# Redressing Health Disparities with Information

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# Redressing Health Disparities with Information

- Introduce the South African health system the setting and the workload for nurses
- Describe the development of the HMIS
- Illustrate the usefulness of the information to redressing inequity
- Community involvement in seeking equity
- Principles of developing an appropriate HMIS
- Examples from other countries



















# South African Health System

- 270 District Hospitals; 267 Health Centers; 3670 Nurse-run Clinics serving 40 million
- Eastern Cape 7 million poorest province
- 92 small hospitals; 55 Health centers; 750 Clinics
- 250 doctors (all in hospitals); 15,000 nurses
- 15 million clinic OPD visits/year
- Routine FP, EPI, STI, TB, Antenatal care
- Diarrhea (cholera), malnutrition, hypertension and obesity, violence and motor accidents and then-
- HIV

### ECape Contrasts Housing



### ECape Contrasts Density of Population



### ECape Contrasts Health Facilities





# Information System

- 9 different competing and non-comparable systems – just for "routine stats"!!
- Independent systems for each vertical program: EPI, FP, STIs, TB, Genetics, malaria, environment and more.....
- Some 2500 "essential drugs and supplies"
- No forms, no registers, no feedback and no know use of the information

A Divided Province - Inequities within the EC **Population Density & Poverty** in the Eastern Cape **Population Poverty Distribution** 

#### MORTALITY RATES IN THE EASTERN CAPE



#### **Estimated Adult HIV Positive Rate 1999**



### Health Expenditure Per Capita 1996/1997 to 1998/1999



# EQUITY Project

- Improve management of resources
- Improve Equity
- Measure disparities in order to redress
  - Baseline sample surveys
  - Annual resurvey to see progress
  - Routine information system to enable managers to visualise the problems and to see the effects of their actions

## "Minimum Essential Data"

- Workload and staff under and over 5 years
- Essential services new and old FP, new and repeat ANC, Complete immunisation, All STIs, TB case load, HIV tests positive
- Patients referred to hospital
- Drugs out of stock 10 key items only
- Supervision visit received
- All recorded on a single page monthly form

#### **Tally Sheet**

NAME OF	ec Empilweni CHC					М	ONTH:		YEAR:		٦
First antenatal visit	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Oral pill cycle	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Nuristerate injection		00000 00000				00000 00000	00000 00000				
Depo-provera/Petogen injection		00000 00000				00000 00000	00000 00000				
IUCD inserted	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Condoms distributed	00000 00000 00000	00000 00000 00000 00000 00000	00000 00000 00000	00000 00000 00000	00000 00000 00000	00000 00000	00000 00000	00000 00000 00000	00000 00000 00000	00000 00000 00000	
Case treated as STI - new	00000	00000 00000 00000	00000	00000	00000	00000 00000 00000		00000	00000	00000	
Male urethral discharge - new	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
STI contact slip issued		00000 00000				00000 00000	00000 00000				
STI contact treated - new	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
Violence against woman	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
HIV counseled - male	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
HIV counseled test done - male	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
HIV positive test - female	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	
HIV positive test - male	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	

TOTAL

FAMILY PLANNING REGISTER											CLINIC Year						
NAME	ADDRESS	#LIVING Children	METHOD	Starting date	JAN	FEB	MAR	ARP	MAY	JUN	JUL	AUG		OCT	NOV	DEC	CONTINUE Next year
Theresa Brown		3	IUD	6/00	χ-					→							
Jill Hill		1	Depo	01-Sep			→										
Thembi Mafoka		0	Condom	02-Jan	Χ-	→											
Xoliswa Jones		1	pill	02-Feb	Χ-			<b>→</b>									

# Key indicators for Action

- Work load patients/nurse/day
- Coverage: immunisation, FP,
- Drug stock outs % that ran out in month
- Disease outbreaks: diarrhea, flu
- Quality of care: standard treatment for STI
- Continuity of care: TB, hypertension
- Severity of cases: referral rates

# Immunisation report

- Previously had 40 plus data items
- Now, % of infants fully immunised this month
- Possible problems:
  - Vaccine stock out
  - Refrigerator not working
  - Nursing absence
  - Lack of community motivation
  - No outreach services

### Call, or go find out how to help!

#### **Immunisation Coverage 2001**



#### Immunisation % by clinic - MBASHE



Mbashe - Measles vs fully immunised



% months DTP\_Hib vacc Out of stock









### WHO mandated TB Info

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strDataFieldPatients not transferred inPatients from TB clinic in other health districtPatients from TB clinic in same health districtPatients from HospitalPatients from ElsewherePulmonary tuberculosis (011)Primary tuberculosis (010)Other tuberculosis (012-018)All PTB - Smear+ (irrespective of culture)All PTB - Smear-/culture+All PTB - Smear-/culture-All PTB - Culture not done/results not inAll PTB - Bacteriology not doneNew PTB - Smear+ (irrespective of culture)New PTB - Smear-/culture+New PTB - Smear-/culture-New PTB - Culture not done/results not inNew PTB - Bacteriology not doneNew Smear+ PTB - White males 00-14 yearsNew Smear+ PTB - White males 15-19 yearsNew Smear+ PTB - White males 20-39 yearsNew Smear+ PTB - White males 40-59 yearsNew Smear+ PTB - White males 60+ yearsNew Smear+ PTB - White females 00-14 yearsNew Smear+ PTB - White females 15-19 yearsNew Smear+ PTB - White females 20-39 yearsNew Smear+ PTB - White females 40-59 yearsNew Smear+ PTB - White females 60+ yearsNew Smear+ PTB - 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communityDOT cases - facilityDOT cases - workplaceDOT cases otherDOT cases - no supportDOT cases - total registeredAll retr cases - pre-treatment

	Streamlined Monthly TB Information								
Data type	Monthly TB Data Fields	Data Source							
Case finding	Suspected TB case	Patient register							
	TB case diagnosed - new	Lab register							
Case prevalence	TB patient under treatment	TB register							
	MDR patient on outpatient treatment	TB register							
	TB patient on DOTS - Facility	TB register							
	TB patient on DOTS - Community	TB register							
Sputum Conversion	2/3 month sputum due	Desk Calender							
	2/3 month sputum sent	Lab register							
	2/3 month sputum positive	Lab register							
Potential Interrupters	TB suspend - new	Suspender Register							
	TB suspend - restarted	Suspender Register							
Child contacts	Child under 5 years - TB contact	Blue cards							
	Child under 5 years - TB treatment	Blue cards							
Monthly outcomes	Outcome - PTB Cured	Blue cards							
	Outcome - PTB Completed	Blue cards							
	Outcome - PTB Failure	Blue cards							
	Outcome - PTB Interrupted	Blue cards							
	Outcome - PTB Died	Blue cards							
	Outcome - PTB Transferred out	Blue cards							

#### TB suspenders restarted on Rx


#### Interrupted as % Outcomes



Interrupted PTB — Linear (Interrupted PTB)

## Locally relevant data items

- Bilharzia cases (school age)
- Malaria (only a few districts in So Africa)
- Rape and HIV response
- Industrial accidents
- New toilets installed in schools





#### Diarrhoea under 5 years - new - 2001







### Improved Management Decisions

- Personnel Deployment
- Drug ordering to avoid stock-outs
- Better Supervision more supportive
- Reallocated finances

#### Nurse clin workload - patients/nurse/day



#### Nurse clinical workload/day Emalahleni District



#### Facility level Indicators

#### **Availability of 10 Key Indicator Drugs**



### **Improving Supervision activities**



### Health Expenditure Per Capita 1996/1997 to 1998/1999



#### Per capita Allocation for PHC 02-03



### The EQUITY Index - 1997 to 2002





- Start small, limit the requests for data
- One page rule: reports fit on ONE PAGE
- Paper based do it by hand till all understand where the numbers come from
- Users identify priorities for info they need

- Data collected only if it makes an indicator
- Action linked to each indicator (up or down inspires some action)
- Indicators are exactly that they INDICATE what needs attention, not what to do
- Indicators MUST be interpreted to make information which is used for ACTION to give results that can be measured
- Managers act on low performers figure out why and redress the needs –ACT!

- Chose only data period likely to show a change: monthly, quarterly, annually – collect and report only as often as needed to see a change
- Feedback and action is the strategy for sustainability

- One-page rule of data forms
- Tick registers and tally sheets simple and easy to use and sum at end of month
- Registers for continuity the real measure of quality is continuity of care
- Let computers come later and with a flexible program that can accommodate local variations as well as do the donkey work of statistics

- Don't let the higher authorities dictate the routine system – force their info requests to clearly define their needs - where these legitimately exceed the routine report, make a part of annual or biannual surveys or audits. Don't overwhelm the workers.
- Establish a national clearing house to approve any and all info requests from "higher up". Let the Committee withstand the pressure from higher up and donors

### Information for Equity – examples:

- Community nutrition programs in Indonesia, India, Honduras and Bangladesh –% kids gaining weight – single indicator of progress
- Tanzania nutrition assessment helped focus government efforts to poorest communities
- Bangladesh districts are now ranked annually based on measured progress for children
- Progress of Indian States –ranked states best practises highlighted and recognised
- Progress of Nations UNICEF ranked countries on World Summit for Children goals



### Conclusions

- Keep it simple! A little accurate and timely information is worth far more than a lot of late and inaccurate figures.
- Donors and experts PLEASE do NOT overwhelm the system – help strengthen it accept more limited data and see performance improve and disparity reduced
- Consult with the front line workers and meet their needs
- Redress Disparity to bring results and Equity

### Obrigado e Boa Sorte!!!

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