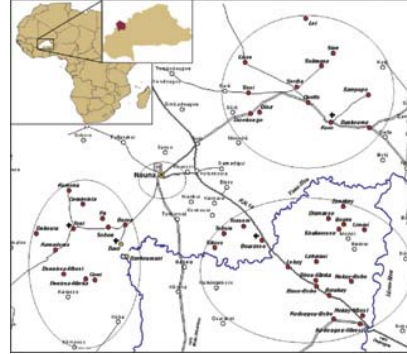


Using innovative ehealth interventions in a local health care context.

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Village clusters in CRSN, Nouna, Burkina Faso. The four clusters are; Nouna town, north-eastern, south-eastern, and south-western village clusters are marked using circular boundaries.

1 Introduction

Information and communication technologies (ITC) offer innovative ways to improve health services and systems. Integration of eHealth into the daily life of rural health-care workers is fast becoming a reality in developing countries. Computer-mediated communication systems can be used to bridge the gap between doctors in underserved regions with local shortages of medical expertise and medical specialists. eHealth for primary health-care includes applications that directly support disease prevention, patient diagnosis and patient management and care.

This study explores the use of innovative IT solutions to provide the social, institutional and infrastructural context for sustained, self-organizing growth of a distributed medical community in Nouna, Burkina Faso. Africa. The area covers 1.775 km² with 76 000 inhabitants in a rural and semi-urban environment.

2. GOAL

The goal of this research is:

- To study human-computer interaction (HCI) within this rural medical community and examine a solution to ensure the establishment of a viable infrastructure in the community.
- To initiate a comparative usability evaluation to determine which dimensions and questionnaire items are most critical.
- To produce a multilevel analysis of sociability, usability, and health community dynamics in the community setting.

3. Conclusion and future work

The primary emphasis is on results of broad application in a local context. As primary health care is the main target of this study, the success of this intervention is predicated on a high level of community involvement to solve key challenges through:

- supporting policy and practice in health systems and technical programmes.
- providing technical assistance for governance, monitoring and improvement of e-Health services within the community.
- providing theoretical context for studies addressing the role of technological design and communication culture.
- providing theoretical context for studies, dealing with large data sets within rural districts and charting the use of IT infrastructure in an African village.

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