contacts. If an offender tests positive, others in his or her cell are tested, although one respondent stated, *"I'm not going to lie, we don't screen the whole section."*

The majority of centres in LMN reported that health education and screening for TB is offered on site, although many also provided access to hospital-based screening. Screening typically occurs at intake and release, symptomatically at the clinic, and/or during campaigns. Reported screening frequency varied. Kitchen workers and offenders sharing a cell with an offender found to be infected must be tested. In some cases, respondents reported that the TB Coordinator is informed, and contact tracing is conducted with offenders' families.

TB Care and Management

Nearly all centre health clinics visited in KZN reported offering TB care and management on site but a few refer to external hospitals for treatment. Offenders are kept in isolation in most centres, usually for two weeks, before they are returned to their cells. Six centres report that offenders with TB (or other infectious conditions, such as chicken pox) are not isolated; isolation cells in one centre were converted into offices. Two others reported that not enough isolation space is available; at the time of interview, one of these centres had 10 isolation spaces available for 20 TB patients. Two respondents at this centre suggested that all offenders with TB be housed together in one cell.

Offenders infected with TB usually are screened for HIV and STIs. Drug-resistant TB cases are typically managed off site, at least for the first two weeks, although two centres have reported that they have increasingly been encouraged to manage these cases on site. Offenders on TB treatment appear to receive regular check-ups but the frequency of these appears to vary. The majority of respondents confirmed that DOTS is available for TB; trained offenders from each section perform this service at a few centres, while others have their medication administered at the hospital or in sections by healthcare workers and officials. One respondent noted that offenders who are released from court tend to default on TB treatment.

In LMN, nearly all centres reported that drug-resistant cases are handled externally, and around half reported that drug-susceptible cases are handled at external hospitals. Two respondents reported that TB treatment is initiated on site, and several centres' responses indicated that TB care is initiated both on and off site, although it was not clear what determines where an offender will be treated. Three respondents did not clearly state who initiates TB treatment. While most centres reported that some offenders receive DOTS, respondents did not always clarify whether this included all offenders on TB treatment, and some centres reported that they were not able to offer DOTS due to shortages of healthcare workers. A few respondents noted that all offenders who need treatment are able to receive it but infections among staff are not monitored or treated by the centre, if at all.

TB Infection Control and Prevention

Respondents noted that overcrowding, centre structure, poor ventilation, failure to disclose known TB diagnoses, and treatment default increase the risk of spreading TB, as do sharing cigarettes and other smoking material. In some centres, ventilation depends on offenders' willingness to open the windows. Several reported that the layout of the centre contributes to exposure, such as through cells that face each other. A healthcare worker reported that the correctional healthcare clinic has too few masks, and that they can only be used for drug-resistant TB management, and may not be available for use in other circumstances when exposure may occur. Respondents also felt that infection control and TB management were not optimal, and a few suggested that a person should be hired to manage TB prevention and care.

In KZN, it was noted that TB information was reported as being included in health education offered at several centres; however, one respondent reported that TB knowledge is low, especially among those awaiting trial. One respondent noted that they now no longer accept or make transfers of offenders who are taking TB medications until the treatment is completed. Another reported that, since the police do not screen for TB, new offenders awaiting trial sometimes come in after having defaulted on TB treatment for several weeks since their arrest.

In some of the centres in LMN, respondents reported that TB was not perceived to be prevalent, or that infections had decreased as a result of HIV-positive offenders' receipt of ARVs, as well as increased health education and personal hygiene. In most centres, however, respondents reported that staff are concerned about TB exposure, and that ventilation problems and overcrowding limit proper control of TB infection.

Once diagnosed, offenders are isolated at nearly all centres. A few reported that there is no dedicated space for this; they must search for space or balance it against other isolation needs, such as cases of chicken pox. In one centre, healthcare workers reported that offenders are just taught

"cough etiquette." Notably, one healthcare worker reported that isolation cells used for TB-infected offenders have broken toilets and windows and thus, offenders are isolated in a different, less specialized space.

General Health and Health Services during Incarceration

Centres did not generally report provision of routine health checks apart from those performed at intake but two centres offered conflicting reports on this point. In general, following admission, healthcare workers see offenders when they have a presenting need. Known diabetics and hypertensive offenders do have regular glucose and blood pressure checks, and in one centre, all those known to have a chronic illness are seen monthly.

When offenders wish to be seen at the clinic, they report it to officials, typically in the morning. Most centres report that this is a basic process: offenders tell officials, officials inform healthcare workers, clinic visits are arranged, and offenders are escorted to the clinic for care. However, there are some variations: in one centre, officials are to use a referral form but reportedly find it difficult to triage requests and prefer to have healthcare workers sort out needs; in another centre, healthcare workers have their section assistant create a list of 10 offenders to be seen each day; or, complaint books or registers are used; or, specific clinic days are assigned to different sections or type of health concerns, barring emergency needs. One centre reported having an electronic booking system to make non-emergency appointments. In one centre, offenders report directly to the clinic to request care. At night, many centres reported that offenders must get the attention of officials, and officials contact healthcare workers on standby or transport the offender to a local hospital, if needed.

At most KZN centres, it appears that most primary health care services are offered on site. A few centres reported having limited healthcare staffing; as a result, many services are provided off site. A few respondents reported that healthcare is good during the day but at night, correctional officers must rely on calling for an ambulance and transporting offenders to external hospitals. One interviewer indicated that access to healthcare services is very limited, reporting, *"Offenders are dying in numbers, not only from TB but from other diseases, approximately once a week."*

At all but three correctional centres in LMN, officials and healthcare workers report that offenders can be consistently be seen at on-site clinics for illness, symptom-based screening, and some management of diabetes, hypertension, TB, HIV, and other chronic diseases. All centres reported that specialty care and more complex needs are addressed in external (DOH) centres. In three centres, qualitative responses revealed that the majority of all healthcare is provided by the off-site hospital due to on-site staffing shortages.

General health information is usually provided through posters, although it is only provided verbally in one centre as offenders there have been found to use written materials to smoke. Others centres reported offering written materials to offenders. Presentations of varying content and frequency are given at the majority of centres. Health education often follows event calendars that guide staff on which health issue to talk about. A few NGOs provide health education, including Umvuti, AIDS Centre, and LoveLife.

Four centres reported that offenders sometimes come to the clinic unescorted. In most cases, officials escort them to the clinic for care; a special escort team is used for maximum-security offenders in one centre, and in another, a team of offenders who serve as supportive workers escort other offenders. Several respondents in different centres reported that there are not enough healthcare workers and not enough security workers available to escort offenders to the clinic to facilitate timely access to care, and that this is a major concern in regard to quality of care. Also, health education sessions are delayed due to too few security officials being available to guard these sessions.

Medical information, including HIV status, is kept confidential at most centres; however, several respondents indicated circumstances in which health information is shared with management or correctional officers, such as when officials provide DOTS, when offenders are

refusing to take medication, or when escorts take offenders to an ARV clinic.

Healthcare workers in most centres record follow-up appointments in a diary and call for offenders to return when it is time. Offenders are not always informed in advance of their appointments, although one centre has provided them with cards to track appointments and medications. One respondent in another centre reported that offenders know when their appointments are, and often remind workers. In another centre, a notice board is updated daily with appointments, and reception is informed in advance to facilitate transportation planning; this centre reports that no offenders miss appointments. In centres that only have visiting healthcare workers, offenders or officials must keep track of medical appointments. One healthcare worker related that some offenders give up on waiting in the clinic to see a healthcare worker and return to their cells.

Overcrowding is a serious concern in most centres. In one centre, cells designed for 24 offenders are now housing approximately 50 offenders. Other major health concerns noted by respondents included delays in accessing care caused by short staffing or by favouritism. Favouritism by offenders can occur when it is offenders themselves who assist staff by bringing fellow offenders to the clinic for care. One healthcare worker reports offenders are brought to the clinic long after they requested care because they are not friends with these assistants, or perhaps because they are not favoured by correctional officers. This respondent noted that correctional officers do not monitor the actions of the offender-assistants as well as they should. Another healthcare worker in different centre reported the impression that correctional officers prefer to bring offenders with minor ailments to the clinic, leaving behind those who truly need attention.

In LMN, respondents generally had moderate ratings of in-centre care, describing it as "average," "sufficient," and "good." Ratings of general care tended to be lower than ratings of HIV- and TB-specific care.

Mental Health Services

Respondents did not present a clear picture of the extent of mental health needs among offenders. One centre in KZN reported that offenders in isolation suffer psychological impacts, including depression and suicidal ideation. Another noted that some offenders do not report health issues due to frustration, anger, and resentment.

Mental health services are provided on site in some centres. There is a psychologist on staff at a few centres, and others have visiting psychologists but it is not clear how often offenders typically have access to these providers. At one large centre, more than 1000 offenders have been deemed in need of "behaviour modification" but there is only one psychologist and five social workers to serve them. Several centres noted that mental health services are provided off site, or external parties provide them on site, but details were not given. Severe mental health cases are kept in the on-site hospital at one centre. One respondent reported that the centre offers DOTS to offenders deemed to be at risk of suicide.

Substance use services are reportedly provided on site in some centres, usually by social workers, but few reports offered details regarding the frequency and content of these services. This is significant, given that many interviewees mentioned offenders smoking dagga and woonga, and even making beer on site. One centre reported having to switch to injectable pain medications to reduce incidents of their misuse. One centre reported offering smoking cessation support and smoke-free cells. Peer educator trainings on alcohol and drug abuse, as well as direct education sessions, are conducted by DOH, DCS, and NGOs, including SACTAWU, Artic, Lifeline, and Transnet.

In LMN, respondents' statements regarding offenders' mental health services and needs differed notably. Sometimes within the same centre, officials reported low incidence of mental health issues, while healthcare workers reported high incidence, or vice versa. Mental health services, if offered, appeared to be limited to severe cases and mostly offered off site. Several centres reported that some drug and alcohol programs are offered on site but it was not clear how frequently or

what these entailed. Over one-third of the centres reported that medications are stolen to be used for recreation (along with other substances). Incidents of corrections officers assisting with smuggling in illicit drugs were also reported.

DOH Referral Facilities

The study team visited 13 health professionals in six primary healthcare (PHC) facilities in KZN, including both hospitals and clinics, serving the correctional centres in their communities. One primary DOH facility served a large correctional centre, and five served small centres. All PHC facilities reported that they offered HIV care, while most reported also offering TB and STI care. Table 12 shows the services provided by community healthcare workers to offenders by province.

Table 12. Services provided by community healthcare workers to prisoners.

	Total	*KZN*	*Limpopo*	*Mpumalanga*	*North West*
Reported providing the following services to incarcerated patients					
Any (N=45)	45 (100.0)	13 (100.0)	9 (100.0)	8 (100.0)	15 (100.0)
HIV (N=41)	41 (100.0)	12 (100.0)	9 (100.0)	8 (100.0)	12 (100.0)
TB (N=41)	33 (80.5)	9 (69.2)	9 (100.0)	6 (85.7)	9 (75.0)
STIs (N=40)	32 (80.0)	8 (66.7)	9 (100.0)	6 (85.7)	9 (75.0)
Reported providing the following services to incarcerated patients					
HIV status and CD4 count (N=39)	11 (28.2)	3 (27.3)	3 (33.3)	2 (28.6)	3 (25.0)
ART medication history (N=39)	15 (38.5)	4 (36.4)	4 (44.4)	3 (42.9)	4 (33.3)
TB status (N=38)	11 (29.0)	2 (18.2)	4 (44.4)	2 (33.3)	3 (25.0)
TB medication history (N=38)	11 (29.0)	2 (18.2)	4 (44.4)	2 (33.3)	3 (25.0)
STI status or history (N=38)	9 (23.7)	2 (18.2)	3 (33.3)	2 (33.3)	2 (16.7)
Tracing contacts for partner notification of STIs (N=38)	6 (15.8)	1 (9.1)	3 (33.3)	1 (16.7)	1 (8.3)
Other primary health needs (N=38)	9 (23.7)	2 (18.2)	1 (11.1)	3 (50.0)	3 (25.0)

While many PHCs rely on their local DOH for support and assistance, many respondents indicated that relying on a substantial amount of external care can negatively affect communication, care coordination, and transportation issues. A hospital healthcare worker in KZN reported that the correctional centre does not tell the DOH enough about an offender's medical history before referring him or her to the DOH. Another DCS respondent noted that communication and partnership between DCS and DOH can be poor, describing it as follows:

"There is a challenge when sending the offender to the DOH; when they return to the DCS centre, there is no feedback from the DOH regarding the findings and management of the offenders. The DOH should communicate with the DCS staff on the offenders' health and management plan...DCS staff was afraid to leave the offender alone with the DOH staff, the DOH staff refused to manage the patient as there was no medical file, and the DCS official refused to leave the offender alone..."

Two other hospitals in KZN reported that DCS sometimes brings offenders to the hospital for services without prior notice. Since they must be seen first, this impacts the triaging of care for the general public. One centre that relies primarily on the local DOH for care reported that, in addition to having too few escorts, they often have too few functioning cars available to transport offenders to the hospital for care.

One centre in KZN noted that once they were authorized to create an on-site ART clinic, escort issues diminished, staff morale and commitment improved, and offenders and DCS workers stopped being exposed to colds and TB in the DOH.

In LMN, 32 health professionals in 13 primary health DOH facilities that served the correctional centres in their communities were visited. All

DOH facilities reported they offered HIV care, while most reported offering TB and STI care as well. Many hospital workers in LMN reported they were willing to serve offenders but felt that the hospital was providing care the correctional centres should provide. Some hospital workers did report that they or their patients were afraid of the offenders.

About one-third of the DOH facilities in LMN reported that they made an attempt to provide records to ensure continuity of care for discharged offender patients. However, the qualitative data revealed reports of correctional centres having difficulty obtaining medical information from treating DOH hospitals and vice versa. Blood work results and transfer or referral forms sent between institutions may be missing information, and protocol at DOH facilities, such as requiring in-person meetings to share information, can delay treatment for offenders. Additionally, several DOH respondents reported the need for DOH and DCS healthcare staff to meet more often, and to establish better procedures for continuity of care.

Services provided

Severe health issues and specialty care are managed by nearby hospitals for all centres. Some centres require hospital referrals be made by the visiting doctor, and others do not. DCS healthcare workers prepare referral forms and arrange transport to the nearby hospital. If the referring need is not an emergency, an appointment may be made in advance.

Local hospital healthcare workers are generally willing to serve offenders and are not afraid of them, although one correctional officer reported that a DOH staff member had told him that they fear the potential of someone (DCS or private citizen) using a firearm in the hospital to stop or subdue an offender client.

For at least three centres with few healthcare workers, the DOH is the primary provider for most services, and dispenses most of the offenders' medications. One understaffed centre must still rely on the DOH, even though the nearest one is very far from the correctional centre. For other PHCs, they are relied upon more for serious health concerns and specialty care. Local hospitals generally report that they provide health promotion and screenings, as well as basic care (if the DCS cannot do it), critical care, and specialty care.

These hospitals offer HCT, and some also offer it on site in correctional centre healthcare centres. One respondent reported that guards stay in the room while test results are given, and that this is preferred. Offenders undergoing HCT are asked about STIs and TB symptoms. Unrelated to HCT, local hospitals report that they offer screening for STIs (frequency unknown). They also offer safer sex and condom use counselling.

The DOH are the primary ARV providers for some centres, primarily in LMN, providing regular (usually monthly) check-ups with offenders on ART, as well as adherence support, including pill counts. Doctors write prescriptions, and offenders are taken to the hospital pharmacy to pick them up, where they are seen first. Medications are typically given to the correctional officer. One hospital reports that offenders who test positive are eligible for treatment and can be initiated on treatment the same day but that correctional escorts are often in a hurry and disrupt this process, rescheduling initiation for a few days later. One hospital healthcare worker reported that offenders often default, telling hospital workers that their medications were stolen, that they were too hungry to take their medications, or that too few DCS escorts were available to take them back for refills. Adherence counselling is usually offered with initiation but again, at this hospital, correctional escorts rush the appointment, limiting the opportunity for full counselling.

The local hospitals also offer screening for TB, as well as treatment initiation, follow-up care and management, and referrals for drug-resistant cases. All patients are assessed for symptoms and tested as needed. Medications are dispensed in monthly supplies. One hospital reported that offenders on TB treatment do not return on time for follow-up appointments because there are too few DCS escorts available to take them. This hospital is also short-staffed but tries to send tracer teams to the correctional centre to follow up if someone has defaulted.

Transfer, Release, and Continuity of Care

All centres reported that upon release, a letter is written documenting the offender's medical history and care plan. This is, in most cases,

given to the offender to take to clinic near his or her home after release. In one case, it was given to parole officers to take to the clinic. One centre reported that medical files are sent on to community corrections, and two more expressed some belief that the medical file is sent on but were not sure. In some cases, the local hospital is asked to write this letter. Reports varied as to whether or not hospital healthcare workers receive advance notice of their client's release; some said they find out a few days in advance, while other respondents noted that they sometimes do not discover for some time that an offender client is no longer incarcerated because the correctional centre does not inform them. In some cases, DOH workers report that offenders are released without this letter, primarily when they are transferred without the DOH healthcare worker's knowledge.

When the DOH healthcare worker does receive advance notice, providers schedule a health screening prior to release but a follow-up appointment after release may be scheduled if not enough notice was given. It was not clear from the interviews how much counselling on treatment adherence or other needs that offenders receive before release. A few respondents at a couple of centres mentioned that continuity of care was facilitated when the individual released chose to continue getting care at the same DOH facility from which they received care while an offender.

Hospitals requested better coordination with correctional centres around release, as well as to improve the transfer letter process, as DCS letters get lost or are not issued, and former offenders come back to the DOH to request repeat testing and report new health issues.

Offenders infected with drug-resistant TB in KZN continue to receive monitoring from the DOH and tracing teams to make sure that treatment is completed. However, a few respondents in both DOH and DCS noted that offenders' reported addresses are sometimes found to be incorrect or no longer valid, making follow-up difficult. Hospital respondents in KZN were not aware of any NGO involvement, or of any formal coordination that occurs with DCS around release of offenders.

Offenders on treatment for TB in LMN reportedly receive more ongoing care and coordination through NGOs, providers, and the local TB Coordinator. Thirty-five respondents in LMN reported that they either did not know if any NGOs were involved in the release process, or did not think any were involved. Seven in LMN thought that an NGO was involved but did not know its name or details on the services provided. Responses were not recorded for this question in 13 interviews. Two interviewees noted that NGOs such as Aurum and New Start assist with other things but not release. NGOs are involved in providing support in some cases after release but some respondents believed these services are for all individuals with health needs, and not exclusively for former offenders, or it was not clear who services were designed to reach. External partners mentioned by respondents with regard to release included Nicro, the Department of Labour, FPD, the Community Responsiveness Program, Human Resource Information Centre, NHLAYISO, Home-based Carers, Holy Family, Broadreach, and Youth for Christ.

In general, correctional centre healthcare workers expected offenders to manage their own connection to and maintenance of care after release, with the opinion that the patient is responsible for seeking medical assistance. Many correctional centre and hospital healthcare workers expressed concern regarding offenders' health outcomes after release.

One hospital healthcare worker noted that offenders who are not from the area where they were incarcerated do poorly, while those who are from the same area and were receiving care at the local DOH clinic often continue care with them and remain stable. Hospital workers noted that former offenders often default on treatment because they do not have money to pay for healthcare or for transportation to access care. They also face stigma, as well as whatever circumstances originally contributed to their infection with HIV or TB and/or their arrest. Hospital health care workers suggested that community support groups be created for former offenders.

Many respondents observed that this limited protocol presents problems because after being in a controlled environment, offenders are expected

to take responsibility for their healthcare upon release, many times with no support from anyone. They may be unfamiliar with managing such tasks as making an appointment for healthcare, finding transportation, having to wait in a queue with the other patients, and adhering to treatment on their own. They may face perceived or real community stigma as a result of their health conditions, and others' fear of ex-offenders may limit former offenders' integration into the community and may contribute to that stigmatization.

Respondents identified a number of other challenges faced by offenders upon release. Those are summarized later in this document, along with recommendations for improving this process.

Transfer, Release, and Continuity of Care (DCS)

It was reported that when offenders are transferred within the correctional services units, their medical files are transferred with them. When offenders are near release, they may be transferred to other centres closer to their homes. A few centres reported that they supply offenders who are going to court with treatment or transfer letters, in case they are released there. Files may be transferred to community corrections for those on parole.

Upon release, a transfer letter is drafted that outlines the offender's health needs, history, and treatment, particularly for offenders living with HIV or TB. Offenders on TB or ARV treatment may be given a copy of a particular form or have a treatment card filled out. TB forms are used to trace those on treatment after release. Three centres reported providing some treatment to offenders, along with the transfer letter. Offenders are almost exclusively considered responsible for taking transfer documents to their local clinic.

A few healthcare workers report that they are notified in advance (one to three days) of releases. By policy in some centres, offenders are supposed to be given a health assessment again prior to their release; this occurs in at least three centres at least some of the time. Some centres offer adherence counselling and health education prior to release. Reports varied regarding whether there is coordination between healthcare and correctional workers before release. One respondent reported that there is a team but he was not sure what they do. Another two reported that there are pre-release and parole programs but it is not clear what those entail; one respondent said they do not contain health aspects.

In a fw centres, DCS staff may meet with family members and do a home assessment prior to release, and one asks family members to take the transfer letter to a local clinic for the ex-offender. Community corrections and "re-integration" may follow up with the offender after release, although this was not widely reported. Social grants are sought for some families in need in order to help support offenders. One centre reported that centre healthcare workers call external clinic workers to confirm that former offenders have presented for treatment, and continue to collaborate as needed after that.

In one centre, the TB/HIV Care Association supports release coordination and traces former offenders after release. An NGO was believed to support release from another centre but respondents did not know the name of the NGO. Although other NGOs are likely providing support, no other NGOs were reported to support offenders post-release.

Default often happens after an offender is released, according to one healthcare worker, who hypothesised that this is due to former offenders being afraid to admit their status to friends and family. One centre that houses juveniles noted that HIV-positive former juvenile offenders may be at particular risk of negative outcomes, especially if their families have rejected them. A respondent suggested that community corrections hire someone with a clinical background to whom released offenders could be referred.

Staff perceptions and knowledge of HIV, TB and STIs

Perception of Incidence and Segregation

Incidence

We interviewed 30 healthcare workers and 28 correctional centre staff in KZN about their perception of HIV, TB, and STI infections and procedures for addressing infected individuals. Healthcare workers estimated the prevalent HIV

infection rate to be about 43% at an aggregate median level, compared to 30% as estimated by other staff. Healthcare workers estimated TB prevalence to be 5%, compared to 30% for other staff (statistically significant difference). Other correctional centre staff and healthcare workers both estimated STIs to be a median 5% across the correctional centres (see Table 13).

In LMN, we interviewed 24 healthcare workers and 24 correctional centre staff about their perception of HIV, TB, and STI infections and procedures for addressing infected individuals.

Healthcare workers estimated the prevalent HIV infection rate to be about 20%, at an aggregate median level, compared to 30% as estimated by other staff. Healthcare workers also estimated TB prevalence to be 2%, compared to 9% for other staff. While other correctional centre staff estimated STIs to be a median 10% across the correctional centres, correctional centre healthcare workers estimated this to be only 3%. In all cases, correctional centre healthcare workers estimated lower infection rates than did other correctional centre staff.

Table 13. Perceptions of HIV, TB and STI infection rates and procedures for addressing infected individuals among healthcare workers and other correctional centre staff in KZN.

	Healthcare workers		*Other staff*		
Estimated infection rates (%)	*N*	*Median (range)*	*N*	*Median (range)*	*p=*
HIV	22	42.5 (3-85)	16	30 (1-70)	0.58
TB	19	5 (0-80)	17	30 (0-70)	0.05
Syphilis and other STIs	22	5 (0-50)	11	5 (0-40)	0.74
HIV+ offenders are:	*N*	*N (%) who responded yes*	*N*	*N (%) who responded yes*	*p=*
Segregated from other offenders	20	0 (0)	19	0 (0)	--
Excluded from work/programs	20	1 (5.0)	19	0 (0)	0.32
Excluded from family visits/ social activities	20	0 (0)	19	0 (0)	--
TB+ offenders indicators	*N*	*N (%) who responded yes*	*N*	*N (%) who responded yes*	*p=*
Segregated from other offenders	20	11 (55.0)	19	5 (26.3)	0.07
Excluded from work/programs	20	5 (25.0)	19	1 (5.3)	0.09
Excluded from family visits/ social activities	20	2 (10.0)	19	0 (0)	0.16

Segregation/Isolation

Staff in all correctional centres visited in KZN reported that HIV patients were not segregated from other offenders, although in one location they were reported to be excluded from some work activities. No correctional centres reported any offenders to be excluded from family visits based on their HIV status. TB patients were reported to be routinely segregated [isolated] from other offenders, typically initially after diagnosis, by 55% of health workers and only one-quarter (25%) of other correctional centre staff. About one-quarter (25%) of healthcare workers and 5% of other staff reported TB patients were excluded from work programs, and only a handful of healthcare workers and no other staff reported excluding TB patients from family visits or social activities. Table 13 describes the perceptions and procedures for HIV, TB, and STI infection rates and services.

Staff in all correctional centres in LMN reported that HIV patients were not segregated from other offenders, although in one location they were reported to be excluded from some work activities (food service). No correctional centres reported any offenders to be excluded from family visits based on their HIV status. TB patients were reported to be routinely segregated [isolated] from other offenders, typically initially after diagnosis, by 77% of health workers and about half of other correctional centre staff. About one-third of both types of workers reported TB patients were excluded from

work programs, and only a handful of workers of either type reported excluding TB patients from family visits. No differences between the reports of healthcare workers and other correctional centre staff reports were statistically significant. Table 14 describes the perceptions and procedures for HIV, TB, and STI infection rates and services.

Table 14. Perceptions of HIV, TB and STI infection rates and procedures for addressing infected individuals among healthcare workers and other correctional centre staff in LMN.

	Healthcare workers		*Other staff*		
Estimated infection rates (%)	*N*	*Median (range)*	*N*	*Median (range)*	*p=*
HIV	24	20.5 (5.0 – 80.0)	24	30.0 (0.0 – 90.0)	0.82
TB	23	2.0 (0.0 – 80.0)	22	9.0 (0.0 – 60.0)	0.53
Syphilis and other STIs	23	3.0 (0.1 – 80.0)	19	10.0 (0.0 – 35.0)	0.72
HIV+ offenders are:	*N*	*% responded yes*	*N*	*% responded yes*	*p=*
Segregated from other offenders	22	0 (0.0)	31	0 (0.0)	-
Excluded from work/programs	22	1 (4.6)	31	0 (0.0)	0.23
Excluded from family visits/social activities	22	0 (0.0)	31	0 (0.0)	-
TB+ offenders indicators	*N*	*% responded yes*	*N*	*% responded yes*	*p=*
Segregated from other offenders	22	17 (77.3)	29	15 (51.7)	0.06
Excluded from work/programs	22	8 (36.4)	29	11 (37.9)	0.91
Excluded from family visits/social activities	22	4 (18.2)	29	1 (3.5)	0.08

Levels of HIV and TB Knowledge

Correctional centre staff were asked questions on their understanding of HIV and TB transmission. Healthcare workers, with the exception of one 'healthcare worker', were not asked these questions. Based on the number of questions they answered correctly, they were given a score from 0 to 10, with a 0 score indicating a perfect score (they answered all knowledge questions correctly), and 10 was an indication of low knowledge (they did not answer any questions correctly). The number and percentage of each question answered correctly were reported, and the median and range of HIV and TB knowledge scores were calculated to describe the level of HIV and TB knowledge (See Tables 15 and 16).

Table 15. HIV knowledge among correctional centre staff.

Understood HIV is spread by:	*KZN*		*LMN*		
Estimated infection rates (%)	*N*	*Responded correctly (%)*	*N*	*Responded correctly (%)*	
Vaginal sex	17	17 (100.0)	33	33 (100.0)	0.82
Anal sex	17	17 (100.0)	33	31 (93.9)	0.82
Oral sex	17	14 (82.4)	33	20 (60.6)	0.53
Sharing needles for injection drug use	17	17 (100.0)	33	32 (97.0)	
Tattooing or piercing	17	16 (94.1)	33	30 (90.9)	
Sharing blood in brotherhood rituals	17	16 (94.1)	33	31 (93.9)	
Breastfeeding	17	11 (64.7)	32	21 (65.6)	
Mother to child during pregnancy or childbirth	17	14 (82.4)	32	28 (87.5)	
Understood HIV is not spread by:		N (%)		N (%)	-
Contact with toilet seat	17	14 (82.4)	33	29 (87.9)	0.23
Sharing a glass or cup with an HIV+ offender	17	17 (100.0)	33	32 (97.0)	-

Kissing	17	14 (82.4)	32	23 (71.9)	p=
Mosquito bites	17	12 (70.6)	33	23 (69.7)	0.06
Common use of razor blades	17	0 (0)	32	2 (6.3)	0.91
Shaking hands	17	14 (82.4)	32	30 (93.8)	0.08
Answered all questions about HIV correctly	*17*	*0 (0)*	*33*	*0 (0.0)*	
		Median (Range)		*Median (Range)*	
HIV knowledge score[A]	*17*[B]	*2.1 (0.7 – 3.6)*	*33*[B]	*1.4 (0.7 – 5.0)*	

[A] An aggregate of the above 14 questions. Out of 10: the higher the score, the lower knowledge about HIV transmission.
[B] KZN: Includes 1 health care worker and 16 other staff. LMN: Includes 1 professional nurse and 32 non-healthcare correctional centre staff.

The rates of HIV knowledge among non-health-care correctional centre staff were relatively high. However, the data indicated some knowledge deficiencies related to the relative risk of razor blades, kissing, breastfeeding, and mosquito bites in HIV transmission. TB knowledge among correctional centre staff was not as high as for HIV. Relatively few knew that TB patients are not contagious after their treatment is underway, and most did not know that TB contagion is higher in a correctional centre than in the community. Furthermore, almost 30% did not know TB may be spread by breathing air near an infected person, and rates of misinformation varied widely by province.

Table 16. TB knowledge among correctional centre staff.

Understood HIV is spread by:	*KZN*		*LMN*		
Estimated infection rates (%)	*N*	*Responded correctly (%)*	*N*	*Responded correctly (%)*	
TB may be spread by breathing air near an infected person	18	13 (72.2)	32	23 (71.9)	0.82
Risks for TB are higher in correctional centres than in the community	18	11 (61.1)	32	20 (62.5)	0.82
Someone coughing >2-3 weeks may be infected with TB	18	16 (88.9)	32	29 (90.6)	0.53
TB can be cured with the appropriate medications	18	18 (100.0)	32	32 (100.0)	
Keeping doors/windows closed will not prevent TB	18	18 (100.0)	32	29 (90.6)	
Cloth/paper masks are not effective to prevent TB	18	2 (11.1)	32	4 (12.5)	
TB patients do not remain contagious throughout treatment	18	10 (58.8)	30	9 (30.0)	
TB is not spread by sharing eating/drinking utensils	18	14 (77.8)	32	9 (23.1)	
TB is not spread through semen/vaginal secretions during sexual intercourse	18	12 (66.7)	32	22 (68.8)	-
TB is not spread by sharing a cigarette	18	10 (55.6)	32	8 (25.0)	0.23
TB is not spread through mosquito bites	18	15 (83.3)	32	19 (59.4)	-
Answered all questions about TB correctly	*18*	*0 (0)*	*32*	*0 (0.0)*	*p=*
		Median (Range)		*Median (Range)*	*0.06*
TB knowledge score[A]	*18*[B]	*2.7 (0.9 – 4.5)*	*32*[B]	*4.55 (0.9 – 7.0)*	*0.91*

[A] An aggregate of the above 11 questions. Out of 10: the higher the score, the lower knowledge about TB.
[B] KZN: Includes 1 health care worker and 15 other staff. LMN: Includes 1 professional nurse and 31 non-healthcare correctional centre staff.

HIV and TB Stigma

It was noted that some activities common within centres tended to reveal offenders' HIV status, including provision of a special diet and bringing all those on ARVs together in a group to receive medications. Even in one case in which staff call HIV-positive offenders to the chapel, which is next door to the ARV clinic, respondents report that it is clear to others that this is a call to the ARV clinic. One centre reported that they do not have access to locks for files.

Several respondents reported that stigma was not an issue in their centres but a nearly equal number of respondents noted that the HIV-positive offenders do face stigma. One said that they are "discriminated [against] but not intentionally". Another, when asked what reaction an HIV-positive offender would receive upon revealing his status, said that they would be humiliated if disclosure was done by another offender or a staff member. Another answered similarly, saying that other offenders may *"take advantage of him and won't want to associate with him and will scold him."* A third concurred, saying, *"I think he will be discriminated against,"* and a fourth said the offender would be *"psychologically victimized."*

One respondent suggested that the reason some are unwilling to be tested for HIV may be because sometimes the attitude of the staff might scare them away.

Quantitatively, stigma among healthcare workers and non-healthcare staff was calculated and compared by asking respondents different questions about which services and rights HIV-positive offenders should receive and if they are willing to provide services to HIV-positive offenders. Based on the responses to ten questions, respondents were given a stigma score from 0 to 10, where a stigma score of 10 indicates the highest stigma and 0 indicates no stigma towards offenders. An additional four questions about how well respondents would accept working with HIV-positive co-workers were used to create a stigma score for staff. The number and percentage of each question were used to generate stigma scores. Correctional centre worker stigma is reported by presenting the median and range of stigma scores.

Stigma in KZN

Median aggregate stigma scores for both healthcare and non-healthcare correctional centre staff were low in KZN, at 0 for healthcare workers and 0.5 for non-healthcare staff and no significant differences were found between healthcare and other correctional centre staff. Four of 18 (22%) non-healthcare correctional centre staff said offenders should not cook in the correctional centre compared to two of 17 (12%) healthcare staff, and four of 18 (22%) non-healthcare correctional centre staff said correctional centre staff should be informed of offenders' HIV status compared to two (11%) of healthcare workers.

Table 17. Stigma towards HIV positive offenders among healthcare workers and non-healthcare staff in KZN.

	Healthcare workers		*Non-healthcare centre staff*		
Stigma indicators	*N*	*Responded yes (%)*	*N*	*Responded yes (%)*	*p=*
HIV+ offenders should not participate in sports	18	1 (5.6)	18	1 (5.6)	1.00
HIV+ offenders should not cook in the correctional centre	17	2 (11.8)	18	4 (22.2)	0.41
HIV+ offenders should not work in the correctional centre	18	1 (5.6)	18	0 (0)	0.31
HIV+ offenders should be in a separate centre	18	1 (5.6)	18	0 (0)	0.31
HIV+ offenders do not require support or sympathy	18	2 (11.1)	18	1 (5.6)	0.55
Correctional centre staff should be informed of offenders' HIV status	18	2 (11.1)	18	4 (22.2)	0.37
HIV+ offenders risk infecting their cellmates	18	1 (5.6)	18	1 (5.6)	1.00

HIV+ offenders risk infecting staff	18	2 (11.1)	18	2 (11.1)	1.00
HIV+ offenders should not be treated the same as other offenders	18	0 (0)	18	0 (0)	-
HIV+ offenders should be publicly identifiable	18	1 (5.6)	18	1 (5.6)	1.00
	N	*Median (range)*	*N*	*Median (range)*	*p=*
Stigma score[A]	*17*	*0 (0 – 3)*	*18*	*0.5 (0 – 2.2)*	*0.70*

[A] An aggregate of all 10 questions above. Out of 10: the higher the score, the greater stigma observed.

The above table examined stigma against HIV-positive offenders. In Table 18 (see below), we can see that stigma against HIV-positive colleagues is similarly low. Aggregate stigma scores for both healthcare and other correctional centre staff are almost non-existent with regard to working and associating with HIV-positive co-workers, with an average score of 0 for both types of worker.

Table 18. Stigma towards HIV positive co-workers among healthcare workers and other staff in KZN.

	Healthcare workers		*Other correctional centre staff*		
Stigma indicators	*N*	*Responded yes (%)*	*N*	*Responded yes (%)*	*p=*
Would not accept working with HIV+ co-worker	17	0 (0)	18	0 (0)	-
Would not accept eating with HIV+ co-worker	17	0 (0)	18	0 (0)	-
Would not accept continuing to meet/associate with HIV+ co-worker	17	0 (0)	18	0 (0)	-
Would not accept sharing cutlery with HIV+ co-worker	17	0 (0)	18	1 (5.6)	0.32
	N	*Median (range)*	*N*	*Median (range)*	*p=*
Stigma score[A]	*17*	*0 (0-0.0)*	*18*	*0 (0-2.5)*	*0.33*

[A] An aggregate of all 4 questions above. Out of 10: the higher the score, the greater stigma observed.

A final set of three stigma questions asked about whether the respondent thought other staff members held stigmatizing beliefs against HIV-positive people. Results in Table 19 show that no staff believe any other correctional centre staff are unwilling to provide services or associate with those who are HIV-positive.

Table 19. Perceived stigma towards HIV positive offenders by other staff in KZN.

	Healthcare workers		*Other correctional centre staff*		
Stigma indicators	*N*	*Responded yes (%)*	*N*	*Responded yes (%)*	*p=*
Other offenders are unwilling to eat with HIV+ offenders	18	0 (0)	18	0 (0)	--
Staff are unwilling to provide services to HIV+ offenders	18	0 (0)	18	0 (0)	--
Staff are unwilling to provide services to TB+ offenders	18	0 (0)	18	0 (0)	--

To further understand stigma, HIV/TB knowledge, and perceptions of the correctional centre environment, scores were analysed by correctional centre size. There was no difference in HIV stigma or TB knowledge between smaller correctional centres compared to their larger counterparts

but the level of HIV knowledge was significantly different between centres with the lowest levels of knowledge found in staff at the small centres, followed by the medium centres, and with staff at the largest centres having the most knowledge of HIV. Data are shown in Table 20.

Table 20: Summary of calculated scores for perceptions of the correctional centre environment, stigma and HIV/TB knowledge by province and correctional centre size in KZN.

Correctional centre size	*Small (< 200)*		*Medium (200–1000)*		*Large (>1000)*		
Calculated score	*N*	*Median (range)*	*N*	*Median (range)*	*N*	*Median (range)*	*p=*
HIV and TB knowledge and stigma[A]							
HIV stigma toward offenders	8	1 (0-2)	16	0 (0-3)	12	0.5 (0-3)	0.49
HIV stigma towards co-workers	8	0 (0-0)	15	0 (0-2.5)	13	0 (0-0)	0.50
HIV knowledge	6	3.2 (0.7-3.6)	7	2.1 (0.7-2.1)	4	*0.7 (0.7-1.4)*	*0.02*
TB knowledge	6	2.7 (0.9-4.5)	7	2.7 (0.9-4.5)	5	*3.6 (0.9-4)*	*0.99*

[A] Scores from 0 to 10, with higher values representing greater stigma and lower HIV/TB knowledge.

Knowledge of HIV or TB was not predictive of stigma or vice versa. Higher perceived rates of substance use were marginally associated with violence and higher rates of violence associated with higher rates of sexual behaviours. These patterns were consistent between health workers, other staff, and across the three correctional centre sizes. Table 21 uses Spearman's correlation coefficients to determine relationship between variables.

Table 21: Spearman's correlation coefficients between calculated scores about perceptions of the correctional centre environment, stigma and HIV and TB knowledge.

Reported score	*Substance use*	*Violence*	*Sex*	*Other cultural practices*	*Stigma: offenders*	*Stigma: perceived*	*Stigma: staff*	*HIV know-ledge*	*TB know-ledge*
Substance use (n=48)	-								
Violence (n=46)	**0.51***	-							
Sexual behaviours (n=47)	0.42	**0.52***	-						
Other cultural practices (n=46)[A]	0.26	0.39	0.26	-					
Stigma: offenders (n=36)	0.06	0.06	0.04	-0.04	-				
Stigma: perceived (n=37)	0.24	0.26	0.16	0.90	-0.21	-			
Stigma: staff (n=36)	-0.01	-0.02	0.05	-0.04	-0.14	0.20	-		
HIV knowledge (n=17)[B]	-0.20	-0.36	-0.50	-0.27	-0.12	0.01	-0.32	-	
TB knowledge (n=18)[B]	-0.38	0.03	0.18	-0.11	-0.50	0.19	0.34	0.03	-

[A] Includes piercing, tattooing, and other blood-sharing practices by offenders.

[B] Non-health worker staff only

* Indicates a statistically significant difference at a p<0.1 level.

Stigma in LMN

In LMN, aggregate stigma scores for both healthcare and other correctional centre staff were relatively low, at 0.8 for each. Two of five (40%) non-healthcare staff said offenders should not cook in the correctional centre, compared to three of 22 (13.6%) healthcare staff, and one of three (33%) non-healthcare staff said correctional centre staff should be informed of offenders' HIV status. Few staff members, both healthcare and non-healthcare, said correctional centre staff are unwilling to provide services to offenders with HIV or TB. Four of 22 (18%) healthcare workers said they felt correctional centre staff should be informed of offenders' HIV status, or that they worry HIV-positive offenders are at risk of infecting their cell-mates or other staff. Table 22 is the aggregate stigma scores towards HIV-positive offenders reported by healthcare workers and other correctional centre staff.

Table 22. Stigma towards HIV positive offenders among healthcare workers and other staff in LMN.

	Healthcare workers		*Other correctional centre staff*		
Stigma indicators	*N*	*Responded yes (%)*	*N*	*Responded yes (%)*	*p=*
HIV+ offenders should not participate in sports	22	0 (0.0)	31	0 (0.0)	-
HIV+ offenders should not cook in the correctional centre	22	3 (13.6)	31	13 (41.9)	0.03
HIV+ offenders should not work in the correctional centre	22	0 (0.0)	31	1 (3.2)	0.40
HIV+ offenders should be in a separate correctional centre	22	1 (4.6)	31	2 (6.5)	0.77
HIV+ offenders do not require support or sympathy	22	2 (9.1)	31	1 (3.2)	0.36
Correctional centre staff should be informed of offenders' HIV status	22	4 (18.2)	31	10 (32.3)	0.25
HIV+ offenders risk infecting their cellmates	22	4 (18.2)	30	4 (13.3)	0.63
HIV+ offenders risk infecting staff	22	4 (18.2)	31	6 (19.4)	0.91
HIV+ offenders should not be treated the same as other offenders	22	1 (4.6)	31	1 (3.2)	0.80
HIV+ offenders should be publicly identifiable	22	0 (0.0)	31	1 (3.2)	0.40
Other offenders are unwilling to eat with HIV+ offenders	21	3 (14.3)	31	1 (3.2)	0.14
Correctional centre staff are unwilling to provide services to HIV+ offenders	22	4 (18.2)	31	2 (6.5)	0.18
Correctional centre staff are unwilling to provide services to TB+ offenders	22	3 (13.6)	31	3 (9.7)	0.89
	N	*Median (range)*	*N*	*Median (range)*	*p=*
Stigma score[A]	22	0.8 (0 – 3.1)	31	0.8 (0 – 3.8)	0.86

[A] An aggregate of all 13 questions above. Out of 10: the higher the score, the greater stigma observed.

Aggregate stigma scores for both healthcare and other correctional centre staff were remarkably low with regard to working with HIV-positive co-workers, with an average score of 0 for both types of worker (see Table 23).

Table 23. Stigma towards HIV positive co-workers among healthcare workers and other staff in LMN.

	Healthcare workers		*Other correctional centre staff*		
Stigma indicators	*N*	*Responded yes (%)*	*N*	*Responded yes (%)*	*p=*
Would not accept working with HIV+ co-worker	23	0 (0.0)	31	0 (0.0)	-
Would not accept eating with HIV+ co-worker	23	1 (4.4)	31	1 (3.2)	0.83
Would not accept continuing to meet/associate with HIV+ co-worker	23	0 (0.0)	31	0 (0.0)	-
Would not accept sharing cutlery with HIV+ co-worker	23	4 (17.4)	30	2 (6.7)	0.22
	N	*Median (range)*	*N*	*Median (range)*	*p=*
Stigma score[A]	23	0.0 (0.0 – 0.8)	31	0.0 (0.0 – 0.4)	0.38

[A] An aggregate of all 4 questions above. Out of 10: the higher the score, the greater stigma observed.

In qualitative responses, many officials reported that healthcare workers keep offenders' diagnoses confidential. Responses varied regarding HIV stigma among offenders and whether or not HIV-positive offenders disclosed their status to other offenders. Some respondents expressed the view that, because there is little privacy among offenders, offenders with HIV do not wish to disclose their status because they fear discrimination. However, many respondents noted that offenders' HIV status was often clear to officials and other offenders, based on such things as receiving extra food or visiting external health facilities each month.

There was no difference in HIV or TB knowledge between smaller correctional centres compared to their larger counterparts. However, HIV stigma towards offenders did vary by province, being highest in Limpopo, compared to the other two provinces (p=0.03), and HIV stigma towards offenders is worse in smaller correctional centres (p=0.06). Data are shown in Table 24.

Table 24: Summary of calculated scores for perceptions of the correctional centre environment, stigma and HIV/TB knowledge by province and correctional centre size in LMN.

Province	**Limpopo**		**Mpumalanga**		**North West**		
Calculated score	*N*	*Median (range)*	*N*	*Median (range)*	*N*	*Median (range)*	*p=*
HIV and TB knowledge and stigma[A]							
HIV stigma toward offenders	20	1.2 (0.0 – 1.5)	16	0.0 (0.0 – 1.5)	17	0.8 (0.0 – 3.8)	0.03
HIV stigma towards co-workers	20	0.0 (0.0 – 0.4)	17	0.0 (0.0 – 0.8)	17	0.0 (0.0 – 0.4)	0.49
HIV knowledge	11	1.4 (0.7 – 4.3)	11	1.4 (0.7 – 3.6)	11	2.1 (0.7 – 5.0)	0.87
TB knowledge	10	3.6 (0.9 – 6.4)	11	4.5 (1.8 – 7.0)	11	4.5 (1.8 – 6.4)	0.48
Correctional centre size	*< 200 offenders*		*200 - 1000 offenders*		*>1000 offenders*		
Calculated score	*N*	*Median (range)*	*N*	*Median (range)*	*N*	*Median (range)*	*p=*
HIV stigma toward offenders	7	2.3 (0.0 – 3.8)	23	0.8 (0.0 – 3.1)	16	0.8 (0.0 – 3.1)	0.06
HIV stigma towards co-workers	7	0 (0.0 – 0.4)	25	0 (0.0 – 0.8)	15	0 (0.0 – 0.0)	0.27
HIV knowledge	6	1.4 (0.7 – 5.0)	14	2.1 (0.7 – 4.3)	9	2.1 (0.7 – 2.9)	0.58
TB knowledge	5	4.5 (2.7 – 6.4)	14	4.5 (0.9 – 7.0)	9	4.5 (1.8 – 6.4)	0.96

[A] Scores from 0 to 10, with higher values representing greater stigma and lower HIV/TB knowledge.

Knowledge of HIV or TB was not predictive of stigma or vice versa. Greater knowledge of HIV was only marginally associated with greater knowledge of TB. These patterns were consistent between health workers, other staff and across the three provinces. Table 25 uses Spearman's correlation coefficients to determine relationship between variables.

Table 25: Spearman's correlation coefficients between calculated scores about perceptions of the correctional centre environment, stigma and HIV and TB knowledge in LMN.

Reported score	*Substance use*	*Violence*	*Sex*	*Other cultural practices*	*Stigma: offenders*	*Stigma: staff*	*HIV knowledge*	*TB knowledge*
Substance use	-							
Violence (n=57)	**0.47****	-						
Sexual behaviours (n=57)	**0.46****	**0.60****	-					
Other cultural practices (n=57)[A]	**0.50****	**0.46****	**0.55****	-				
Stigma: offenders (n=53)	0.05	0.03	-0.02	0.20	-			
Stigma: staff (n=51)	0.21	0.10	0.09	0.07	0.29 (n=49)	-		
HIV knowledge (n=33)[B]	-0.05	-0.03	-0.23	-0.02	0.06 (n=32)	-0.11 (n=28)	-	
TB knowledge (n=32)[B]	-0.04	-0.24	-0.28	-0.32	-0.17	-0.08 (n=28)	0.52*	-

[A] Includes piercing, tattooing, and other blood-sharing practices by offenders.

[B] Non-health worker staff only

* Indicates a statistically significant difference at a $p<0.1$ level.

** Indicates a statistically significant correlation at a $p<0.01$ level.

Despite low stigma scores, in qualitative responses in LMN, many respondents still reported HIV-related stigma to be a concern for positive offenders. They may face stigma or gossip from other offenders and staff members, as well as their families and communities outside the correctional centre. Additionally, analysts noted that many statements conveying stigma toward HIV-positive offenders, mental health issues, or offenders in general resulted from the interviews. Some of these examples include:

- Describing offenders' intention to infect others with HIV, including *"Not sure of willingness to use [condoms], some don't care and want to spread diseases."*
- The need to isolate positive offenders because they are "dangerous"
- Saying *"Most offenders are psychopaths"*
- Saying *"I know how irresponsible [offenders] can be"*
- Questioning the worth of trying to help substance-using offenders
- Officials reportedly teasing offenders who underwent HIV testing, telling the offender that they could "tell" he tested positive
- Respondents at one centre referring to sex between men as "dangerous," and indicating that their health education programs take the same perspective.

Perceived Offender Behaviour during Incarceration

The study team interviewed correctional centre staff and healthcare workers to assess their views of behaviours in the correctional centres where they worked. For a list of behaviours (N=18 behaviours), there was a score, with values from zero to three for each respondent, where a score of three indicated the behaviours were common and zero indicated the behaviours never happened. Behaviours were grouped into four categories: 1) substance use; 2) violence (categorized as physical, rape, or psychological); 3) sexual behaviour; and 4) cultural practices (including piercing, tattooing, and other blood sharing practices by offenders).

Perceived Behaviour in KZN

In KZN, physical violence was reported as occurring the most often, receiving a median score of 1.0 among healthcare workers and 0.67 among other correctional centre staff. Rape and psychological violence were reported less often. Overall violence ratings were 0.7 among healthcare workers and 0.6 among other correctional centre staff, indicating that no difference in perception of violence between all staff. Substance use was reported as happening very infrequently. Sexual behaviour was rated very infrequently by both healthcare workers, at 0.2, and as almost non-existent by other staff, who gave an aggregate score of 0. Tattooing and piercing behaviours received scores of 0.5 by healthcare workers and 0.3 by other staff.

Table 26 shows the median aggregated and scored perceptions of offender substance use, violence, sexual behaviour, and other cultural practices reported by healthcare workers and correctional centre staff.

Table 26. Perceptions of offender substance use, violence, sexual behaviour, and other cultural practices among correctional centre healthcare workers and other staff in KZN.

	Healthcare workers		Other correctional centre staff		
Score	*N*	*Median score*[A]	*N*	*Median score*[A]	*p=*
Substance use	*22*	*0*	*25*	*0.3*	*0.32*
Violence (combined)	21	0.7	24	0.6	0.38
Physical violence	21	1.0	25	0.7	0.11
Rape	21	0.5	25	0	0.18
Psychological violence	21	0.5	24	0.5	0.60
Sexual behaviour	*21*	*0.2*	*25*	*0*	*0.24*
Other cultural practices[B]	21	0.5	24	0.3	0.22

[A] Based on questions regarding the occurrence of events in the correctional centre. The score is rated from 0 to 3, with 0 indicating these events do not happen to 3 meaning these events occur daily

[B] Includes piercing, tattooing, and other blood-sharing practices by offender

In the qualitative data, several respondents noted that sex between offenders is not allowed, and that it is discouraged. Several other respondents noted that offenders deny interest in sex with other offenders but that it does occur. Contrary to the quantitative data, respondents in many centres confirmed that consensual sex and relationships occur. One noted, *"...when they call the person 'umfana', we know that that's their girlfriend."* Others reported hearing offenders refer to each other in possessive terms, indicating a relationship, and staff from a few centres noted that transactional sex also occurs.

Also contrary to the quantitative data, reported levels of violence varied between centres, ranging from low levels to reports of it occurring daily. Most centres reported that violence occurs almost exclusively between offenders. Stabbings were described as commonplace in one centre. Fights occur over money, drugs, sexual partners, and gang-related issues. One centre reported that offenders fight for fun, in addition to gang violence, and that violence increases during the summer, out of a belief that being beaten in the summer hurts less than in the winter.

Despite the low levels of reported official to offender violence, multiple comments were made insinuating its occurrence. One respondent reported, while discussing gang violence, that violence between officials and offenders occurs, saying *"When you are a leader you only instruct others to do something. If one is sent to do something and found by official and beaten, one who is sent must never cry as it is a sign of weakness and will be sent to do the same thing."*

Another reported that, after breaking up fights between offenders, officials *"give them a hiding afterwards to make them aware that this is not acceptable."* Two respondents suggested that violence levels were low due to housing only small numbers of offenders per cell in their centres, and two reported that keeping offenders busy with planned activities, such as sports, has reduced violence.

Respondents at one centre report sexual assault occurs monthly. Others were less specific with regard to frequency but generally did not report it to be common. One respondent noted that newly admitted offenders are more likely to be assaulted, and another reported that gang members "keep" younger offenders, especially those without family support, or sexually assault new gang members as a part of initiation. When asked about sexual assault, some responses indicated a lack of clarity regarding what defines sexual assault, including:

- *"...sometimes not sure whether it is sexual assault or there is assent to having sex."*
- *"They don't normally report rape as it is normally consensual sex."*
- *"Sex most of the time is consensual but they may later report it as rape if the partner did not keep his promises."*

One key informant reported that all reported sex must, according to code, be reported as rape even if offenders say it was consensual. In most centres, rape victims are reportedly sent to nearby hospitals and crisis centres for PEP. Some centres report that they conduct assessments and interviews and offer HCT to both the victim and offender on site, before they are taken to the hospital. Several centres reported that criminal investigations follow up on cases of sexual assault.

Respondents from two centres noted that other offenders, rather than the victim or the perpetrator are responsible for reporting incidents of sexual assault. In one centre, a correctional officer reported that rapes are gang-related, and that they go unreported because offenders *"discuss it among themselves and resolve it."*

There were many statistical differences for perceived rates of violence and sexual behaviour between small, medium, and large correctional centres. Table 27 is a summary of calculated scores for perceptions of the correctional centre environment in KZN by correctional centre size. The combined category of violence, as well as physical violence, rape, and sexual behaviour were reported as more frequent at the large centres with rates reducing for medium centres, and even more reductions for small centres.

Table 27: Summary of calculated scores for perceptions of the correctional centre environment in KZN, stigma and HIV/TB knowledge by correctional centre size.

Correctional Centre size	Small (<200)		Medium (200-1000)		Large (<1000)		
Calculated score	*N*	*Median (range)*	*N*	*Median (range)*	*N*	*Median (range)*	*p=*
Perceptions of the correctional centre environment[A]							
Substance use	11	0 (0 – 1)	21	0.25 (0 – 1.75)	16	0.28 (0 – 1.5)	0.33
Violence	10	0.4 (0– 0.6)	21	0.7 (0.3 – 1.3)	15	1.1 (0.3 – 1.9)	<0.01
Physical violence	10	0.5 (0-1.3)	21	1 (0.7-2)	16	1.2 (0-2.7)	0.01
Rape	10	0 (0-0.5)	21	0 (0-1)	16	0.5 (0-1.5)	0.01
Psychological violence	10	0.3 (0 -1)	21	0.5 (0-2)	15	1 (0-3)	0.08
Sexual behaviour	10	0 (0-0.4)	21	0 (0-1)	16	0.3 (0-1.4)	<0.01
Other cultural practices[B]	10	0.1 (0-0.8)	21	0.5 (0-1)	15	0.5 (0-1.3)	0.33

[A] Scores ranges from 0 to 3, with higher values representing greater perception of events occurring in the correctional centre.
[B] Includes piercing, tattooing, and other blood-sharing practices by offenders.

Perceived Behaviour in LMN

In LMN, 32 correctional centre staff and 26 healthcare workers were interviewed. Psychological violence seemed to be reported as most common, receiving a median score of 1.5 among healthcare workers and 1.8 among other correctional centre staff. Physical violence was scored at 1.7 among healthcare workers, which was a worse assessment than among other correctional centre workers, who gave a rating of 1.3. Rape was reported less often, with both healthcare and other correctional centre staff scoring it low (0.5). Overall violence ratings were 1.3 among both healthcare workers and other correctional centre staff, indicating that no difference in perception of violence between all staff across correctional settings. Sexual behaviour was rated more problematic by healthcare workers, at 0.8, compared to other staff, who gave an aggregate score of 0.5. Tattooing and piercing behaviours received scores of 0.8 by healthcare workers and 0.5 by other staff.

Table 28 is the aggregated and scored perceptions of offender substance use, violence, sexual behaviour, and other cultural practices reported by healthcare workers and correctional centre staff in LMN.

Table 28. Perceptions of offender substance use, violence, sexual behaviour, and other cultural practices among correctional centre healthcare workers and non-healthcare correctional centre staff in LMN.

	Healthcare workers		Other correctional centre staff		
Calculated Score	*N*	*Median score*[A]	*N*	*Median score*[A]	*p=*
Substance use	*26*	*0.9*	*32*	*0.6*	*0.73*
Violence (combined)	25	1.3	32	1.3	0.82
Physical violence	25	1.7	32	1.3	0.14
Rape	25	0.5	31	0.5	0.90
Psychological violence	25	1.5	32	1.8	0.86
Sexual behaviour	*25*	*0.8*	*32*	*0.5*	*0.15*
Other cultural practices[B]	25	1.0	32	0.5	0.09

[A] Based on questions regarding the occurrence of events in the correctional centre. The score is rate from 0 to 3, with 0 indicating these events do not happen to 3 meaning these events occur daily

[B] Includes piercing, tattooing, and other blood-sharing practices by offender

Qualitative responses differed in some respects from quantitative responses with regard to sex and violence. A few noted that the dynamics of sex and violence within their centres change as offender population turns over. Only one centre reported that both sex and violence do not occur among offenders. Most centres reported that violence occurs on site and almost completely between offenders. Reported frequency varied, and reports of general correctional centre staff about these issues were not different than reports by healthcare staff. Physical fights most often occur between offenders during disputes in romantic relationships, or over transactional sex, food, gossip, or drug smuggling. Some, but not all, centres reported that violence has occurred over gang- or regional-based disputes between offenders.

Officials reported generally that violence between offenders and officials is rare but that it most often occurs when officials try to break up fights, or when offenders refuse to be searched or to allow officials to enter their cells. At one centre, incidents occur between offenders and officials when offenders engage in such behaviour as burning mattresses or cells, or *"rais[ing] complaints that they are being searched too much, [or that they are] not getting enough food or visits."* One respondent reported that officials have used batons and tear gas in self-defence. Some centres reported that offenders are found with weapons that they either made or smuggled in; weapons are hidden in anal cavities, or, if not smuggled in, are made from toothbrushes and canisters from inhaled medications. Social workers at one centre work

with offenders to try to prevent fights before they happen.

In contrast to the quantitative data, some respondents stated that rape among offenders was an issue but that in many cases offenders do not report sexual assault for fear of retribution. Cases of rape described during interviews included instances when an offender refused to have sex with a sexual partner, or as a part of gang violence. A respondent recalled the case of one juvenile, who was bleeding rectally, tried to say he was menstruating, since his partner (or, "husband") did not want to have it reported. In one centre, rape was reported to be more common among pre-trial male offenders housed in overcrowded cells of 60, with first-time offenders more vulnerable to being abused sexually.

In general, respondents reported having counselled new offenders not to borrow or accept items from other offenders, so as to reduce the expectation of transactional sex. One centre reported that they encourage offenders to report rape. Another centre reported that police investigate reports of rape among offenders, and that offenders may go to court, or be assigned an anger management course. One DOH healthcare worker reported providing PEP to offenders from a centre, despite respondents at that centre reporting no knowledge of rape.

Several respondents expressed disapproval of sex between offenders but nearly all centres acknowledged that it occurs, and that it includes romantic and sexual relationships, transactional sex, and—among female offenders, at least—the sharing of objects used to masturbate. Transactional sex was noted to be used to obtain more food and cigarettes, among other things. Romantic relationships or "girlfriends" may be disclosed by male offenders during pre-MMC counselling, when the need to avoid arousal post-procedure is discussed. In one notable case, women in a relationship at one centre were reportedly separated and sent to different centres.

There were no provincial differences for violence and sexual behaviour but staff at large and medium correctional centres were more likely to report violence (physical and rape) and sexual behaviour compared to small correctional centres. Psychological violence was more likely to be reported than other forms of violence. Table 29 is a summary of calculated scores for perceptions of the correctional centre environment by province and correctional centre size in LMN.

There was no association between staff perceptions of violence, sexual behaviours, substance use, or other cultural practices in the correctional centres where they worked in relation to stigma or knowledge of HIV or TB.

Table 29: Summary of calculated scores for perceptions of the correctional centre environment, stigma and HIV/TB knowledge by province and correctional centre size in LMN.

Province	Limpopo		Mpumalanga		North West		
Calculated score	*N*	*Median (range)*	*N*	*Median (range)*	*N*	*Median (range)*	*p=*
Perceptions of the correctional centre environment[A]							
Substance use	22	0.8 (0 – 1.8)	19	0.8 (0.0 – 1.5)	17	1.0 (0.0 – 2.0)	0.63
Violence	22	1.3 (0.1 – 2.6)	18	1.2 (0.0 – 2.1)	17	1.3 (0.4 – 2.3)	0.75
Physical violence	22	1.5 (0 – 3.0)	18	1.0 (0.0 – 2.5)	17	2.0 (0.0 – 3.0)	0.23
Rape	22	0.5 (0.0 – 2.0)	17	0.5 (0.0 – 1.0)	17	0.5 (0.0 – 1.5)	0.51
Psychological violence	22	1.3 (0.3 – 3.0)	18	1.5 (0.0 – 2.7)	17	1.7 (0.3 – 2.7)	0.83
Sexual behaviour	22	0.7 (0.0 – 1.3)	18	0.8 (0.0 – 1.2)	17	0.4 (0.0 – 1.2)	0.90
Other cultural practices[B]	22	1.0 (0.0 – 3.0)	18	0.5 (0.0 – 1.8)	17	0.5 (0.0 – 3.0)	0.23

Correctional centre size	*< 200 offenders*		*200 - 1000 offenders*		*>1000 offenders*		
Calculated score	*N*	*Median (range)*	*N*	*Median (range)*	*N*	*Median (range)*	*p=*
Perceptions of the correctional centre environment[A]							
Substance use	8	0.3 (0.0 – 1.5)	26	1.0 (0.0 – 1.8)	17	0.8 (0.0 – 2.0)	0.12
Violence	8	0.5 (0.1 – 1.3)	25	1.3 (0.0 – 2.1)	17	1.6 (0.4 – 2.6)	0.01
Physical violence	8	0.8 (0.0 – 2.7)	25	1.7 (0.0 – 2.7)	17	2.0 (0.3 – 3.0)	0.01
Rape	8	0.0 (0.0 – 0.5)	24	0.5 (0.0 – 2.0)	17	1.0 (0.0 – 1.5)	0.01
Psychological violence	8	0.5 (0.0 – 2.0)	25	1.5 (0.0 – 2.5)	17	2.0 (0.0 – 3.0)	0.14
Sexual behaviour	8	0.0 (0.0 – 1.2)	25	0.8 (0.0 – 1.2)	17	1.0 (0.2 – 1.3)	0.02
Other cultural practices[B]	8	0.3 (0.0 – 1.3)	25	0.8 (0.0 – 2.0)	17	1.0 (0.0 – 3.0)	0.16

[A] Scores ranges from 0 to 3, with higher values representing greater perception of events occurring in the correctional centre.
[B] Includes piercing, tattooing, and other blood-sharing practices by offenders.

Occupational Health

Nearly all centres lack any occupational health services for staff members. One reported allowing brief assessments on site before referring staff to external care. One interviewer noted that a participant felt that, *"...all the energy is directed to improvement of services and activities for offenders and staff are forgotten. Staff need to have access to health services in correctional centre hospital and if injured on duty (instead of having to travel miles away to get medical attention) and payments should be made to cover medical bills. We are willing to do our best but we also need to be happy by having enough resources such as gloves when we search offenders and running water so we can wash our hands."*

PEP

In KZN, PEP was reported as available to staff members at an external hospital in most centres, and sometimes first aid and assessment are first provided on site. One reported on the post-exposure procedures in detail, including immediate first aid, person to report to, and how to seek care at the hospital. One centre offers PEP on site for healthcare workers only. In the quantitative data, 53% of healthcare staff report on-site access to PEP, compared to reports of on-site PEP access by only 18% of other correctional centre staff. Data are shown in Table 30.

Most centres in LMN articulated that staff must follow some sort of procedure when exposed to blood but few details were given as to what those procedures are; only two clearly articulated that PEP must be given, and the remainder indicated that some kind of medical follow-up is done, usually off site. One staff member noted that it is not possible for officials to use proper precautions while breaking up a fight because they are not able to anticipate fights and have the right protection equipment on hand when they occur. In the quantitative data, about 23% made PEP available to staff.

Table 30. PEP available by province.

	Limpopo (N=5)	**Mpumalanga (N=3)**	**North West (N=5)**	**KZN (N=17)**
Services available	*N (%)*	*N (%)*	*N (%)*	*N (%)*
Is Post-Exposure Prophylaxis (PEP) available:				
For occupational exposures (clinical staff)?	0 (0.0)	1 (33.3)	2 (40.0)	9 (52.9)
For occupational exposures (correctional centre staff)?	0 (0.0)	1 (33.3)	2 (40.0)	3 (17.8)

HCW Screening for HIV and TB

Key informant interviews and healthcare worker interviews collected data on health exposure, screening, and care for both correctional centre staff and HCWs at the correctional centre clinics. In general, HIV and TB testing is very low for

both groups, while only ever having had a TB test was significantly higher in healthcare workers compared to other correctional centre staff.

Table 31 looks at testing between healthcare workers and other correctional centre staff.

Table 31. Receipt of HIV and TB testing services among healthcare workers and other staff.

	KZN					*LMN*				
	Healthcare workers		*Other correctional centre staff*			*Healthcare workers*		*Other correctional centre staff*		
Testing services	*N*	*Received services (%)*	*N*	*Received services (%)*	*p=*	*N*	*Received services (%)*	*N*	*Received services (%)*	*p=*
Received HIV test within previous 12 months	17	8 (47.1)	20	4 (20.0)	0.08	23	8 (34.8)	32	3 (9.4)	**0.02**
Ever received an HIV test	17	9 (52.9)	20	6 (30.0)	0.16	23	16 (69.6)	32	8 (25.0)	**<0.01**
Received TB test within previous 12 months	17	7 (41.2)	19	4 (21.1)	0.19	23	3 (13.0)	31	2 (6.5)	*0.41*
Ever received TB test	17	11 (64.7)	19	6 (31.6)	**0.05**	23	12 (52.2)	31	8 (25.8)	**0.05**
Received sputum screening within previous 12 months	16	7 (43.8)	16	6 (37.5)	0.72	21	4 (19.1)	30	4 (13.3)	0.58
Ever received sputum screening	16	14 (87.5)	16	10 (62.5)	0.10	21	10 (47.6)	30	14 (46.7)	0.95
If yes, sputum was provided through correctional centre	14	9 (64.3)	10	3 (30.0)	0.10	10	8 (80.0)	14	3 (21.4)	0.01

To examine this further, the data was stratified by size of correctional centre. Table 32 shows statistically significant differences between rates of testing for those having ever received an HIV or TB test, TB testing in the last year, sputum testing in the last year, and the sample being collected through the correctional centres in KZN. In all cases, the testing rates are highest for staff working at a large centre. For all but one test type (sputum screening in the last year), the staff at the small centres report the least testing.

Table 32. Receipt of HIV and TB testing services among staff by size of correctional centre in KZN.

Correctional Centre size	*Small (<200)*		*Medium (200-1000)*		*Large (<1000)*		
Testing services	*N*	*Received services (%)*	*N*	*Received services (%)*	*N*	*Received services (%)*	*p=*
Received HIV test within previous 12 months	8	1 (12.5)	15	8 (53.3)	15	4 (26.7)	**0.11**
Ever received an HIV test	8	2 (25.0)	15	10 (66.7)	15	4 (26.7)	**0.05**
Received TB test within previous 12 months	8	0 (0)	14	8 (57.1)	15	3 (20.0)	**0.01**
Ever received TB test	8	1 (12.5)	14	10 (71.4)	15	7 (46.7)	**0.03**
Received sputum screening within previous 12 months	6	2 (33.3)	14	9 (64.3)	13	2 (15.4)	**0.03**
Ever received sputum screening	6	4 (66.7)	14	13 (92.9)	13	8 (61.5)	**0.14**
If yes, sputum was provided through correctional centre	4	0 (0)	13	9 (69.2)	8	4 (50.0)	**0.05**

In LMN, HIV testing and TB screening was significantly higher in healthcare workers compared to other correctional centre staff but was still low across both groups. Table 31 looks at testing between healthcare workers and other correctional centre staff, and Table 33 looks at HIV and TB testing services provincially. Limpopo province had the highest testing uptake for both TB and HIV.

Table 33. Receipt of HIV and TB testing services among staff by province in LMN.

	Limpopo		Mpumalanga		North West		
Testing services	*N*	*Received services (%)*	*N*	*Received services (%)*	*N*	*Received services (%)*	*p=*
Perceptions of the correctional centre environment[A]							
Received HIV test within previous 12 months	21	6 (28.6)	17	1 (5.9)	17	4 (23.5)	0.20
Ever received an HIV test	21	11 (52.4)	17	6 (35.3)	17	7 (41.2)	0.56
Received TB test within previous 12 months	20	4 (20.0)	17	1 (5.9)	17	0 (0.0)	0.10
Ever received TB test	20	10 (50.0)	17	5 (29.4)	17	5 (29.4)	0.32
Received sputum screening within previous 12 months	21	4 (19.1)	17	3 (17.7)	13	1 (7.7)	0.65
Ever received sputum screening	21	9 (42.9)	17	9 (52.9)	13	6 (46.2)	0.82
If yes, sputum was provided through correctional centre	9	4 (55.6)	9	4 (44.4)	6	2 (33.3)	0.70

The qualitative data for KZN showed that in one centre, a counsellor is available to offenders to discuss HIV but, as one interviewee noted, these services are not available for correctional centre staff, although HIV also impacts them. In another, a healthcare worker reported refusing to offer HCT to staff out of fear that, should knowledge of their status get out, the healthcare worker will be blamed for sharing it. In this centre, an NGO, the TB/HIV Care Association, is providing HCT to staff. Rarely, staff can access HCT from the on-site services that offenders' use.

Staff Training and Clinical Competency

Data related to training needs was collected through various tools, including interviews, assessments and through the healthcare worker skills audit.

KZN Staff Training and Clinical Competency

KZN reported that some training, including workshops and 'on-the-job training', are provided on and off site at most centres but it is not clear how frequently they occur at each centre. Many respondents did not identify who provides training but those who did mostly cited NGOs (Resaf, Orphan Care, TB/HIV Care, TLC), the DOH, the Foundation for Professional Development (FPD), the Regional Training Centre (RTC), and DCS. One respondent noted that the centre nurses are dependent upon the DOH to let them know when a training going to occur, and that sometimes they are not notified. Another noted that healthcare is considered a support service to the DCS, and so healthcare workers' need for updates and trainings are not considered in a timely manner. Several other respondents reported that training is not sufficient.

Known training sessions have covered: nutrition; NIMART; HIV, TB, and STI management and/or integration; palliative care; Palsa Plus; mental health; ART initiation; basic counselling; MSM and HIV; and HIV and TB treatment guidelines.

Some statements made by respondents indicated on-going HIV, TB, and offender stigma training is needed. These included the need for education related to prevention of HIV, care for men who have sex with men, and TB knowledge levels around infection and treatment.

Respondents also had specific training requests. These included:

- Several healthcare workers requested refresher or on-going development training on a number of topics, particularly HIV and TB
- HIV-specific training:
  - Some centres have few healthcare workers who can initiate ART, and would like more to be trained to do so
  - Increased number of HIV prevention activities, as one respondent noted that there were very few
  - Others requested training on HIV management, new HIV techniques and information, NIMART training for nurses, and ARV medication training
- Respondents at one centre requested additional TB training, workshops, and campaigns
- Nurses requested training to become clinical nurse practitioners
- Hospital workers reported the need for increased training at DCS on confidentiality, stigma, the importance of medication adherence, TB symptoms, and the importance of allowing offenders time to receive needed information during hospital visits
- Hospital workers requested training on how to counsel offenders when they present at the hospital with challenges related to their incarceration, such as poor diet and medication default, and when they disclose their crimes.

In LMN, the majority of centres reported that healthcare workers have received some training while in this position but no centres reported regular or consistent training. Healthcare workers reported that trainings have covered: TB management and supportive mentoring; MMC; ART and pre-ART registers; HCT; NIMART; adherence; PALSA; ART initiation; and IPT.

Through the qualitative data collected, many interviewees reported gaps in the support of training and development for healthcare workers. Some respondents expressed the feeling that they are not up-to-date, or may be forgetting important skills and information due to an inability to practice these. Respondents identified the following training needs for all nurses: HCT; HIV updates; training and mentoring on the care and management of STIs and TB; IMCI; primary healthcare training; and computer and electronic equipment instruction. One doctor noted that healthcare workers do not have a good sense of where and when offenders are becoming infected.

The data demonstrated the need for more health education training related to HIV and STI transmission and prevention, as evident in the following statements and perspectives from employees:

- An employee stated that h/she tells offenders that HIV can be transmitted only through sex between men and sharing needles;
- An employee stated that the centre provides condoms, *"but not the special MSM condoms";*
- Offering HIV education solely focused on abstinence;
- It is not necessary to notify offenders' partners because offenders are incarcerated.

From the Nurse Audits conducted in KZN, responses on trainings received in the last five years, demonstrated that between 43% and 93% of respondents had not received training for key areas of HIV/AIDS, TB, and STI. An alarmingly high percentage (93%) of staff reported having received no HIV, AIDS, or STI training in the last five years. Yet, confusingly, 64% report NIMART training and 71.4% report PALSA plus training. Also especially high yet particularly relevant for the correctional centre setting is the lack of training received for 'Dispensing', 'Infection control & universal precautions', and 'Mental Health & Substance Abuse Counselling' in the last five years. Most of the training reported had been led by the DOH, DCS, and various universities. These data are presented in Table 34.

Table 34: Skills Audit Reported Nurse Training KZN.

Training (N=14)	*Yes*	*No*	*Years held*[A]	*Institutions*[A]
Adherence issues	3 (21.4)	11 (78.6)	2012 (1); 2013 (2)	DOH (1); PMB(DCS) (1); USAID (1)
Any HIV, AIDS, STI	1 (7.1)	**13 (92.9)**	2013 (1)	PMB (DCS) (1)
Basic HIV, AIDS, STI	8 (57.1)	6 (42.9)	2010 (1); 2011 (1); 2012 (1); 2013 (1)	DOH (1); Qalakabusha (1); UKZN (1); UNISA (1); USAID (1)
Counselling Skills	7 (50.0)	7 (50.0)	2008 (1); 2009 (1) 2010 (2); 2011 (1); 2012 (1); 2013 (1)	DOH (2); DOH/DCS (1); Greys (1); UKZN (1); UNISA (1)
Dispensing	2 (15.4) B	**11 (84.6)**	2009 (1) 2010 (1)	DCS (1); DOH (1); University of Pretoria (1)
Drug Side Effects and Interactions	4 (28.6)	10 (71.4)	2010 (1); 2013 (1)	UKZN (1)
HIV counselling and testing	7 (53.9)	6 (46.2)	2008 (2); 2011 (1); 2012 (2); 2013 (2)	DCS (2); DOH (1); Greys (1); UKZN (1); UNISA (1)
IMCI	5 (35.7)	9 (64.3)	2009 (1); 2010 (1); 2012 (1); 2013 (1)	DUT (1); Edendale (1); UKZN (1)
Infection control & universal precautions	2 (14.3)	**12 (85.7)**	2009 (1); 2010 (1)	DCS (1); Ngwelezane (1); UKZN (1)
Mental Health & Substance Abuse Counselling	2 (14.3)	**12 (85.7)**	2010 (1); 2011 (1)	DCS (1)
NIMART	5 (35.7)	9 (64.3)	2012 (1); 2013 (1)	DOH (2); FPD (1); UKZN (1); USAID (1)
Opportunistic Infections	3 (21.4)	11 (78.6)	2011 (1); 2012 (1); 2013 (1)	DOH (1); UKZN (1); USAID (1)
PALSA plus	4 (28.6)	10 (71.4)	2010 (1); 2012 (3)	DCS (2); FPD (1); UWC (1)
Positive Prevention	6 (42.9)	8 (57.1)	2009 (1); 2010 (2); 2011 (1); 2012 (1); 2013 (1)	DCS (1); TB/HIV (1)
PEP	6 (42.8)	8 (57.1)	2008 (1); 2009 (1); 2010 (2); 2011 (1); 2012 (2)	DCS (1); DCS/DOH (1); FPD (1); Greys (1); Ladysmith Prov (1)
Syndromic management of STIs	4 (28.6)	10 (71.4)	2011 (2); 2012 (2); 2013 (1)	DCS AND DOH (1); FPD (1); TB/ HIV CARE (1); UKZN (1)
TB	5 (35.7)	9 (64.3)	2011 (1); 2012 (2); 2013 (2)	DOH (1); FPD (1); PMB (DCS) (1); TB/HIV CARE (1); USAID (1)

[A] Large amounts of missing data on years trainings held and by which institutions

[B] Missing data from one skills audit

The nurses also rated themselves on clinical competency in several areas. While self-rated competency seems quite high overall, there are varied levels among staff. Fewer than 40% of respondents rated themselves as 'very competent' in the areas listed below.

1) HIV care and management: a) Prescribing ARVs to all HIV-positive patients and provide follow up care; b) initiating and managing support groups; c) identifying and treating a patient with clinical depression; d) providing mentorship support for lay counsellors; and e) providing mentorship to other nurses new to initiation and HIV care.
2) TB management: a) managing MDR and XDR in co-infected patients and b) managing the common ART side effects in TB patients.
3) STI diagnosis and management: 1) recognising and correctly diagnosing and providing syndromic management of STIs in patients and 2) managing a patient with a positive syphilis result.

Few respondents felt 'very competent' in most areas for PEP and clinical guidelines. Data are presented in Table 35.

Table 35: Skills Audit Reported Nurse Competency Skills KZN.

(A=most confident; E=least confident)

Clinical Competency Tasks: Adult HIV Care[A]	A	B	C	D	E
Take an appropriate history of all patients? (E.g. medical, family, reproductive, and HIV history)?	9 (64.3)	4 (28.6)	1 (7.1)	0	0
Perform head to toe physical examination?	7 (50.0)	5 (35.7)	2 (14.3)	0	0
Advise HIV-positive patients to encourage partners and children to test?	9 (69.2)	1 (7.7)	2 (15.4)	1 (7.7)	0
Provide all patients with HIV counseling and testing using the PICT model?	7 (53.9)	1 (7.7)	2 (15.4)	3 (23.1)	0
Screen for and manage opportunistic infections?	9 (64.3)	2 (14.3)	1 (7.1)	2 (14.3)	0
Stage patients according to WHO and SA guidelines?	9 (64.3)	1 (7.1)	3 (21.4)	1 (7.1)	0
Interpret blood results (e.g., viral load, CD4 count, ALT, FBC, Creatinine Clearance, and HepB)	5 (35.7)	2 (14.3)	4 (28.6)	3 (21.4)	0
Prescribe ARVs to all HIV-positive patients and provide follow up care (NIMART/ART initiation)?	4 (28.6)	3 (21.4)	2 (14.3)	4 (28.6)	1 (7.1)
Discuss all medications including possible drug interactions?	6 (46.2)	1 (7.7)	3 (23.1)	3 (23.1)	0
Discuss the importance of treatment adherence with all patients about to begin or already on ARVs?	8 (57.1)	1 (7.1)	3 (21.4)	2 (14.3)	0
Follow up with patients on ARVs who do not show up for appointments?	8 (57.1)	4 (28.6)	1 (7.1)	1 (7.1)	0
Initiate and manage support groups?	3 (21.4)	3 (21.4)	4 (28.6)	4 (28.6)	0
Treat the common ART side effects in all patients?	7 (50.0)	3 (21.4)	1 (7.1)	3 (21.4)	0
Screen for and treat HIV-positive patients with TB?	9 (69.2)	2 (15.4)	1 (7.7)	1 (7.7)	0
Identify and treat a patient with clinical depression?	3 (21.4)	4 (28.6)	4 (28.6)	3 (21.4)	0
Provide mentorship support for lay counselors?	4 (28.6)	3 (21.4)	3 (21.4)	3 (21.4)	1 (7.1)
Provide mentorship to other nurses new to initiation and HIV care	4 (28.6)	3 (21.4)	4 (28.6)	1 (7.1)	2 (14.3)
Provide the correct level of referral for treatment when required?	7 (50.0)	4 (28.6)	2 (14.3)	1 (7.1)	0
Discuss how to avoid infecting a sexual partner with HIV with an HIV-positive patient?	9 (64.3)	3 (21.4)	0	2 (14.3)	0
Provide family planning for HIV-positive patients?	5 (35.7)	2 (14.3)	4 (28.6)	1 (7.1)	2 (14.3)
Discuss rights and access for HIV-positive patients? (N=13)	7 (53.9)	3 (23.1)	1 (7.7)	2 (15.4)	0
Clinical Competency Tasks: TB	**A**	**B**	**C**	**D**	**E**
Recognise and correctly diagnose TB in patients? (N=13)	7 (53.9)	2 (15.4)	3 (23.1)	0	1 (7.7)
Initiate treatment and manage all patients with TB? (N=13)	8 (61.5)	2 (15.4)	3 (23.1)	0	0
Manage TB / HIV / HBV co-infected patients? (N=13)	7 (53.9)	2 (15.4)	2 (15.4)	2 (15.4)	0
Discuss adherence to TB treatment and implications if treatment is not taken as prescribed or completed? (N=13)	6 (46.2)	3 (23.1)	3 (23.1)	1 (7.7)	0
Follow up with the smear negative patient and diagnose treatment failure? (N=13)	6 (46.2)	3 (23.1)	1 (7.7)	3 (23.1)	0
Manage MDR and XDR in co-infected patients? (N=13)	1 (7.7)	5 (38.5)	3 (23.1)	4 (30.8)	0
Manage the common ART side effects in TB patients? (N=13)	4 (30.1)	3 (23.1)	3 (23.1)	3 (23.1)	0
Provide the correct level of referral for treatment when required? (N=13)	6 (46.2)	4 (30.1)	1 (7.7)	2 (15.4)	0

Clinical Competency Tasks: STIs	A	B	C	D	E
Discuss STIs and implications for acquiring and transmitting HIV (while promoting the use of condoms)? (N=13)	6 (46.2)	4 (30.7)	2 (15.4)	1 (7.7)	0
Recognise and correctly diagnose and provide syndromic management of STIs in patients? (N=12)	4 (33.3)	1 (8.3)	4 (33.3)	3 (25.0)	0
Manage a patient with a positive syphilis result? (N=13)	4 (30.8)	1 (7.7)	6 (46.2)	2 (15.4)	0
Follow up with patients who do not show up for appointments? (N=13)	7 (53.9)	2 (15.4)	3 (23.1)	1 (7.7)	0
Provide the correct level of referral for treatment when required? (N=13)	8 (61.5)	1 (7.7)	3 (23.1)	1 (7.7)	0
Clinical Competency Tasks: PEP	**A**	**B**	**C**	**D**	**E**
Provide care for sexually assaulted adults and children, including HIV prophylaxis? (N=13)	2 (15.4)	4 (30.8)	4 (30.8)	3 (23.1)	0
Provide prophylactic treatment to HIV-exposed patients? (N=13)	4 (30.8)	4 (30.8)	4 (30.8)	1 (7.7)	0
Protect yourself from HIV exposure (e.g., needle stick injury)? (N=13)	7 (53.9)	1 (7.7)	3 (23.1)	2 (15.4)	0
Apply the protocol for occupational exposure? (N=13)	3 (23.1)	3 (23.1)	5 (38.5)	2 (15.4)	0
Provide the correct level of referral for treatment when required? (N=13)	4 (30.8)	2 (15.4)	5 (38.5)	2 (15.4)	0
Clinical Competency Tasks: Guidelines	**A**	**B**	**C**	**D**	**E**
Understand and use the 2007 guidelines on nutrition for people living with HIV, AIDS, TB, and other chronic debilitating conditions? (N=11)	4 (36.3)	1 (9.1)	6 (54.6)	0	0
Understand and use the CCMT/ART guidelines for adults and children? (N=13)	3 (23.1)	2 (15.4)	6 (46.2)	2 (15.4)	0
Understand and use the Sexual Assault Management guidelines? (N=13)	2 (15.4)	1 (7.7)	7 (53.9)	3 (23.1)	0
Understand and use the National STI syndromic management guidelines? (N=13)	2 (15.4)	2 (15.4)	4 (30.8)	5 (38.5)	0
Understand and use the National TB Control guidelines? (N=13)	4 (30.8)	3 (23.1)	4 (30.8)	2 (15.4)	0
Understand and use the IMCI booklet? (N=13)	2 (15.4)	1 (7.7)	5 (38.5)	4 (30.8)	1 (7.7)
Understand and use the National HIV Counselor Mentorship guidelines? (N=13)	2 (15.4)	2 (15.4)	4 (30.8)	5 (38.5)	0

LMN Staff Training and Clinical Competency

In LMN, 35 audits were completed, 13 (37%) from DOH facilities and 22 (63%) from DCS clinics. By province, 20 (59%) were in Limpopo, five (15%) were in Mpumalanga, and nine (26%) were in North West. With just four Doctor's Skills Audits, and two Pharmacist's Audits, priority was given to analysing the Nurse Audits, given their high number and the fact that nurses are the largest category of health staff working in the DCS system.

Responses from the Nurse Audits on trainings received in the last five years demonstrated that between 39% and 93% of respondents had not received training for key areas of HIV/AIDS, TB, and STIs. The amount of training received for 'Positive Prevention' and 'Mental Health & Substance Abuse Counselling' was especially low—93% and 90% of nurses, respectively had received no training in the last five years respectively—yet particularly relevant for the correctional centre setting. A high number of staff likewise lacking training for 'Infection Control', 'PEP', and 'Syndromic management

of STIs,' which are also very important in this setting (84%, 70%, and 70%, respectively).

Most of the training reported had been led by the DOH and/or the NGO, Aurum. Half of respondents (52%) had received training in NIMART (55% of this from DCS vs. DOH), despite the fact that most correctional centres are not currently initiating ART.

The nurses also rated themselves on clinical competency in several areas. Nurses have varied levels of competency but seem to feel less competent in two main areas: 1) Medications for ARVs and PEP, their side effects, and drug interactions; and, 2) Initiating and managing support groups. When asked whether they felt they required training or mentoring to perform their tasks, 26 (93%) said yes. Many staff felt they would like to mentor others (23 of 29 respondents), and most felt they were ready to do so (22 of 23 respondents).

Table 36: Skills Audit Reported Nurse Training LMN.

Training	Yes	No	Years held	Institutions
Adherence issues (n=28)	6 (21%)	22 (79%)	2011 (2); 2012 (1)	Aurum DOH (1); DOH (3); FPD
Any HIV, AIDS, STI (n=32)	8 (25%)	24 (75%)	2007 (1); 2010 (1); 2011 (1); 2012 (1)	Aurum DOH (1); DOH (2); DOHD + Medunsa (1)
Basic HIV, AIDS, STI (n=30)	16 (53)	14 (47%)	2007 (2); 2008 (2) 2009 (1); 2010 (2) 2011 (1); 2012 (1)	Aurum (1); DCS (1); DOH (4); MQH (1); RHRU (2)
Counselling Skills (n=29)	9 (31%)	20 (69%)	2007 (3); 2008 (3); 2011 (1)	Aurum (1); DOH (2); Excelsius College (1); MQH (1); RHRU (2)
Dispensing (n=32)	5 (16%)	27 (84%)	2007 (1); 2008 (1)	DCS (1); University of Pretoria (3)
Drug Side Effects and Interactions (n=31)	7 (23%)	24 (77%)	2007 (1); 2012 (1) 2013 (1)	DOH (2); District RTC (1); PHC Aurum (1); University of Pretoria (2)
HIV counselling and testing (n=30)	16 (53%)	14 (47%)	2007 (4); 2008 (2) 2009 (2); 2010 (1) 2011 (1); 2013 (1)	DOH (5); District RTC (1); RHRU (1); Talent Emporium (1); WITS + DOHD (1)
IMCI (n=30)	7 (23%)	23 (77%)	2007 (1); 2008 (1) 2010 (1); 2011 (1)	DOH (1); Excelcius Nursing College (1); Venda Nursing College (1)
Infection control & universal precautions (n=31)	6 (16%)	26 (84%)	2008 (1); 2009 (1)	Aurum (1); DOH (1); INHOUSEINSURANCE (1); JHB Hospital (1)
Mental Health & Substance Abuse Counselling (n=31)	3 (10%)	28 (90%)	2007 (1); 2013 (1)	Big tree (1); Excelcius (1); PHC (1)
NIMART (n=31)	16 (52%)	15 (48%)	2010 (1); 2011 (1) 2012 (10); 2013 (2)	Aurum (2); DOH (1) District RTC (1); FPD (4); FPD(DOH) (1); RHRU (1)
Opportunistic Infections (n=29)	8 (28%)	21 (72%)	2010 (1); 2012 (4)	DOH (3); FPD (2); WITS (1)
PALSA plus (n=31)	9 (29%)	22 (71%)	2010 (1); 2012 (5) 2013 (1)	Aurum (1); DOH (1) DOH/FPD (2); FPD (1)
Positive Prevention (n=30)	2 (7%)	28 (93%)	2012 (1)	Aurum (1); DOH (1)
PEP (n=28)	6 (21%)	22 (79%)	2007 (1); 2010 (2); 2012 (1)	Aurum (1); DOH (3) Excelcius (1)
Syndromic management of STIs (n=28)	6 (21%)	22 (79%)	2007 (2); 2010 (1) **2013 (1)**	Aurum DOH (1); DOH (1); District RTC (1); Excelcius (1); FPD (2)
TB (n=28)	17 (61%)	11 (39%)	2007 (1); 2008 (3) 2009 (1); 2011 (2) 2012 (2); 2013 (3)	Aurum + DOH (1); Big tree (1); DCS (1); DOH (5); DOHD+FPD (1); FPD (2)

Table 37: Skills Audit Reported Nurse Competency Skills LMN.

Clinical Competency Tasks: Adult HIV Care	A	B	C	D	E
Take an appropriate history of all patients? (E.g., medical, family, reproductive, and HIV history)?	28	2	1	0	1
Perform head to toe physical examination?	26	3	0	1	1
Advise HIV-positive patients to encourage partners and children to test?	28	0	1	2	1
Provide all patients with HIV counseling and testing using the PICT model?	18	3	3	4	3
Screen for and manage opportunistic infections?	21	2	5	1	2
Stage patients according to WHO and SA guidelines?	18	2	8	3	1
Interpret blood results (e.g., viral load, CD4 count, ALT, FBC, Creatinine Clearance, and HepB)	**11**	**3**	**10**	**5**	**1**
Prescribe ARVs to all HIV-positive patients and provide follow up care (NIMART/ART initiation)?	**7**	**0**	**9**	**8**	**5**
Discuss all medications, including possible drug interactions?	**10**	**5**	**7**	**8**	**1**
Discuss the importance of treatment adherence with all patients about to begin or already on ARVs?	15	3	8	4	1
Follow up with patients on ARVs who do not show up for appointments?	14	4	6	2	5
Initiate and manage support groups?	**8**	**3**	**9**	**4**	**6**
Treat the common ART side effects in all patients?	**8**	**10**	**2**	**6**	**4**
Screen for and treat HIV-positive patients with TB?	14	5	5	4	2
Identify and treat a patient with clinical depression?	10	4	7	7	3
Provide mentorship support for lay counsellors?	14	4	5	4	4
Provide mentorship to other nurses new to initiation and HIV care?	9	3	4	8	5
Provide the correct level of referral for treatment when required?	20	3	1	5	2
Discuss how to avoid infecting a sexual partner with HIV with an HIV-positive patient?	26	1	1	2	2
Provide family planning for HIV-positive patients?	16	3	6	2	4
Discuss rights and access for HIV-positive patients?	20	6	3	1	1
Clinical Competency Tasks: TB	**A**	**B**	**C**	**D**	**E**
Recognise and correctly diagnose TB in patients?	21	2	2	2	0
Initiate treatment and manage all patients with TB?	14	3	5	2	2
Manage TB / HIV / HBV co-infected patients?	18	2	4	1	3
Discuss adherence to TB treatment and implications if treatment is not taken as prescribed or completed?	22	2	2	2	0
Follow up with the smear negative patient and diagnose treatment failure?	14	5	4	3	2
Manage MDR and XDR in co-infected patients?	**4**	**1**	**10**	**5**	**6**
Manage the common ART side effects in TB patients?	**9**	**0**	**8**	**7**	**3**
Provide the correct level of referral for treatment when required?	17	1	6	1	1
Clinical Competency Tasks: STIs	**A**	**B**	**C**	**D**	**E**
Discuss STIs and implications for acquiring and transmitting HIV (while promoting the use of condoms)?	21	1	2	1	3

Recognise and correctly diagnose and provide syndromic management of STIs in patients?	18	2	4	0	3
Manage a patient with a positive syphilis result?	13	4	5	2	3
Follow up with patients who do not show up for appointments?	17	1	5	1	3
Provide the correct level of referral for treatment when required?	20	1	3	3	1
Clinical Competency Tasks: PEP	**A**	**B**	**C**	**D**	**E**
Provide care for sexually assaulted adults and children, including HIV prophylaxis?	**9**	**4**	**8**	**5**	**3**
Provide prophylactic treatment to HIV exposed patients?	**7**	**5**	**6**	**4**	**5**
Protect yourself from HIV exposure (e.g., needle stick injury)?	20	2	2	3	2
Apply the protocol for occupational exposure?	16	3	6	4	1
Provide the correct level of referral for treatment when required?	16	3	5	3	3
Clinical Competency Tasks: Guidelines	**A**	**B**	**C**	**D**	**E**
Understand and use the 2007 guidelines on nutrition for people living with HIV, AIDS, TB and other chronic debilitating conditions?	**9**	**3**	**6**	**4**	**4**
Understand and use the CCMT/ART guidelines for adults and children?	12	4	2	9	1
Understand and use the Sexual Assault Management guidelines?	12	2	6	7	3
Understand and use the National STI syndromic management guidelines?	14	4	7	3	2
Understand and use the National TB Control guidelines?	14	4	6	3	1
Understand and use the IMCI booklet?	10	1	4	6	4
Understand and use the National HIV Counselor Mentorship guidelines?	7	9	7	1	4

DISCUSSION

Correctional Centre Clinics

In both KZN and LMN, understaffing was reported as a serious concern in many correctional centre clinics. Most reports were focused on the number of nurses or escorting officials available but many respondents also expressed the need for additional doctors, pharmacists, psychologists, nursing assistants, social workers, counsellors, and centre-level HIV and TB coordinators. Understaffing was reported to undermine care in a number of ways, including missed appointments, delayed screening, increased in-correctional centre infections, delayed access to care and treatment, or inadequate adherence support. In some cases, officials and other offenders are called upon to support healthcare staff. In cases where healthcare workers were unavailable, officials relied on local hospitals for a great deal of offenders' care, which required additional transportation and guard duty, which appeared to strain the relationship between correctional centres and hospitals. Healthcare workers reported that they rarely meet with their supervisors, and cross-unit staff meetings do not typically occur. Limited communication between officers and healthcare workers within correctional services presented barriers to communication between DOH and DCS healthcare workers. Additionally, centres reported high levels of staff stress and poor retention strategies, further contributing to understaffing.

Correctional Centre Clinic Infrastructure and Supplies

Although correctional centres reported a dedicated space for healthcare services, centre clinic quality varied. Many respondents said infrastructure was poor, and overcrowding limited their capacity to deliver quality healthcare. Infrastructure was primarily of concern in relation to TB prevention, because older buildings and overcrowding prevented appropriate isolation of potential and active TB cases.

Most essential clinic equipment was available and functioning, including thermometers, blood pressure cuffs, scales, gloves, surgical masks, running water, and hand washing items. However, more than half the centres in LMN and three in KZN reported no N95 masks, essential for prevention of TB among healthcare workers. One-quarter of the correctional centre clinics in KZN reported no running water. Additionally, the majority of centres had no internet capacity.

Lab Services and Drug Availability

Lab Services

Laboratory testing availability varied greatly by centre in KZN. Over half of centres (62.5%) reported availability of CD4 and viral load testing through the correctional centre. A majority of centres reported the availability of HIV screening via ELISA (80%) or rapid HIV testing (86.7%). The availability of TB screening was slightly lower, with 73.3% of centres offering AFB sputum screening by microscopy and only 46.7% reporting availability of GeneXpert TB screening through the correctional centre. Screening for syphilis by RPR was reported as available by 71.4% of clinic centres but rapid RPR was only available at 20% of correctional centres. Additionally, many respondents reported delays in obtaining lab results.

In LMN, DCS staff reported most essential laboratory services for HIV and TB care were available for their use. However, it was difficult to discern from our questionnaire data whether the services were available at the correctional centres themselves, or whether patients needed to be referred to the DOH facilities. In addition, the reported turnaround time for most lab test results, particularly for viral load testing, was much shorter than generally experienced, leading to limited confidence in the respondent's knowledge regarding turn-around time. Aside from the essential tests that DCS staff reported available, viral load testing and creatinine clearance were not widely available through correctional services. These are essential for proper HIV management, per national guidelines. Staff also reported that poor communications methods, from non-functioning equipment like fax machines to well as poor systems, resulted in delays in receiving lab results.

Drug Availability

ART was reported as dispensed on site by 10 (66.7%) correctional centre clinics in KZN. Although the majority of centres (75%) reported the availability of initial TB medications, three (27.3%) reported unavailability of at least one TB drug. STI drugs were most often reported unavailable, with only 69.2% reporting the availability of ciprofloxacin and 75% reporting cefixime available. Correctional centre clinics reported issues with obtaining and storing medications, including challenges with transportation to collect medications or issues with air conditioning or refrigeration.

However, nearly all centres in LMN sourced medications from outside pharmacies (either DCS or local pharmacies). As a result, stock outs were frequently reported. Stock outs were reported more often for STI drugs than for TB drugs, and only three of the centres surveyed reported they dispensed ARV drugs. Fluconazole was reported by stakeholders as not available as it cannot be dispensed by a nurse.

These findings were concurrent with reports of offenders seeking refills and medications from outside facilities. Given the reported challenges for offenders to access care at DOH facilities, including transport limitations, offenders are at risk of frequently experienced delays in treatment and defaulting. Additionally, we noted limited availability of onsite provision of PEP for HIV and STIs to both offenders and corrections centre staff.

Health Services for Offenders

Offender Health Intake

In KZN, the intake process was inconsistent, specifically as it related to timing. A number of

factors were reported as influencing the delay in a health assessment at intake. These included the timing of intake arrival, miscommunication between officers and health staff, and a lack of healthcare workers. Reports were made of missed medications by new offenders due to no medications at arrival and challenges with systems related to procuring new medications or collecting the medications from family members of the offenders.

Staff in LMN reported consistent descriptions of the intake process, and these descriptions were consistent with national DCS policy across centres. However the timing of the intake process varied across centres, dependent in part on health worker capacity and availability, and timing of admissions. Reports on the process for transferring medical information about offenders from other correctional centres or the South African Police Service were not consistent. Delays in obtaining that information can lead to health problems, especially for those with chronic care needs. Additionally, new offenders arriving without documentation or medications, particularly those awaiting sentencing, may be housed in a centre too briefly to coordinate care or deliver test results. Efforts to improve timing and consistent practice of the intake process can help decrease default or late care.

HIV and STI Screening and Care

HIV Testing

In KZN, HIV screening was reported as most often occurring at admission and then on a voluntary basis or if the offender was symptomatic. Reports of the frequency of HIV screening were inconsistent across correctional centres. Both the DCS and partners were reported as offering HIV testing. At least six centre clinics reported HIV testing took place in a confidential manner onsite, with no guard present in the room.

In LMN, HIV testing for offenders was readily available and provided at multiple opportunities, including at intake, through regular campaigns, upon request, and if symptoms were present. Staff reported offenders were knowledgeable about HIV and willing to be tested. For offenders who initially declined an HIV test, subsequent opportunities for testing were presented. Questions surrounding the issue of privacy during HIV testing were met with mixed responses. Continuing current HIV testing efforts can ensure continued availability of opportunities for offenders to test for HIV.

HIV Care and Management

In most KZN correctional centres, ART initiation and continuation was reported as provided on site. A few centre clinics still refer off site for ARV initiation. Challenges discussed related to HIV care provision and included medication side effects, lack of combination pills, lack of access to transport to DOH facilities, and a limited number of HIV counsellors and healthcare workers capable of providing HIV care. Adherence support was provided in a variety of ways, in some circumstances with other offenders or the head of centre providing DOTS in the absence of the healthcare worker. Self-administration of medications was also common, although mechanisms for adherence, such as the availability of time-keeping tools, were inconsistently reported.

In LMN, HIV care was consistently available for offenders. Pre-ART services and continued follow-up of ART was provided within the correctional centres, although offenders were typically referred to DOH facilities for ART initiation and follow-up at routine intervals. The majority of DOH workers were reportedly willing to provide these services; however, logistics, limited transport, and availability of guards to transport offenders result in barriers to and delays in care. Mechanisms and capacity for provision of adherence support were inconsistently provided across centres, and there were tensions between correctional centres and DOH facilities in some jurisdictions.

HIV and STI Prevention during Incarceration

Condom Availability

Condom availability was widely reported in the KZN centres. However, the location of the condoms varied from site to site. In some centres condoms were available where they could easily be accessed by offenders, such as in hallways or sections where offenders are housed. However, in other centres, condoms were reported as available only within member areas, at reception, or at the health clinics.

In LMN, condoms were also reported to be consistently available; however location varied by centre. Further, assessment team members often could not see condoms available where staff reported they were available. Staff expressed concern about offender condom use, location of condom dispensers, and worries about stigma from other offenders or correctional centre employees.

PEP for Offenders

PEP for offenders was primarily available offsite through DOH crisis centres. PEP was available onsite in 24.5% (n=4) centres in KZN.

In LMN, PEP availability was limited for offenders who said they were raped, with only 39% of correctional centres reporting they made this available. However, it is uncertain whether these findings reflect confusion regarding whether the question referred to availability within the correctional centre itself or through the department of health centre. Additionally, the low perceived rate of rape among offenders likely factors into the low response rate. Regardless, the low rate of availability of PEP on site is concerning, particularly given the limited service hours of correctional centre clinics and low number of centres reporting availability of the drugs necessary to provide appropriate STI and HIV PEP.

Stakeholders reported that although rape may be reported to officials, that information may not reach the nurse, and thus may have led to some of the lower reported incidence of rape, which would certainly affect availability of PEP.

MMC Availability

MMC was reported available onsite in only four centres in KZN. At each of these centres, the services were provided by external healthcare workers, primarily NGOs, rather than DCS healthcare workers. Six local hospitals also reported providing MMC.

TB Prevention, Screening, and Care

TB Screening and Care

In KZN, TB screening was reportedly provided at admission, upon release and otherwise at varying frequencies, such as during campaigns or if symptoms were present. Screening of contacts of exposed offenders was reported as occurring inconsistently, with some reports acknowledging that not all contacts are routinely screened.

In LMN, screening of offenders was reported to occur with some frequency, at the following intervals: at baseline; upon release; if the offender reported signs or symptoms; and during campaigns. Staff reported that contacts (both fellow offenders and outside contacts) of active TB cases were not routinely contacted. Fortunately, GeneXpert services were reportedly available at all surveyed correctional centres.

TB Infection Control and Prevention

In KZN, nearly all correctional centres reported offering TB care and treatment onsite. Although most centres reported isolating all persons with TB through at least the first two weeks of treatment, six centres reported they did not isolate offenders with TB. In each of these instances the rationale cited for not isolating offenders with TB was related to the unavailability of isolation cells.

Misperceptions were commonly reported related to risks and prevention of TB, leading to an increased need for education of both officers and healthcare workers within the DCS in LMN. Also, in LMN in cases where a shortage of healthcare workers limited the availability of DOTS services, it was difficult to monitor TB-infected offenders' adherence. Without DOTS, patients can easily default on treatment, resulting in drug-resistant cases. Many centres were unable to provide isolation cells for contagious TB patients, nor were they able to conduct rigorous case-finding among cell-mates or outside family. Both of these are important for TB infection control and prevention.

General Health and Health Services

Respondents in KZN described offenders being seen when symptomatic for primary care needs. There was no report of screening for primary care needs at routine intervals following intake. Mental health care and substance abuse care were additional areas for which care was inconsistent or not routinely made available, despite a reported need.

None of the LMN centres reported conducting routine screening for issues outside of HIV, TB, or STIs other than at intake or in response to specific health complaints. Given that some offenders may remain in correctional centres for prolonged periods of time, standard practice is for routine physical examinations occur to

review any general health concerns. Respondents did not present a clear picture of the extent of mental health issues or other significant health problems among the offender population but on the whole, access to mental healthcare or substance abuse services is very limited.

DOH Referral Facilities

All DCS sites in KZN reported utilizing DOH healthcare services for severe health issues or those requiring specialty services. Despite the majority of correctional centres providing HIV and TB care on site for offenders, some centres continue to refer to DOH facilities for these services. Off-site care was reported as delayed and complicated by lack of available escorts, transport issues, and poor communication between the DCS and DOH. The general consensus was that moving to offer more health services within the DCS has and can streamline and improve care for offenders.

In LMN, the reported need to continuously refer patients to external facilities created a clear burden on the DCS staff. Many facilities reported that the volume of off-site care limited healthcare access as well as posing a security threat. Both DCS staff and DOH staff reported infrequent communication between correctional centres and DOH facilities. Healthcare workers at the DOH facilities reported uncertainty regarding specific correctional-related policies, and some DOH healthcare workers reported fear of providing care to offenders.

Transfer, Release, and Continuity of Care

Reports varied surrounding the involvement of DOH personnel in offender's healthcare planning just prior to their release in the KZN facilities. Better coordination, including the process of obtaining pre-release healthcare transfer letters, was requested by DOH facilities. Some DCS centres reported conducting a home assessment prior to release and follow up conducted by community corrections; however, many did not report this strategy or have an organized approach to ensuring continuity of post-release care.

Respondents in both hospitals and centres in LMN expressed concern over how little coordination and follow up was available for offenders at the point of release or afterwards. Offenders may be released with little to no advance notice, creating a challenge in providing transfer letters or notifying a DOH facility of the transfer. Respondents were also concerned regarding the offender's unfamiliarity with navigating the system of care without support. Poor communication within correctional centres and between DCS and DOH further complicated the issue. Respondents reported limited information or knowledge surrounding the policy or chain of responsibility of the DCS or DOH following release of offenders. Respondents also reported limited knowledge of partner organizations providing support in this area.

Staff Perception and Knowledge and Perceived Offender Behaviour

Both healthcare and non-healthcare staff in KZN reported their perceptions of the incidence of STIs at approximately 5%. However, the perceived incidence of HIV varied, with healthcare workers reporting a 43% HIV incidence compared to 30% as reported by other staff. In an opposite trend, healthcare workers perceived a 5% TB incidence, compared to a 30% TB incidence reported by other staff.

No HIV segregation was reportedly occurring within correctional centres, and stigma rates were low for both healthcare and other correctional centre staff. Knowledge rates related to HIV were very high among non-healthcare DCS staff. However, the knowledge rates related to TB transmission and prevention were much lower.

When asked about HIV risk behaviours perceived to occur among offenders, physical violence among offenders was reported most often. Great variability existed in the qualitative data related to reported violence, particularly between offenders and staff. Although this type of violence was denied when direct inquiries were made, the data did reveal issues of offender-staff violence. Rape and psychological violence were reported less often.

The perception of HIV, TB, and STI infection rates also varied between healthcare workers and officers in LMN, with healthcare workers estimating lower infection rates overall. HIV segregation was not reported, although for TB, 77% of respondents said patients are isolated following diagnosis until after the initial treat-

ment period. Knowledge levels of all respondents related to HIV and TB were high; however, the lowest scores were related to transmission and prevention of TB, pointing to a specific area for intervention with both staff and healthcare workers. Overall across both staff and healthcare workers, stigma levels were low. However, qualitative statements made during the course of interviews often contradicted answers to closed-ended questions, revealing continued stigma and a need for additional sensitisation for both DOH and corrections staff, as well as offenders. Respondents reported the occurrence of risk behaviours related to HIV and STIs, including psychological, physical, and sexual (rape/behaviour). Healthcare workers more frequently acknowledged physical risk factors, while other staff more frequently acknowledged the presence of psychological factors.

Occupational Health

In KZN, it was noted that occupational health is not available for DCS staff, although some reported that PEP was available on site. In the quantitative data, 53% of healthcare staff reported PEP available on site, compared to only 18% of non-healthcare staff reporting availability of on-site PEP. Healthcare workers within DCS centres were also asked about the frequency of their HIV and TB screening. Healthcare staff at larger centres reported higher rates of screening for HIV and TB compared to their colleagues working in smaller centres. And in LMN overall, the availability of occupational health services for correctional centre staff was reported to be low. Additionally, respondents reported an inadequate supply of N95 masks, gloves, hand washing materials, and other protective equipment for prevention of infection transmission. Additionally, PEP for prevention of STI and HIV following occupational exposure was available in a limited number of correctional centres. Staff screening, particularly of TB is another need, with limited or no opportunities for staff screening of TB within the correctional centre following occupational exposure.

Staff Training and Clinical Competency

Reported training needs and number of nurses trained on different HIV, TB, and STI-related topics varied in KZN. Infection control training rates appear low, with 85.7% of healthcare workers reporting they had not received training on this topic in the last five years. Over 71% of healthcare workers reported they had not received any STI training, and 64.3% reported not having received training on TB. Additionally, healthcare workers self-reported low competency in syndromic management of STIs and management of syphilis results. Low competency was also reported for management of MDR/XDR patients and managing side effects related to TB medication and ART co-administration. Training levels related to HIV were confounding. Nearly 93% of healthcare workers reported no HIV, AIDS, or STI training, although 35.7% reported NIMART training and 28.6% reported PalsaPlus training.

In LMN, some healthcare staff reported they were trained to initiate ART but do not have the medications or mentorship to do so. Many centres expressed interest in becoming accredited to provide ARVs and overall it was felt that initiatives to make it feasible for correctional centres to provide the full spectrum of care for TB- and HIV-infected individuals would relieve stress on both the correctional centres and DOH.

Gaps were evident related to healthcare worker training. In particular, a large majority of respondents reported no training related to adherence, opportunistic infections, and drug side effects (79%, 72%, and 77% respectively). Given that these are all pertinent areas of knowledge for healthcare workers, regardless of where ART and TB treatment is initiated, these should be considered training priorities. Additionally, 84% of respondents reported no training related to infection control or universal precautions in the past five years, and 90% reported no training on mental health related issues. Similarly, a lack of confidence was reported in regard to providing PEP for offenders, understanding and applying STI and TB guidelines, interpretation of lab results, management of ART and TB medication side effects, syphilis management, and continued management of drug-resistant TB.

Additionally, findings indicated a need for both offender and corrections officer training related to HIV, TB, and STIs.

RECOMMENDATIONS

Recommendations were discussed and determined through discussions during the course of the report back meeting in each region. Stakeholders present included representatives from the National DCS, Regional DCS, Provincial DOHs, Regional Training Centres, and partner organizations. Through a collaborative discussion process, stakeholders determined the following recommendations.

Kwa-Zulu Natal DCS Region Recommendation Plan

Correctional Facility Infrastructure, Materials, Drug/Lab Availability and Staffing

Facility			
Recommendations	*Activity*	*Priority*	*Feasibility*
Improve ventilation	1. Explore alternate correctional centre ventilation models. 2. Engage healthcare workers and infection, prevention, and control committee in renovation process to advise on improving space related to ventilation and TB isolation facilities. 3. Ensure space for TB isolation of inmates with TB disease. 4. Ensure maintenance and availability of retraction fans, other ventilation methods through maintenance schedule.	*High priority*	*Low Feasibility*
Improve space for clinical consultations to allow for privacy and confidentiality at reception and the hospital	1. Explore use of park homes as a temporary measure. 2. Identify existing private, confidential space in reception for healthcare workers to conduct clinical consultations and screening.	*High Priority*	*Low Feasibility*
Ensure running water in all centres, particularly in the healthcare areas	1. Determine facilities with no water. 2. Explore use of Jojo water containers. 3. Liaise with Department of Public works to install water pipes/ reservoirs.	*High Priority*	*Medium Feasibility*
Improve systems to ensure consistent availability of all essential items (medications, PEP for inmates and staff, N95 masks, gloves, etc.)	1. Explore the pharmaceutical database to track provincial / district/sub-district stock supply & raise queries if no orders placed. 2. Conduct routine quality control exercises and audits. 3. Develop a stock take sheet to be completed and filed weekly, including N95 masks, PEP, hand washing items, sanitizing items and gloves.	*High Priority*	*High Feasibility*
Ensure knowledge of appropriate use of N95 masks.	1. Conduct in-service training with all staff on use & storage of N95 masks. 2. Include in orientation training curriculum/protocol.	*High Priority*	*High Feasibility*
Review and consider alignment of DCS staffing to DOH policies	1. Conduct a services/staff/inmate ratio comparison exercise with DOH. 2. Consider revision/adjustment of DCS staffing structure in comparison with DOH and services provided. 3. Advertise, fund additional essential posts to include: professional nurses; enrolled nurses; counsellors; and data capturers. 4. Consider expanding staff, such as contract doctors, to increase inmate's access to mental health and substance use services.	*High Priority*	*Low Feasibility*
Review current staff remuneration policies; implementation of public service orders (DPSA) is recommended due to poor retention of healthcare workers.	1. Conduct a remuneration benchmarking exercise with DPSA. 2. Review salary, allowances, and OSD.	*High Priority*	*Low Feasibility*
Synergize DCS corporate services regarding professional development, placement, and promotion activities to encourage retention.	1. Schedule routine inter-unit corporate services meetings to synergise activities. 2. Liaise with RTC for healthcare worker training activities.	*Low Priority*	*Low Feasibility*

Ensure at least one professional nurse per correctional facility in order to address the gaps related to intake processes and care and treatment of both urgent and chronic health issues.	1. Conduct a regional review of nurses assigned per facility. 2. Develop a rotation roster of back-up nurses to also cover for nurses on leave.	*High Priority*	*Medium Feasibility*
Improve links with DOH and private partners to increase the number of specialists providing care within DCS.	1. Develop an MOU with DOH regarding specialist services and rotational schedule. 2. Identify and develop a service level agreement with private partners for care provision.	*High Priority*	*High Feasibility*
Initiate DCS, DOH, and SAPS discussion to align medication collection and intake activities for new inmates.	1. Schedule meeting with SAPS. 2. Develop MOU for training of SAPS on performing health screening. 3. Conduct routine chart reviews for completion of screening checklists. 4. Conduct routine chart reviews at DCS for completion of screening checklists and availability of medication on admission. 5. DCS, DOH, or partners can offer assistance to SAPS to work on priority health areas as there is no health division within SAPS.	*High Priority*	*High Feasibility*
Explore possibility of allocating nurses to every DCS facility and police station to conduct screening processes for new admissions or releases on a daily basis.	1. Explore DOH personnel support to SAPS police stations for health screenings. 2. Train identified DCS/SAPS personnel to conduct health screening of inmates/ATDs on admission. 3. Identify a secure, confidential space for the interview to be conducted. 4. In the absence of adequate staffing develop a self-screening tool for use by non-healthcare staff.	*High Priority*	*High Feasibility*
Include MSM-appropriate questions on screening tool.	1. Revise intake form to add MSM questions.	*High Priority*	*High Feasibility*
Streamline communication with DOH to obtain referral letters.	1. Strengthen use and linkage to Tier.net at all DCS facilities. 2. Develop a DOH facility contact list. 3. DOH to strengthen/develop a standard referral letter. 4. Strengthen use of Tier.net for automated HIV-related referral letters.	*High Priority*	*High Feasibility*
General Health Care			
Conduct routine physical examination, including age-appropriate screening (hypertension, diabetes, prostate/cervical cancer, etc.).	1. Develop/adapt comprehensive health screening tools to include routine physical examinations (e.g., hypertension, diabetes and cancer screening, TB screening, STI screening and HCT). 2. Amend bi-annual screening policy to include 5-year compulsory repeat screening. 3. Conduct a DQA exercise for file review to assess and strengthen implementation (baseline and annually).	*High Priority*	*High Feasibility*
Increase screening for HIV, TB and STIs.	1. Task shifting with the training of other DCS officials, to conduct finger prick tests, counselling, and STI and TB screening (primarily at correctional facilities with fewer healthcare workers).	*High Priority*	*High Feasibility*
Strengthen use of partner support and resources to conduct HCT for both staff and inmates as an interim solution.	1. PEPFAR to arrange partner meeting with DCS and allocate partners to support with human resources. 2. Develop a rotational mobile services support schedule. 3. Strengthen DOH support with HR and resources.	*High Priority*	*Medium Feasibility*
Explore the feasibility of hiring counsellors, similar to the approach the KZN DOH has taken.	1. Add and hire counsellors to the DCS organogram. 2. Engage partners to assist with seconding counsellors. 3. Engage with DOH to provide counsellors on a rotational schedule.	*Medium Priority*	*Medium Feasibility*
Ensure all nurses are skilled and provide routine HCT services.	1. Provide HCT training to all nurses and identified DCS officials. 2. Ensure availability of resources. 3. Increase scope of work of identified and trained DCS officials to include screening and performing HCT. 4. Include HCT as a vital component of the job description of DCS nurses.	*High Priority*	*Medium Feasibility*

Ensure healthcare staff consistently orders a supply of NDOH-approved rapid HIV test kits.	1. Laboratory services to conduct routine on-site quality assessments. 2. Pharmacy to track stock ordered on the database. 3. Train HCWs on quality checks of the test kits.	*High Priority*	*High Feasibility*
Ensure adherence to DCS policies related to the frequency of HCT, STI screening and biannual screening.	1. Develop a schedule for routine services. 2. Health managers to conduct routine file reviews. 3. Develop routine DQA and standards of care SOP and assessment tools. 4. Ensure consistent routine use of STI and TB screening checklists at all visits with all inmates instead of only responding to symptoms/complaints.	*High Priority*	*Medium Feasibility*
Provide more education to promote health knowledge within both the staff and inmate population to bolster screening initiatives and improve diagnosis and treatment.	1. Conduct routine refresher courses/in-service training and educational talks. 2. Develop a schedule for trained staff (healthcare workers, other DCS officials, partners and/or peer educators) to provide routine health education to staff and inmates. 3. Ensure all inmates are provided with proper health education (include STIs and HIV) to promote screening and treatment.	*High Priority*	*High Feasibility*
Ensure all centres follow national programs for training.	1. Collaborate with DOH RTC training schedule. 2. Develop a staff training plan. 3. Explore use of TrainSMART/SkillSMART. 4. Routinely review staff training at performance reviews.	*High Priority*	*High Feasibility*
Conduct routine campaigns related to STIs to ensure screening.	1. Train staff on STI screening tool. 2. Develop a screening schedule (facility-specific, TB/HIV,STIs). 3. Develop indicators for routine campaigns. 4. Monitor uptake and case findings.	*Medium Priority*	*Medium Feasibility*
Coordinate with partners to ensure centres with limited staff are still able to follow national programs, including targeted campaigns.	1. Align partner support through routine partner, funder, DCS, and DOH meetings. 2. Develop a partner go-to list.	*High Priority*	*Medium Feasibility*
Provide health education on all health-related issues for all levels of staff, particularly guards who may be responsible to respond to an inmate's physical complaints and ensure they are escorted to the clinic within a timely manner..	1. Develop a health education topic roster. 2. Include information in staff meetings. 3. Initiate/strengthen monthly staff meetings. 4. Develop SOC indicator to measure response time to inmates medical complaints.	*Medium Priority*	*High Feasibility*
Streamline HIV care and treatment, NIMART, adherence to ART, and education.	1. Ensure all nurses are NIMART-trained. 2. Access DOH support with mentoring of NIMART trained nurses for certification. 3. Obtain approval from DOH DG for DCS nurses to initiate ART. 4. Memo to be drafted and circulated for DCS nurses to initiate, prescribe, and dispense treatment. 5. Submit memo to pharmacist allowing DCS nurses to initiate, prescribe, and dispense ART. 6. Explore use of pharmacovigilance-seconded pharmacist to support DCS pharmaceutical needs	*High Priority*	*Medium Feasibility*
Explore implementation of point-of-care testing modalities, including CD4 and Viral load testing.	1. Engage with partners and NHLS re: procurement of POC testing equipment. 2. Review DCS budget and HR for maintenance. 3. Train staff on use of equipment. 4. Develop a routine quality control schedule. 5. Smaller centres to send specimens to larger facilities in close proximity.	*High Priority*	*Medium Feasibility*
Switch or start offenders on FDC, where medically feasible.	1. Cost analysis exercise to migrate ART patients on FDC. 2. Ensure FDC issued to all eligible inmates newly initiated on ART. 3. Strengthen pharmacovigilance. 4. Conduct pharmacovigilance training.	*Medium Priority*	*Medium Feasibility*

Develop standardised policy and procedures related to medication delivery with criteria to determine inmates who are eligible for self-medication dosing.	1. Develop medication flow and dispensing SOP. 2. Develop and document criteria tool for identifying inmates to self-administer medication (include in existing clinical charts). 3. Train health care workers on the criteria.	*Medium Priority*	*Medium Feasibility*
Strengthen DOTS, ensuring a regular DOTS or buddy system is established within each correctional centre.	1. Develop a routine training/orientation and selection criteria for identified inmates to assist with DOTS. 2. Conduct training of DCS officials on DOTS. 3. Explore use of buddy system.	*High Priority*	*High Feasibility*
Initiate and implement an inter-facility staff meeting and support group to share experiences, sharing lessons learned and good practices related to peer education and support groups	1. Identify staff to coordinate these meetings 2. Schedule routine quarterly or bi-annual MDT meetings among health management areas to share good practices/ lessons learned, data review etc. 3. Include as a standing agenda item for Justice Cluster Meetings.	*Medium Priority*	*Low Feasibility*
Strengthen peer education development programs to capacitate inmates beyond incarceration. These programs can help guide the implementation of peer services in facilities which currently do not offer them.	1. Conduct Training of Trainers (ToT) of identified inmates in peer education. 2. Identify selection criteria. 3. Explore enrolment of identified inmates into DOH CHW program.	*Medium Priority*	*High Feasibility*
Provide health education for guards, particularly related to medication adherence and support.	1. Conduct training of DCS officials on adherence and support. 2. Train DCS officials on occupational health and use of PPE. 3. Ensure availability of PPE (gloves, N95 masks, etc.).	*High Priority*	*High Feasibility*
Increase awareness and develop strategy on special diets.	1. Adapt/develop special diet guidelines. 2. Raise awareness among inmates about special diets and the many health conditions for which it is prescribed. 3. Health Area Managers to conduct routine facility visits to review/ensure access to special diets.	*Medium Priority*	*Medium Feasibility*
Build the capacity of DCS staff to provide MMC.	1. Liaise with DOH and partners to ensure DCS healthcare workers are included in provincial MMC training. 2. Engage provincial DOH for mentoring and in-service support in conducting MMC. 3. Conduct a resource inventory to determine capability to conduct MMC. 4. Liaise with partners and DOH for resources with a DCS-owned maintenance plan. 5. Develop a partner inventory with services rendered. 6. Develop a LSA with partners for routine MMC services support.	*High Priority*	*Medium Feasibility*
Employ a doctor/nurse as a roving team to go from one facility to another to perform MMC.	1. Review staffing organogram to include adequate clinical staff per facility. 2. Liaise with DOH for a roving provincial specific clinical team to provide MMC services in the DCS.	*High Priority*	*Low Feasibility*
MMC should be provided as part of a combination prevention package.	1. Train nurses on MMC counselling. 2. Develop tools for routine screening for eligibility and counselling for MMC. 3. Utilise peer educators to raise awareness among inmates.	*High Priority*	*Medium Feasibility*
Enforce the policy on condoms, ensuring that condoms be made accessible within the facilities for inmates, including female condoms for MSM.	1. Conduct peer education/awareness sessions on condom, lubricant use and use of femidoms for MSM. 2. Ensure condoms are replenished, stored correctly and not expired. 3. Include condom counselling and dispensing as part of routine clinical consultations. 4. Explore procurement of femidoms for MSM. 5. Develop/adapt condom messaging tool to be used consistently by all staff and peer educators. 6. Identify accessible, non-stigmatising areas for condom dispensing. 7. Develop a counselling tool to document condom messaging provided. 8. Conduct PHDP training with staff and inmates.	*High Priority*	*High Feasibility*

Review and address the policy on lubrication as there are mixed feelings and message on this issue.	1. Review and adapt policy on lubricant use and dispensing. 2. Provide training of DCS staff and peer educators on the use of lubricants. 3. Engage DOH and partners to provide lubricants. 4. Train nurses to counsel and dispense lubricants as and when requested. 5. Develop a memo regarding use of lubricants.	*Medium Priority*	*Medium Feasibility*
Identify and strengthen mechanisms and procedures for increasing opportunities and the safety of inmates to report violence, especially that of a sexual nature	1. Provide training of staff and inmates on the importance of reporting sexual assault. 2. Ensure availability of PEP for staff and inmates. 3. Conduct routine clinical visits and screen for sexual assault. 4. Review data on assault, injury, STIs, and new HIV infections per facility for active case findings.	*High Priority*	*Medium Feasibility*
Strengthen ability to provide onsite PEP and rape support.	1. Train HCWs on PEP and staff on rape support and counselling. 2. Ensure a PEP and rape counselling trained official is always scheduled on duty (more trained=more available). 3. Ensure availability of medications needed for on-site PEP.	*High Priority*	*High Feasibility*
Ensure that implementation of policy on TB screening for inmates and staff is enforced.	1. Train HCW and identified officials on the TB screening tool. 2. Conduct routine DQA exercises. 3. Due to staff shortages, explore alternate method for TB screening, such as an inmate completing a simple questionnaire with the 4 key TB screening items. 4. Train other DCS staff to utilize a simple TB screening tool is recommended.	*High Priority*	*High Feasibility*
Provide education on TB at each screening opportunity.	1. Adapt clinical stationery to reflect health education provided. 2. Include as an element in the DQA tool. 3. Develop a guide on TB education points to be discussed.	*High Priority*	*High Feasibility*
Improve contact screening for all persons exposed to an individual with TB.	1. Develop and ensure implementation of contact screening policy, especially for inmates sharing a cell and/or family. 2. Conduct routine TB screening to reduce stigma. 3. Compile a contact tracing list for District Health TB Coordinator for follow up of TB infected inmates contacts in the community. 4. Strengthen support and feedback from DOH tracer teams.	*High Priority*	*Low Feasibility*
Strengthen DOT systems and initiation and strengthening of buddy systems for TB medication adherence.	1. Develop an SOP with criteria and scope of work for DOTS, peer educators and buddies. 2. Develop standardised training. 3. Conduct training of DOTS and peer educators.	*High Priority*	*High Feasibility*
Ensure each centre is able to provide TB treatment.	1. Conduct TB/HIV and stationery training with nurses. 2. Conduct DQA on TB patients files. 3. Ensure nurses trained on TB/HIV management. 4. Ensure availability of TB drugs and develop a stock sheet. 5. Explore installation and use of electronic pharmacy dispensing tool. 6. Central pharmacy and area health managers to conduct pharmacy audits (including stock take). 7. Where not feasible, explore centralization of TB cases at a facility where isolation, appropriate treatment, security, and protection are feasible.	*High Priority*	*High Feasibility*
Explore and develop a plan for those with TB and awaiting trial, as they provide a particular challenge due to frequent transition in and out of centres.	1. Develop a policy on management of ATDs with TB; consider transferring them to the centralised DCS TB centre until treatment initiation.	*High Priority*	*Medium Feasibility*
Ensure INH prophylaxis is issued standardly to all eligible individuals.	1. Review INH protocol. 2. Train HCW's on IPT. 3. Develop DQA tools. 4. Conduct DQA exercises to monitor IPT.	*High Priority*	*High Feasibility*
Streamline TB reporting process through use of electronic software that connects to DOH systems	1. Explore installation and use of ETR.net. 2. Conduct training of staff on use of ETR.net and stationery. 3. Ensure data-capturing staff are available. 4. Develop resource procurement and maintenance plan.	*High Priority*	*High Feasibility*

Improve communication and involvement with SAPS to improve continuity of care and treatment of inmates.	1. Engage with SAPS regarding screening checklist upon arrest. 2. Invite SAPS to routine quarterly meetings/Justice Cluster meetings.	*High Priority*	*Low Feasibility*
Strengthen and expand the pre-release program for inmates to include content related to accessing healthcare	1. Revise pre-release program to add a module on life orientation (includes accessing care post release and linkages to CBOs). 2. Explore CHW training of identified pre-release inmates.	*High Priority*	*High Feasibility*
Prior to release, unit managers to ensure all inmates are seen at the clinic	1. Adapt admission and release database to identify inmates pending release in the next 30 days. 2. Ensure HCWs to have access to this database in order to prepare the inmate (physical examination and referral letter). 3. Explore use of Tier.net or similar software to capture patients' information electronically with an automated referral letter updated with information per visit conducted. 4. Standardize and enforce the current policy for screening all inmates prior to release or transfer. 5. Add a check point on the inmates file to reflect review by the Unit Manager. 6. Conduct DQA exercises.	*High Priority*	*Medium Feasibility*
Ensure pre-release clinical visits address medication dispensing. Dispensing additional medication allows for a longer readjustment period for released inmates without risking non-adherence or treatment interruption.	1. Send memo to DCS staff (managers, nurses, doctors, pharmacists) to support dispensing of a 2-3 month supply of prescribed medication upon release, as per DOH. 2. Ensure adequate medication stock availability. 3. Strengthen medication procurement and dispensing practices.	*High Priority*	*Medium Feasibility*
Improve communication between DCS healthcare workers with community corrections and NGOs or CBOs providing ex-inmate support to assist with increasing support to ex-inmates to help guide their entry back into community-level care.	1. Conduct MDT routine meetings. 2. Develop an NGO/CBO inventory. 3. Develop and train NGOs, CBOs and DCS staff on released inmates re-integration needs.	*High Priority*	*High Feasibility*
Promote linkage of inmates to care post-release care.	1. Explore feasibility of duplicate referral letters sent to Community Health Centres. 2. Develop a release list and send to DOH District coordinators for tracer team follow up and linkage to care. 3. Include CBO, NGO representatives in the inmate pre-release training program to facilitate a relationship with the organization in preparation for release.	*High Priority*	*Medium Feasibility*
Develop a policy for TB coordinators to assist with tracing released inmates with TB to formalize the process for linkage to care using the DCS admission and release database to track and ensure follow up.	1. Develop a policy/agreement with DOH coordinators for sharing of inmates' pending release list and use of tracer teams for follow up to linkages to care. 2. Explore a centralised database to communicate this list to all provincial coordinators for follow up, as sometimes inmates do not provide correct details.	*High Priority*	*Medium Feasibility*
Utilise existing DOH electronic systems to help facilitate linkage to care.	1. Install DHIS, Tier.net and ETR.net at all DCS facilities. 2. Train DCS staff on database and stationery. 3. Strengthen linkage to DOH for tracing released inmates requiring medical linkages to care and follow up.	*High Priority*	*High Feasibility*
Conduct an assessment of availability of infection control and occupational health equipment/resources.	1. Conduct a resource inventory for IC and PPE equipment and resources such as running water, gloves, hand washing items, and N95 masks. 2. Review current order forms to ensure these items are listed. 3. Identify if the gap is in ordering or pharmacy stock outs. 4. Implement stock order improvement systems. 5. Add N95 masks to the standard order list.	*Medium Priority*	*Medium Feasibility*
Identify a designated infection control nurse.	1. Identify and train HCW staff on infection control, with an identified nurse being the responsible person. 2. Strengthen visibility and routine activities of the Infection Control Committees.	*High Priority*	*Medium Feasibility*

Build current staff capacity to handle infection control under the present conditions..	1. Conduct routine IC refresher trainings. 2. Develop staff training/in-service training log book. 3. Health area managers to include review of the logbook in routine facility audits/visits and to ensure stock availability and correct use. 4. Develop infection control in-service training curriculum for clinical and non-clinical staff. 5. Ensure clear and practical infection control measures for DCS officials when performing escorting duties to and from external health facilities, including separation of those with a cough/confirmed TB+ during transport. 6. Include training on N95 mask fitting and use, storage and maintenance module and IC when transporting/escorting inmates.	*High Priority*	*High Feasibility*
Provide basic infection control education for inmates and DCS staff.	1. Conduct routine health awareness talks among staff and inmates. 2. Include topics such as Universal precautions, hand washing, PPE use, cough etiquette, ventilation, etc.	*High Priority*	*High Feasibility*
Improve ventilation of the vehicles with extractor fans or opening of windows.	1. IC committee to review ventilation in transport vehicles and consider safe options. 2. Conduct an assessment of DCS transport and status of ventilation apparatus.	*High Priority*	*Medium Feasibility*
Explore the possibility of hiring an occupational health nurse per management area to conduct routine TB, HIV, and other key screenings for all DCS staff and to assist DCS staff with occupational injuries, particularly those requiring PEP.	1. Explore adding an occupational health nurse per management area to the DCS staffing organogram. 2. Explore DOH support with Occupational Health Services 3. Develop a routine roster for Occupational Health Services for rotating teams. 4. Use of screening tools for routine screening of staff. 5. Interim appointment of existing staff from each facility section to lead the program monitor follow up staff screening.	*Medium Priority*	*Medium Feasibility*
Provide a safe and confidential environment for staff screening at the workplace.	1. Identify a confidential, private space which only staff can access. 2. Develop a confidential filing system or use of electronic employee wellness database.	*High Priority*	*High Feasibility*
Strengthen access to social workers and mental health care for the overall health, well-being and retention of DCS staff.	1. Raise awareness among staff on healthcare services available 2. Review accessibility of service providers. 3. Conduct routine employee wellness days through medical aid company. 4. Develop a staff go-to directory for services. 5. Strengthen compulsory staff trauma debriefing activities. 6. Engage Corporate Services to provide coordination to ensure appropriate care is offered.	*High Priority*	*High Feasibility*
TB, HIV, and STI awareness days, led by the existing occupational health unit, should be used to increase staff knowledge and encourage testing and screening.	1. Conduct routine TB, HIV, and STI awareness days.	*High Priority*	*Medium Feasibility*
Centres to ensure a minimum stock of PEP be made available (2 for small centres and 5 for larger), with an option of those who prefer to access off-site services, so staff can start their treatment in the most expedited manner possible, increasing its effectiveness.	1. Revise PEP policy to allow for PEP for occupational exposure to be available on site. 2. Include PEP for staff in the drug order form (2 for small centres and 5 for larger centres). 3. Provide staff with referral site information for testing if not preferred at the facility.	*High Priority*	*High Feasibility*
Provide/increase education on occupational exposure risks and PEP benefits and policies among all DCS Staff.	1. Include Occupational Health and PEP benefits and policies in routine health awareness talks among staff.	*High Priority*	*High Feasibility*
Training on health promotion topics, MMC, HAST areas, medication adherence, and infection control.	1. Conduct routine inmate health education talks to include MMC, HAST, medication adherence, and infection control. 2. Include the above content in the peer educator curriculum.	*Medium Priority*	*High Feasibility*

Engage with partners to develop and implement routine trainings.	1. Include partners in awareness and training plans. 2. Identify peer educators for training to conduct awareness/ health education talks.	*Medium Priority*	*Medium Feasibility*
Facilitate training of DCS staff on health services.	1. Develop and maintain staff training calendar. 2. Develop a staff training logbook. 3. Explore use of TrainSMART. 4. Strengthen routine in-service training of clinical and non-clinical DCS staff. 5. Recommended areas for training include: TB, HIV, and STI transmission, prevention, and treatment; identification of urgent care issues; first aid training; TB isolation policies; correct and consistent N95 mask use; and PEP policies. 6. Health area managers to include in-service training/awareness logs in routine audits.	*Medium Priority*	*High Feasibility*
Develop a training schedule for all healthcare staff.	1. Develop a training schedule in collaboration with RTC and DOH. 2. Conduct trainings on ARV side effect management, opportunistic infections, infection control, MDR and XDR TB management and prevention, occupational exposure, and training related to mental health and substance use issues. Health area managers to audit staff training logbook. 3. Explore use of TrainSMART. 4. Strengthen collaboration with DOH and RTCs.	*High Priority*	*High Feasibility*
Healthcare staff and officials who are responsible for data use should receive training on basic statistics and data use for improving health care outcomes.	1. Liaise with DOH RTC on training on DHIS, ETR.net, and Tier.net, and data analysis and use.	*High Priority*	*High Feasibility*
Training on data collection protocols and indicators and clarification on how to fill in all forms correctly.	1. NDCS M&E to coordinate provincial training on M&E tools and indicators. 2. Develop an M&E framework with indicator definitions and guidance on completion of stationery. 3. Engage with partners to provide training and on-going in-service training on M&E.	*High Priority*	*High Feasibility*
Draft/strengthen the health policies.	1. Draft/amend policies on: a. Routine physical examination of inmates at intervals throughout the incarceration period (i.e., every 5 years); b. Biannual staff screening for TB; c. Medication administration and possession by inmates. d. Lubrication and condom dispensing; e. DOH and DCS health information sharing at intake and upon release; f. Escorting of inmates for health care visits, particularly around security issues, maintaining appointments, and safeguarding both inmate and staff health; g. Improving linkage and retention to healthcare for inmates upon release; h. PEP for occupational exposure and inmates. 2. Develop a strategic partner framework to guide and direct the DCS engagement with partner organizations.	*High Priority*	*Medium Feasibility*
Standardize and ensure compliance, with use of paper-based monitoring tools.	1. Develop an SOP on standardised M&E tools and stationery. 2. Conduct provincial training of data staff. 3. Identify individuals to assist with data management in the absence of data staff. 4. Explore hiring of data capturers. 5. Engage partners to provide in-service training. 6. Conduct routine DQA exercises.	*High Priority*	*High Feasibility*
Explore migration to electronic systems such as Tier.net and ETR.net in all DCS facilities.	1. Ensure DHIS, ETR.net, and Tier.net is installed at all DCS facilities. 2. Conduct a resources inventory to ensure access to computers, electricity, internet, security, and maintenance. 3. Engage partners to support equipment procurement with a DCS maintenance plan. 4. Strengthen DCS resources for maintenance. 5. Train identified staff on the use of the database.	*High Priority*	*Medium Feasibility*

Ensure availability of standardised paper-based monitoring tools to avoid staff using incorrect forms or pieces of paper.	1. NDCS to procure DOH standardised stationery. 2. Develop a policy/agreement regarding supply of standardised stationery and flow of resources from DOH to DCS. 3. Ensure version control of stationery. 4. DCS data staff to be included in DOH data management meetings and trainings.	*High Priority*	*High Feasibility*
Ensure adequate stationary.	1. Add stationery to stock order forms. 2. Health area managers to keep surplus stationery secure to avoid stock outs at DCS facilities.	*Medium Priority*	*High Feasibility*
Strengthen M&E systems to evaluate quality of care.	1. Train staff on correct completion of stationery. 2. Review existing M&E tools, indicators and definitions. 3. Develop an M&E framework for HAST programs with standardized indicators, denominators, protocols, and data collection, and data dissemination and use. 4. Train staff on M&E, indicators, reporting forms and data analysis and use for programme monitoring.	*High Priority*	*High Feasibility*
Develop tools to conduct review of clinical charts to examine quality of care.	1. Develop DQA tools. 2. Conduct training of health area managers on DQA tools. 3. Develop a routine DQA schedule. 4. Engage partners to assist.	*High Priority*	*High Feasibility*
Explore DHIS DCS provincial health data being disaggregated or analysed separately from the DOH facility to help with reporting and establishing progress toward targets.	1. Engage with NDOH to disaggregate DCS data from DOH data for programme monitoring and evaluation. 2. Explore adaptation of DHIS for DCS to report separately on the DOH DHIS.	*Medium Priority*	*High Feasibility*
Improve communication between DCS security staff and healthcare staff, especially on the urgency of inmate clinic visits.	1. Conduct in-service training/talks with DCS officials on urgency of getting inmates to the hospital for medical attention when requested. 2. Develop a policy regarding the turnaround time for inmates to access healthcare services.	*High Priority*	*High Feasibility*
Explore implementation of a diary system (electronic if possible), with the list of daily appointments generated one day in advance.	1. Explore diary for scheduling inmates for follow-up visits and appointments. 2. Explore use of Tier.net for automated patient scheduling and alerts. 3. Train unit managers on using the database to track inmates' visit schedule and monitor adherence.	*Medium Priority*	*High Feasibility*
Initiate/strengthen multidisciplinary meetings to discuss inmate plans.	1. Initiate routine MDT meetings to discuss inmates' health management plan holistically.	*High Priority*	*High Feasibility*
Improve timely communication to healthcare staff about client transfers and releases.	1. Develop a paper-based tracking system or DCS admissions and release database to identify inmate movement prior to the movement to help ensure appropriate file transfer, referral letters and links to the new correctional centre. 2. Explore use of admissions and release database to highlight and inform clinical staff when an inmate is going to be released or transferred. 3. Explore use of Tier.net to assist in printing automated inmate medical records and referral letters. 4. Train staff on use of Tier.net.	*High Priority*	*Medium Feasibility*
Train inmates and officials to improve inmate access to healthcare within the DCS.	1. Develop training curriculum to include modules for training/increase awareness on the following topics for officials and inmates: a) how to access health care services, their right to healthcare, and how to report barriers to healthcare during the intake process; b) performance of custodian duties to ensure that they facilitate health service provision (i.e., that they must always take inmates to the clinic when requested). 2. Formalize this job duty for DCS staff by including it in a training manual/job description.	*Medium Priority*	*High Feasibility*

Review current channels of communication between DCS National office to facility-based staff (currently requires 11 steps or 'levels', resulting in delays in communication).	1. Review model for communication between NDCS and facility-based staff. 2. Explore an intranet service and availability and affordability of resources. 3. Identify strategies to promote direct line communication for quicker responses. 4. Improve internet access for all facility-based staff for official correspondence. 5. Explore use of a notice board and/or staff meetings to raise urgent matters of communication.	*Medium Priority*	*High Feasibility*
Develop a policy to guide and streamline the process for obtaining health information related to inmate's healthcare between DCS and DOH.	1. Develop communication SOP between DCS and DOH (telephonic, verbal, and electronic). 2. Define content allowed to be communicated in a standardised tool to ensure that adequate and complete information related to shared patients is communicated between healthcare workers at the DCS and DOH, especially for inmates receiving initial or routine care at a DOH facility while housed and receiving continuing care within the DCS. 3. Increase awareness among DCS and DOH staff on SOP. 4. Conduct awareness talks for DOH workers on managing inmates.	*High Priority*	*High Feasibility*
Develop a protocol to systemize the process of referring inmates from the DCS to DOH for care to reflect current best practices.	1. Develop a SOP for inmate referral to DOH to include: a) DCS staff responsible for organising inmate transport to a DOH facility should coordinate and receive appointment reminders for external visits one day in advance; b) on the day of the appointment, the official should first take the inmate to the DCS healthcare unit where nurses should provide them with a referral form including a comprehensive history of the client, before transporting them to the DOH; c) the official should take the referral letter with the inmate to the external facility and ensure the referral form is completed by the attending staff there; d) after the visit, the official should bring the referral letter, any medication, and the inmate back to the DCS healthcare unit so the nurse can review the referral letter, ensure appropriate follow-up and medication has been received, and enter all future appointments into the system. 2. Disseminate the SOP to ensure all individuals are clear on their responsibilities. 3. Explore use of Tier.net for automated referral notes and linkage to clinical notes between the DCs and DOH 4. Train all staff on the SOP 5. Include unscheduled visits to the external facility, whereby the DCS identify dedicated and trained DCS staff for the escorting of inmates to external facilities and for telephonic follow up if no referral letter feedback received	*High Priority*	*Medium Feasibility*
Develop a policy and appropriate orientation on information sharing.	1. Develop an orientation SOP for all DCS staff with sections on: a) how to maintain security and confidentiality; b) importance of inmates health services appointments; c) communication between healthcare workers (DCS and DOH); d) emergency first aid.	*Medium Priority*	*High Feasibility*
Develop/reinforce protocol or procedure for DOH staff caring for inmates and/or receipt of orientation related to inmate care.	1. Develop an awareness/orientation/guideline SOP for DOH staff on care and security measures for inmates at the DOH facilities. 2. SOP to include information on: a) DCS capacity and systems; b) responsibilities of DOH healthcare workers, including completion of referral letters and best ways for communicating with DCS healthcare workers; c) security procedures, such as the importance of allowing security officials to be present throughout the consultations; d) advising against doing favours for inmates; e) notification of inmates of their follow-up appointment dates.	*High Priority*	*High Feasibility*
Establish routine in-person meetings or phone conversations between DCS and DOH healthcare workers particularly in settings where the majority of patients are transported to DOH facilities for care.	1. Conduct routine MDT meetings with DOH and DCS staff. 2. Invite DOH staff to DCS meetings and vice versa. 3. Develop a go-to list at the DCS and DOH facility for contact persons. 4. DCS facility OM to ensure this list is updated and distributed to DOH.	*High Priority*	*High Feasibility*

Relationships with DOH			
DCS (includes community corrections officials) to be included in DOH district and HAST meetings.	1. Establish and strengthen liaison with DOH. 2. Participate in routine DOH district-level HAST meetings. 3. DOH to provide meeting schedule to OM.	*High Priority*	*High Feasibility*
Strengthen partnerships with the DOH to facilitate strengthening HAST Care and Prevention.	1. Engage with DOH on services required at DCS. 2. Identify DOH resources available to support DCS HAST and prevention activities. 3. Develop an agreement for services to be rendered. 4. Develop a visit schedule/routine with DOH.	*High Priority*	*High Feasibility*
Explore creating a HAST manager position for all management areas.	1. DCS to review organogram to include HAST manager at provincial level. 2. HAST manager to liaise between DCS and DOH and RTC, orientate staff on SOPs and guidelines, and provide supervision for DQA activities. 3. Additional responsibilities will include: a) facilitating liaising with their DOH counterparts; b) attendance at key meetings; c) coordinating transfer of information; d) implementing new policies; and e) coordinating training.	*Medium Priority*	*Medium Feasibility*
Re-establish and maintain regular provincial level meetings between the DCS and DOH.	1. Develop DCS/DOH/RTC provincial meetings schedule (quarterly). 2. Alternatively, ensure that DCS participates and presents at existing provincial level DOH quarterly review meetings.	*High Priority*	*High Feasibility*
Engage/include DCS staff responsible for implementation processes, both officials and healthcare staff, prior to the monthly Justice Cluster meetings to ensure comprehensive discussions.	1. HCC to conduct monthly staff meetings with MDT prior to Justice Cluster Meetings. 2. Standing agenda to include data review, program monitoring, and issues to be raised at Justice Cluster meetings.	*High Priority*	*High Feasibility*

LMN Region Recommendation Plan

Correctional Centre Clinic Infrastructure, Equipment and Staffing

High Medium Low

Facility

Recommendations	*Activity*	*Priority*	*Feasibility*
Conduct renovations to all centres to ensure space for screening at reception and adequate ventilation.	1. Engage public works to review the infrastructure of correctional centres to include ensuring appropriate ventilation for TB infection control measures and adequate isolation units for individuals with infectious TB	*High Priority*	*Low Feasibility*
	2. Justice Centre to continue efforts to address overcrowding in the timeliest manner feasible.	*High Priority*	*Medium Feasibility*
	3. Healthcare workers to be included in committees making recommendations related to building changes or new buildings, in order to ensure key healthcare considerations are taken into account.	*High Priority*	*High Feasibility*
	4. Explore use of temporary structures, such as 'portacams.'	*Medium Priority*	*Low Feasibility*
	5. Identify alternate existing space within reception area of the centre for screening.	*High Priority*	*High Feasibility*
	6. Explore short-term ventilation solutions such as installing extractor ceiling fans or creatively maintaining security features while allowing windows to open more appropriately.	*High Priority*	*Medium Feasibility*
	7. Ensure suitable space at reception for screening to be done on all admissions.	*High Priority*	*High Feasibility*
	8. Explore partitioning and ventilating the reception space adequately: the use of a one-way mirror or glass with a guard on one side could ensure safety is maintained for the nurse and privacy from other offenders for the client.	*High Priority*	*Low Feasibility*
	9. Strengthen collaboration between regional DCS, the centres, Finance and DRC.	*High Priority*	*High Feasibility*
	10. Support each centre to make suggestions with costing and submit their proposal to the Regional Office for funding.	*High Priority*	*Medium Feasibility*
	11. Reinforce managerial scope of work and capacitate staff at facility level to be proactive in making smaller decisions, such as installing air conditioners.	*High Priority*	*High Feasibility*
Ensure on-site availability of medication for offenders.	1. Conduct routine drug stock inventory checks weekly/monthly checklist to ensure availability of PEP, STI medication, ART, and TB medications. 2. Develop weekly/monthly checklist to ensure availability of PEP, STI medication, ART, and TB medications. 3. Develop and reinforce PEP provision policy for offenders. 4. Conduct training of HCW on PEP.	*High Priority*	*High Feasibility*
Ensure implementation of the protocol for transfer to emergency services for sexual violence/abuse care is maintained, primarily during hours in which a clinic may be closed.	1. Reinforce policy on transfer of offenders for emergency services following sexual violence/abuse. 2. Conduct refresher training of DCS staff on policy.	*High Priority*	*High Feasibility*
Identify supply chain issues.	1. Conduct an assessment on drug availability at facility, district, and provincial-level pharmacies. 2. Identify bottlenecks. 3. Develop strategy/plan to address the challenges identified. 4. Align the 'Standard Order List' and 'Standard Protocols List' with each other and their DOH equivalents to avoid stock outs.	*High Priority*	*Medium Feasibility*
Accept DOH support, as offered, to send assist by sending DOH pharmacists to advice and train DCS pharmacists and nurses.	1. Develop LSA with DOH for DCS pharmacy/nursing staff training, support, and mentoring. 2. Develop a schedule for DOH support visits. 3. Strengthen relationship and communication between DOH and DCS.	*High Priority*	*High Feasibility*

Strengthen training of DCS HCWs on pharmaceutical practices.	1. Train clinic staff in stock management, drug management, and pharmacovigilance. 2. Access DOH/RTC trainings. 3. Obtain RTC training schedule. 4. Explore/strengthen use of pharmaceutical tracking database.	*High Priority*	*High Feasibility*
Tracking pharmaceutical stock availability, orders and stock outs.	1. Develop a pharmaceutical stock tracking database. 2. Explore use of a database alert system to advise on stock quantities at provincial, district, and facility levels. 3. Conduct routine stock inventory audits.	*High Priority*	*Medium Feasibility*
Ensure availability of PPE.	1. Ensure adequate supply of gloves, hand washing or sanitizing items, and N95 masks at all centres. 2. Align ordering and protocols lists to ensure availability. 3. Develop a key items section in the existing stock order checklist. 4. Track centres that are ordering or not ordering key items to alert them to flag and follow up. 5. Include stock order audits in routine facility visits to ensure that Operational Managers order essential healthcare materials and that they remain available.	*High Priority*	*High Feasibility*
Develop a Standard Operating Procedure (SOP) which details correct use of the N95 masks.	1. Develop SOP for use of N95 masks by HCWs and DCS officials. 2. Conduct routine training and/or information sessions related to the appropriate use of 95 masks. 3. Conduct N95 fitting exercise at orientation.	*High Priority*	*High Feasibility*
Examine and streamline procurement processes.	1. Review current procurement processes and status of completion/delivery. 2. Identify bottle necks and develop plan to address them. 3. Revise and streamline processes, including aligning dates. 4. Coordinate with DOH to share their tenders and/or vendor contracts with the DCS. 5. Explore sharing vendors between provinces to address the issue of not getting stock because the prescribed vendors don't have the equipment available or due to a complicated procurement process.	*High Priority*	*Medium Feasibility*
Ensure adequate staffing to optimise efficiency in procurement.	1. Conduct an assessment to identify actual HR requirements for this process at centres. 2. Provide training on the procurement process including topics on finance and administration/operational management (through the HR development skills matrix).	*High Priority*	*Medium Feasibility*
Explore availability and procurement of resources.	1. Conduct an equipment inventory. 2. Ensure all sites have a working computer, printer and internet access for the health clinic for lab results. 3. Ensure availability of internet, computers, fax machines, printers, paper and ink for internal DCS communication and communication/linkage to care between DCS and DOH. 4. Explore use of an intranet facility.	*High Priority*	*Medium Feasibility*
Identify strategies to improve laboratory services.	1. Engage with NHLS to install SMS messaging services at all DCS facilities as currently in use by the DOH. 2. Evaluate courier service and develop a routine schedule. 3. Explore use of Point-of-Care Testing for STIs, CD4 counts, and Viral Load testing.	*High Priority*	*High Feasibility*
Strengthen review of lab results for improved patients monitoring.	1. Develop a procedure for timely follow up by DCS healthcare workers to ensure lab results have been received and are reviewed. 2. Conduct routine data quality and standards of care exercises.	*High Priority*	*High Feasibility*
Review of healthcare staffing levels –overall and per centre.	1. Conduct a review of existing posts. 2. Ensure at least 1, preferably 2-3 FTE nurses per facility. 3. Develop a relief staff roster with rotating staff from other facilities. 4. Explore feasibility to align with DOH ratio of HCW to patients (1:240) adjusted based on population and services provided. 5. Explore inclusion of other categories of HCWs such as Enrolled Nurse Assistants per facility and doctors, data capturers, pharmacists and lay counsellors per management area. 6. Review and explore alignment of HCW remuneration with DOH staffing structures.	*High Priority*	*Medium Feasibility*

Explore accessing alternate human resource hiring to improve service provision.	1. Explore hiring of sessional dentists and psychologists contracted to DCS instead of through the DOH. 2. Explore appointment of a mobile dental therapist per management area who can provide routine oral health care per management areas weekly. 3. Develop a LSA with DOH for routine rotational services of the above cadres. 4. Increase access to mental health and substance use services provided either in-house or by external providers. 5. Improve links with DOH and private partners to increase the number of specialists providing care within DCS.	*High Priority*	*Medium Feasibility*
Improve staff retention.	1. Develop a staff retention strategy to include training and support. 2. Align remuneration with DOH salary structure adjusted to services and population served. 3. Ensure position equity across management areas (hiring the same post, i.e., a HAST coordinator, across all management areas). 4. Conduct a study on existing models for retention from DOH and explore implementation in DCS.	*High Priority*	*Medium Feasibility*
Improve health screening of all admissions.	1. Explore providing new offenders with a screening form for self-completion and then prioritizing illiterate individuals and those reporting symptoms for screening by a healthcare worker. 2. Explore task shifting/hire of alternate cadres, such as enrolled or assistant nurses, social workers, or even a group of DCS security staff to conduct the intake screening.	*High Priority*	*High Feasibility*
Engage with SAPS to improve medication adherence in offenders with chronic illnesses upon arrest.	1. Streamline communication with SAPS and outside health facilities for new intakes with chronic health conditions. 2. Engage with SAPS to ensure ATDs have medication with them while awaiting trial and on admission into DCS. 3. Explore training SAPS-identified staff to conduct the health screening on arrest.	*High Priority*	*Medium Feasibility*
Ensure adequate staffing and standardised operating hours for centre clinics.	1. Review clinic operating times on routine site visits . 2. Review facility staffing (HCWs, escorts, security) to ensure adequate coverage for clinic operational hours. 3. Ensure availability of clinic staff after hours.	*High Priority*	*High Feasibility*
Develop a policy for routine physical examination.	1. Revise health assessment screening tool to include routine screening for non-communicable diseases. 2. Ensure routine age- and gender-specific examinations are conducted (i.e., prostate exams, PAP smears). 3. Ensure clinical stationery captures these investigations. 4. Train healthcare workers on the revised tools and how to conduct prostate exams and PAP smears.	*High Priority*	*High Feasibility*
Increase education to offenders to promote knowledge and care-seeking behaviour.	1. Conduct routine health screening and awareness talks with offenders. 2. Explore use of peer educators to provide health education and importance of accessing care.	*High Priority*	*High Feasibility*
Ensure implementation by all centres of the STI screening tool on admission.	1. Train all HCWs and other identified DCS staff on the STI screening tool. 2. Conduct file audits to review implementation of STI screening at admission.	*High Priority*	*High Feasibility*
Develop a facility-specific plan on implementation of screening in centres with high daily intakes and few staff.	1. Review facility infrastructure and HR to provide screening on admission. 2. Identify adequate space and HR to conduct screening at high intake volume facilities. 3. Explore screening task-shifting or self-completion models.	*High Priority*	*Medium Feasibility*
Improve contact tracing of STI and HIV contacts who are not currently offenders with the DOH.	1. Develop a strategy to contact treatment contacts outside of DCS 2. Strengthen relationship with DOH Coordinators for contact. tracing. 3. Develop a weekly/monthly schedule with a list of contact names and contact details to be sent to DOH district offices for tracing. 4. Evaluate adherence to the guiding policy for HAST care, especially in terms of contact tracing and screening, and develop intervention.	*High Priority*	*High Feasibility*

Capacitate all correctional centre health care clinics to initiate ART on site.	1. Conduct training of all nurses on NIMART, FDC, and dispensing medications. 2. Liaise with PDOH, RTC, and partners to assist with training, mentoring and granting access to DOH facilities to complete POE for certification. 3. Liaise with NDOH, NDCS, and SANC for authorization of DCS nurses to initiate and dispense ART within the DCS. 4. Ensure availability and training on use of national stationery. 5. Equip HAST Coordinators and Health Managers to assist with mentoring.	*High Priority*	*High Feasibility*
Ensure willingness of staff to deliver this service (see 'Retention of staff').	1. Provide training to capacitate staff and encourage personal development. 2. Incentivise additional certification and provision of expanded services.	*High Priority*	*High Feasibility*
Strengthen ART adherence activities.	1. Explore feasibility of changing offenders' regimens to FDC, if eligible, to improve adherence and diminish partial dosing due to medication trading. 2. Develop a document on eligibility criteria for offenders eligible for self-medication dosing. 3. Develop a standardised policy and procedures related to medication delivery. 4. Provide health education for guards, particularly related to medication adherence and support, to avoid offenders' medication being removed or destroyed during cell searches. 5. Increase health education and awareness for all staff and offenders regarding who qualifies for special meals. (E.g., a high protein diet is not recommended for offenders with liver issues or with high BMI. Additionally, offenders with diabetes or anaemia may also require specific diets.). 6. Coordinate and strengthen information dissemination on the care-giver policy for healthcare workers and other appropriate DCS staff.	*High Priority*	*Medium Feasibility*
Develop capacity of offenders to support ART adherence activities.	1. Ensure a regular DOTS or buddy system is established within each correctional centre. 2. Conduct peer education development programs to capacitate offenders beyond incarceration and to assist with implementation of peer services in centres which currently do not offer them. 3. Conduct training activities for offenders participating in care giving and support to support the care of incarcerated people, as well as providing skills to offenders which can be utilized post-release.	*High Priority*	*High Feasibility*
Share lessons learned and good practices related to peer education and support groups between centres.	1. Establish routine meetings for staff and offenders who are peer educators, DOTS, and buddies to share lessons learned and good practices. 2. Share updates and strategies to capacitate staff and offenders. 3. Explore engagement with DOH and CHW Program.	*High Priority*	*High Feasibility*
Ensure adequate supply and availability of clinical stationery:	1. Conduct an M&E exercise to ensure all HIV and TB Registers and Stationary (ART, Pre-ART, TB Screening, TB Admission, IPT Register, ART Stationary, Daily PHC Register, PEP Register, Death Register) are available. 2. Develop a LSA with DOH for procurement of stationery. 3. Procure and store adequate supply of stationery. 4. Conduct training for staff on the correct completion of stationery.	*High Priority*	*High Feasibility*
Explore development/printing of stationery within DCS.	1. NDCS to explore possibility of reproducing the DOH registers so that they can be ordered from within the DCS instead of needing to ask the DOH investigate availability of registers and stationary. 2. Develop MMC register, and other necessary substitutes.	*High Priority*	*High Feasibility*
Strengthen HIV prevention during incarceration.	1. Develop policies to reduce the risk entailed during tattooing. 2. Sensitize all DCS staff and offenders on stigma and healthcare needs of MSM and transgender individuals. 3. Encourage routine HIV screening.	*High Priority*	*High Feasibility*

Increase reporting of sexual violence by offenders and staff.	1. Identify mechanisms and procedures for increasing opportunities and comfort level of offenders to report incidences of sexual violence (i.e., increased confidentiality, provision of PEP on site, like routine clinic visits). 2. Engage legal aid to provide training related to sexual violence to staff and offenders. 3. Explore and develop anti-gangster training and activities in prevention programs (in line with policy currently in development to eradicate gang violence within correctional centres). 4. Conduct training and mentoring of HCWs on forensic nursing.	*High Priority*	*High Feasibility*
Enforce the policy on condoms, ensuring that condoms be made accessible within the centres for offenders.	1. Ensure provision of female condoms within the male correctional centres, as these can also be utilized during the course of male-to-male sexual contact. 2. Explore training/awareness of staff on key populations. 3. Explore developing a policy to make lubrication available along with condoms, either sourced through the DOH or partners. 4. Develop and provide consistent messages about condoms and sex within the DCS and across the cadres (health workers, officials, and other staff).	*High Priority*	*High Feasibility*
Ensure correct storage of condoms in all correctional centres in dry, shaded and accessible areas.	1. Identify a staff to ensure correct review of expiry and storage of condoms. 2. Ensure access to condoms (male and female). 3. Develop a condom quality checklist.	*High Priority*	*High Feasibility*
Conduct routine MMC services within each correctional centre.	1. Develop a schedule/booking system (diary) per facility to ensure MMC is consistently provided. 2. Engage with DOH and partners to support correctional centres with inadequate staffing with mobile MMC services. 3. Conduct training of HCWs on MMC. 4. Develop a memo for DCS MMC-trained nurses to conduct procedure. 5. Conduct acceptability study among offenders on the use of Prepex devices for MMC. 6. Explore use of resident doctors to provide MMC services with the assistance of trained correctional centre nurses. 7. Explore use of a visiting doctor to provide the service and/or follow-up care.	*High Priority*	*Medium Feasibility*

SUMMARY

Correctional Centre Infrastructure, Materials, Drug/Lab Availability and Staffing

Centre

While acknowledging that improvements to centre infrastructure are a long-term goal, when renovations are being considered, they should include improvements to the centres' methods of ventilation and their ability to provide sufficient space for isolation of offenders with TB disease. The infection, prevention, and control committee should be engaged in the process to advise on improving space related to ventilation and TB isolation centres. Renovations should improve the space for clinical consultations to allow for privacy and confidentiality at reception and the hospital (or explore park homes). Capitalising on available expertise, healthcare workers should be engaged in the process to advise on health considerations for renovations. Of critical importance, running water should be ensured in the centres, particularly in the healthcare areas. Additionally, units requiring repairs, such as retraction fans, should also receive maintenance. Small improvements, including availability of fans and other ventilation items, can also be of benefit.

Recommendations were made to address the concerns over correctional centre infrastructure hindering the ability to deliver appropriate health care services and posing infection control risks. A long-term solution should include engaging public works to review the infrastructure of correctional centres. Key areas to be addressed include ensuring appropriate ventilation for TB infection control measures and adequate isolation units for individuals with infectious TB. Additionally, overcrowding is a well-acknowledged challenge, resulting in multiple health-related risks. The stakeholder group is aware that the Justice Centre is working on this concern and recommended these efforts continue in the timeliest manner feasible. It is advisable to include healthcare workers in committees making recommendations related to building changes or new buildings, in order to ensure key healthcare considerations are taken into account.

Several more immediate solutions are also proposed. One of the challenges posed by the infrastructure is a lack of space and ability to ensure visual and auditory privacy during physical examination, MMC, HIV testing, group sessions, and other routine healthcare visits. Providing temporary structures, such as 'portacams', and investigating the possibility of using alternate existing space within a centre, can allow centres to comply with these necessary factors for provision of appropriate health services. Ventilation issues also place healthcare and other DCS staff at occupational risk. Exploring short-term ventilation solutions, such as installing extractor ceiling fans or creatively maintaining security features while allowing windows to open more appropriately, is of critical importance. Additionally, all drug storage areas need appropriate air conditioning or cooling measures in order to ensure appropriate storage temperatures and compliance with pharmacovigilance protocols.

Structural issues also strongly impact the new admissions intake procedure. The new TB policy specifies that screening should be conducted at reception areas, despite the fact this is not a conducive space for health activities. While the assessment might be quick, the lack of space results in no visual and auditory privacy and no space in which to conduct an adequate physical exam. While it is essential that every new intake is screened for TB upon entry, there is a need for a more suitable space to be identified at each centre. One option might be to explore partitioning and ventilating the reception space adequately. For centres where this might be possible, the use of a one-way mirror or glass with a guard on one side could ensure safety is maintained for the nurse and privacy from other offenders for the client.

On all infrastructure problems, it was acknowledged that the solution lies with collaboration between regional DCS, the centres, Finance, and DRC. Each centre can make their suggestions with costing and submit their proposal to the Regional Office, which can make a plan for funding. No approval is needed from Head Office to move forward in this manner. At the centre level, staff can also be proactive by making smaller decisions,

like installing air conditioners. A review of the appropriate process with appropriate individuals at the centre, regional, and national levels is necessary, with direct action plans identified to resolve the most critical issues.

Materials/Labs/Drug Availability

Systems to ensure consistent availability of all essential items are recommended, including ART, TB medications, STI medications, and N95 masks for staff. Prioritization should ensure the availability of hand washing or sanitizing items and gloves at all centres. It is also essential to ensure knowledge of appropriate use of N95 masks.

The unavailability of PEP was discussed as both a health service for offenders in the case of rape, as well as for staff in the case of occupational exposure (see 'Occupational Health' section). PEP is most effective when administered as soon as possible after a possible exposure to HIV or other STIs. Acknowledging the frequent delays in reporting, available care, and transport, it was agreed that PEP should be made available for offenders on site. In addition, the protocol for transfer to emergency services for sexual violence/abuse care should also be maintained, especially during hours in which a clinic may be closed.

Unavailability of certain medications and stock outs were reported in the data. To address issue, centres should increase the availability of their STI medication stock and work to guarantee the availability of ART medications, TB medications, and PEP (as discussed above). Appropriate individuals should investigate where the supply chain issues, are occurring. Mandatory follow up with consistent checks on the availability of drugs is recommended.

To rectify ongoing drug shortages, the stakeholder group recommended aligning the 'Standard Order List' and 'Standard Protocols List' with each other and their DOH equivalents to make sure items are not missing on the DCS lists. Additionally, if challenges are identified at the pharmacy level, the DOH has offered to assist by sending their pharmacists to advise and train. To address training needs of the clinic staff in stock management, the DOH has also pledged to invite DCS staff to their trainings, which cover this area. A tracking system of stocks should also be coordinated by the Regional Coordinators.

Training and/or information sessions related to the appropriate use of N95 masks should also take place. As indicated above, aligning ordering and protocols lists can potentially assist with this process. Alternately, regional DCS should also create a checklist to review which centres are ordering or not ordering key items such as N95 masks. This checklist would alert them to which centres are not ordering these supplies, so they can flag these for follow up. The Healthcare Coordinator should oversee and ensure that operational managers order essential healthcare materials and that they remain available. This review and check should happen on a monthly basis.

Healthcare Equipment (anything costing more than 5,000 Rand is classified as high level)
The process of buying equipment has been regarded as daunting and full of challenges and a process that few people understand. As a result, this can result in challenges obtaining key healthcare-related items such as blood pressure machines and scales. Four recommendations for improving the process and reducing problems with medical supplies are:

1) Examine and streamline the process where possible, including aligning dates.
2) Ascertain actual HR requirements for this process at centres. In discussions with key individuals, attempt to ensure adequate personnel or support for this process.
3) Train personnel on the procurement process. Topics such as finance and administration/ operational management (through the HR development skills matrix), were felt to be key. In preparation for this, a comprehensive picture of the processes and hindrances to it, as well as potentially having streamlined the process, will facilitate this endeavour.
4) Coordinate for DOH to share their tenders and/ or vendor contracts with the DCS, and identify vendors to be shared between provinces. This would address the issue of not getting stock because the prescribed vendors don't have the equipment available or because the procurement process is too complicated.

Information Technology (IT) also comes under 'medical equipment'. While a budget exists for IT, not all sites have a working computer and none had internet access from the health clinic. Ensuring access to a working computer, printer, and internet at each centre clinic would be key to moving forward, primarily in areas such as lab result turn-around time, internal DCS communication, and communication/linkage to care between DCS and DOH.

Lab Results

The DCS has a contractual obligation to use NHLS for sending their lab tests; however, there are reports that clients' CD4 reports are not coming back to the DCS healthcare workers, or not coming back in a timely manner. The DCS should engage with NHLS and raise the possibility of reducing turn-around time by using SMS messaging services, a service already utilized by the DOH. A procedure for timely follow up by DCS healthcare workers to ensure lab results, which have been received and reviewed, should also be established. Another potential solution is implementation of Point-of-Care testing, primarily for CD4 and HIV viral load testing. Conducting the laboratory tests on site can allow for a quick turn-around time. This diminishes the need for follow up with results, helps ensure appropriate patient care is delivered in a timely manner, and reduces transport costs and HR needs.

Staffing

Given the high ratio of offenders to healthcare workers, it was recommended DCS use the DOH's staffing ratio as a benchmark and move to align with this ratio. In order to address the gaps related to intake processes and care and treatment of both urgent and chronic health issues, ensuring staffing levels of at least one professional nurse per correctional centre was recommended. To account for healthcare workers on leave, allocation systems can be utilized to reallocate nurses throughout the DCS system, ensuring one at least one nurse per correctional centre. The DCS should create and finance missing posts for additional professional nurses, enrolled nurses, counsellors, and data capturers, as well look at expanding staff like contract doctors to increase offenders' access to mental health and substance use services. A recommendation is to have at least one but ideally two or three nurses as full-time staff even at the smaller centres. This would allow for proper and efficient care to be rendered to offenders. Another option would be to arrange for 'relief coverage' when there is only one staff per centre. By increasing the number of nurses in the larger centres, they could provide the relief where and when it is needed as long as the main centres have enough staff capacity.

In the bigger picture, the DCS should consider changing the ratio of healthcare workers per client, moving more in-line with the ratio used within the DOH. Presently the DCS ratio of nurse to offender is approximately 1:240. Low staffing is affecting staff retention and ability to provide quality patient care. This is intensified when there are woman and children with special needs requiring attention or centres housing a large number of offenders awaiting trial. The stakeholders acknowledged that DCS may not need to adopt the same ratio as primary health centres, which provide a wider variety of services, but that a review should examine the services provided, current staff workloads, and the size of the population served.

Additionally, considerations should be given to creating a more multidisciplinary team, including at least one doctor per management area. The doctor could then provide services to other correctional centres within the management area. It was acknowledged that a challenge for recruitment of doctors is the lower salary offered in comparison to an equivalent position within the DOH. As such, salary scales should be aligned. This is also a concern for retention of nurses. Staffing structures should also include data capturers, pharmacists, and lay counsellors. Teams should consider including sessional dentists and psychologists who would ideally be contracted with DCS instead of through the DOH. Another option, similar to that mentioned for doctors above, is to provide a mobile dental therapist per management area who can provide routine oral health care through weekly visits to management areas. Staffing should also include increased access to mental health and substance use services either provided in-house or by external providers. Consideration should be given to improving links with DOH and private partners to increase the number of specialists providing care within DCS in this way. For such

services, negotiations could be conducted at the Regional or National DCS levels in order to help facilitate the process.

Staff retention was also cited as a major challenge within the DCS health services, along with understaffing. There are numerous reasons why nurses are not staying in their positions, including: lack of alignment to DOH policies, such as rural allowance, pay scale, and rank; the risk of blame during the course of an investigation; burn out; and working in an emotionally-challenging environment with little to no mental health support. The development of a retention strategy should address these items, as well as training and support. Additionally, position equity should be considered across management areas (hiring the same post—i.e., a HAST coordinator— across all management areas). Consideration can be given to a work study using newer tools and based on the current DOH models instead of the DCS staffing model. The DCS should consider improving links with DOH and private partners to increase the number of specialists providing care within DCS. Noting that poor retention of healthcare workers contributes to the staffing gap, it is recommended to review current staff remuneration policies and consider implementation of public service orders through the Department of Public Service and Administration (DPSA. Additionally, DCS corporate services should synergize regarding professional development, placement, and promotion activities to encourage retention.

Medical Intake and General Health Care

Intake Process

The majority of correctional centres provide a thorough standardised intake process for new offenders, including screening for HIV, TB, and STIs and obtaining a thorough medical history. However, it is the obligation of all centres to guarantee all new offenders are screened at admission. Reports varied from site to site related to how promptly this occurred, and concerns were raised regarding the inability for the intake process to be conducted at centres in which no nurse is present. In these cases, correctional officers with little or no training in healthcare provision are left to recognize urgent signs and symptoms, and routine health care screening may not be conducted. In an effort to mitigate these issues, it was recommended that a nurse be allocated to every centre, large or small, to ensure available healthcare staff for new admissions or releases on a daily basis. To expedite the process and allow for a more confidential screening process, offenders could be requested to complete a brief form with health-related screening questions at intake. This form could in turn be reviewed by the designated nurse. To account for illiterate offenders, the form could utilize both words and images. Additionally, MSM-appropriate questions should be included on the intake forms.

Centres with high numbers of individuals awaiting trial should especially focus on providing screening. Due to the high number of admissions, this poses a significant challenge. Multiple suggestions were made for possible solutions, including hiring and/or training alternate cadres, such as enrolled or assistant nurses, social workers, or even a group of DCS security staff, to conduct the intake screening.

Also, many concerns were raised about new offenders defaulting on their medication while incarcerated with SAPS prior to their arrival at the correctional centre. To mitigate the challenge of offenders arriving at correctional centres without their medication, DCS and DOH should initiate discussion with SAPS to explore the possibility of assigning a responsible individual to collect medications for those with chronic illnesses. Acknowledging there is no health division within SAPS, the DCS, DOH, or partners can offer assistance to SAPS to work on priority areas.

The process of communication with their community clinics should be streamlined for new intakes with chronic illnesses. Ensuring immediate communication with DOH communities to obtain referral letters can help mitigate delays.

Additionally, efforts should be made to streamline communication with SAPS and outside health facilities for new intakes with chronic health conditions. Establishing a thorough patient history and appropriate follow up is of utmost importance.

General HealthCare

As discussed earlier, current staffing levels make it challenging for all centres to provide health care services throughout the DCS for the required

minimum days and times. Providing the necessary staffing mechanism and ensuring centre clinics are open and functioning during these hours is a recommendation.

Another identified gap was the lack of routine general healthcare screening for offenders incarcerated for long periods of time. One approach would be to develop a policy for routine physical examination at intervals throughout the incarceration period (i.e., every five years). These general health care screenings should take place in addition to symptomatic care and in addition to biannual TB and STI screening or HCT. The routine physical examination would include screening for non-communicable diseases, such as hypertension and diabetes, and age-appropriate examinations, such as screening for prostate disease or cervical cancer. Additionally, age-appropriate screening should be conducted for all offenders, regardless of length of time incarcerated.

Screening, Care and Prevention of HIV and STIs

Screening for HIV and STIs

Although screening for HIV and STIs is currently conducted routinely at intake and when symptoms arise, there continues to be room for improvement in this area. Recommendations related to screening centre around increasing screening for HIV and STIs, primarily at correctional centres with fewer health care workers. Although stakeholders agreed to continue leveraging partner support and resources to conduct HCT for both staff and offenders, it is recognized this is only an interim solution. A longer-term suggestion was made to explore the feasibility of hiring counsellors, similar to the approach the KZN DOH has taken. While HCT is found to be offered at many of the larger centres, some smaller centres may be falling behind on providing this service or being wholly reliant on external partners. Hiring counsellors would help, as would ensuring all nurses are skilled and provide routine HCT services. Additionally, DCS nurses and HR should recognize HCT as a vital component of their job description. Healthcare staff must also be responsible for ordering a consistent supply of rapid HIV test kits that are NDOH-approved.

Ensuring adherence to DCS policies related to the frequency of HCT and STI screening was recommended, as well as ensuring that biannual screening is available for both offenders and DCS staff (see more under 'Occupational Health'). A method should be established to ensure comprehensive and timlely screening is conducted in order to increase STI screening to 100% of new offenders.

The low levels of reported STIs, combined with the fact that currently only syndromic management is given, could be disguising higher rates which are going undiagnosed and untreated. In addition to the recommendations above, healthcare staff should use their checklist for STI screening during all visits instead of just responding to symptoms. Also, supplying more education to promote knowledge within both the staff and offender population would bolster screening initiatives and improve diagnosis and treatment. How to deliver this screening in centres with high daily intakes and few staff needs to be explored further. Additionally, improved contact tracing of STI and HIV contacts that are not currently offenders needs to be a priority and coordinated with the DOH.

Biannual screening for STIs and HIV should be offered for all offenders (and potentially staff, should they wish to take advance of it). The guiding policy for HAST care should be examined by each centre to investigate their own adherence to the policy as laid out, especially in terms of contact tracing and screening.

All offenders require proper health education related to STIs and HIV, in part to ensure that they present for screening and treatment related to those issues. Health education can be conducted by healthcare or other DCS staff, partners or peer educators. Some centres are able to follow national programs for education but others are not (due to staffing). A campaign related to STIs should be considered to ensure screening on this issue. Additionally, coordination with partners can ensure centres with limited staff are still able to follow national programs, including targeted campaigns. Education related to these items is also important for all levels of staff, particularly as guards may be responsible to respond to an offender's physical complaints and ensure they are escorted to the clinic within a timely manner.

HIV Care and Treatment

In-centre Provision of Care

Impressively, most centres in KZN were providing their own HIV care and treatment. Recommendations related to HIV care and treatment centre around streamlining care, NIMART, adherence to ART, and education. Although KZN centres are mostly able to initiate ART in-house, some are only delivered by the doctor. Assuming current policy barriers to NIMART can be overcome, the priority recommendation is for all DCS nurses to be initiating ART (NIMART). Training and mentoring are essential components of NIMART preparation and should be conducted for those nurses not already certified as NIMART competent.

At present, only one centre within the LMN Region has the capacity to initiate ART. Conducting as much of the HIV care on site, as possible will help ensure timely care, prevent default, and decrease the pressure on transportation required for DOH visits. Ideally, all correctional centre health care clinics will be able to initiate ART. For this to happen, two things are needed: 1) Clarity around NDOH and NDCS authorization of nurses to initiate and dispense ART within the DCS; and 2) DCS nurse training and mentoring. The RTC, DOH, and partners are willing to offer training and mentoring once the authorization has been clarified. Additionally, current and future HAST Coordinators and Health Managers could assist with mentoring. The DCS nurses need to be willing to deliver this service (see 'Retention of staff') and should receive relevant training on NIMART, FDC, dispensing medications, etc. They should also have the appropriate stationary and guidance and support.

Point-of-Care Testing

Implementing point-of-care testing modalities, including CD4 and Viral load testing, can also diminish the need for external healthcare visits, ensure test results are received, and improve the appropriate follow-up care is provided. Additionally, use of these laboratory testing modalities in centres with large numbers of offenders awaiting trial can diminish loss of appropriate follow up.

Adherence

Several recommendations were made on potential strategies for improving ART adherence. The majority of offenders on ART were taking FDC. For those not already on FDC, this would be a good alternative for improving adherence and diminishing partial dosing due to medication trading.

Development of a standardised policy and procedures related to medication delivery is recommended. At present, which offenders are eligible for self-medication dosing varies greatly on staff availability and convenience. This does not build offender capacity and can be confusing to know to who is allowed to have their own medications, particularly during searches. Strengthening DOTS is another area for potential improvement, particularly ensuring a regular DOTS or buddy system is established within each correctional centre. As centres each have their own experiences, sharing lessons learned and good practices related to peer education and support groups between centres is recommended. Peer education development programs can capacitate offenders beyond incarceration. These programs can help guide the implementation of peer services in centres that currently do not offer them. Health education is also essential for guards, particularly related to medication adherence and support. This was found to be of importance as it was frequently reported that offenders' medication may be removed or destroyed during cell searches.

Diets

Providing special diets for offenders who are living with HIV is a controversial issue. Not all centres provide special diets and it can lead to accidental disclosure of an offender's health issues. All staff and offenders should receive clarity on who qualifies for special meals. For example, a high protein diet is not recommended for offenders with liver issues or with high BMI. Additionally, offenders with diabetes or anaemia may also require specific diets.

Care-Givers

At some correctional centres, offenders participate in care giving and support roles for other offenders. Despite the existence of a correctional-based care giver policy, the stakeholders felt there had been little dissemination of this policy and confusion still exists around the ability to

train and pay these individuals. Coordination of information dissemination on this topic for healthcare workers and other appropriate DCS staff would be helpful. For offenders participating in care giving and support, training activities can assist with supporting the care of incarcerated people, as well as providing skills to offenders that can be utilized post release.

Data Management

HIV and TB registers and stationary (ART, Pre-ART, TB Screening, TB Admission, IPT Register, ART Stationary, Daily PHC Register, PEP Register, Death Register, Develop MMC register, and other necessary substitutes) need to be in full stock at all times. There are currently problems obtaining the DOH registers, although reporting through these means is expected. Head Office should look at availability of registers and stationary and investigate the possibility of the NDCS reproducing the same registers so they can be ordered from within the DCS instead of needing to ask the DOH.

Prevention

Prevention of HIV

Some new ideas for improving prevention of HIV during incarceration involve the following:

- Consider policies to reduce the risk entailed during tattooing;
- Examine increased training for all DCS staff on decreased stigma and healthcare needs of MSM and transgender individuals;
- Consider mechanisms and procedures for increasing opportunities and comfort level of offenders to report incidences of sexual violence (i.e., increased confidentiality, provision of PEP onsite, etc.);
- Involve legal aid to provide training related to sexual violence;
- Include healthcare, social services, and security staff in prevention programmes;
- Include anti-gangster training and activities in prevention programs (in line with policy currently in development to eradicate gang violence within correctional centres).

MMC

In the longer term, the goal is to build the capacity of DCS staff to provide MMC. In the meantime, there is a need to further leverage partner and DOH capability for provision of MMC. Another alternative would be to employ a doctor/nurse as a roving team to go from one centre to another to perform the MMC. The staff at each centre can be capacitated to assist and/or provide the follow-up care. This can augment partner and DOH assistance. MMC should be provided as part of a combination prevention package.

To ensure MMC is consistently provided across the provinces, one suggestion was the regional DCS needs to ensure and strengthen partnerships with partners to provide MMC. An in-house booking system was suggested as a possible tool to ensure provision throughout the region and to enhance coordination of services provided across different partners, DOH, and the DCS. In the future, staffing can potentially include resident doctors, who could provide the service with the assistance of trained correctional centre nurses. Alternately, a visiting doctor could provide the service and/or follow-up care.

Condoms and Lubricants

The policy on condoms needs to be enforced, ensuring that condoms be made accessible within the centres for offenders. Making female condoms available within the male correctional centres should also be considered, as these can also be utilized during the course of male to male sexual contact. Condoms should be available in all correctional centre areas in which offenders spend time. During the course of the assessment, condom availability varied greatly, with condoms frequently available only within the clinic or in a public area not frequented by offenders. Consistent messages about condoms and sex need to be provided within the DCS, across the cadres (health workers, officials, and other staff). The policy on lubrication needs to be addressed, as there are mixed feelings and messages on this issue. Lubricants could be made available alongside condoms, either sourced through the DOH or partners.

PEP

As there are reports of offenders not reporting violence, especially that of a sexual nature, the DCS should consider mechanisms and procedures for increasing opportunities and the safety of offenders to report. This should also include the ability to provide on site PEP and rape support.

Screening, Care and Prevention of TB

Screening

Policy on TB screening states it should take place upon admission, every six months, upon release/transfer, and additionally if presenting with complaints, HIV-positive, or with TB symptoms. This policy needs to be enforced, as well as being extended to cover staff as well as offenders (see more under Occupational Health). An addition to the policy should include mandatory screening of exposed to those newly diagnosed with TB. Due to current staffing limitations, screening is not always provided until the healthcare worker is available to conduct the screening. In these cases, the risk for TB transmission is high. Providing an alternate method for TB screening, such as an offender completing a simple questionnaire with the four key TB screening items, or training other DCS staff to utilize a simple TB screening tool, is recommended. Providing education on TB at each screening opportunity would also be advantageous. Improved contact screening should be implemented for all persons exposed to an individual with TB.

Operational Managers and partners could assist with training more offenders as peer educators, who could in turn educate fellow offenders on TB. Further discussion is needed on whether biannual screenings should be provided for the staff, as well as whether the paperwork for submitting sputum for testing could be shortened and the process streamlined.

TB Care and Treatment

Similar to HIV recommendations, strengthening of DOT systems and initiation and strengthening of buddy systems for TB medication adherence is pivotal. Some centres are not able to provide TB care to offenders, referring these offenders to external services. Each centre should be able to provide TB treatment and all appropriate medications should be made routinely available. If it proves impossible for centres to manage their own TB cases, consideration can be given to centralizing TB cases at one location. In this way treatment would be facilitated, isolation made feasible and security and protection of staff maintained. Discussion needs to continue to map out a plan for those with TB and awaiting trial, as they provide a particular challenge due to frequent transition in and out of centres.

Additionally, INH prophylaxis should be standardly provided to all eligible individuals. This is an additional area for strengthened healthcare worker and DCS staff training and mentoring.

Streamlining TB reporting processes through use of electronic software that connects to DOH systems is recommended. This would cut down on duplication of reporting mechanisms and will improve linkage to and continuity of care as the offender moves in and out of the correctional system.

With lack of isolation cells in centres, offenders with TB, especially XDR and MDR, are referred for care to external facilities. Providers at external facilities can become frustrated with having to receive offenders with XDR and MDR TB and some external facilities refuse to take offenders because of the security concern they pose. During stakeholder discussion a proposal was put forward to invite key members of the DOH to visit DCS centres to see how un-able most are to deliver the care themselves. This might result in more understanding and collaboration with these cases. The DCS understands that referral of their patients goes against DOH efforts to decentralize TB care, however options are limited.

The DOH and DCS should develop an agreement with specific DOH hospitals that are equipped for housing offenders. The protocol should ensure offenders with XDR/MDR are accommodated at DOH facilities returning to the centre upon conversion. While this protocol is followed at some centres, others have to send their clients out daily for treatment and even returning daily during their infectious phase. In the longer term, centres should look at having adequate isolation cells so that the DOH is not relied upon even for the initial phase. Communication should continue with the DOH as well as between Regional and Provincial DCS to find workable solutions to these problems.

As mentioned previously, there is an offender model for the buddy system and DOTS (through peer educators). These systems should be strength-

ened and rolled out to all centres. Promotion of these models should be conducted provincially.

Infection Control and Prevention

Having a designated infection control nurse is a strong recommendation put forward by the stakeholder groups. Another is to build current staff capacity (for both health care worker and other officers) to handle infection control under the present conditions. Training on infection control is advisable for officials as well as health care workers and must include proper use of N95 masks. Basic infection control should also be included for offenders and DCS staff, including universal precautions such as hand washing, glove use, appropriate cleaning of soiled linens, and cough hygiene.

The stakeholder group recommended clear and practical infection control measures for DCS officials when performing escorting duties to and from external health facilities, including separation of those with a cough/confirmed TB during transport. Also measures should be taken to improve ventilation of the vehicles with extractor fans or opening of windows. DCS staff should wear N95 masks when transferring offenders with TB and at all times when in close contact with an offender with infectious TB.

To examine the issue of lacking key materials for infection control and occupational health, such as running water, gloves, hand washing items, and N95 masks, centres need to examine where the 'gap' is – whether there is no stock at the pharmacy or there is a problem with ordering. N95 masks need to be moved onto the standard order list for centres with key guidance as to the appropriate N95 masks to be utilized and training on their appropriate use and fit. Regional Coordinators and Health Managers are accountable to ensure they are available and being used correctly.

Linkages to Care Pre/Post Incarceration

Prior to incarceration and at intake

Linkages to healthcare upon incarceration were reported as challenging due to the lack of healthcare provided while the offender is in SAPS care. The stakeholder group recommends improving communication and involvement with SAPS to improve continuity of care and treatment of offenders.

On release

A number of recommendations are made to strengthen offender preparation and linkage to care upon release. Strengthening and expanding the pre-release program for offenders can include content related to accessing care within the DOH, as well as adherence and HIV, TB and STI prevention counselling. Prior to release, unit managers are responsible for ensuring all offenders are seen at the clinic. Ensuring this visit takes place is critical for appropriate offender preparation and a referral letter to be drafted. The visit also provides the opportunity for medication dispensing, dispensing additional medication allows for a longer readjustment period for released offenders, without risking non-adherence or treatment interruption. Advising DCS pharmacists of the benefit and need to provide two month ARV supply upon release could also be beneficial. Additionally, the current policy for screening all offenders prior to release or transfer should be standardized and enforced.

An increase in communication between DCS healthcare workers with community corrections and Non-Governmental Organisations (NGOs) or Community-Based Organisations (CBOs) providing ex-offender support could assist with increasing the support they provide ex-offenders in helping guide their entry back into community level care. To promote linkage of offenders to care post release, stakeholders suggest a parallel referral system where, upon release, a referral letter is standardly not only provided to the offender, but a duplicate is sent by post to their local clinic for follow-up facilitation. Additionally, identification of local NGOs and CBOs providing ex-offender support and engagement directly by the DCS, DOH or the offender can assist with linkages.

Development of a policy for TB coordinators to assist with tracing released offenders with TB would formalize the process for TB linking to care too. The policy should make use of the DCS admission and release database to track offenders, ensuring follow-up of care. Utilising existing DOH electronic systems can also help facilitate

the communication of information and process of linkage to care.

Infection Control and Occupational Health

Infection Control and Prevention

Having a designated infection control nurse is a strong recommendation put forward by the stakeholder groups. Another is to build current staff capacity to handle infection control under the present conditions. Training in infection control is advisable for officials as well as health care workers and must include proper use of N95 masks. Basic infection control should also be included for offenders and DCS staff, including universal precautions such as hand washing and glove use and cough hygiene.

The stakeholder group recommended clear and practical infection control measures for DCS officials when performing escorting duties to and from external health centres, including separation of those with a cough/confirmed TB+ during transport. Also measures should be taken to improve ventilation of the vehicles with extractor fans or opening of windows. DCS staff should wear N95 masks when transferring offenders with TB and at all times when in close contact with an offender with infectious TB.

To examine the issue of lacking key materials for infection control and occupational health, such as running water, gloves, hand washing items, and N95 masks centres need to examine where the 'gap' is – whether there is no stock at the pharmacy or there is a problem with ordering. N95 masks need to be moved onto the standard order list for centres with key guidance as to the appropriate N95 masks to be utilized and training on their appropriate use and fit. Regional Coordinators and Health Managers are accountable to ensure they are available and being used correctly.

Occupational Health

Despite policies and recommendations for screening of healthcare workers, the stakeholder group acknowledged that without dedicated occupational health services, this will continue to be a gap. A recommendation was made to explore the possibility of hiring an occupational health nurse per management area. This would make it feasible to conduct routine TB, HIV, and other key screenings for all DCS staff. Given the occupational exposure risk, providing the opportunity for screening within a safe and confidential environment at the workplace is recommended. The biannual TB screening policy, currently in effect for offenders, could then be expanded to include DCS staff. This person could also assist DCS staff with occupational injuries, particularly those requiring PEP. There are additional healthcare services available for offenders, but not staff. Additional key services that were felt to be of importance to the overall health, well-being and retention of DCS staff were access to social workers and mental health care. A service for things such as trauma debriefing should be initiated for staff. The stakeholder group recognized that some of these issues would fall under occupational health and safety within Corporate Services and additional coordination to ensure appropriate care is offered is necessary.

In the interim, while awaiting the possible appointment of occupational health staff, occupational exposure screening, particularly for TB, should continue to be recommended. Each centre can look at appointing a staff member from each section to lead the program and keep a register to remind individuals of the dates for repeat screening. TB, HIV and STI awareness days should be used to increase staff knowledge and encourage testing and screening. These trainings should be led by the existing occupational health unit.

PEP

With the exception of a few centres, at present, staff have to complete a G111 form and then go to private doctor for PEP following occupational exposure. PEP used to be available at all centres but was not being utilized due to reported high staff stigma and medication expiration. A decision was made at centres, particularly those close to a DOH or private facility, to use external centres for PEP. This decision was revisited by the stakeholder group and a recommendation proposed that all centres ensure a minimum stock of PEP be made available (2 for small centres and 5 for larger). This means staff can start their treatment in the most expedited manner possible, increasing its effectiveness. Staff can then go to a referral site for testing. Alternately,

those who prefer could still choose to access off-site services. All DCS Staff need education on occupational exposure risks and PEP benefits and policies.

Training Needs

Offender Training Needs

Although the Situational Analysis did not involve any data collection with offenders, the stakeholder group suggests trainings for offenders. Training should include health promotion topics, MMC, HAST areas, medication adherence and infection control. DCS working with partners can develop and implement trainings as a regular feature.

The DCS department for education is responsible for organizing all training for offenders. Coordinating training ideas and trainings offered by partners and healthcare workers through this department is ideal. Although the Situational Analysis did not involve any data collection with offenders, the stakeholder group suggests trainings for offenders. Training should include health promotion topics, MMC, HAST areas, medication adherence and infection control. Training offenders on skills development related to health services, such as DOTS, caregiving, basic healthcare, disease prevention, first aid, etc., would be beneficial for the offender and may improve future job opportunities. Creating a strategy to provide accredited training would further benefit offenders in relation to future employment opportunities.

Training Needs for Correctional Centres Staff

Because most training targets offenders, it was clear from the data collection that DCS staff, require training on various health subjects. Not only is it relevant for their own knowledge and health (see also Occupational Health) but also to prepare staff in provision of offender's health services during escort, transport and supportive care services. Recommended areas for training include: TB, HIV and STI transmission, prevention and treatment; identification of urgent care issues; and, ideally, first aid training. Training should be held several times a year to ensure updates are provided and all staff members have received appropriate training. Additionally, a suggestion was made that DCS staff could join healthcare staff during less clinically related trainings, such as related to prevention and occupational health, including TB isolation policies, correct and consistent N95 mask use, and PEP policies.

Training Needs for Correctional Centres Healthcare Staff

The data showed that many healthcare staff have not received training in key areas over the last five years. A training schedule for all healthcare staff is proposed. Trainings should include ARV side effect management, opportunistic infections, infection control, MDR and XDR TB management and prevention, occupational exposure, and training related to mental health and substance use issues. All training plans should be coordinated with the DOH and RTC to ensure relevancy and ongoing programme success.

In addition to health topics, healthcare staff and officials responsible for data use should receive training on basic statistics and data use for improving health care outcomes. Training on data collection protocols and indicators is important and clarification on how to fill in all forms correctly.

Communication between DCS, Regional Training Centres, and DOH should take place related to trainings conducted and individuals trained. SkillSMART is a potential tool that can be used between organizations to facilitate this process.

Policies and Data Management

Policies

For the most part, policies were found to exist and be well followed. However, the following is a list of suggested policy areas for development or revision. The stakeholder group proposes this list as a draft, cognizant that some of these policies may already exist and simply require enforcing or dissemination.

- Routine physical examination of offenders at intervals throughout the incarceration period (i.e., every 5 years)
- Biannual staff screening for TB
- Medication administration and possession by offenders
- Lubrication and condom dispensing

- DOH and DCS health information sharing at intake and upon release
- Escorting of offenders for health care visits, particularly around security issues, maintaining appointments, and safeguarding both offender and staff health
- Improving linkage and retention to healthcare for offenders upon release
- PEP for occupational exposure and offenders
- A strategic partner framework to guide and direct the DCS engagement with partner organizations
- Staffing policy consistent with DOH policy related to grading progression and rural allowance

Data Management

A number of data collecting and reporting recommendations were put forward by the stakeholder group. While short-term recommendations involved working toward standardization and compliance with paper monitoring forms, long-term goals are focused on moving to electronic capture. Electronic systems such as Tier.net and ETR.net, already in place within many DOH facilities, should be utilized. It is acknowledged that resources such as computers will be needed. Partners should be identified who could assist with delivering these components in a sustainable way so that at the end of any contract, the DCS is able to absorb costs and maintain services.

In order for the short term-goals to be reached, forms must always be available to avoid staff using incorrect forms or pieces of paper. Health managers are responsible and should take stock monthly and order necessary stationary, which should then be kept securely so that clinical stationary is always available within all correctional centres. Staff need guidance on how to correctly complete forms.

Improving M&E systems to examine quality of care was an important recommendation. Part of the M&E process should involve review of clinical charts to examine quality of care; at present, the review only asks whether services are provided. Although within the current health centre sturcture any M&E activities would have to be done by health professionals, this proposition should be moved forward, as it would identify gaps and provide quality information that could serve as a capacity building tool for staff as well.

The DCS should develop a comprehensive M&E framework for HAST programs. Within this, indicators, denominators, protocols, and data collection should be standardized. As part of the M&E plan, consideration needs to be given to how data is currently shared and used. Currently, DCS data is aggregated with the nearest DOH clinic, which may actually be in a different province from the centre. Consider keeping DCS provincial health data disaggregated or analysed separately to help with reporting and establishing progress toward targets. The plan should also involve scheduled training on guidelines and M&E to build staff capacity, as well as ensure that reporting and feedback occurs routinely.

Communication and Linkages to Care

Communication within the DCS

Findings from the Situational Analysis showed that not only do communication and protocols need strengthening between the DCS and DOH, there is also a need to improve communication between security staff and healthcare staff within the DCS. The most frequently reported area of miscommunication centred around the urgency of offender clinic visits. Currently, healthcare workers call the security staff to avoid missed appointments. One potential solution would be to implement a diary system (electronic, if possible) with the list of daily appointments generated one day in advance. Opportunities to meet and discuss offender plans need to be created and/or made more efficient. Inclusion of both security officers and healthcare workers is key. Improving timely communication to healthcare staff about client transfers and releases can help ensure appropriate file transfer, referral letters, and links to the new correctional centre. This can improve overall communication between correctional centres.

Additionally, the following training recommendations are made to improve offender access to healthcare within the DCS: 1) include information for offenders on how to access health care services, their right to healthcare, and how to report barriers to healthcare during the intake process; 2) train DCS staff on the 'performance

of custodian duties' to ensure that they facilitate health service provision (i.e., that they must always take offenders to the clinic when requested); 3) formalize this job duty for DCS staff by including in their training manual.

At present, information from the DCS National office to staff on the ground requires 11 steps or 'levels'. The multiple steps make communication within the DCS challenging. There is a need to promote line communication and revitalize direct communication. Improvements to internet access at the centre level need to be made as currently only health managers have email and the overwhelming majority of centres reported no access to internet at all. The DCS should revive its computerized health care system and management with healthcare managers taking the lead. Improved communication between healthcare workers and officers related to offenders is essential. Efficiency can be improved by creating opportunities for officers and healthcare workers to meet and discuss offenders' health plans.

Linkage to Care between DCS and DOH

Areas for improvement currently exist within both the DCS and DOH related to linkages to care for offenders at intake to the correctional centre, upon release from the correctional centre, and during their imprisonment if receiving care at a DOH facility. DOH and DCS should work together to develop a policy to guide and streamline the process for obtaining health information related to offenders' healthcare.

There is a need to ensure that adequate and complete information about shared patients is communicated between healthcare workers at the DCS and DOH. This is of particular importance for offenders who receive initial or routine care at a DOH facility, but receive continuing care within the DCS. The stakeholder group recommended the development of a protocol to systemize the process of referring offenders from the DCS to DOH for care. This process reflects current best practices and includes the following steps: 1) DCS staff responsible for organising offender transport to a DOH facility should coordinate and receive appointment reminders for external visits one day in advance; 2) on the day of the appointment, the official should first take the offender to the DCS healthcare unit, where nurses should provide them with a referral form and a comprehensive history of the client, before transporting them to the DOH; 3) the official should take the referral letter with the offender to the external facility and ensure the referral form is completed by the attending staff there; 4) after the visit, the official should bring the referral letter, any medication, and the offender back to the DCS healthcare unit so the nurse can review the referral letter, ensure that appropriate follow up and medication has been received, and enter all future appointments into the system. Once a protocol has been developed, it should be disseminated widely to ensure all individuals understand their responsibilities.

If it is not a scheduled visit to the external facility, the referring healthcare staff should first call the DOH to tell them to expect the offender clients. In this way, no visits are unknown or unexpected either by DOH or DCS staff and there is a clear line of communication and continuity of care between the parties. It is the DCS staff's responsibility to follow up if there is no report sent back from the external facility. If this happens, an enquiry must immediately be made by telephone.

Dedicated and trained people are needed to escort offenders to external facilities. It is important these DCS staff members are knowledgeable about both the security process and healthcare. Developing a cadre of designated DCS security staff responsible for this task could be one approach. A policy and appropriate orientation should be developed, with a priority on how to maintain security, keep appointments, and communicate important information between healthcare workers. Ideally, these individuals would also be trained in emergency first aid.

Additionally, many DOH healthcare workers reported a lack of clarity related to DCS processes, procedures, and priorities. Development of a protocol or procedure for DOH staff caring for offenders, or an orientation related to offender care, would assist in mitigating the confusion. Some of the necessary information that should be conveyed includes: outlining DCS capacity and systems; responsibilities of DOH healthcare workers, including completion of referral letters and best ways for communicating with DCS

healthcare workers; security procedures, such as the importance of allowing security officials to be present throughout the consultations; the importance of not doing favours for offenders; and avoiding notifying offenders of their follow-up appointment dates. The establishment of routine in-person meetings or phone conversations between DCS and DOH healthcare workers could be helpful, particularly in settings where the majority of patients are transported to DOH facilities for care.

Additionally, personnel at ward-based outreach teams (from PHC reengineering) and Community Corrections could be engaged for contact tracing of offenders not re-engaging in care upon release. Additionally, these individuals could also conduct contact tracing for STI, TB, and HIV contacts of currently incarcerated offenders. If HAST Coordinators are hired, they could also be used to facilitate this linkage.

Various components for linkage to care are suggested, some of which may already be utilised. These include:

1) Prior to the release of offenders with chronic illnesses, tracer teams go to the address given to confirm the offender will live there. A signature is obtained from someone there and this address is confirmed to the release committee and to healthcare staff (for their use on referral forms)
2) DCS centres send out weekly discharge lists to the DOH sub-district (TB/HIV and STO Coordinators and tracer teams/community health workers)
3) Tracer teams or community health workers locate released client and facilitate their linkage to care.
4) Feedback between DCS, DOH and other parties on those successfully linked and those still being traced.

A pilot study was recommended by the stakeholder group to examine multiple modalities to improve referral and successful linkage to care for released offenders. A three-month pilot study would help illuminate the current gaps and identify workable solutions.

Information Systems

Improving communication between the DCS and DOH, as well as improving linkages to care upon incarceration and upon release, are two priority areas for strengthening offenders' health care. Although multiple systems are currently in place, these are weak and can be improved.

Improving information access between the DCS and DOH can better enable linkage to and continuity of care for both new and recently-released offenders. Linking electronic data collection systems between the DOH and DCS would be one potential streamlined approach that is presently in discussion at the national level. Software such as DHIS and ETR.net/Tier.net could be used for these purposes. It is already possible to see transfers in the DCS system, and this should be utilised to ensure continuity of care for transferred offenders. Prior to connecting with the DOH electronic system, a protocol should be created for communication between DOH and DCS to improve sharing of patient information.

Preparation for Release

A number of recommendations are made to strengthen offender preparation and linkage to care upon release. Strengthening and expanding the pre-release program for offenders can include content related to accessing care within the DOH, as well as adherence and HIV, TB, and STI prevention counselling. Prior to release, unit managers are responsible for ensuring all offenders are seen at the clinic. Ensuring this visit takes place is critical for appropriate offender preparation and for a referral letter to be drafted. The visit also provides the opportunity for medication dispensing. Dispensing additional medication allows for a longer readjustment period for released offenders without risking non-adherence or treatment interruption. Additionally, the current policy for screening all offenders prior to release or transfer should be standardized and enforced.

SAPS Role in Continuity of Care

Linkages to healthcare upon incarceration were reported as challenging due to the lack of healthcare provided while the offender is in the care of SAPS. The stakeholder group recommends improving communication and involve-

ment with SAPS to improve continuity of care and treatment of offenders.

NGOs and CBOs

An increase in communication between DCS healthcare workers with community corrections and those non-governmental organisations (NGOs) or community-based organisations (CBOs) providing ex-offender support could result in increased support to ex-offenders, helping guide their entry back into community-level care. To promote linkage of offenders to post–release care, stakeholders suggest a parallel referral system where, upon release, a referral letter is not only provided to the offender but a duplicate is sent by post to their local clinic for follow-up facilitation. Additionally, identification of local NGOs and CBOs, can assist with linkages.

Relationships with DOH

In order to strengthen relationships and increase communication, DCS should participate in DOH district and HAST meetings. Due to their role in community linkage, community corrections officials should also be present at these meetings. Forging partnerships with the DOH to facilitate strengthening HAST Care and Prevention is a key goal. A HAST manager position for all management areas can facilitate liaising with their DOH counterparts and attendance at key meetings. These individuals can also play a key role in transfer of information and implementation related to new policies and coordination of training.

In addition to quarterly HAST meetings, reestablishment of regular provincial-level meetings between the DCS and DOH is recommended. Justice cluster meetings are held monthly. During these meetings, health issues, including mental health issues, are discussed. To ensure health care individuals are engaged in this process, it is recommended that the Head of Centre engage DCS staff (officials and healthcare staff) who will be responsible for implementing the process prior to the meetings. Additionally these individuals should be included in the meetings.

Improved Communication between DCS and DOH

There is an awareness that the DCS needs to create a forum for improved communication with DOH. Providing an opportunity for DOH and partner involvement in DCS meetings could provide this opportunity. Additionally, to strengthen relationships and increase communication, DCS should participate in DOH district and HAST meetings. Due to their role in community linkage, community corrections officials should also be present at these meetings. Forging partnerships with the DOH to facilitate strengthening HAST Care and Prevention is a key goal. A HAST manager position for all management areas can facilitate liaising with their DOH counterparts and attendance at key meetings. These individuals can also play a key role in transfer of information and implementation related to new policies and coordination of training. Justice cluster meetings should include DCS health personnel, as they are currently not invited to attend these meetings.

REFERENCES

[1] Institute of Medicine. http://www.iom.org.za/publications/KeypopPolicybrief.pdf. Accessed March 17, 2013.

[2] South African Department of Correctional Services. 2007 Prevalence Survey for HIV.

[3] WHO. http://www.who.int/tb/challenges/correctional centres/story_1/en/. Accessed March 6, 2013.

[4] Catz S, et al. Prevention Needs of HIV-Positive Men and Women Awaiting release from Correctional centre. AIDS Behav. 2012 Jan; 16(1):108-120.

[5] Grinstead O, et al. Reducing Post-Release Risk Behaviour among HIV Seropositive Correctional centre Offenders: The Health Promotion Program. AIDS Educ Prev. 2001 Apr; 13(2):109-19.

[6] Flanigan T, Zaller N et al. HIV and Infectious Disease Care in Jails and Correctional centres: Breaking Down the Walls with the help of Academic Medicine. Transactions of the American Clinical and Climatological Association. Vol.120, 2009.

[7] United Nations Office of Drugs and Crime. HIV in Correctional centres Situation and Needs Assessment Toolkit. https://www.unodc.org/documents/hiv-aids/publications/HIV_in_correctional centres_situation_and_needs_assessment_document.pdf Accessed November 10, 2013.

APPENDIX A: PARTICIPANTS IN STAKEHOLDER AND DATA COLLECTION ACTIVITIES

KZN Stakeholder Meeting Contributor List

Albert Bakor
Bennet Boyce
Lungisile Buthelezi
Mumsy Dlamini
Suzanne Jed
Sharlene Govender
Limakatso Kuali
King Kumalo
Jaques Livingston
Sarel Marais
Cathrine Masote
Lindelani Mbanjwa
Rosemary Mdunge
Phumela Mgobhozi
Siphiwe Mhlongo
Thembisile Mhabela
Vuyisile Mkhize
Xolani Mngadi
Samuel Mohuba
Vusumuzi Mokoena
Jessica Morris
Ntokozo Mthembu
Busisiwe Mthimkhulu
Nokuthula Mthiyane
Themba Ndabandaba
Nkosikhona Ndlovu
Hope Ngobese
Ntobeko Nkabini
Ntokozo Nkabini
Phila Ngwabo
Zingisa Nodada
Mercury Nzuza
Nondumiso Qayiso
Carlton Silaule
Balbina Tlatsi
Nonhlanhla Xaba
Nombasa Yoyo
Sharon Zaayman
Luther Zandamela
Jabulani Zondi
Thandazile Zondo
Harry Zwane

KZN Data Collection Participant List

Fulufhelo Malamatsho
Jeri Sumitani
Sharlene Govender
Sipho Mazibuko
Suzanne Jed
Zingisa Nodada
Valerie Kirby
Andres Maiorana
Nomvuyo Mashibini
Siphiwe Mhlongo
Ntokozo Nkabini
Nombasa Yoyo
Lindelani Mbanjwa

LMN Stakeholder Meeting Contributor List

Cathrine Masote
Roeleen Booi
Samuel Mohuba
Dineo Chephe
Stefnie Muller
Gillian Gresak
Ngobeni Norman
Rapakwana Johannah
Malaka Lebowa
Dube Thapelo
Kobola Eva
Ntsewa Aldina
Mabunda Tiyan
Lephondo Matshidiso
Galane Kwena Kate
Baloyi Gavaza
Lea Thangavhuelelo
Livhuwani Nethengwe
Martinah Nephalama
Valerie Khalushi
Prudence Kekana
Khosa Gilbert
Ngomane Isaac
Nkabinde Nozipho
Phakathi Eunice
Khoza Dawn
Pitso-Mlambo Emmarentia
Gumede Florence
Cecelia Sithole
Thuse Pamella
Sipho Guliwe
Mavis Ritha Lukhele
Nanaza Sindane
Samuel Sithole
Siphiwe Thobela
Sylvian Nkosi
Willies Lukhele
Linda Thabethe
Eunice Phakathi
Aaron Shoba
Linah Mhlongo
Esther Mahlangu
Patrick Tladi
Thoko Mdluli
Sibusiso Ntombela
Magda Naude
Nkagisang Ditlobolo
Beauty Ciocha
Thlobogang Thupae
Ntebeng Moche
Joseph Thabanchu
Francinah Motlhamme
Nanna Medupe
Justice Maake
Tumoetsile Lefifi
Boy Lefera
Phodisho Mere
Keitumetse Mekgwe
Jeanette Sebetlele
Fulufhelo Malamatsho
Jessica Morris
Sharlene Govender
Sipho Mazibuko
Suzanne Jed
Zingisa Nodada
Amy Hagopian

LMN Data Collection Participant List

Cathrine Masote
Kosie Ferreira
Dineo Chephe
Francina Sehume
Stefnie Muller
Lea Thangavhuelelo
Livhuwani Nethengwe
Cecelia Sithole
Mr Ditlobolo
Jeanette Sebetlele
Fulufhelo Malamatsho
Jessica Morris
Sharlene Govender
Sipho Mazibuko
Suzanne Jed
Zingisa Nodada
Amy Hagopian

APPENDIX B: DATA COLLECTION TOOLS

DCS Data Collection Tool
Key Informant Interview Guide v0.1 June 27, 2013

Correctional centre	
Location	
Date	
Interviewer	
Respondent Code	

Provider Interview Guide – To be conducted with correctional centre clinic staff		
No	Question	Response
INTRODUCTION. *First I am going to ask you a few questions about yourself and your role in the correctional centre:*		
1	How long have you been working in the correctional centre service?	____years
2	What is your actual professional position?	Administrative worker Correctional centre officer Officer in charge Other, specify _____
3	What is the highest level of education that you have completed	No school Some primary school Completed primary school Some secondary school Completed secondary school College, university or technikon Other
4	How long have you been working at this centre?	____years
5	In which section of the correctional centre do you spend MOST of your working time?	☐ Administration ☐ All sections / units ☐ Isolated quarters ☐ Other:
Do NOT ask the following two questions, just enter information based on your observation:		
6	*Approximate age of interviewee*	☐ 18-25 ☐ 25-40 ☐ Over 40
7	*Gender of interviewee*	☐ Male ☐ Female ☐ Transgender/unknown
PART 1: CORRECTIONAL CENTRE ENVIRONMENT AND HEALTH *Now I am going to ask you some questions about activities and behaviours among offenders at this centre. Please tell me how often the following happens:*		

		Happens a lot (e.g. daily)	Sometimes happens (e.g. weekly)	Occasionally happens (e.g. monthly)	Never happens	Don't know
8a	Drug use of offenders					
8b	Injecting drug use of offenders					
8c	Medications dispensed by the clinic are sold between offenders					

8d	Offender alcohol use					
8e	Physical violence (fist fights, attacks with weapons) between correctional centre staff and offenders					
8f	Physical violence (fist fights, attacks with weapons) between offenders					
8g	Gang based violence between offenders					
8h	Psychological violence (threats, bullying, intimidation) between offender staff and offenders					
8i	Psychological violence (threats, bullying, intimidation) between offenders					
8j	Conjugal visits with wife/partner/girlfriend by offenders					
8k	Unauthorised sexual contacts between offenders and members of the community (other than conjugal visits)					
8l	Consensual sex between offenders					
8m	Consensual sex between offenders and correctional centre staff					
8n	Rape (forced or non-consensual sex) or other sexual violence (sexual abuse or sexual exploitation against somebody's will) between correctional centre staff and offenders					
8o	Rape (forced or non-consensual sex) or other sexual violence (sexual abuse or sexual exploitation against somebody's will) between offenders					
8p	Sexual intercourse between offenders as a form of currency (i.e. to pay for goods, services, or favours)					
8q	HIV infection among offenders					
8r	Tuberculosis infection among offenders					
8s	Piercing by offenders					
8t	Tattooing by offenders					
8u	Other blood sharing rituals or practices by offenders					
8v	Sharing sharp instruments such as shaving instruments by offenders					

PART 2: HIV AND TB STIGMA AND SERVICES FOR OFFENDERS

Now I am going to ask you for your opinion and knowledge about some HIV, Sexually Transmitted Infections (STIs), and tuberculosis topics:

In your opinion, what percentage of offenders in this correctional centre are infected with:

9a	HIV	____%
9b	Syphilis and other STIs	____%
9c	Tuberculosis	____%

Access to protection:		Yes	No	Don't know
10a	Are condoms dispensed to offenders in the correctional centre (e.g., available from a public area)?			
10b	Are lubricants dispensed to offenders in the correctional centre (e.g., available from a public area)?			
10c	If yes, where are they placed and who can access them and at what times. If no, reason for not being available:			

10d	In the case of rape, are offenders able to access Post Exposure Prophylaxis?	Yes	No	Don't know	
Do you think that Human Immunodeficiency Virus (HIV) can be transmitted from an infected person:		Yes	No	Don't know	
11a	By vaginal sexual intercourse without condom				
11b	By anal sexual intercourse without condom				
11c	By oral sex				
11d	By contact with the toilet seat				
11e	By drinking from the glass or cup of an HIV infected person				
11f	By kissing				
11g	By a mosquito bites				
11h	By an injection with used needles (medical or injecting drugs use)				
11i	By the common use of razor blades or tooth brushes				
11j	By tattooing, piercing				
11k	By sharing blood in brotherhood rituals				
11l	By shaking hands				
11m	By breastfeeding				
11n	From mother to child during pregnancy and childbirth				
Do you agree or disagree with the following: HIV-infected offenders should be allowed to:		Strongly Agree	Agree	Disagree	Strongly Disagree
12a	Participate in sports				
12b	Cook in the correctional centre				
12c	Work in the correctional centres				
12d	It is necessary to put HIV-infected offenders in a separate building				
12e	Offenders living with HIV need support and sympathy				
12f	Correctional centre staff should be informed about offenders' HIV status				
12g	An HIV-infected offender risks infecting the offenders who share his cell				
12h	An HIV-infected offender risks infecting the correctional centre staff				
12i	HIV-infected offenders should be treated the same way as other offenders				
12j	HIV-positive offenders should be publicly identifiable (e.g., different clothing, different coloured health cards etc.)				
12k	Other offenders are unwilling to work, eat, continue to meet or share a cell with HIV-positive offenders				
12l	Correctional centre staff are unwilling to provide services to HIV+ offenders				
12m	Correctional centre staff are unwilling to provide services to TB-infected offenders				
Offenders with HIV are:		Yes	No	Don't know	
13a	Segregated				
13b	Excluded from some work/programs				
13c	Excluded from family visits/social activities				
Do you think that tuberculosis (TB) can be spread from an infected person -		Yes	No	Don't know	
14a	By breathing the air around a person who is sick with TB				

14b	By sharing eating/drinking utensils			
14c	Through semen or vaginal secretions shared during sexual intercourse			
14d	From sharing a cigarette			
14e	From mosquito or other insect bites			

Based on your knowledge, please indicate for each of the following sentences related to tuberculosis (TB) if True or False		True	False
15a	The risks for TB transmission are higher in correctional centre than in the community		
15b	A person who is coughing for more than 2-3 weeks should be suspected for tuberculosis		
15c	Tuberculosis can be cured with appropriate medications		
15d	To prevent the spread of tuberculosis in a correctional centre, one should keep doors and windows of the cells closed		
15e	Cloth or paper mask (surgical mask) for contagious TB patients is effective to prevent tuberculosis transmission		
15f	TB patients remain contagious during the entire duration of the treatment		

Offenders with Tuberculosis are:		Yes	No	Don't know
16a	Segregated			
16b	Excluded from some work/programs			
16c	Excluded from family visits/social activities			

Can offenders and staff easily find information, education and communication (IEC) materials on the following: P=available at the correctional centre C=available at the correctional centre health care clinic		Available through correctional centre health service	Available through NGO/CSO /external services	Not available
17a	General health and health rights	P / C	P / C	
17b	Reproductive health including STI prevention and treatment	P / C	P / C	
17c	HIV transmission and prevention, testing and treatment	P / C	P / C	
17d	TB transmission, risk reduction, screening and treatment	P / C	P / C	
17e	Stigma and discrimination reduction	P / C	P / C	

The following services are available for offenders:		Yes	No	Don't know
18a	Peer led groups for the offenders			
18b	Other groups for the offenders			
18c	Peer led groups for the staff			
18d	Other groups for the staff			

Do you think that the implementation of the following strategies in your correctional centre would / do prevent the spread of HIV?		Agree	Disagree	Don't know	Already exists
19a	Providing private prolonged visiting rooms for conjugal visits				
19b	Making condoms available in private visiting rooms for conjugal visits				
19c	Making condoms available for offenders anonymously and free of charge				
19d	Providing sterile needles for tattooing				
19e	Providing offenders with information on communicable diseases				
19f	Providing offenders with information on alcohol & drugs				

19g	Training offenders as peer educators on communicable diseases, drugs and alcohol				
19h	Organizing workshops for offenders conducted by trained health educators on communicable diseases				
19i	Providing access to voluntary HIV counselling and testing to offenders				
19j	Providing access to voluntary HIV counselling and testing to correctional centre staff				
19k	Systematically testing offenders for HIV				
19l	Systematically testing staff for HIV				
19m	Providing correctional centre staff with information on communicable diseases, drugs and alcohol				
19n	Training offenders as peer educators on alcohol and drugs				
19o	For any that currently exist, please describe them, how well they are working and any results so far:				

PART 3: OCCUPATIONAL RISK AND PROTECTION

I will now ask you a few questions about your personal risk of infection and access to services

In your correctional centre, have you been offered information or training concerning the means of transmission and prevention of infectious diseases?		Yes, within the last 12 months	Yes, more than one year ago	No
20a	HIV			
20b	Syphilis and other STI's			
20c	Tuberculosis			

If you knew a co-worker was infected with HIV, would you accept:		Yes	No	Don't know
21a	Working with him/her			
21b	Eating with him/her			
21c	Continuing to meet or associate with him/her			
21d	Sharing the cutlery with him/her			

During your work in correctional centre, have you ever been confronted with an event which made you fear you may become infected with:		Yes	No
22a	HIV		
22b	Syphilis and other STIs		
22c	Tuberculosis		

During your work in correctional centre, have you ever experienced an injury with blood exposure?		Yes	No
23a	During a fight		
23b	Accidental puncture in medical service or with medical waste		
23c	Accidental puncture with hidden needles from injecting drug user		
23d	Accidental puncture with needles used for tattooing or piercing		
23e	Others		
24	As part of your work do you have access to post-exposure prophylaxis (PEP)	Yes	No
25	Are you aware of what to do in case of blood exposure?	Yes	No

Due to your work in correctional centre have you ever been tested for the following?		Yes, within the last 12 months	Yes, more than one year ago	No
26a	HIV			

26b	Tuberculosis				
27a	When did you have your last sputum screening for TB?	Less than a year	More than a year	Never	Don't know
27b	If you had a sputum screening for TB, was it due to your work in correctional centre?	Yes		No	
28	For what reasons do correctional centre staff use the correctional centre health clinics?	For all health concerns (occupational and personal)	Occupational health only	Neither	

PART 4: CARE AT INTAKE AND DURING INCORRECTIONAL CENTREMENT *The next set of questions I am going to ask you are about the health services provided for offenders*				
29	When an offender is admitted, is s/he given a comprehensive health screening / health assessment covering all key aspects of their health by a qualified health staff member?	Yes	No	Don't know
30	Describe in detail the offender intake health assessment including when and where it takes place and any health screenings that take place (i.e., HIV, TB, STIs, hypertension, diabetes, and other conditions) (Probe if symptomatic screening only or testing as well (HCT, sputum for TB, glucose, blood pressure, etc.)			
31	Explain how the process is different for various groups of people such as pre-trial offenders versus sentenced offenders / women versus men / minors versus adults (as applicable by correctional centre type)			
32	Explain how the process is different for day versus night intakes?			
33	Explain how the process is different by offender security level			
34	What health services are available to offenders?			
35	Describe how offenders get medical attention:			
36	Describe any regular testing services you know of for HIV/TB			
I would like to know your opinions on correctional centre sex and violence				
37	Can you describe the kinds of romantic or sexual partnerships people have in this correctional centre? (Probe for transactional sex/sexual bartering)			
38	Can you describe the condom use that happens in the correctional centre? (Probe for locations, barriers to access, willingness to use)			
39	What is the level of violence in this correctional centre (offender on offender, staff on offender)			
40	What is known about sexual assault?			
Regarding your opinion of the correctional centre health services				
41	In your opinion, what are correctional centre resources like for health? (Probe for limitations)			
42	Does everyone in the correctional centre setting have access to health services? If no, who does or doesn't?			
43	What are the most frequent barriers to accessing health services at the correctional centre?			

44	How do offenders get their medications? (Probe for ease of assess, location and confidentiality; check same for HIV and TB medications)
45	How are HIV-related medications like antiretroviral therapy received and stored in this correctional centre?
46	For patients who are responsible for taking their own medications in their own cell, how many doses do they keep in their cell at a time? Do offenders have a way to tell the time in their cell?
47	Are medications sold or bartered with other offenders or staff? Which ones are most often sold/bartered?
48	Can you say what kinds of challenges people living with HIV face in here?
49	What do you think would happen if a person who was just diagnosed with HIV were to disclose his or her status to others in the correctional centre?
50	Which behaviours and practices do you think exposes offenders (and staff) to HIV infection in this correctional centre?
51	In your opinion what is the quality of HIV services offered in this correctional centre? (Probe what the main challenges constraining the provision of HIV services are)
52	How does TB affect this correctional centre? (Probe for scale and who is most affected)
53	Are people here concerned about TB? If yes, who? What is being done?
54	Which behaviours and practices do you think exposes offenders (and staff) to TB infection in this correctional centre?
55	In your opinion, what is the quality of TB services offered in this correctional centre? (Probe what the main challenges constraining the provision of TB services are)

DCS Data Collection Tool
Correctional centre Health Care Worker Interview Guide
v0.1_June 27, 2013

Correctional centre	
Location	
Date	
Interviewer	
Respondent Code	

Provider Interview Guide – To be conducted with correctional centre clinic staff		
No	**Question**	**Response**
INTRODUCTION. *First I am going to ask you a few questions about yourself and your role at the health centre:*		
1	How long have you been working in the correctional centre service?	___ Years
2	What is your actual professional position at this centre?	☐ Doctor ☐ Professional Nurse ☐ Enrolled Nurse Assistant

		☐ Counsellor ☐ Social Worker ☐ Laboratory staff ☐ Other, specify _____
3	How long have you been working at this centre?	__ Years
Do NOT ask the following two questions, just enter information based on your observation:		
4	*Approximate age of interviewee*	☐ 18-25 ☐ 25-40 ☐ Over 40
5	*Gender of interviewee*	☐ Male ☐ Female ☐ Transgender/unknown

PART 1: CORRECTIONAL CENTRE ENVIRONMENT AND HEALTH

Now I am going to ask you some questions about activities and behaviours among offenders at this centre. Please tell me how often the following happens:

		Happens a lot (e.g. daily)	Sometimes happens (e.g. weekly)	Occasionally happens (e.g. monthly)	Never happens	Don't know
6a	Drug use of offenders					
6b	Injecting drug use of offenders					
6c	Medications dispensed by the clinic are sold between offenders					
6d	Offender alcohol use					
6e	Physical violence (fist fights, attacks with weapons) between correctional centre staff and offenders					
6f	Physical violence (fist fights, attacks with weapons) between offenders					
6g	Gang based violence between offenders					
6h	Psychological violence (threats, bullying, intimidation) between offender staff and offenders					
6i	Psychological violence (threats, bullying, intimidation) between offenders					
6j	Conjugal visits with wife/partner/girlfriend by offenders					
6k	Unauthorised sexual contacts between offenders and members of the community (other than conjugal visits)					
6l	Consensual sex between offenders					
6m	Consensual sex between offenders and correctional centre staff					
6n	Rape (forced or non-consensual sex) or other sexual violence (sexual abuse or sexual exploitation against somebody's will) between correctional centre staff and offenders					
6o	Rape (forced or non-consensual sex) or other sexual violence (sexual abuse or sexual exploitation against somebody's will) between offenders					
6p	Sexual intercourse between offenders as a form of currency (i.e., to pay for goods,					

	services, or favours)					
6q	HIV infection among offenders					
6r	Tuberculosis infection among offenders					
6s	Piercing by offenders					
6t	Tattooing by offenders					
6u	Other blood sharing rituals or practices by offenders					
6v	Sharing sharp instruments such as shaving instruments by offenders					

PART 2: HIV AND TB STIGMA AND SERVICES FOR OFFENDERS

Now I am going to ask you for your opinion and knowledge about some HIV, Sexually Transmitted Infections (STIs), and tuberculosis topics:

In your opinion, what percentage of offenders in this correctional centre are infected with:		
7a	HIV	%
7b	Syphilis and other STIs	%
7c	Tuberculosis	%

Access to protection:		Yes	No	Don't know
8a	Are condoms dispersed to offenders from the clinic? (e.g., available from a public area in the clinic)?			
8b	Are lubricants dispersed to offenders from the clinic (e.g., available from a public area in the clinic)?			
8c	If yes, where are they placed and who can access them and at what times. If no, reason for not being available:			
8d	In the case of rape, are offenders able to access Post Exposure Prophylaxis?	Yes	No	Don't know

Do you agree or disagree with the following: HIV-infected offenders should be allowed to:		Strongly agree	Agree	Disagree	Strongly disagree
9a	Participate in sports				
9b	Cook in the correctional centre				
9c	Work in the correctional centres				
9d	It is necessary to put HIV infected offenders in a separate building				
9e	Offenders living with HIV need support and sympathy				
9f	Correctional centre staff should be informed about offenders' HIV status				
9g	An HIV-infected offender risks infecting the offenders who share his cell				
9h	An HIV-infected offender risks infecting the correctional centre staff				
9i	HIV-infected offenders should be treated the same way as other offenders				
9j	HIV-positive offenders should be publicly identifiable (e.g. different clothing, different coloured health cards etc.)				
10	Other offenders are unwilling to work, eat, continue to meet or share a cell with HIV-positive offenders				
11	Correctional centre staff are unwilling to provide services to HIV+ offenders				

12	Correctional centre staff unwilling to provide services to TB-infected offenders?				

Offenders with HIV are:		Yes	No	Don't know
13 a	Segregated			
13b	Excluded from some work/programs			
13c	Excluded from family visits/social activities			

Offenders with TB are:		Yes	No	Don't know
14a	Segregated			
14b	Excluded from some work/programs			
14c	Excluded from family visits/social activities			

Can offenders and staff easily find information, education, and communication (IEC) materials on the following: P=available at the correctional centre C=available at the correctional centre clinic		Available through correctional centre health service	Available through NGO/CSO /external services	Not available
15a	General health and health rights	P / C	P / C	
15b	Reproductive health including STI prevention and treatment	P / C	P / C	
15c	HIV transmission and prevention, testing and treatment	P / C	P / C	
15d	TB transmission, risk reduction, screening and treatment	P / C	P / C	
15e	Stigma and discrimination reduction	P / C	P / C	

The following services are available for offenders:		Yes	No	Don't know
16a	Peer led groups for the offenders			
16b	Other groups for the offenders			
16c	Peer led groups for the staff			
16d	Other groups for the staff			

Do you think that the implementation of the following strategies in your correctional centre would / do prevent the spread of HIV?		Agree	Disagree	Don't know	Already exists
17a	Providing private prolonged visiting rooms for conjugal visits				
17b	Making condoms available in private visiting rooms for conjugal visits				
17c	Making condoms available for offenders anonymously and free of charge				
17d	Providing sterile needles for tattooing				
17e	Providing offenders with information on communicable diseases				
17f	Providing offenders with information on alcohol & drugs				
17g	Training offenders as peer educators on communicable diseases, drugs and alcohol				
17h	Organizing workshops for offenders conducted by trained health educators on communicable diseases				
17i	Providing access to voluntary HIV counselling and testing to offenders				
17j	Providing access to voluntary HIV counselling and testing to correctional centre staff				
17k	Systematically testing offenders for HIV				
17l	Systematically testing staff for HIV				
17m	Providing correctional centre staff with				

	information on communicable diseases, drugs and alcohol				
17n	Training offenders as peer educators on alcohol and drugs				
17o	For any that currently exist, please describe them, how well they are working and any results so far:				

PART 3: OCCUPATIONAL RISK AND PROTECTION

I will now ask you a few questions about your personal risk of infection and access to services

If you knew a co-worker was infected with HIV, would you accept		Yes	No	Don't know
18a	Working with him/her			
18b	Eating with him/her			
18c	Continuing to meet or associate with him/her			
18d	Sharing the cutlery with him/her			

Do you think that because of your work you are at risk of contracting:		High risk	Low risk	No risk	Don't know
19a	HIV				
19b	Syphilis and other STIs				
19c	Tuberculosis				

During your work in correctional centre, have you ever been confronted with an event which made you fear you may become infected with:		Yes	No
20a	HIV		
20b	Syphilis and other STIs		
20c	Tuberculosis		

	During your work in correctional centre, have you ever experienced an injury with blood exposure?	Yes	No
21a	During a fight		
21b	Accidental puncture in medical service or with medical waste		
21c	Accidental puncture with hidden needles from injecting drug user		
21d	Accidental puncture with needles used for tattooing or piercing		
21e	Others Specify:_____		
22	As part of your work do you have access to post-exposure prophylaxis (PEP)	Yes	No
23	Are you aware of what to do in case of blood exposure?	Yes	No

Due to your work in correctional centre have you ever been tested for the following?		Yes, within the last 12 months	Yes, more than one year ago	No
24a	HIV			
24b	Tuberculosis			

25a	When did you have your last sputum screening for TB?	Less than a year	More than a year	Never	Don't know
25b	If you had a sputum screening, was it due to your work in correctional centre?	Yes		No	

PART 4: CARE AT INTAKE AND DURING INCORRECTIONAL CENTREMENT *The next set of questions I am going to ask you are about the health services provided for offenders*			
26	When an offender is admitted, is s/he given a comprehensive health screening / health assessment covering all key aspects of their health by a qualified health staff member?	Yes	No
	Does the intake process cover:	Yes	No
27a	Past or current medical status including:		
27b	HIV		
27c	Diabetes		
27d	Hypertension or other heart-related condition		
27e	Symptomatic screening for TB		
27f	Symptomatic screening for STIs		
27g	HCT		
27h	TB screening by sputum or x-ray		
27i	If yes, which one	sputum	x-ray
27j	RPR (syphilis blood test)		
27k	Blood pressure		
27l	Glucose		
27m	Tracing contacts back to communities and partner notification processes		
28	Describe in detail the offender health intake process		
29	How do you ensure continuity of care with regards to HIV, TB, and chronic health care issues? (include obtaining records)		
	(Ask the following where relevant)		
30	Explain how the process is different for pre-trial offenders versus sentenced offenders		
31	Explain how the process is different for men and women		
32	Explain how the process is different for minors and adults		
33	Explain how the process is different for day versus night intakes		
34	Explain how the process is different by offender security level		
35	What is the maximum time between the admission of an offender and their health screening?	___ days	
	Following the intake health assessment,	Yes	No
36	Is an individual and comprehensive health care plan developed for each offender based on the findings of the health screening?		
37	Is a confidential report available in the health services?		
38	If yes, is the report shared with staff (including correctional centre managers) outside health services?		
39	Is there are certain length of sentence under which a patient file/chart will NOT be started for an offender?		
40	If yes, what is the minimum length of correctional centre stay for which a file will be started? Describe how offenders serving UNDER this length sentence are served and any recording of their health that is done.		

	During correctional centrement, can offenders and staff easily find information, education and communication (IEC) materials on the following: P=available at the correctional centre C=available at the correctional centre clinic centre	Available through correctional centre health service	Available through NGO/CSO /external services	Not available
41a	General health and health rights	P / C	P / C	
41b	Reproductive health including STI prevention and treatment	P / C	P / C	
41c	HIV transmission and prevention, testing and treatment	P / C	P / C	
41d	TB transmission, risk reduction, screening and treatment	P / C	P / C	

41e	Stigma and discrimination reduction	P / C	P / C	
	Are the following services available:	Available through correctional centre health service	Available through NGO/CSO /external services	Not available
42a	A peers prevention programme			
42b	Voluntary confidential HIV testing and counselling services (VCT)			
42c	Screening, Diagnosis of and treatment for sexually transmitted infections			
42d	Prevention, screening and treatment of TB			
42e	Post-exposure prophylaxis for offenders who have been exposed to a risk			
42f	Access to MMC			
42g	Mental health services (i.e. therapists, psychologists, psychiatrists)			
If female offenders, are the following services available:		Available through correctional centre health service	Available through NGO/CSO /external services	Not available
43a	Care for pregnancy, including prenatal care, labour and delivery, and postpartum care			
43b	Antiretroviral therapy for HIV-positive pregnant women to prevent mother-to-child Transmission			
43c	Is follow-up treatment offered for HIV-infected babies and accompanying children?			
43d	Can women receive examination, treatment and care only from female doctors and nurses if they prefer this or, if this is not possible, is there a chaperone approach?			
43e	How often are pap smears offered to women while a person is in correctional centre (for HIV negative)?	____years		
43f	How often are pap smears offered to women while a person is in correctional centre (for HIV positive)?	____years		
Describe any regular and/or symptomatic screening and testing there is for offenders for the following:				
44a	Routine health checks (e.g., checking weight and BP for diabetes, pregnancy for women, any potential health issues)			
44b	HIV (ask about provider and client initiated HCT)			
44c	STIs			
44d	TB (ask if any TB intensified case-finding)			
45	For any HIV testing (intake, provider or client initiated), who performs the test and who is present during the test?			
46	Can offenders receive medical consultations without the presence of operational staff (per security level)?	Yes	No	
	Are the following health services provided so as to avoid transmission of blood borne pathogens:	Yes	No	
47a	Clean needles and syringes for offenders			
47b	Safe blood transfusions			
47c	Use of universal precautions by staff			
47d	Safe tattooing equipment for offenders			
47e	Bleach for disinfection for offenders			
47f	Protective equipment/materials for staff			

48	Comment on how accessible these are
I have a few questions about general service availability and referrals:	
49	What are some of the most important health challenges faced by offenders in this centre?
50	Are all offenders able to access this clinic or are services difficult to access for some offenders? (Probe for who comes to the clinic, who doesn't come to the clinic)
51	How do offenders get from cells to clinic?
Regarding HIV testing in this correctional centre, can you tell me:	
52	How is HIV testing conducted in the correctional centre?
53	In general, how would you say that offenders decide to go for an HIV test in correctional centre?
54	In general, why wouldn't offenders decide to go for HIV testing in correctional centre?
55	Is anything done to encourage testing among offenders?
56	What challenges do HIV-positive offenders face in correctional centres?
Regarding HIV services in this correctional centre, can you tell me:	
57	Who is **NOT** getting access to HIV treatment? (Probe for why)
58	What are the main challenges constraining the provision of HIV services here in this correctional centre (including referral to services if relevant)?
59	What recommendation do you have to improve the quality of HIV services provided in this correctional centre?
60	What kinds of challenges do patients face in terms of taking their medications?
61	What programs or resources assist with adherence?
Regarding TB testing and treatment, can you tell me:	
62	Which behaviours and practices do you think expose offenders (and staff) to TB infection in this correctional centre?
63	Who is **NOT** getting access to TB screening and treatment? (Probe for why)
64	In your opinion what are the main challenges constraining the provision of TB services in this correctional centre?
65	What recommendations do you have to improve the quality of TB services provided in this correctional centre?

PART 5: CONTINUITY OF CARE *These are the final few question about continuity of care between the correctional centre and the community upon offender release:*			
66	Do you have an established system for continuity of treatment and care for offenders on release from correctional centres?	Yes	No
67	Describe how continuity of care and treatment upon release is currently ensured:		
68	Do you cooperate with other correctional centre staff in jointly preparing offenders for their release (for example, staff meetings to discuss preparations for release and agreed necessary action to ensure both continuity of care and assistance in resettlement after release)? Explain:		
69	Are there any Civil Society Organizations (CSOs) or Non-Governmental Organizations (NGOs) involved in assisting with offenders' health, their preparation for release or resettlement upon release? Which and in what capacity?		
70	What other partner organizations do you work with in the community for continuity of care?		
71	Is a copy of the offenders medical file is given to offenders released from the correctional centre?	Yes	No
72	How is a patient's medical information shared or communicated to community health centre upon release and resettlement?		
73	Are there regular meetings between the correctional centre management and the health care staff in correctional centres?	Yes	No
74	How often do they meet and what is discussed at those meetings? (Probe for what the agenda was for the last meeting and if they do not meet, why not?)		

DCS Data Collection Tool
Community Health Care Worker Interview Guide **v0.1_June 27, 2013**

Clinic	
Location	
Date	
Interviewer	
Respondent Code	

INTRODUCTION. *First I am going to ask you a few questions about yourself and your role at the health facility:*		
1	How long have you been working in health care?	Years
2	What is your actual professional position at this facility?	☐ Doctor ☐ Professional Nurse ☐ Enrolled Nurse Assistant ☐ Counsellor ☐ Social Worker ☐ Laboratory staff ☐ Other, specify
3	How long have you been working at this facility?	Years
Do NOT ask the following two questions, just enter information based on your observation:		
4	*Approximate age of interviewee*	☐ 18-25 ☐ 25-40 ☐ Over 40
5	*Gender of interviewee*	☐ Male ☐ Female ☐ Transgender/unknown

PART 1: SERVICES TO (EX) OFFENDERS *Now I am going to ask you some questions about services provided to offenders and ex-offenders:*				
			Yes	**No**
6	Do you currently provide health care services to offenders?			
	If yes, do they include the following :			
7a	TB services			
7b	HIV services			
7c	STI services			
7d	Other services: specify			
8a	If yes to the above, describe what delivery of these services entails, for example, if offenders present with guards, etc.			
8b	If yes to the above, describe how offender's medications are dispensed:			
9a	Are any clinic staff unwilling to provide services to ex-offenders?	Yes	No	Don't know
9b	If yes, why do you think this might be the case?			
10	Do you receive requests for information or medical files for patients upon their incarceration (as requested by the correctional centre / correctional centre clinic?)		Yes	No
11	If yes, what information is requested? Please explain the process and people involved:			
	Are you contacted by correctional centres / correctional centre clinics about former patients with regards to the following?		Yes	No
12a	Their HIV status and CD4 count			

12b	Their ART medication history		
12c	Their TB status		
12d	Their TB medication history		
12e	Their STI status or history		
12f	Tracing their contacts back to communities and partner notification (for STIs)		
12g	Their primary health needs (e.g., hypertension, diabetes, etc.)		
13	If yes to any of the above, describe this process. (Probe for how soon after incarceration it happens, what is frequently requested, how the information is communicated.)		
14	Do you have an established system for continuity of treatment and care for offenders upon release from correctional centre (with the correctional centre system)?	Yes	No
15	If yes, describe:		
16	Do you cooperate with other correctional centre staff in jointly preparing offenders for their release (for example, staff meetings to discuss preparations for release and agreed necessary action to ensure both continuity of care and assistance in resettlement after release)?	Yes	No
17	If yes, describe:		
18	Are there any Civil Society Organizations (CSOs) or Non-Governmental Organizations (NGOs) involved in assisting with offenders' health, their preparation for release or resettlement upon release? Which and in what capacity?		
19	What other partner organizations do you work with in the community for continuity of care for ex-offenders?		
20	Describe how continuity of care and treatment upon release is currently ensured (especially with regards to HIV, TB, and chronic health care issues? (Include obtaining records or how a patient's medical information is shared or communicated to you upon their release and resettlement).		
21	What are some of the most important challenges for continuity of care with ex-offenders?		
22	What recommendation do you have to improve continuity of care for offenders regarding HIV, TB, and STI care and management?		

DCS Data Collection Tool
Correctional centre Centre Assessment **v0.1**
June 27, 2013

Correctional centre	
Location	
Date	
Interviewer	
Respondent Code	

Correctional centre Centre Assessment – To be conducted with highest level correctional centre centre personnel available		
No.	**Question**	**Coding** *[fill in the blank or circle the appropriate answer]*
PART 1 : CENTRE INFRASTRUCTURE		
1	What is the security level of offenders incarcerated at this	

	correctional centre?	
2	What is the total correctional centre population at this centre?	[__] , [__][__][__] , [__][__][__] OR 88 = Don't Know
3	Are men and women separated?	Yes OR No
4	What is the capacity and actual occupation rate of the correctional centre? a) Total b) Men c) Women d) Male minors < 18 years e) Female minors < 18 years	Capacity / Actual Rate a) b) c) d) e)
5	What percentage of offenders are awaiting trial?	Number of offenders: [__][__] OR 88 = Don't Know
6	Among sentenced persons, what is the percentage of those sentenced to less than 2 years and those sentenced to more than 5 years?	____% less than 5 years ____% more than 5 years
7	What is the annual offender turnover rate of this centre? (admissions per year divided by the average census)	
8	What is the percentage of repeat offenders at this centre?	
9	What are the percentages of all foreign nationals at this centre?	
10	What is the number and type of offender staff?	
11	What is the process for staff to access healthcare following an occupational exposure?	
12	What is the % of offenders diagnosed as mentally ill (i.e., offenders with depression, schizophrenia, manic depressive disorder etc.) by a licensed psychiatrist or psychologist?	

PART 2: POLICY AND PROCEEDURES	
13	What is the policy regarding place of detention of offenders in relation to location of homes?
14	What are the procedures for offender transfer between centres and offender release? How do offenders move through the system?

DCS Data Collection Tool
Correctional Centre Health Care Clinic Assessment **v0.1**
June 27, 2013

Correctional Centre	
Location	
Date	
Interviewer	
Respondent Code	

Correctional Centre Health Care Clinic Assessment – To be conducted with relevant individuals at the correctional centre clinic		
No.	Question	Coding *[fill in the blank or circle the appropriate answer]*
PART 1 : HEALTHCARE CENTRE INFRASTRUCTURE		
1	Is there a structure designated as a clinic?	Yes No

2	Where is the clinic located?	
3	What are the centres opening times and days?	Days [__][__][__][__][__][__][__] Times [__][__][__][__][__][__][__][__][__][__][__][__]
4	Do you have 24-hour, on-call, or emergency staffing for medical services?	Yes - Who provides this service? No - Where are people referred for medical care?
5	Do you have 24-hour, on-call, or emergency staffing for pharmacy services?	Yes - Who provides this service? No - Where are people referred for medical care?
6	On average, how many clients does the centre serve each day?	Number of clients: [__][__][__][__] OR 88 = Don't Know
7	On average, how many clients under 18 and how many clients 18 and older does the centre serve each month?	Number of clients under 18: [__][__][__][__] OR 88 = Don't Know Number of clients 18 or older: [__][__][__][__] OR 88 = Don't Know
8	On average, how many pregnant clients does the centre serve each month?	Number of clients: [__][__][__][__] OR 88 = Don't Know

	Inquire about availability of the following:	Reported available and visualized	Reported available, not visualized	Reported not available
9	Means of visual privacy			
	Means of auditory privacy			
	Working thermometer			
	Working blood pressure cuff			
	Working scale			
	Gloves			
	Surgical masks			
	N95 Masks			
	Running water			
	Sharps disposal container			
	Hand Washing Items			
	If women are at the institution, speculums			
	Access to internet services for clinic staff			

PART 2: STAFFING AND TRAINING

For each of the staff categories, indicate the number of staff assigned and present on the day of the assessment, those assigned but not present, and positions unfilled:

10		Full-time present today	Full-time not present today	Full-time position unfilled	Part-time present today	Part-time not present today	Part-time position unfilled
	Physician/doctor						
	Clinical officers						
	Professional nurse						
	Enrolled Nurse						
	Nursing Assistant						
	Psychologist/Psychiatrist						
	Social Worker						
	Adherence Counsellor						
	Data Manager						
	Data Capturer						
	Mental health care staff						

	How many staff have left their job in the last 12 months?	Number:				
11	Nurses					
	Doctors					
	Other					
12	If an offender desires to be seen at this clinic, how do they make an appointment or access services?					
13	Does supportive outreach to this centre happen from other centres?					0 = No 1 = Yes
14	If yes, what kind and how often?		Once per week (or more)	Twice per month	Once per month	Less than once per month
		Dental				
		Occupational Therapy				
		Dietary				
		Nutritional				
		Mental Health				
		Speech Therapy				
		Other:				
		Other:				
		Other:				
		Other:				
		Other:				
15	If services are not available directly at this centre, where are offenders taken for the following services	Emergency services				
		Labour and Delivery				
		Drug-resistant TB management				
		Mental healthcare				
		Drug rehab				
		Medical specialty services (i.e. oncology, orthopaedics, etc.				
16	What is the process for referral to outside medical services?					
17	What is the process for transport to outside medical services?					
	Describe any current HIV prevention program for offenders in your centre addressing the following:					
18a	HIV Testing and Counselling					
18b	Condom Promotion					
18c	Targeted information on risk reduction and HIV education					
18d	Stigma and Discrimination					
18e	STIs					
18f	HIV treatment					
19	Describe any current TB prevention programme for offenders in your centre:					
20	Does South Africa have laws, policies, or regulations that present obstacles to effective HIV prevention, treatment, care, and support for offenders		Yes No			
21	If yes, briefly describe the content of these laws, regulations or policies and briefly comment on the degree to which these policies are currently implemented					
22	How are trainings organized for the health care workers at this correctional centre?					
23	Who conducts the trainings?					
24	If recent trainings were conducted, can we see a	Please write the names of any recent trainings,				

	copy of the training manuals?	and the sponsor organization:			
25	Does the Regional Training Centre (RTC) conduct trainings for the correctional centre health care workers?	Y	N	Don't know	
26	Do any other groups conduct trainings?	Y (list)	N	Don't know	
27	Are trainings adapted to the correctional centre setting?	Yes No Don't know			
PART 3: HEALTH SERVICES AND INFECTION CONTROL					
28	How many health care workers at your centre initiate the following:	Antiretroviral therapy			
		TB treatment			
		MDR TB Treatment			
		XDR TB Treatment			
		PMTCT			

29	Which of the following laboratory services are available:	No	Yes	Turn-around time	Where is the lab sent or conducted? S=on site O=Off site(list)
	CD4				S /O _____
	HIV Viral Load				S /O _____
	Sputum microscopy for AFB				S /O _____
	Sputum culture for AFB				S /O _____
	Sputum drug susceptibility testing				S /O _____
	GeneXpert				S /O _____
	TST (TB Skin Test)				S /O _____
	FBC (Full Blood Count)				S /O _____
	Hb (Haemoglobin)				S /O _____
	Creatinine Clearance				S /O _____
	Glucose				S /O _____
	Cryptococcal antigen				S /O _____
	Radiology services				S /O _____
	Rapid HIV testing				S /O _____
	HIV ELISA				S /O _____
	Rapid Syphilis				S /O _____
	RPR/VDRL (syphilis testing)				S /O _____

30	Are there system limitations in obtaining any of the above laboratory results?	☐ Yes ☐ No	
31	If yes, what are they?		
32	What happens when someone is HIV+ but does not qualify for ARVs? (Probe for what care is available; how often patients are seen; how they are contacted, etc.)		
33	What is the average delay in days between HIV diagnosis and treatment initiation	____ days	
34	Do you have PEP (Post-Exposure Prophylaxis) available for occupational exposure for clinical staff?		0 = No 1 = Yes
35	Do you have PEP (Post-Exposure Prophylaxis) available for occupational exposure for correctional centre staff?		0=No 1 = Yes
36	Do you have PEP available for rape cases that occur while incarcerated for offenders?		0=No 1 = Yes
37	Do you have a PEP Policy?		0 = No 1 = Yes
38	Do you have a centre infection control policy/plan?		0 = No 1 = Yes

39	Do you have a plan for triage of TB suspects?			0 = No 1 = Yes
40	If so, please describe?			
41	Are TB patients isolated?	0=No 1=Yes		
42	If yes, describe:			
43	Where are patients with drug resistant TB treated?			
PART 4: QUALITY IMPROVEMENT AND DATA				
44	Do you currently have a CQI (Continuous Quality Improvement) plan in place?			0 = No 1 = Yes
45	If yes, what does the plan include?			
46	Do you use data from registers and files to formulate CQI?			0 = No 1 = Yes
	Tools / registers used to track patient records			
47	**Tools retained by clinic**		No	Yes
	HCT register (counselling and testing)		0	1
	HIV patient register (pre-ART)		0	1
	ARV register (ART)		0	1
	TB Case Identification and follow up register		0	1
	Tuberculosis register (Admission)		0	1
	Other:		0	1
	Other:		0	1
	Other:		0	1
48	**Tools retained by patient:**		No	Yes
	PHC/OPD Book (Booklet with progress notes, medications and TCA date – not disease specific)		0	1
	Patient Treatment Card (Green card with ART information)		0	1
	Maternity Record Booklet (with ANC information)		0	1
	Road to Health Card (for paeds)		0	1
	Other:		0	1
	Other:		0	1
	Other:		0	1
49	**Any patient referral tools? (list)**			
PART 5: HEALTH INFORMATION SYSTEMS				
50	Are you using the 3Tier.Net system?			0 = No 1 = Yes
51	If no, tell us about any plans for electronic data programs			
52	If yes which phase is the centre in (phase I, phase II, or phase III)?			1 = Phase I 2 = Phase II 3 = Phase III
53	Do you have an appointment system at the centre that shows when patients are due back for follow up HIV and TB care?			0 = No 1 = Yes
54	If yes please describe?			
55	How do you track whether a patient has missed a follow up appointment?			
56	How do you re-engage those patients in care?			
57	How do you receive patient medical information from PHCs in the community?			
58	How do you transfer medical information to PHCs in the community upon an offender's release?			
PART 6: PHARMACY/MEDICATIONS *[Respondent may need to consult with a pharmacist or check for stock outs. Ask to see pharmacy or wherever medications are stored]*				

59 Are antiretroviral drugs for HIV dispensed here?		0 = No → Skip to 62 1 = Yes		
60	Are ART drugs available for adults?	Never available	Currently out of stock	Available
	Fixed Dose Combination (FDC)	0	1	2
	Tenofovir (TDF)	0	1	2
	Zidovudine (AZT)	0	1	2
	Lamivudine (3TC)	0	1	2
	Combivir (AZT/3TC)	0	1	2
	Stavudine (d4T)	0	1	2
	Abacavir (ABC)	0	1	2
	Didanosine (ddI)	0	1	2
	Emtricitabine (FTC)/Truvada	0	1	2
	Nevirapine (NVP)	0	1	2
	Efavirenz (EFV)	0	1	2
	Lopinavir/Ritonavir (LPV/r)	0	1	2
	Atazanavir (ATV)	0	1	2
	Darunavir (DRV)	0	1	2
	Etravirine (ETV)	0	1	2
	Raltegravir (RAL)	0	1	2
	Ritonavir (RTV)	0	1	2
	Fixed Dose Combination (FDC)	0	1	2
61	If children < 13 are in the centre, Are ART drugs available in paediatric formulations?	Never available	Currently out of stock	Available
	Zidovudine (AZT)	0	1	2
	Lamivudine (3TC)	0	1	2
	Emtricitabine (FTC)	0	1	2
	Nevirapine (NVP)	0	1	2
	Stavudine (d4T)	0	1	2
	Efavirenz (EFV)	0	1	2
	Lopinavir/Ritonavir (LPV/r)	0	1	2
	Abacavir (ABC)	0	1	2
	Didanosine (ddI)	0	1	2
62	Are TB drugs available	Never available	Currently out of stock	Available
	Isoniazid (INH) 300 mg	0	1	2
	Isoniazid (INH) 100 mg	0	1	2
	Isoniazid, Rifampicin, Ethambutol, Pyrazinamide	0	1	2
	Isoniazid, Rifampicin 30/60	0	1	2
	Isoniazid, Rifampicin 60/60	0	1	2
	Streptomycin	0	1	2
	Ethambutol	0	1	2
	Kanamycin	0	1	2
	Moxifloxacin	0	1	2
	Ethionamide	0	1	2
	Terizidone	0	1	2
	Pyrazinamide	0	1	2
	Capreomycin	0	1	2
	PAS	0	1	2
	Clofazimine	0	1	2
63	Are any of the following drugs available for treatment or prevention of STIs and/or opportunistic	Never available	Currently out of stock	Available

	infections?			
	Bactrim	0	1	2
	Fluconazole	0	1	2
	Doxycycline	0	1	2
	Ciprofloxacin	0	1	2
	Metronidazole	0	1	2
	Acyclovir	0	1	2
	Cefixime	0	1	2
	Ceftriaxone IV	0	1	2
	Benzathine Penicillin	0	1	2
	Amoxicillin	0	1	2
64	How are medications dispensed?			
65	Where are medications kept?			
66	What tracking methods are used to monitor for patient medication adherence?			
67	What pharmacovigilence measures are in place?			
68	Tell us about the supply process for medications:			
69	If patients must come to the clinic for DOT, who brings the patients?			
70	At what time of day are patients brought to the clinic for DOT?			

Nurse (Professional Nurse, Enrolled Nurse, and Enrolled Nursing Assistant)

TRAINING AUDIT

Dear Participant: Thank you for participating in this audit. The purpose of the audit is to determine the current status of skills and knowledge available. The information gained from the audit will be used solely to assist and empower you to provide quality care for your patients as well as help develop your personal development plans.

This questionnaire must be completed by Professional Nurse, Enrolled Nurse and Enrolled Nursing Assistant.
Once completed, kindly hand in the document to the relevant department.

Tick or fill in the appropriate **white** boxes

Demographic Profile										
Title	Prof.		Dr.		Mr.		Mrs.		Ms.	
First Name							**Middle Name**			
Surname										

Government Employee	Yes		No		**Professional Registration #**	
Professional Regulatory Council					**PERSAL Number**	

Nationality	South African	Non-South African*	*Specify nationality if Non South African:
I.D. Number			
Passport Number (If Non-South African)			
Date of Birth			

Gender			
Male		Female	

Race							
African		Asian		Coloured		White	

Disability	Yes		No	
If Yes, Nature of disability				

Occupation Category

Professional Nurse		Enrolled Nurse		Enrolled Nursing Assistant	
Nurse Supervisor		Matron		Other (Please specify):	

Contact Details			
Mobile Number		Fax Number	
Work Number		Email Address	

Province of Employment									
Eastern Cape		Free State		Gauteng		Kwa Zulu Natal		Limpopo	
Mpumalanga		Northern Cape		North West Province		Western Cape		National	

District of Employment	District Name	
Sub-District of Employment	Sub-District Name	

Facility of Employment	
Facility Name 1 (Primary)	
If rotational staff, and working at more than 1 facility, list additional facilities below:	
Facility Name	
Facility Name	
Facility Name	

Facility Type					
Clinic		Community Health Centre		District Hospital	
Regional Hospital		Tertiary Hospital		Other (Please Specify):	

If hospital , specify the unit/ ward/department			
Casualty		OPD	
Occupational Health Services		TB	

Do you manage patients with HIV?	YES	NO
If Yes, from which year?		

ART Clinic		Paediatrics	
Maternal Obstetric Unit		Other (Please Specify):	

Based on amount of time spent with each patient group, rank them 1-3 accordingly (Example: Adults 1, Pregnant Woman 2 and Children 3) (Percentage %)								
Pregnant Woman		%	Adults		%	Children		%

SECTION A

1. How are you supervised?	On-site		Off-site		No supervision						
2. What is the frequency of your supervision?	Daily		Weekly Visits		Monthly Visits		Telephonic access		Other (Specify):		
3. What is your supervisor's profession?											

4. Are you a…?	Master Trainer		Facility Trainer		Nurse initiating ART		N/A or none	
	Nurse Mentor		If a Nurse Mentor, which training institution?					

5. Indicate the training received since 2007 - (Specify training related to HIV Care and treatment):

		X	Year	Training Institution			X	Year	Training Institution
Training Categories	Adherence Issues				**Training Categories**	PMTCT			
	Advanced HIV, AIDS, STI					Positive Prevention			
	Basic HIV, AIDS, STI					Post-Exposure Prophylaxis			
	Counselling Skills					Syndromic Management of STIs			

Dispensing				TB				
Drug Side Effects & Interactions				Other, specify				
HIV Counselling & Testing								
IMCI								
Infection Control & Universal Precautions								
Maternal & Child Health								
Mental Health & Substance Abuse Counselling								
NIMART								
Opportunistic Infections								
Paediatric HIV								
PALSA Plus								

SECTION B

Please rate your competence and confidence using the rating scale for the following questions.

Key:

Competence: Adequate training received in skills and knowledge.

Confidence: Feel comfortable to carry out the tasks in your daily practice.

Rating Scale:

A - Fully competent and confident; able to teach others (mentor).

B - Fully competent; not able to teach other (not able to be a mentor).

C - Capable; would like to receive refresher training.
D - Not capable; would like to receive training.
E - Not currently in my job description/ duties.

Category	Clinical Competency Tasks *"Do you feel competent and confident to..."*	A	B	C	D	E
Adult HIV Care	1) Take an appropriate history of all patients? (e.g., medical, family, reproductive, and HIV history)?					
	2) Perform head to toe physical examination?					
	3) Advise HIV-positive patients to encourage partners and children to test?					
	4) Provide all patients with HIV counselling and testing using the PICT model?					
	5) Screen for and manage opportunistic infections?					
	6) Stage patients according to WHO and SA guidelines?					
	7) Interpret blood results (e.g., viral load, CD4 count, ALT, FBC, Creatinine Clearance, and HepB)					
	8) Prescribe ARVs to all HIV positive patients and provide follow up care (NIMART/ART initiation)?					
	9) Discuss all medications including possible drug interactions?					
	10) Discuss the importance of treatment adherence with all patients about to begin or already on ARVs?					
	11) Follow up with patients on ARVs who do not show up for appointments?					
	12) Initiate and manage support groups?					
	13) Treat the common ART side effects in all patients?					
	14) Screen for and treat HIV-positive patients with TB?					
	15) Identify and treat a patient with clinical depression?					
	16) Provide mentorship support for lay counsellors?					
	17) Provide mentorship to other nurses new to initiation and HIV care?					
	18) Provide the correct level of referral for treatment when required?					
	19) Discuss how to avoid infecting a sexual partner with HIV with an HIV-positive patient?					
	20) Provide family planning for HIV-positive patients?					
	21) Discuss rights and access for HIV-positive patients?					
Category	**Clinical Competency Tasks**	**A**	**B**	**C**	**D**	**E**

	"Do you feel competent and confident to..."					
Paediatric HIV Care	1) Correctly diagnose, classify, and treat HIV positive infants and children? (Initiate eligible infants on ART)					
	2) Treat ARV side effects in children? (Monitor baseline and routine blood test periodically; interpret blood results, e.g., viral load, CD4 count (%), Creatinine Clearance, FBC, LFT (ALT))					
	3) Correctly treat an HIV-positive child with TB and on ARV therapy?					
	4) Provide counselling for HIV-positive children and their caregivers?					
	5) Monitor the nutritional status of HIV-positive children?					
	6) Explain the importance of ARV adherence to HIV-positive children and their caregivers?					
	7) Disclose HIV status to children?					
	8) Follow up with HIV-positive children who miss their appointments?					
	9) Provide the correct level of referral for treatment when required?					
Category	**Clinical Competency Tasks**					
	"Do you feel competent and confident to..."	**A**	**B**	**C**	**D**	**E**
Tuberculosis	1) Recognise and correctly diagnose TB in patients?					
	2) Initiate treatment and manage all patients with TB?					
	3) Manage TB / HIV / HBV co-infected patients?					
	4) Discuss adherence to TB treatment and implications if treatment is not taken as prescribed or completed?					
	5) Follow up with the smear negative patient and diagnose treatment failure?					
	6) Manage MDR and XDR in co-infected patients?					
	7) Manage the common ART side effects in TB patients?					
	8) Provide the correct level of referral for treatment when required?					
Category	**Clinical Competency Tasks**					
	"Do you feel competent and confident to..."	**A**	**B**	**C**	**D**	**E**
STIs	1) Discuss STIs and implications for acquiring and transmitting HIV (while promoting the use of condoms)?					
	2) Recognise and correctly diagnose and provide syndromic management of STIs in patients?					
	3) Manage a patient with a positive syphilis result?					
	4) Follow up with patients who do not show up for appointments?					
	5) Provide the correct level of referral for treatment when required?					

Category	Clinical Competency Tasks *"Do you feel competent and confident to..."*	A	B	C	D	E
PMTCT	1) Counsel and test pregnant women for HIV?					
	2) Provide BANC using integrated BANC/HIV checklist during the Antenatal period?					
	3) Perform PAP smears?					
	4) Initiate ART prophylaxis and treatment for HIV-positive women during pregnancy, labour, and postnatal periods?					
	5) Recognise and treat common ART side effects in HIV-positive pregnant women?					
	6) Counsel and provide appropriate contraception to HIV-positive women?					
	7) Counsel for and terminate unwanted pregnancies; counsel women and partner/family on postnatal care; provide Cotrimoxazole prophylaxis?					
	8) Correctly treat HIV-positive pregnant and lactating women with TB/HBV co-infection who are also on ART?					
	9) Follow up with HIV-positive pregnant women who miss their appointments?					
	10) Provide the correct level of referral for treatment when required?					
	11) Collect DBS-PCR from all HIV-exposed infants?					
	12) Promote, monitor, and support safe infant feeding?					
	13) Promote correct childhood immunisations for HIV-exposed children?					
Category	**Clinical Competency Tasks** ***"Do you feel competent and confident to..."***	**A**	**B**	**C**	**D**	**E**
Post Exposure Prophylaxis	1) Provide care for sexually assaulted adults and children, including HIV prophylaxis?					
	2) Provide prophylactic treatment to HIV-exposed patients?					
	3) Protect yourself from HIV exposure, e.g., needle stick injury?					
	4) Apply the protocol for occupational exposure?					
	5) Provide the correct level of referral for treatment when required?					
Category	**Clinical Competency Tasks** ***"Do you feel competent and confident to..."***	**A**	**B**	**C**	**D**	**E**
Guidelines: (Answer Those Relevant to You)	1) Understand and use the 2007 guidelines on nutrition for people living with HIV, AIDS, TB, and other chronic debilitating conditions?					
	2) Understand and use the CCMT/ART guidelines for adults and children?					
	3) Understand and use the Sexual Assault Management guidelines?					

	4) Understand and use the Contraceptive Management guidelines?					
	5) Understand and use the Choice on Termination of Pregnancy Act (No. 92 of 1996)?					
	6) Understand and use the National STI syndromic management guidelines?					
	7) Understand and use the Prevention of Mother to Child Transmission guidelines?					
	8) Understand and use the Maternity guidelines?					
	9) Understand and use the National TB Control guidelines?					
	10) Understand and use the IMCI booklet?					
	11) Understand and use the National HIV Counselor Mentorship guidelines?					

Category	Clinical Competency Tasks	Yes	No
OTHER	1) Do you require additional training or mentoring to perform your tasks?		
	2) If yes, specify these needs.		
	3) Would you like to become a nurse mentor?		
	4) Do you feel prepared to become a nurse mentor?		

correctional services

Department:
Correctional Services
REPUBLIC OF SOUTH AFRICA