BACKGROUND

Service delivery such as quality healthcare in rural South Africa is fraught with deep-rooted challenges, many of which entail access problems emanating, in part, from the remoteness and spatial dispersion of rural communities (Mashiri et al., 2008). To speed up and equate healthcare delivery for all, healthcare was decentralised by the post-1994 government (SADOH, 2004). Poor transport remains a challenge faced by most of these organisations, therefore exacerbating access difficulties. Access to information communications technology (ICT) and systems is cross-cutting through most of these challenges. This poster presents a platform to highlight how ICT systems could be used as viable solutions to reduce transport and communication burdens of healthcare workers and to strengthen the decentralised healthcare system. The poster looks at the impacts of the prototype of a healthcare patient-monitoring ICT system, which is the result of a joint research programme between the Dutch University of Technology Delft (TU Delft) and the CSIR.

OBJECTIVE AND APPROACH

The primary objective of this project was to demonstrate how ICT interventions can be used to support and strengthen the decentralised healthcare system by empowering the home-based care and the primary healthcare institutions in the demonstration project area. A case study demonstration developmental approach, combined with a studio methodology, was used to collect data for the development of prototypes. The area inhabited by the Leroro communities (near Graskop in Mpumalanga, with approximately 40 000 residents) served as the research and test areas for this project.

EFFECTIVENESS OF THE SYSTEM

The district health system is a self-contained system in which primary healthcare (PHC) is the core intervention area (Haynes & Hall, 2003). To overcome clinical shortcomings, a strong tradition of informal healthcare has become increasingly important. If a patient with a chronic disease is discharged from the hospital, he or she can make use of the home-based care (HBC) organisation, which allocates a caregiver to the patient. In the Leroro communities, about 1 000 patients make use of the HBC system. The caregiver works on a voluntary basis and visits the patient daily to weekly. The main tasks of the caregiver include monitoring, identifying and reporting any problems. Hence, the patient information at the clinic means that the patient cannot be monitored properly and that the Sister cannot take timely action. This lack of patient information at the clinic means that the patient cannot be monitored properly and that the Sister cannot take timely action.

Since the caregiver acts as the direct link between the patient and the clinic, it is of great importance that the caregiver and the clinic to submit the reports but now that I no longer have to physically submit the reports, I can spend the entire day with patients. Previously, I used to spare some time for walking to the centre to submit the reports but now that I no longer have to physically submit the reports, I can spend the entire day with patients. Today I managed to see 14 patients, which is the highest record for me, and the day has not finished yet. Since I started using this system I am able to see a lot of patients. Today I managed to see 14 patients, which is the highest record for me, and the day has not finished yet. Previously, I used to spare some time for walking to the centre to submit the reports but now that I no longer have to physically submit the reports, I can spend the entire day with patients.

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CONCLUSION

ICT interventions can thus be used to support and ease the delivery of healthcare in rural and remote areas.

REFERENCES


Figure 1: Architectural design of the patient monitoring system

An ICT-based patient monitoring system assists with decentralised healthcare in rural areas.