

Project Summary

Please provide a summary of the project, describing how it came about, what it aims to achieve, what will be done to achieve this aim, and who will do this. Max 500 words.

Title

Strengthening emergency communications between hospital and rural health clinics, in the Chitambo District, central Zambia

Background

Friends of Chitambo SCIO¹ is a registered Scottish charity supporting healthcare initiatives at Chitambo Hospital, central Zambia, where Scottish missionary/explorer, Dr. David Livingstone, died². Our project builds on these longstanding historical and more recent healthcare links. It was proposed by senior clinicians at the hospital, who have been reporting the need to improve emergency care communications in the area since 2003. The project builds on a successful international development project to implement e-learning for nurse training in Zambia, including at Chitambo³. It also links to an African medical librarian collaboration on 'translating knowledge into practice for improved healthcare quality'⁴, on which Chitambo Hospital is partnered.

Aim

To reduce mortality and morbidity due to common medical emergencies (trauma, obstetric and paediatric emergencies etc.) in the Chitambo District, central Zambia, and improve quality of local emergency care services, through establishing a strong information and communications network between Chitambo Hospital and, initially, 3 Rural Health Clinics (RHC).

Activities

- Establish a hospital-based Decision Support Base (DSB), staffed by an identified Chitambo Hospital nurse and equipped with relevant information resources (books, computer, digital healthcare library, guidelines, information leaflets etc.) to inform clinical decision-making on common medical emergencies
- Train the qualified Chitambo Hospital Information Officer as a Knowledge Broker (KB) to support the DSB nurse, RHC and ambulance staff to access and utilise the DSB resources in routine emergency care practice.

¹ Friends of Chitambo SCIO: <http://friendsofchitambo.blogspot.co.uk/>

² Currie Marion A. (2013) *Livingstone's Hospital: The Story of Chitambo* AuthorHouse Books, 2nd Edition

³ THET Multilink Project on 'Building Capacity for e-learning for nurse training in Zambia and Ghana: <http://www.thet.org/hps/health-partnerships/jvallis>

⁴ NES: University of Edinburgh. *Evaluation of Knowledge into Action – a framework and tools*. in *Knowledge into Action for NHS Scotland: methods, strategic national projects and an evaluation framework. A report for NHS Education for Scotland and Healthcare Improvement Scotland*. 2013, Chapter 7.

- Implement a VillageCell⁵ low cost mobile phone network linking the hospital with the 3 RHC and ambulance, for relaying of emergency calls.
- Provide 2 Information and Communication Technology (ICT) refresher workshops for relevant hospital and community staff, to facilitate their access and utilisation of information resources for emergency care decision-making/advice-giving.
- Source and download relevant digital information (e.g. books, apps, guidelines) to low cost VillageCell mobile phones, for access by key emergency healthcare staff at the hospital, RHC and ambulance.

Outcomes

- Discernible 1% reduction in reported mortality/morbidity, due to common medical emergencies, within 2 years of project implementation.
- Staff and up to 40,000 service users sampled from around 10,000 per 4 participating healthcare facilities (Chitambo Hospital and 3 RHC) reporting improved quality of emergency care services.
- Chitambo Hospital and RHC staff better able to access and utilise quality, evidence-based information in routine decision-making/advice-giving on common medical emergencies

Partners

- ZRDTA⁶ : Lead in-country partner, responsible for implementing the technical network and collaborating with the University of Zambia (UNZA)⁷, NHS Education for Scotland (NES)⁸, Chitambo Hospital and Friends of Chitambo SCIO) on:
 - Training the KB to embed relevant information in frontline emergency care practices and support frontline clinical staff to access and utilise these in practice.
 - Establishing the DSB, staffed by a local nurse and populated with relevant emergency care resources.
 - Establishing the VillageCell mobile phone network linking hospital and 3 RHC
 - Downloading relevant digital resources to VillageCell low cost mobile phones for easy access by frontline emergency care hospital and community care staff.
 - Conducting ICT awareness workshops with clinical staff to facilitate their use of the above information resources.

⁵ Anand A. et al (2012) VillageCell: Cost effective cellular connectivity in rural areas:
http://www.cs.ucsb.edu/~ebelding/txt/ictd12_vc.pdf

⁶ ZRDTA: Zambia Research and Development Technology Academy

⁷ UNZA: University of Zambia

⁸ NES: NHS Education for Scotland: <http://www.nes.scot.nhs.uk/>