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DATE OF DISPUTATION: 6th December 2012

DISSERTATION TITLE: *In Search of Missing Data: The case of maternal and Child Health Data in Malawi*

This thesis draws on the community of practice (CoP) theoretical lens to explore the factors that cause the problem of missing data in the Malawi health sector. The health sector in Malawi comprises of two sectors – “modern” (formal) and “traditional” (informal), therefore, there is need to ensure that data generated in both sectors is integrated into the official health information systems (HIS). Focusing on maternal and child health data, the main problem is the fact that many births occur outside the formal health system since the majority of people (over 80%) reside in rural areas where there are limited abilities to access or afford the modern health services, forcing most rural people to rely on traditional health sector. The dilemma is that most of the data generated in the traditional health sector is not collected and entered into HIS. Yet the information generated by HIS is the means for measuring the achievements towards the Millennium Development Goals (MDGs) targets.

This research established that the problem of missing data is a result of weak links among communities of practice, particularly between the modern and traditional health sector. Further, it was established that some socio-cultural conditions, governance issues, policies, and political realities influence the quality of data. For example, the drive to produce results for the MDGs have led to policy for maternal and child health program which advocate that every pregnant woman seeks care from modern health sector by skilled Personnel (trained from a recognized medical or nursing school). Although skilled personnel are being promoted, issues of affordability, access and inadequate provision of rural health services comes into play, implying the continued reliance of most rural pregnant women on traditional health sector. Since most data in the traditional health sector is not collected, attaining health-related MDGs remain a challenge. Addressing missing data problem would give good MDG indicators and good quality data for planning and decision making.

The main findings from the thesis contribute to the IS field, specifically HIS, and to the health domain. Theoretically, the study extends the CoP theory with *weak link* concept. Practices, knowledge, and data are shared across the organization through CoPs linkages, and these links needs to be strengthened. In addition, the following recommendations were made: i) from a political perspective, the formulation and implementation of policy decisions should be guided by consensual processes, involving participants from health sector at all levels. ii) governance mechanisms needs to utilize existing structures and enhance existing practices to capture data - such as having a village chief record the data when community members reports a birth and/or death in their community. iii) there is need to introduce policies that enhance strong collaboration between modern and traditional health sectors, allowing births taking place out of modern health sector to be recorded in a health passport by a chief. iv) knowledge and practices generated in the traditional sector need to be taken on board to assist in capturing data generated in that sector. Community health workers (CHW) should act as knowledge brokers, and be given hardbound note books for capturing data instead of loose forms. Where feasible, CHWs and chiefs should be given mobile phones for sharing data.

