Summary Learning Report 2007 Health projects Tanzania

"Gathering reliable and accurate reports for planning purposes"

IICD with CORDAID are supporting projects that enhance the development and use of ICT for improved health care delivery in Tanzania. Two such projects, namely The District Health Management Information System (DHMIS) in Mwanza and the Development of a Health Management Information System (HMIS) at facility level at ELCT in Arusha have been implemented since September 2006.

The implementation of a DHMIS aims to use ICT in improving the ability to collect, store and analyse accurate health data at the district level to increase service delivery efficiency, data accuracy, and effectiveness of intervention, increased accountability and better gauging of health trends in the district.

The HMIS project aims at developing a customized HMIS for use in ELCT health facilities' management while meeting the needs of the national government registration system for the health sector (HMIS-MTUHA).

To assess the impact and avail project participants an opportunity to learn from the projects under implementation, a Focus Group Discussion was held in Arusha on 16th-17th April 2007. The 21 participants were project team members of DHMIS and HMIS, users of these projects (doctors, nurses, ICT staff and administrative staff) and team members of other Health projects supported by IICD, such as initiatives for elearning, creating a web portal for knowledge sharing and the introduction of telemedicine. The FG combined two activities, namely a session on learning by means of a 'brown paper session' and discussions based on the data that came out of 31 questionnaires collected with users of the HMIS and DHMIS projects early 2007.

The brown paper session focussed on project goals, target groups and the project environment, looking at which factors in the environment of the project push it forward and which factors inhibit the project from reaching its goals. As to what factors were encouraging the use of ICT and consequently the success of the project, participants mentioned for instance:



- The need to communicate with external partners
- Patient complaints
- Collaboration among stake holders
- Willingness of staff to use new technology
- Executive support to champions and users
- Reporting needs of the government
- Support from government and churches

There are also factors that are inhibiting the realization of project goals. These include:

- Lack of ICT skills and awareness create fear resulting in resistance to change
- Due to same reason, management too fear, and set their priorities in other hospital needs
- In some cases decision making process in the church takes a long time causing delays in a fast changing sector
- Unqualified staff with little motivation or ability to learn
- Rapid staff turnover, either to greener pastures or relocation by management
- Inadequate infrastructure particularly poor supply of power, lack of space and equipment

Following the brown paper sessions, the participants split into smaller groups to look more closely at the outcomes of the questionnaires.



The respondents to the questionnaires consist of a fairly cohesive professional group, the majority of which are technical staff (36%) followed by administrative staff (19%) and managers (19%). Most of the respondents are between ages 31-50 (84%) Gender-wise females are in the majority (58%). 77% of respondents is urban. This reflects the position of the project, namely Arusha and Mwanza cities. All respondents have secondary (67%) and tertiary (33%) education, which is to be expected given the nature of the work.

84% of participants stated they had achieved their goals by participating in this project, which was evidenced by quotes that talked about well kept and easily accessed patients' and other records; successful computer training of project people; use of the computer daily as a tool and change from a manual to a computer system facilitating fast daily, weekly and monthly activities: "By participating on this project we have been able to achieve most of our goals, because its fast, reachable, accurate and punctual to attend to our clients effectively and forward our reports on time.".

Where goals have not been achieved this is due to sharing the project with other departments who do not care to fill in the data.

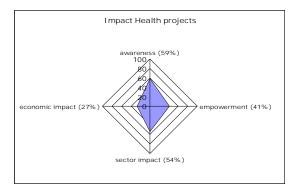
An issue that was picked up for group discussion was to what extent linkage of ICT projects with MTUHA (the government registration system for the health sector) eases or complicates things. The conclusion of the participants to the Focus Group is that Linking ICT projects with MTUHA makes things much easier. It is time saving and it

turns out easy reports quite fast. The problem arises when both manual and computer systems are used simultaneously. The exercise then takes more time. It was remarked by participants that some doctors do not fill the manual MTUHA forms properly or feed the computer. Participants saw the need to move to the computer system, though in the initial stage, both computer and manual systems may be used.

Satisfaction for most aspects of the projects is quite high (around 70% of users claiming to be partially or strongly satisfied about the training and quality of service and information). Less satisfied are users with the costs of the service, indicating that there are heavy costs involved in running an ICT project. These include:

- The cost of equipment such as computers, printers, backup devices and networking facilities (donated equipment is often not the answer).
- Infrastructure such as electricity, LAN, connectivity.
- Time volume of work and schedules
- Human resources ICT personnel and quality of education
- Maintenance and repair
- Capacity building
- Labour turnover
- Opportunity cost of forgone expenditure on other areas of the hospital.

Unless all of these items have been budgeted for from the very beginning, a health facility entering ICT project might fail to continue after an initial start.



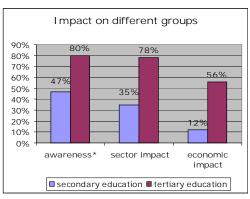
The figure above summarizes the impact of the two health project so far. From the figure, we note that a medium-high degree of awareness 59% has been achieved. From the same figure, we note that empowerment score is 41%. It is not strange that it is lower than awareness. To empower requires more time and effort than to build awareness.

Economic impact scored rather low (27%). This may be expected given the short implementation period, but is also an indicator that dramatic results in this area may not be expected. One aspect of economic impact is lower patient fees. The participants to the Focus Group indicated that this is not necessarily a goal of a hospital management system.

The sector impact at 54% is lower than that of awareness, but much higher than empowerment and economic impacts. Users indicated more customized patient records (55%) and access to infrastructure and connectivity (52%) which contributed to this impact indicator.

The score on negative impact is not shown in the figure above. It is low (24%) indicating that the positive impact is of much greater significance and as such there is not much to worry about for the time being. The statement resulting in most agreement among the respondents is "This project reaches mostly the privileged", with 57% of users responding affirmative to this in some degree. In the Focus Group, participants concluded that the projects at the outset may be seen to reach mostly the privileged. ICT centers are mostly found in urban and not in rural areas. More of them are found in hospitals as opposed to dispensaries. The criteria for selection of pilot sites for the introduction of ICTs were not clear to some. When deeper analysis is done it is evident that underprivileged areas were considered, but were inhibited by such factors as lack of electricity and a very weak economic situation.

There are some differences in the impact the projects have on people from different levels of education, as the figure on the right indicates: People with tertiary education feel more aware (no significant difference), view significantly more economic impact of the projects and significantly more sector impact of the projects than those with secondary



education (negative impact and empowerment are the same for both groups). The trend is also that people with secondary education use the projects less electronically and more in oral form than people with tertiary education

The discussions arising on differences in impact on people with different levels of education concluded that the ICT training programmes should consider education levels. At times some institutions allocate people with low education in sensitive ICT areas. The results may be dismal.

The Focus Group participants very much appreciated the learning and experiences shared in the workshop. Their assessment was that within a short time a lot had been achieved and it was worth exploring the possibilities of greater networking to consolidate the benefits of the IICD Health Projects. A small group was delegated with the responsibility of digesting the whole idea and to present some concrete proposals to the stakeholders in a next meeting.

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