



HEALTH SYSTEMS TRUST

**CLINIC  
INFRASTRUCTURE: A  
SITUATION ANALYSIS OF  
DATA AVAILABLE  
2007**

**Health Systems Trust**

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## Background

- **Reliable and valid data fundamental to health services planning**
- **No vehicle for the collection, storage and utilization of data relating to clinic infrastructure**
- **“Infrastructure” can be defined as “the basic, underlying framework or features of a system or organization” (Modern Language Association 2007)**
- **In public health facilities it refers to the state of the buildings, the water, electricity and communications technology available, the quality of access roads, and the availability of equipment**



## Infrastructure and service delivery

- **Poor infrastructure undermines health service delivery (Belay et al 2007, Mandal et al 2006)**
- **Also affects patients' perceptions of quality of care (Rao et al 2006)**
- **And health workers' satisfaction with working conditions (Kotzee & Couper 2007, King & McInerney 2006 ).**



## Infrastructure data

- **Data required to ensure that infrastructure is maintained at satisfactory level AND**
- **To plan infrastructure development to better meet the needs of the populations served**
- **Collection of such data requires:**
  - ❖ **Specialist skills**
  - ❖ **Regular updating.**



## Project: Assessment of available PHC infrastructure data

- **Aim:**
- **The aim of this study was to assess the information on primary health care infrastructure available at provincial level.**
- **Objectives:**
- **To assess the availability of information on aspects of primary care infrastructure at provincial level**
- **To assess the timeliness of this data**
- **To assess the completeness of the data (in terms of coverage of all aspects of physical infrastructure)**
- **To assess the utility of the data in calculating the costs of clinic upgrades or maintenance**



## Methods

- **Descriptive cross sectional study**
- **Primary data retrieved from all provinces**
- **Checklist of data elements compiled**
- **Checklist contained data required to assess, rand and cost maintenance/upgrading needs**
- **Available data compared to checklist.**



## Checklist

- **Plans of building (m<sup>2</sup>, uses of rooms)**
- **State of maintenance (score if possible)**
- **Water, sanitation, electricity, access road**
- **Basis for costing of repairs**
- **Service indicators**
- **Status of equipment (medical and non-medical).**



## Results

- **Western Cape and Limpopo approximated the list of elements required**
- **KZN had substantial data but much was out of date**
- **Others had very little of the required data.**



## Results

- Limpopo – excellent data
- Western Cape – excellent but some outdated
- KZN – good data but much outdated
- Free State – only water, electricity, sanitation and access roads
- Northern Cape – only for certain districts
- Mpumalanga – insufficient detail
- Gauteng – important areas missing
- North West - only water, electricity, sanitation and access roads
- Eastern Cape – very little data available.



## Discussion

- **Several issues raised by this research include:**
- **What information is collected**
- **How it is collected**
- **Where it is collected (which clinics/districts)**
- **How often it is collected**
- **Who collects it**
- **The comparability of data across provinces**
- **How the information is used.**



## What information is collected

**Depends on its use:**

- **Maintenance (ongoing)**
- **Upgrading where necessary**
- **Costing of these**
- **Planning for service delivery**

**National minimum dataset**

**Comparability of data across provinces.**



## How information is collected

- **Special surveys**
- **Routine**
- **Issues of cost vs. accuracy and detail**



## Where information is collected

- **All districts?**
- **Municipalities (local government)?**
- **Only priority clinics?**

**Implications for equity**



## How often information is collected

- **Deterioration of infrastructure over time**
- **Costs of maintaining less than those of replacing**
- **Balance costs of collecting data with costs of not collecting data.**



## Who collects the information?

- **Relates to costs, frequency and coverage of data collection**
- **Health staff at clinics (?skills)**
- **Departments of Public Works (?availability)**
- **Outside consultants (?costs)**
- **Combination of these.**



## What information is used for

- **Information is money wasted unless it's used**
- **Vital component of provision of services**
- **Should inform planning and budgets at district, provincial and national level.**