Strengthening Emergency Care Information and Communications in the Chitambo District, Central Zambia: a Cross-boundary Collaboration

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Background/Aims

We report interim results of a Scottish Government-funded cross-boundary collaboration on 'Strengthening emergency' care communications in rural Chitambo District, central Zambia,' where lack of quality

information and communications can cost lives.¹

Methods

A Scottish Government Small Grant Award (£35,805 over 2 years, April 2015 to April 2017)) is enabling collaboration on:

- Creating an emergency hotline with a single number to enable healthcare staff and the public to call for support when needed.
- Establishing a suite of knowledge resources to support emergency care decisions – online point of care evidence summaries, decision support resources, print and electronic books.²
- Provision of a PC, tablet, and smartphones and setting up an, emergency care resource centre at Chitambo Hospital.
- Training local information and library staff in Knowledge Broker (KB) skills, to support healthcare staff to find, share and apply knowledge in frontline decisions.³





with information and clinical staff to introduce Knowledge into Action (K2A) and Knowledge Broker (KB) concepts, and develop related roles



Hotline developments:

- Some emergency calls, to a dedicated smart phone number, recorded
- Free national emergency care short-code number (992) application submitted
- Radio repair costs, for 'hard to reach' Rural Health Clinics (RHC), obtained

Knowledge developments

• Emergency care resource room (Decision Support Base, DSB) established at Chitambo Hospital, equipped with:



• A suite of emergency care knowledge resources (digital and print): http:// ow.ly/4mJ6B4

• Computer technologies: Desktop, laptop, and tablet pcs, and smartphones loaded with emergency care resources

- Some information resources (Print and digital) extended to staff at RHC

• KB training/support ongoing, via Webex, from NES

UF4:11:11:

Opened 27th August 1969--

 2 5-day follow-up ICT workshops conducted with Chitambo clinicians, to consolidate K2A and KB training/facilitate project implementation

Evaluation developments:

• Baseline evaluation, of staff and community members' views/experience of local emergency services, conducted

Conclusion

This project **showcases NES leadership** on cross-boundary working with Third Sector and International organisations (4), and **Knowledge Translation into Action (K2A)** for quality improvement of frontline emergency care. This is contributing both to transforming Chitambo District emergency care services, through improved information and communications, and **rich reciprocal** learning on effectiveness of mHealth interventions (5), to inform digital transformation of Scottish emergency care communications.

• Chitambo Hospital Emergency Care Facebook page; WhatsApp Support Network; and illustrative Emergency Response video (on Colle's fracture) created

Training developments • 2 Knowledge Translation workshops conducted

References

1. Mould-Milman N-K, De Vries S., Stein C., Kafamfwa M. Et al, Developing Emergency Medical Dispatch Systems in Africa-Recommendations of the African Federation for Emergency Medicine/International Academies of Emergency Dispatch Working Group, African Journal of Emergency Medicine, (2015) 5:141-147. 2.Wales. A., Translating Knowledge into Action to Support Emergency Care in Chitambo: Progress Report for Friends of Chitambo Scottish Government Small Grant (SGSG) Project, October 2015, NHS Education for Scotland.

3. 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. 4. Scottish Government, A Route Map to the 2020 Vision for Health and Social Care, 2013, Scottish Government.

5. Lee S.H, Nurmatov U.B., Mukherjee M. et al, Effectiveness of mHealth interventions for maternal, newborn and child health in low- and middle-income countries: Systematic review and meta-analysis Journal of Global Health, (2016) Vol. 6, No. 1, doi: 10.7189/jogh.06.010401.

