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## Barriers and Facilitators to Electronic Medical Record (EMR) Use in Urban Slums - Kibera Field Study

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Nearly one billion people live in slums throughout the world, where they suffer from the health problems of vulnerable populations. Recognizing the potential of electronic medical records (EMRs) to improve communication, sharing and tracking of health care; this study explored facilitators and barriers to effective EMR use in an urban slum in Kibera, Nairobi. Descriptive qualitative methods were used to characterize perceptions of primary care staff about effects of EMR implementations in two different Kibera clinics. Ten staff participated in in-depth interviews guided by open-ended, semi-structured questions. Content analysis methods were used to explore transcribed data. Three major themes – infrastructure, software, social and organizational issues – emerged, with sustainability crossing all as an overriding concern for participants. Although many infrastructure (e.g., reliable power, networks and interoperability) and software (e.g., health data, confidentiality and deployment) challenges were described, social and organizational factors (e.g., identity management and EMR use incentives) appeared to be the most potent determinants of positive or negative EMR impacts. These findings are consistent with what others have reported, especially the importance of practical (infrastructure and software) barriers to EMR use in both limited resource settings and developed countries. Other findings appear to be uniquely impactful in slum settings, including the importance of identity management, meaningful incentives and sustainability programs.

### Biography

Badeia obtained a bilingual Bachelor of Commerce degree, is a Certified Human Resource Professional (CHRP) and completed a Master of Science degree focused on health informatics from the University of Alberta. Badeia developed a passion for health technology and global development when presenting at the 2009 Education without Borders conference in Dubai. She began an exploration of innovative uses of tele-health and mobile devices in rural Kenya, then progressed to a range of work in not-for-profit health informatics and global health initiatives. Badeia's research interests include applications of mobile health technology and impacts of health information systems in resource-limited settings. Badeia is currently managing an EMR initiative in Nairobi, Kenya and works with global partners providing support and expertise to other EMR deployments.

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