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Decentralized Care of Drug Resistant Tuberculosis in KZN

Mrs. N. Misra

Pharmacy Manager: KDHC

7 October 2016

Presented at the AWACC Conference held at the ICC

King Dinuzulu Hospital Complex



MDR Multistory Building



PSYCHIATRIC HOSPITAL



DISTRICT HOSPITAL

Challenges

- South Africa is the **3rd high burden TB country in the world.**
- **Delays in treatment initiation,**
- inadequate bed capacity and
- High defaulter rate
- poor treatment outcomes.
- System challenges

Priority Area: OCTOBER 2014

	No. of patients awaiting MDR TB initiation as at 20 October 2014
Total Number of patients awaiting OP MDR TB Treatment initiation	43
Total Number of patients awaiting IP MDR TB Treatment initiation	62
TOTAL	105

Waiting between one to six weeks – average of 21 days

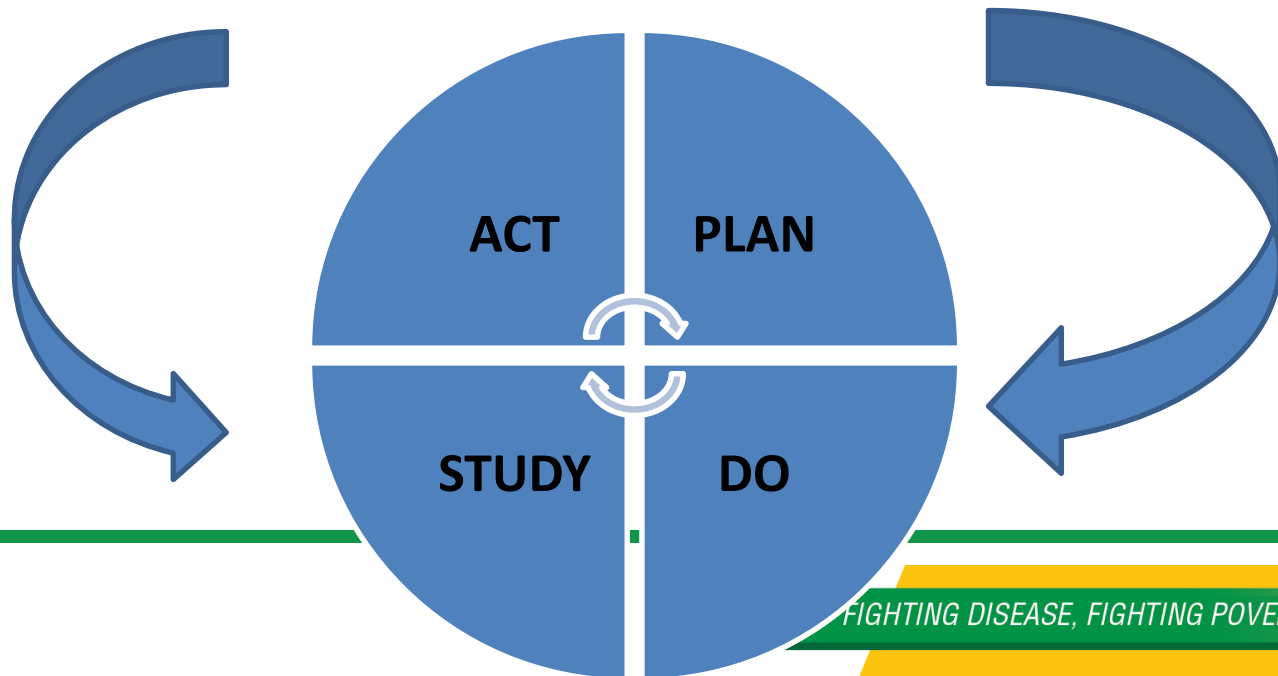
TARGET = 5 DAYS

Model For Improvement

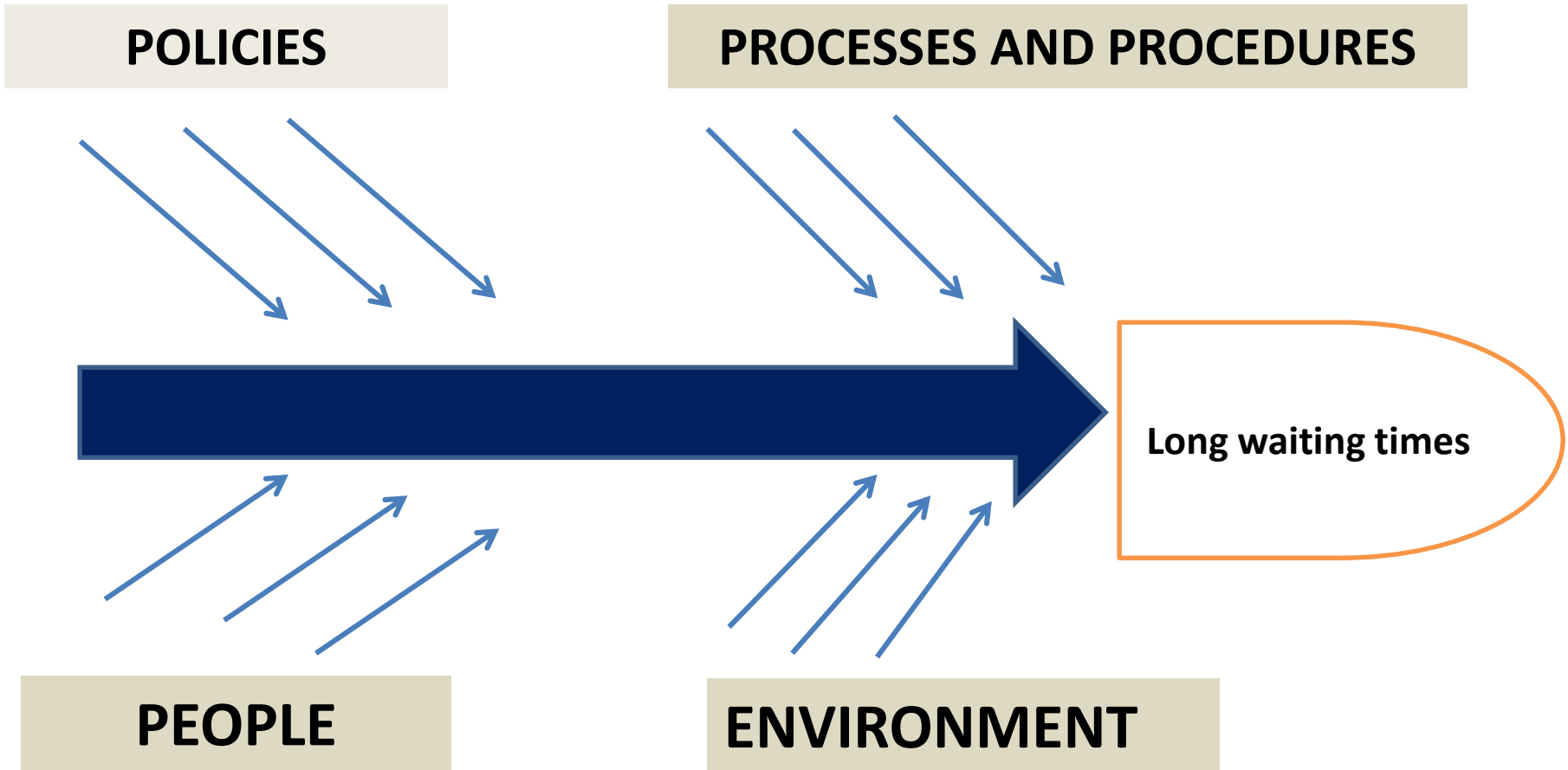
What are we trying to accomplish?

What change can we make that will result in improvement?

How will we know that a change is an improvement?



ROOT CAUSE ANALYSIS



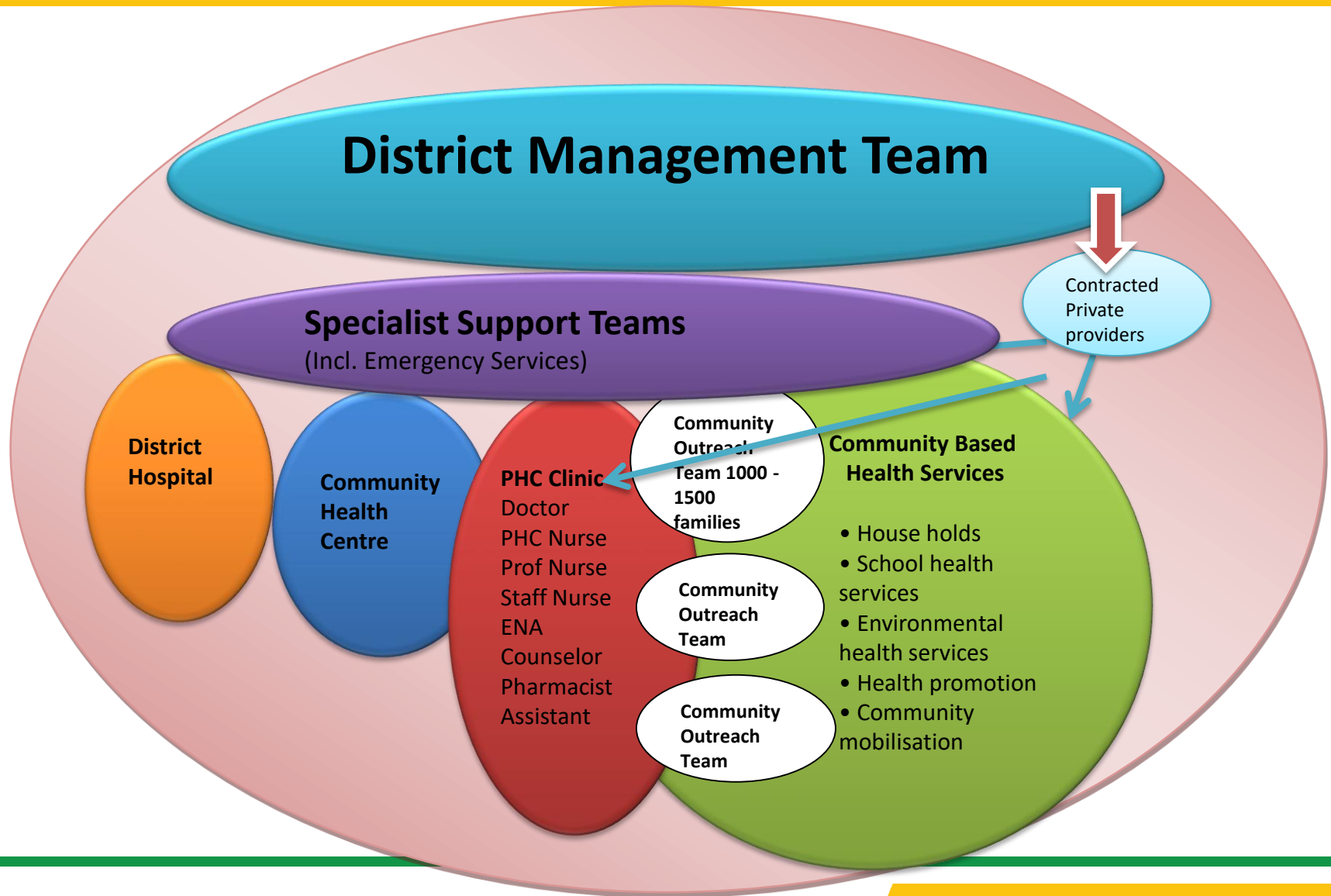
SWOT Analysis

Strengths

- Expertise
- Good Policy Framework
- Dedicated, committed staff
- Access to Medicine
- Partners
- KZN informed the policy on decentralization in 2011

Weaknesses

- Fear of TB
- Lack of knowledge
- HR constraints
- Lack of referral pathways
- Access to audiology services





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Access to Medicine



Hospital level
adult, 2015



Hospital level
Paediatric, 2013



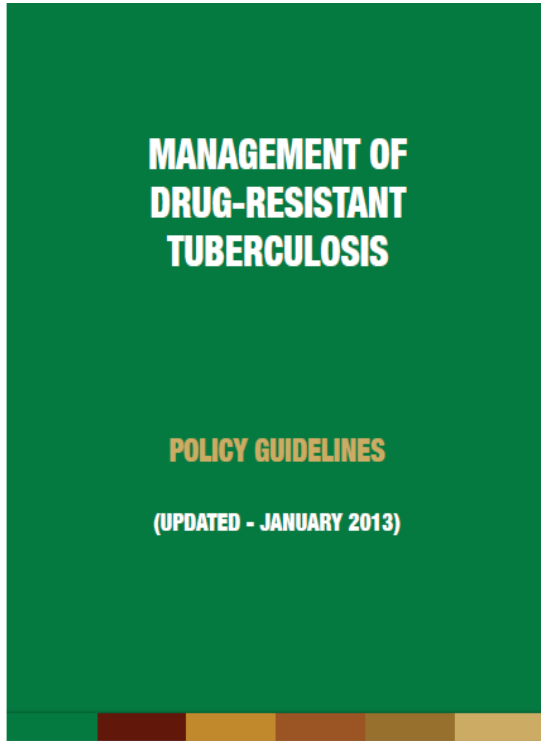
PHC Level , 2014



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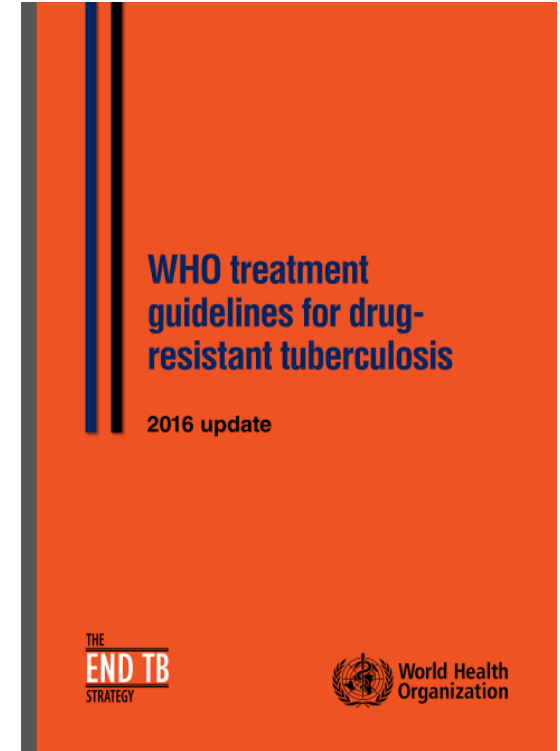
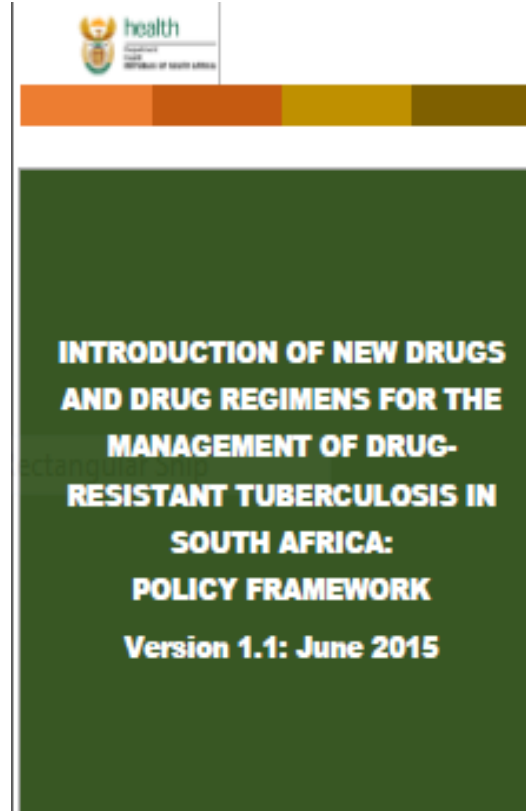
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Latest Tuberculosis Guidelines



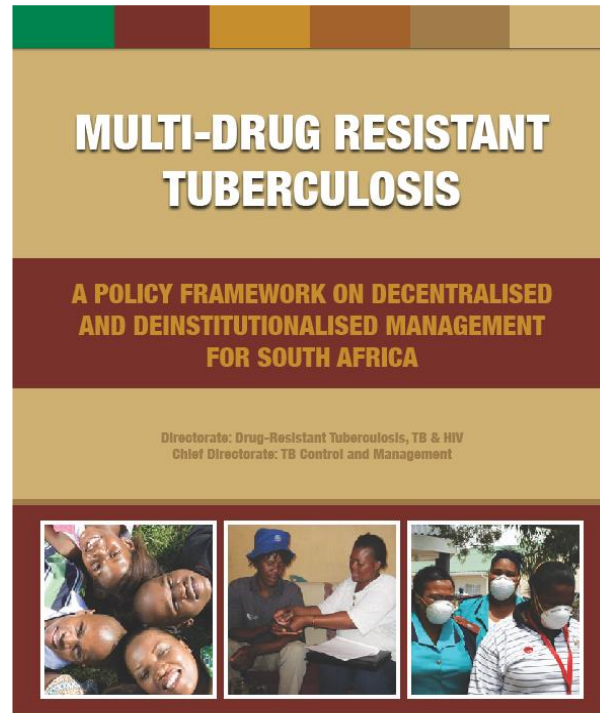
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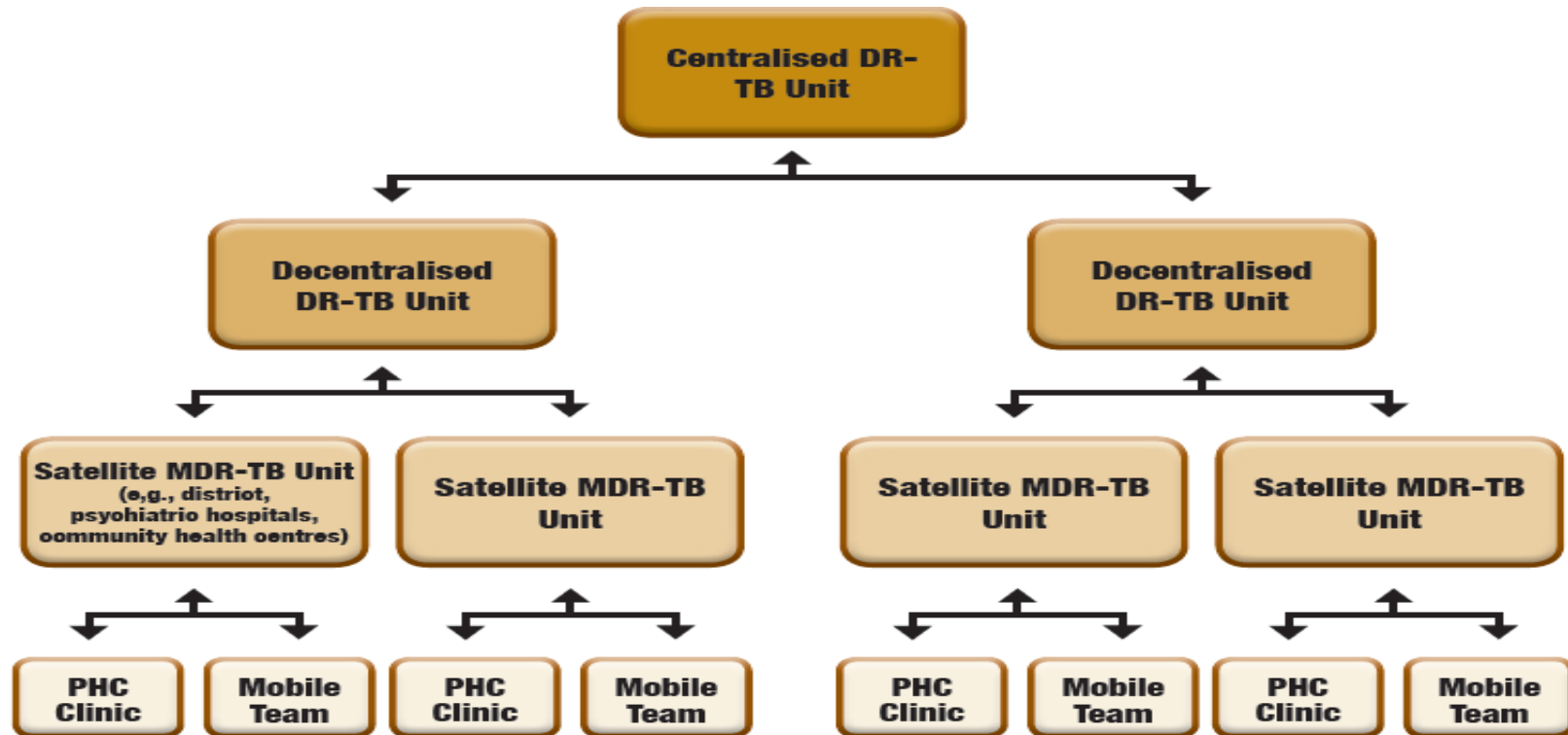




Translate Policy into Practice



Access to DR TB Medicine is competency based



Satellite MDR-TB Unit exist to complement bed capacity of decentralised sites. They are essentially transitional and should be capacitated to become decentralised sites. Mobile teams are to be attached to PHC services but operate within the community.



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Q: How do you eat an elephant?

A: One bite at a time...





Translating Policy into Practice

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KING DINUZULU HOSPITAL COMPLEX
POLICY AND PROCEDURE

POLICY TITLE : **Initiation of Drug Resistant Tuberculosis (DR TB) treatment at Decentralized Sites**

POLICY NO : EThekwini DR TB 2

INPUT : H. Sunpath, S. Fynn, Dr. K. Naidu, I. Master
Dr. S. Maharaj, S. Chotoo, N. Singh, N. Misra,
Dr. T. Govender

EFFECTIVE DATE : November 2014

REVIEW DATE : November 2015

SIGNATURE :
EThekwini District Manager (Mr. Yose)

APPROVED :
Regional Manager (Dr. Sewlal)

Department of Health KZN: EThekwini District: Activation of Decentralized Sites
01/12/2014 Author : N. Misra, Pharmacy Manager, KDHC, November 2014

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KING DINUZULU HOSPITAL COMPLEX
POLICY AND PROCEDURE

POLICY TITLE : **Down Referral of Stable MDR TB patients from KDHC Centralized MDR TB unit to Satellite Sites (Hospitals and CHCs)**

POLICY NO : EThekwini DR TB 1

INPUT : H. Sunpath, S. Fynn, Dr. K. Naidu, I. Master,
Dr. S. Maharaj, N. Misra, S. Chotoo, N. Singh,
Dr. T. Govender

EFFECTIVE DATE : November 2014

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Department of Health KZN: EThekwini District
01/12/2014 Author : N. Misra, Pharmacy Manager, KDHC, November 2014

Key Definitions and Roles

Centralised MDR-TB unit (KDHC)

initiating treatment and monitoring patients with

- extensively drug -resistant TB (XDR-TB)
- pre – XDR TB
- selected patients with MDR TB such as those with complications, co-morbidities, or those who live near the unit.
- paediatric patients.
- Roll out of new drugs – BDQ, LZD, Delaminid

Key Definitions and Roles

➤ Centralised MDR-TB unit (KDHC)

- support and advise the provincial TB Directorate, decentralized sites and satellite sites regarding the clinical management of DR-TB in the province.



Key Definitions and Roles

Decentralised DR-TB units

- initiating treatment and monitoring patients with **MDR-TB (resistance to rifampicin and isoniazid)**.

Key Definitions and Roles

**Satellite MDR-TB units will not initiate
treatment of DR-TB cases but will issue
treatment, monitor adherence and response to
treatment and side effects in patients that were
initiated at centralised or decentralised units.**

Decentralized Management – prior to 2014

District	Decentralized Site
UMgungundlovu	Doris Goodwin
UMkhanyakude	Hlabisa, Manguzi
UThungulu	Catherine Booth
UGu	Murchison
Zululand	Thulasizwe
UMzinyathi	Greytown
Sisonke / Harry Gwala	St. Margaret



Additional Sites – November 2014 - 2016

Hospital	District
Don McKenzie Hospital	EThekwini
Charles James	EThekwini
Madadeni	Amajuba
Montebello	ILembe
Escort	UThukela

Amaoti Clinic	KwaMashu Chest Clinic	Osindisweni Hospital
Amatikwe Bhekimpilo (NGO) Clinic	KwaNdengezi Clinic	Ottawa Clinic (LA)
Amatikwe Mission Clinic	KwaNgcolsi Clinic	Peaceville Clinic
Besters Clinic (LA)	Lindelani Clinic	Phoenix CHC
Caneside Clinic (LA)	Luganda Clinic (LA)	Quadi Clinic
Clermont Clinic	Mahatma Ghandi Hospital	Redcliffe Clinic (LA)
Fredville Clinic (LA)	Maphephetheni Clinic	Sandasonke Bhekimpilo (NGO)
Goodwins(LA)	Marianridge Clinic	Sivananda Clinic
Hally stott Clinic	Molweni Clinic	St Marys Hospital
Hambanathi Clinic	Mpola Clinic (LA)	Starwood Clinic
Hlengimpilo Bhekimpilo (NGO)	Mpumalanga Clinic	Stonebridge Clinic (LA)
Hlengisizwe CHC	Msunduzi Clinic	Tongaat CHC
Inanda C CHC	Mzamo Clinic (LA)	Trenance Park Clinic (LA)
Inanda Day Bhekimpilo (NGO) Clinic	Nagina Clinic (LA)	Tshelimnyama Clinic
Inanda Seminary Clinic	New Germany Clinic (LA)	Verulam Clinic (LA)
Klaarwater Clinic (LA)	Newtown A CHC	Waterfall Clinic (LA)
Kloof Clinic (LA)	Ntshongweni Clinic	Waterloo Clinic (LA)
KwaDabeka CHC	Ntuzuma Clinic	Whyebank Clinic (LA)
KwaMashu B (LA)	Oakford Clinic	Zwelibomvu Clinic

Adams Clinic(LA)	Osizweni Clinic
Amanzimtoti Clinic (LA)	PMMH Gateway clinic
Athlone Park Hall satellite Clinic	PMMH Hospital
Bhekimpilo Kuhlekwethu Clinic	Umbumbulu Clinic
Bhekulwandle Bhekimpilo Clinic	Umkomaas Clinic (LA)
Clairwood Hospital	Umlazi AA Clinic (LA)
Cragieburn Clinic (LA)	Umlazi D Clinic
Dhanganya Clinic	Umlazi G Clinic
Ekuhlengeni Hospital	Umlazi H Clinic
Emandleni Bhekimpilo Clinic	Umlazi K Clinic
Folweni Clinic	Umlazi L Clinic
Hlengisizwe Bhekimpilo Clinic	Umlazi N Clinic
Illovo Clinic (LA)	Umlazi U21 Clinic
Isipingo Clinic (LA)	Umlazi V Clinic
Isipingo Hospital (LA)	Umnini Clinic
Kingsburgh Clinic(LA)	Lamontville Clinic (LA)
Kingsway Hospital	Iuganda Clinic
Kusakusa Clinic	Magabheni Clinic
Kwamakhutha Clinic	Nsimbini Clinic
	Odidini Clinic

Addington Gateway clinic	Montclair sea View Hall (LA)
Addington Hospital	Overport Clinic (LA)
Austerville Clinic (LA)	Pinetown Clinic (LA)
Bayview Clinic (LA)	Prince Cryil Zulu CDC (LA)
Beatrice Street Clinic	Queensburgh Clinic (LA)
Bluff Clinic (LA)	Redhill Clinic (LA)
Cato Manor Clinic	RKK gateway clinic
Chesterville Clinic (LA)	RKK Hospital
City Hospital	Sea Cow Lake Clinic (LA)
Claire Estate Clinic (LA)	Shallcross Clinic (LA)
Commercial City Clinic	St Augustines Hospital
Glen Earle Clinic (LA)	Sydenham Heights Clinic (LA)
IALCH	Township Clinic (LA)
King Dinuzulu Hospital	Umhlanga Clinic (LA)
King Edward VIII Hospital	Westville Clinic (LA)
La Lucia Clinic (LA)	Westville Correctional Services
Lancers Road Clinic	Woodhurst Clinic (LA)
McCord Hospital	Grove End Clinic (LA)
Merebank Clinic (L/A)	

Satellite Sites

- 4 in EThekweni – Phoenix CHC, Inanda CHC, Tongaat CHC, Kwamashu CHC
- Access to predispensed DR TB medicine.

ACCESS IS COMPETENCY BASED.

WWH, CLAIRWOOD, CDC

Feeder Clinics for CHC activated as Satellite Sites

*KWAMASHU CHC	*TONGAAT CHC	*PHOENIX CHC	*INANDA CHC
GOODWINS	TERRENECE PARK(LA)	STARWOOD	AMAOTI
LINDELANI	VERULAM (LA)	CANESIDE (LA)	QADI
NTUZUMA	REDCLIFF (LA)	GROVE END (LA)	SIVANANDA
KWAMASHU B	HAMBANATHI	STONE BRIDGE (LA)	INANDA SEMINARY
BESTER	OTTAWA (LA)		AMATHIKWE MISSION
SANDASONKE BHEK			INANDA DAY
NEWLAND EAST (LA)			HLENGIMPILO
NEWLANDS WEST			
GLEN EARL			

Impact of translating policy into practice (Nov 2014 – Nov 2015)

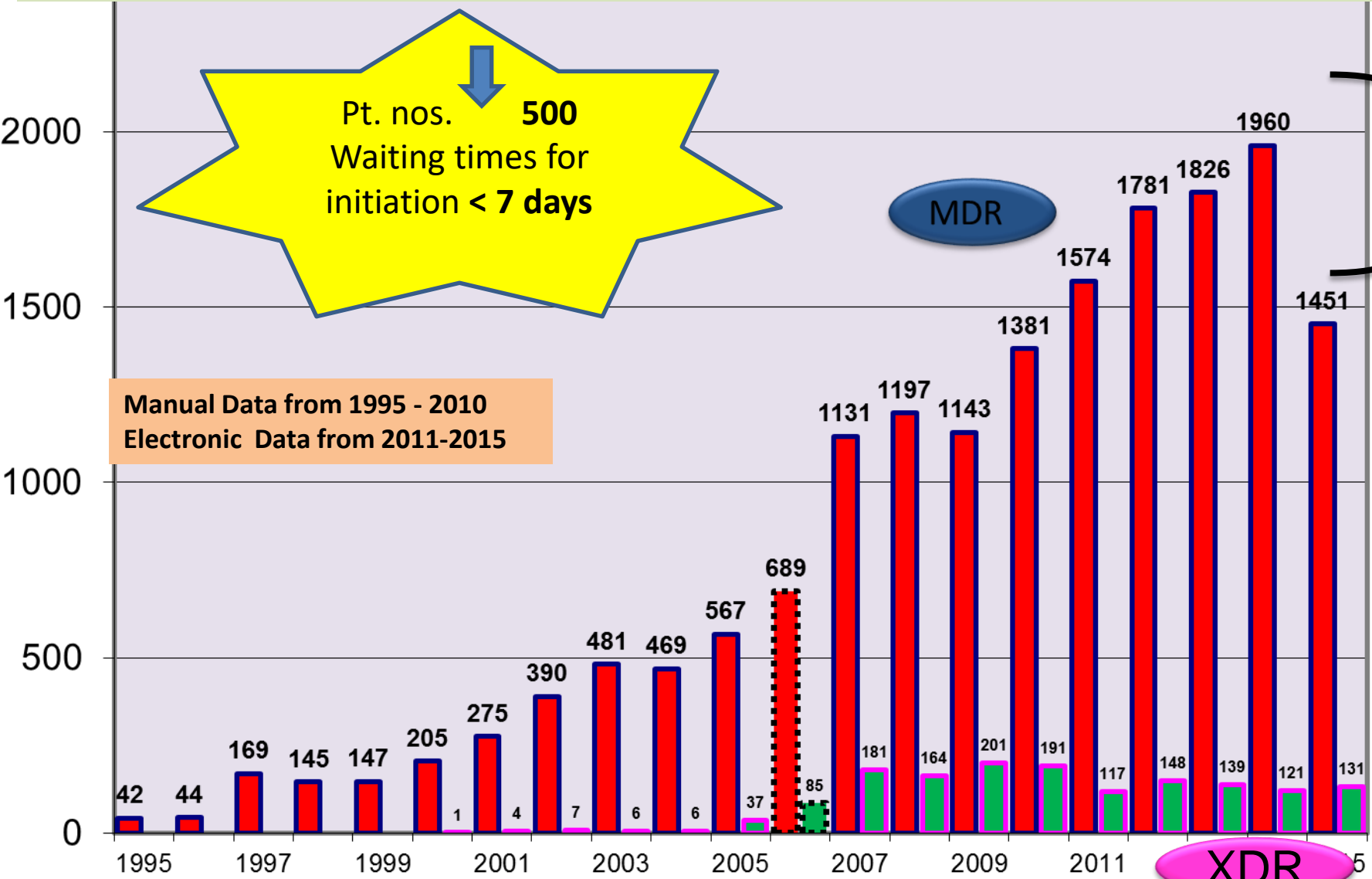
Pt. nos. **500**
Waiting times for initiation < 7 days

Manual Data from 1995 - 2010
Electronic Data from 2011-2015

MDR

XDR

HOPE



Impact of translating policy into practice (Nov 2014 – Nov 2015)

- KDHC – improved capacity to function as a centre of excellence.
- Outreach and mentorship
- Dedicated booking line
- Toll free help line
- Improved communication and collaboration
- Improved knowledge of HCWs
- Improved quality of care



Question 1

Satellite sites must initiate DR TB treatment

1. True
2. False

Upscaling

1. **Monitoring outcomes** – work in progress
2. **Revise SOP based on lessons learnt (Generic)**
 - Upscaling of Satellite sites to decentralized sites
(Tongaat)
 - Additional Satellite Sites (**CDC, WWH, Clairwood**)

Site Readiness Assessment: Minimum requirements

- Services provided
 - Infrastructure
 - Process Flow
 - Policies and guidelines
 - Projected Case load
 - Human resources
 - Infection control
- PMIS – Electronic and manual
 - Community involvement
 - Transport (patients and medicine)
 - Training and mentorship
 - Referral network
 - Community support (NGO, CCGs, WBOTS)

Site Readiness Assessment: Minimum requirements

Focus Area	Decentralized Site	Satellite Site
1. Services provided (x-ray, audiology)	14	5
2. Human Resources (pharmacist, dietician, audiologist, on site clinician)	16	7
3. PMIS (EDR, manual registers)	6	3
4. Infrastructure (pharmacy to store bulk medicine)	12	9

CRITERIA FOR DOWN REFERRAL

- Stable patients on MDR TB treatment who have **completed their injectable medication.**
- Sputum culture converted to negative.
- Has been compliant with medication
- Does not have any other significant co-morbidities that requires special monitoring.

RIGHT PATIENT

- Is able to easily access the relevant clinic on a regular basis (using planned patient transport) or is resident in that catchment area.
- Patients are agreeable to continue follow up at the relevant clinic for a period of at least 6 months before review at the decentralized unit in the 7th month.

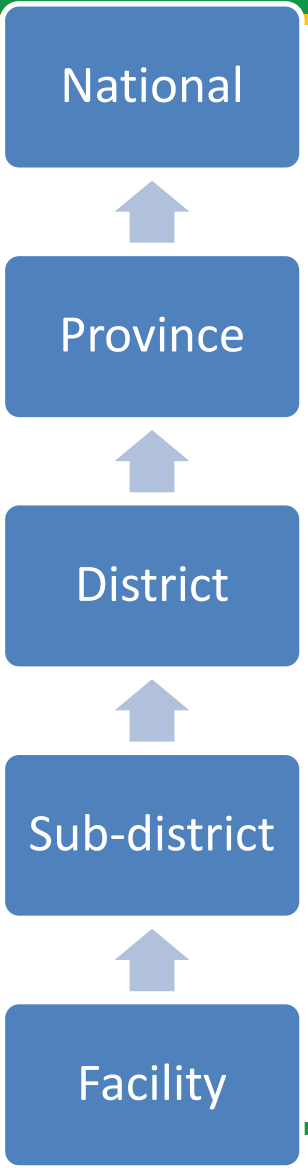
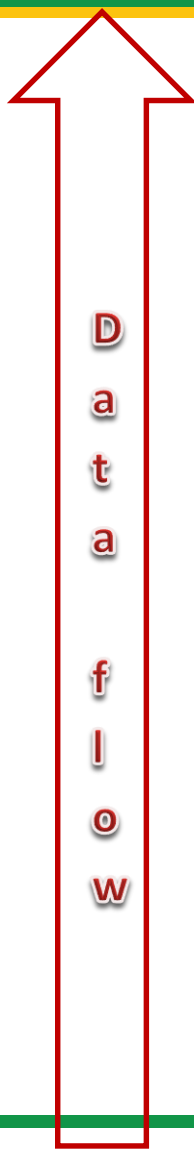
RIGHT PATIENT

- If patient is on ARVS, the patient must be stable and the antiretroviral medicine as well as the DR TB medicine must be pre-dispensed and sent to the satellite unit.
- If the patient is collecting ARVs at another unit this must be noted in the summary sheet and a transfer to the satellite unit must be advised.
- Patient education and counselling is critical.

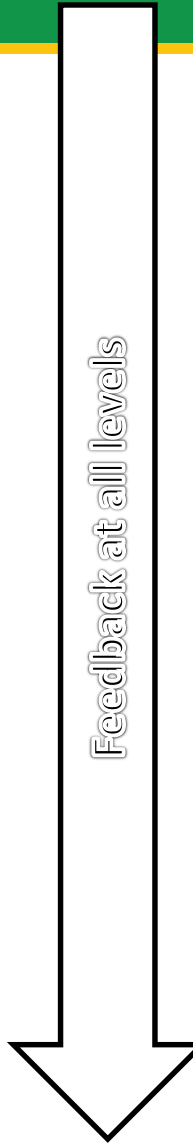
SOPs

1. Prescribing of medicine for patients down referred.
2. Dispensing and issuing of medicine
3. Management of patients down referred to satellite sites - monitoring.
4. Pharmacovigilance and monitoring of side effects.
5. Loss to follow up tracking and retention in care.
6. Recording and Reporting for programmatic management

Flow	Responsible Person	Activities
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Director	Analyze, report and use information
Programme Manager <i>(Data to be signed off)</i>	<ul style="list-style-type: none"> • Validate data • Support • Analyze and use information
TB CO-ORDINATOR	<ul style="list-style-type: none"> • Support and check data for quality and completeness
CO-ORDINATOR AND DATA CAPTURER <i>(In- charge to sign off to next level)</i>	<ul style="list-style-type: none"> • Analyze and use Information
Nurse and Data Capturer <i>(In charge to sign off to next level)</i>	Nurse captures data from patient folder to manual DR TB register. Data capturer captures data on EDR



Policy implementation translates into quality of life



Haitian Patient, before and after Receiving Free Treatment for HIV Infection and Tuberculosis.

The photograph on the left was taken in March 2003, and that on the right in September 2003. Many impoverished patients in rural Haiti and Rwanda now receive comprehensive medical care through public-private partnerships.

Question

Decentralized Management of DR TB is critical to improving treatment outcomes:

- 1. Yes**
- 2. No**
- 3. I do not know.....**



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Can We Rise to the Challenge?



TOGETHER WE CAN.....

You

CAN HELP

STOP TB

in

SOUTH AFRICA!!

TUBERCULOSIS (TB)
is a serious disease,
but it can be
PREVENTED and CURED!

KZN DEPARTMENT OF HEALTH

... FIGHTING DISEASE, FIGHTING POVERTY, GIVING HOPE

Acknowledgement

- KDHC Management and Staff
- eThekweni District Office – Dr. Sunpath, S. Fynn and the District TB Action group
- KZN Provincial HAST unit and TAG
- Partners



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Thank you

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