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THE USE OF TELEHEALTH IN CERVICAL CANCER SCREENING AND CARE IN ZAMBIA

A needs assessment undertaken for SPIDER
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Executive summary

Acknowledgements

First of all, we express our sincere thanks to all the participants whose insights have informed this report. We appreciate the time they took to respond to the questionnaire. With due respect to all the other participants, we are particularly indebted to the women with diagnosed cervical cancer who kindly shared their experiences living with it and how they believed telehealth would affect women in situations similar to theirs.

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The study was undertaken by researchers who were entirely independent of SPIDER program. Dr John Owuor was a Research fellow based at the Department of Computer and Systems Sciences (DSV), Stockholm University when the project began. He is currently a Marie Curie ASSISTID Research fellow at the Centre for Global Health, Trinity College Dublin and a distance module tutor at the London School of Hygiene and Tropical Medicine.

Dr Charles Chengo is a practicing clinician at Lumwana Mining Company in North Western Zambia and the interim president of Zambia Health Informatics Association (ZHIA).

The study was also supported by two research assistants in Zambia, Lushomo Shanaube and Natasha Chung.

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The key stakeholder focus group discussions described in this report were undertaken to form a basis for the proposed implementation of telehealth in cervical cancer screening and care in Zambia. This report focuses on the needs assessment specific to Zambian context, but similar studies were also conducted in Kenya and Rwanda concurrently. This report will feed into a unified telehealth implementation framework to be developed out of the multi-country findings.

Methods

The project involved desktop literature review and face to face focus group discussions with purposively selected representatives of different health system actors in

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Zambia. The focus group discussions were audio recorded and the resulting data was transcribed verbatim and analysed using thematic analysis approach.

Key findings

Below is a summary of the key issues that emerged from the thematic analyses of the data gathered from this needs assessment exercise.

A) The need for telehealth in cervical cancer screening in Zambia

We found an overwhelming support for telehealth in cervical cancer screening in Zambia. The participants offered an affirmative endorsement of the potential use of telehealth in cervical cancer screening based on numerous reasons as outlined below.

- Telehealth can bridge the gap for specialists' shortages - through knowledge sharing
- Telehealth can enable patient access to scarce healthcare workers
- Telehealth can reduce patient expenses by reducing their travel time and costs
- Telehealth can facilitate information sharing and communication between healthcare workers for the good of the patients
- Telehealth can enable economies of scale – the government can purchase less expensive equipment that serves more people across the country.

B) Uncertainties and concerns

Despite their enthusiasm regarding potential use of telehealth in cervical cancer screening, the respondents also expressed concerns about uncertainties that believed would bar any potential use of telehealth.

- There were reservations about the cost of the project and where the money would come from, who would pay for screening when the women access services and the long term sustainability of the proposed project.
- The respondents also expressed great concerns about the confidentiality of the users of the proposed system and data protection
- There was a concern that the proposed project may be a duplication of existing efforts, in which case the resources would be best used elsewhere if there was no added value to the existing programs
- The participants noted that one of the current challenges is the lack of awareness and the motivation to access services. They therefore wondered how the proposed project would create awareness among women to come forward for screening.
- The respondents also worried about how the perceived healthcare workers' apathy towards technology would be resolved.
- The respondents also had strong reservations about the equipment or system that would be ultimately selected for the proposed project. They expressed concerns about whether it will be run by local or foreign expertise, whether the developers would provide any after sales back up to ensure the project doesn't run to halt as soon as a minor problem occurs. They were also genuine concerns about data ownership and the location of the servers that will be backing up the proposed project. Ideally, they noted, data should be owned by Zambia and stored in Zambia.

C) System readiness for Telehealth

Representatives of different stakeholders or health system members expressed different perceptions about their readiness for the potential use of telehealth in cervical cancer screening and care in Zambia.

- Copperbelt region is ready in terms of ICT connectivity. The only downside is that Copperbelt is not a priority area for many potential funding partners because it's not considered dire need area.
- Universities and their affiliate training institutions are equipping students with ICT knowledge and skills to supply local ICT experts. Telehealth and health informatics should be included in the curricula of all health allied sciences training.

Zambian provinces. Map of the provinces of Zambia in English (local language). Made by User: Golbez. Wikimedia Commons

- Insurance companies are happy to engage in dialogues that would lead to the development of a plan to cover cervical cancer screening and care – just like they did with voluntary medical male circumcision (according to a representative of healthcare financing).
- NGOs may not be ready for telehealth implementation because their work relies on policy directives and services offered by government facilities. They would be ready as soon as ministerial instruments are in place.
- Mainstream health services ready and some are already using diverse forms of telehealth. But there is need for more awareness to reduce cervical cancer stigma and increase services uptake by women.

D) Policy environment
The findings suggest a lack of clear policies and guidelines that can underpin a successful implementation of telehealth in cervical cancer screening and care in Zambia.
- There is need for clarification of policy on data sharing between health care workers, what medium to use and what data to share.

- There is also vagueness in policy over who takes ultimate responsibility in telehealth decisions given that front line staff would be seeking counsel of the remote expert who on the other hand cannot see the physical state of the patient. Telehealth thus challenges the notion that a physician can only take responsibility over a physical diagnosis, since the whole idea is to enhance electronic diagnosis.
- The ultimate project will be guided by E-governance policies, approved by the Centre for ICT to ensure adherence to local policies and local ownership, under the stewardship of the Office of the President.

E) Pre-requisites for telehealth in cervical cancer screening and care in Zambia

The participants described a lot of issues that need to be considered for a successful implementation of telehealth in cervical cancer screening and care in Zambia.

- Improved network connectivity is vital
- Incorporate health informatics in health and allied workers' trainings curricula to ensure skilled personnel
- The need to build the capacity of existing healthcare workers to be able to implement the proposed telehealth system
- The need to determine who covers the cost of screening
- Involvement of all relevant ministries and government departments such as the Centre for ICT excellence and e-governance unit
- Improve health care workers' attitude towards ICT
- Telehealth should be added value not added burden to healthcare workers or existing systems
- Ensure data protection, security and integrity
- Consider scalability and sustainability of the project – not a one off project
- Develop human capacity – train technical people to manage the system and health care workers to use the system
- Culturally sensitive awareness to encourage service uptake by women