NHS Education for Scotland

From Librarian to Knowledge Broker in Scotland and Zambia:
Towards an Internationally Transferable Model for Translating Knowledge into Action for Frontline Care

BACKGROUND

We report results of the Knowledge into Action (K2A) strand of a 2-year Scottish Government-funded collaboration on 'Strengthening emergency care communications in Chitambo District, central Zambia,' where lack of quality information can cost lives' [1]. K2A is a cyclical process developed in NHS Scotland. It involves Knowledge Brokers (KB) supporting healthcare workers to find, summarise, share and apply knowledge in frontline practice to deliver safe and effective care.

AIMS / GOALS

The K2A strand of the project contributes to reducing mortality and morbidity due to common medical emergencies (e.g. complications of childbirth; trauma; road traffic accidents; snakebites) by ensuring that:

► Clinicians providing emergency advice over the phone have ready access to critical knowledge to be confident that their recommendations are based on best evidence

► Healthcare workers throughout the Chitambo District are empowered, through knowledge access, support and training to deliver the safest possible care both at the site of an emergency and on arrival at hospital.

WHAT WE DID

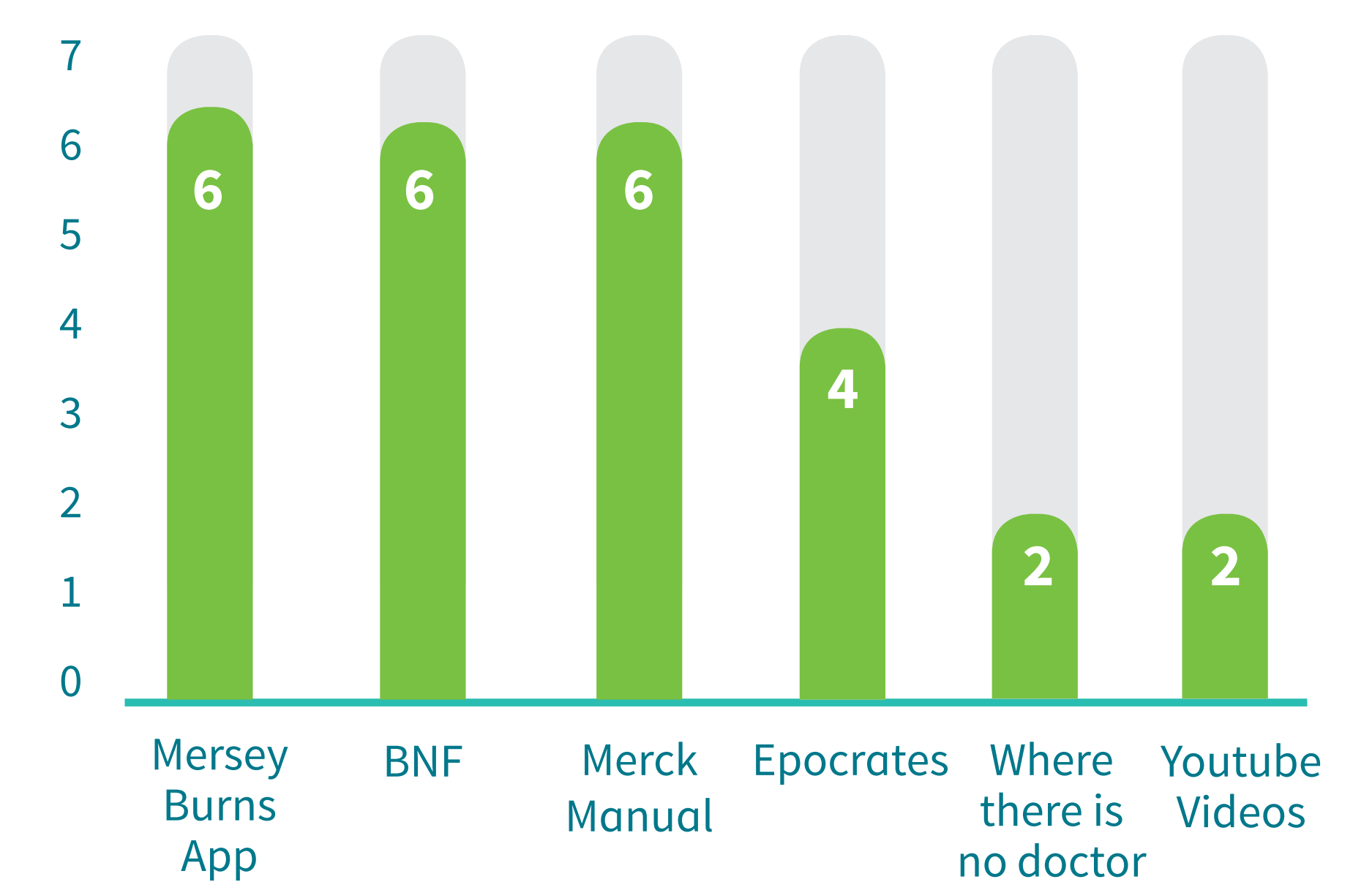Over the grant period (April 2015 to April 2017), partners in Scotland and Zambia collaborated, to:

► Establish an emergency care resource centre at Chitambo Hospital, equipped with books, and computer devices (desktop pc, tablet, mobile phones) loaded with emergency care knowledge resources.

► Distribute freely available digital and print knowledge resources to staff at Chitambo Hospital and 12 rural health centres, RHC, including installing apps on smartphones

► Train 2 librarians/information scientists at Chitambo and 6 health librarians and researchers at University of Zambia as Knowledge Brokers, by adapting a KB capability framework and training materials developed in NHS Scotland.

► Upskill 24 Chitambo health staff in uptake and usage of the resources at the point of care.

► Develop a strategy for testing the KB concept with wider groups of clinicians.

WHAT WE ACHIEVED

Library and information staff valued the NHS Scotland-inspired knowledge broker training, reporting that it gave them a new understanding of opportunities to extend their roles in frontline decision-making.

Most popular resources included the Mersey Burns App (for burns management); British National Formulary (BNF); and Merck Statistical Manual. (Table 1) The Clinical Officer and Dental Therapist were the most frequent users. Digital information formats were preferred. Clinicians expressed interest in greater use of knowledge broker support in sourcing and summarising evidence and training in using it at the point of care.

Main resources accessed
(April 2016 to January 2017)

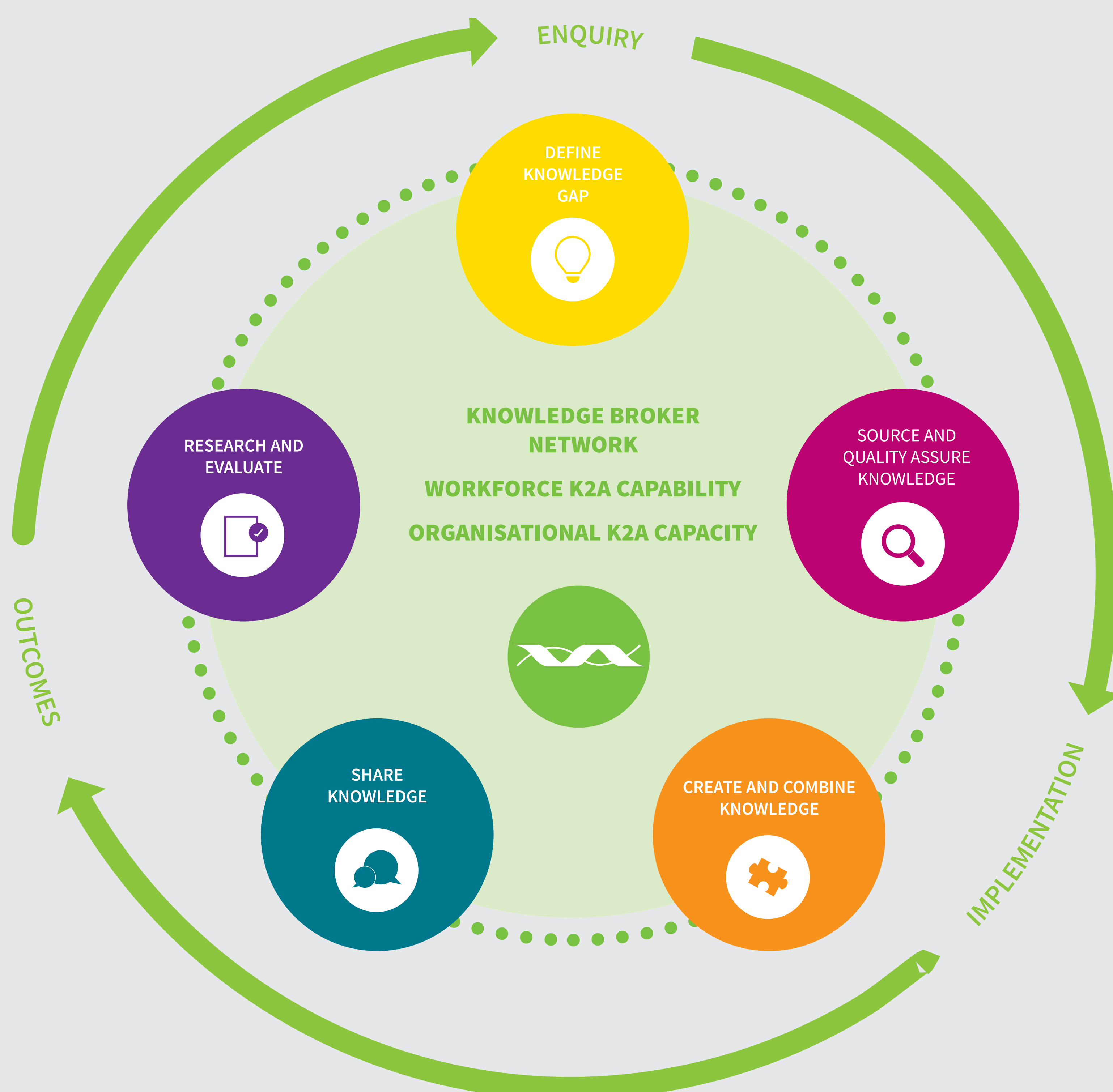| Resource	Value
Mersey Burns App	6
BNF	6
Merck Manual	6
Epocrates	4
Where there is no doctor	2
Youtube Videos	2

CONCLUSIONS

The Knowledge into Action model and KB role training developed in NHS Scotland have been adapted for the different context of Zambia, and both librarians and clinicians value the current and future potential of these developments. Future work will focus on embedding the K2A approach and KB role and spreading it more widely, within and beyond Chitambo.

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Figure 1: The Knowledge into Action (K2A) Cycle

ENQUIRY

DEFINE KNOWLEDGE GAP

RESEARCH AND EVALUATE

SOURCE AND QUALITY ASSURE KNOWLEDGE

KNOWLEDGE BROKER NETWORK
WORKFORCE K2A CAPABILITY
ORGANISATIONAL K2A CAPACITY

SHARE KNOWLEDGE

CREATE AND COMBINE KNOWLEDGE

OUTCOMES

IMPLEMENTATION

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

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FRIENDS OF CHITAMBO