Emergency Transport Fact Sheet: Key Messages Emerging From a Workshop Held in Tanzania in March 2014

A health system is missing a vital link in its chain if there is no effective emergency transport provision. Effective emergency transport provision helps to deliver Millennium Development Goals (MDGs) and address pillar five of the UN decade of Road Safety. These are the key messages that emerged from a group of subject experts who met in Dar es Salaam, Tanzania in March 2014 for an emergency transport conference.

'Advocacy & Knowledge Management for Emergency Transport' - IFRTD.

Why is it important for health systems to have a functioning and effective ambulance service?

There is growing evidence of the detrimental impact of poor transport on maternal, new born and child mortality. Formalised transport and communication arrangements need to be integrated into efforts to improve referral for Emergency Obstetric Care. This is recommended by several reviews of research evidence including one which highlights that;

> *'Modelling techniques have predicted that maternal mortality decline will reach a threshold of less than 35% decline if access to emergency obstetric care is not provided, and that referral and transport strategies, alongside other interventions, could contribute to as much as an 80% reduction in maternal mortality.'* - The Effectiveness of Emergency Obstetric Referral Interventions in Developing Country Settings: A Systematic Review by Hussein et. al

Some evidence demonstrates the scale of this problem yet there is a need for greater monitoring of the referral chain as well as more robust evaluation of transport interventions.

One of the key conclusions of the workshop was that a greater degree of Monitoring and Evaluation (M&E) needs to be applied to emergency transport for health projects and that there is a considerable amount of grey and unpublished literature that does not appear in systematic reviews. It was also acknowledged that, in order to upscale the impact of emergency transport projects being implemented, it is important to build in a policy engagement component right from the project design stage.

What are some of most effective ways to tackle this challenge? This fact sheet will highlight areas for particular consideration and share promising results from practitioners and case studies.

The AFCAP/Transaid Emergency Transport Workshop—Breakout Discussions

Factors that will improve the success of an ambulance service

The importance of sustained political commitment

'To improve the chances of a successful ambulance service in a resource constrained country it is important to have sustained political commitment, technical expertise, available finances, public awareness and pressure'.—Prof. Zakariah, Chief Executive Officer (CEO) of the Ghana Ambulance Service.

The views from the workshop endorsed this message. It was also noted that any effort to improve healthcare must approach the whole (emergency) system rather than one component of patient care. The objective must be to provide a robust and sustainable improvement in care.

David Mamatela, Transport Director of SA Ambulance Service, presenting on 'Implementing a Successful TMS in South Africa's MoH'

Transport must be well planned, managed and equitable to all

"You cannot leave transport management to chance – you must plan it, control it, measure it and understand its role in health delivery." – Saaka Dumba, Chief Transport Manager at the Ghana Ministry of Health.

It is critical to ensure that vehicles are well managed and maintained to ensure high levels of vehicle availability and that they are operated safely. Vehicles are an expensive resource and need to be managed by people who have the appropriate levels of technical know-how.

Transport Management training at the MoH Zanzibar

CASE STUDY – Implementing a successful Transport Management System (TMS) in the department of Health, North West, South Africa

- Since introducing a TMS in 2009, in 5 years the number of vehicles decreased by 1,178 (30%) with considerable cost savings realised as a result whilst providing the same service provision
- Since the introduction of a TMS, organisational and individual capacity has significantly increased, policies have been instigated to improve the management of transport and 7 Key Performance Indicators were adopted to report and measure the services provided.
- South Africa Ambulance Services also introduced a tool to determine the ideal fleet model and size, and adopted Planned Preventative Maintenance (PPM) as a management strategy. This allows them to follow a cyclic process of vehicle management throughout its life cycle.

Efforts need to be made to ensure that 'no one is left behind' and that emergency transport is suitable for all ages and genders. Research, interventions and policies should consider all demographics.

The specification of the vehicle must address the needs of the users and the operating environment

There needs to be a clearer distinction between emergency transport from the household to the facility and from referral upwards. There must also be an appreciation, throughout this chain of issues, of vehicle availability, cost, community acceptance and maintenance provision. There should be a clearer conceptual framework around this so that resources are used in an appropriate and sustainable way.

"We need different ambulances for different distances and more effective and timely referral." Prof. Stephen Munjanja, Professor at the University of Zimbabwe.

There is a widely held perception that ambulances are motorised vehicles. Often in Africa this would be a four wheeled vehicle equipped with essential medical equipment. However, the workshop highlighted the range of different modes of transport that can provide emergency transport services.

Katete District, Zambia, 2009. A volunteer Community Health Worker riding a bicycle ambulance

The experts recognised that the specification of the vehicle must address the needs of the users and the operating environment. Examples were shared of boats being used in Madagascar and India, bicycles and bicycle ambulances in the UK and Zambia for first response and for transporting patients living in rural communities. Motorcycle taxis are now one of the most commonly used mode of transport in rural areas of countries such as Uganda and Tanzania and they are providing an important role in opening up rural access. There is scope to explore how this mode of transport can be organised, regulated and made safer for emergency transport provision.

Information/mobile technology can play a significant role in shaping communication, which is vital for an effective emergency transport system

Mobile phones are becoming increasingly important for communication between patients and their emergency transport provider and health facility. GPS devices can be used to find the location of a patient and also record data about the patient and the vehicle. The rising use of mobile phones offers significant potential for shaping and enabling access to emergency healthcare.

Emergency referral systems can be strengthened by improving communications through mobile phones by establishing a special Closed User Group to enable mobile phone calls between health facilities, Community Health Workers, Council Health Management Teams and Intervention Coordinators.

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Innovations and Public Private Partnerships for improving emergency transport

Kabiru Ado Ya'u, Deputy General Secretary of the National Union of Road Transport Workers (NURTW) in Nigeria, shared his experiences from Northern Nigeria which are summarised in this case study below. The NURTW is a union of commercial drivers who drive passenger transport vehicles. Even remote communities in the north usually have access to cars driven by NURTW drivers.

NURTW ETS Driver in a motor park, Gombe State, Nigeria

- An ETS driver is a professional driver who volunteers his time willingly and free of charge to transport women to the nearest health facility whenever required, has a vehicle, resides in the local community and is accepted by the community after selection
- NURTW partnered with a number of organisations and government agencies from 2004 to the present day to implement the Emergency Transport System (ETS)
- ETS on its own would not be successful or sustainable without the cooperation of both public and private agencies in addressing identified delays that prevent pregnant women from accessing care
- Between January 2010 and August 2013 7526 women were transported using the ETS in three states *(Haq, Gary, World Transport Policy and Practice 2013)*

CASE STUDY – Successful public-private partnerships, the NURTW working to reduce maternal mortality in Nigeria

- Goal - to reduce the maternal mortality rate in Nigeria
- Objective - to increase access to emergency obstetric care for women
- The ETS is a system that provides transportation (on payment of fuel costs only) to pregnant women experiencing maternal complications. It transports them to health facilities without delay in order to address the logistical barriers that delay women from getting to health facilities to access Emergency Obstetric Care (EOC)

ETS success story—Family with triplets who were delivered after using ETS, Gombe State, Nigeria

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Subodh Satyawadi from The GVK Emergency Management Research Institute (GVK EMRI) in India shared another interesting and innovative public-private partnership model.

CASE STUDY – The GVK EMRI's Public-Private Partnership in India

- GVK EMRI provides an integrated emergency response service (fire, police, medical) in India. As a not- for-profit professional organisation operating on a Public Private Partnership (PPP) model, GVK EMRI is the largest professional Emergency Service Provider in India
- GVK EMRI covers 750 million people. It has 6,668 ambulances and attends one emergency every four seconds and saves one life every five minutes
- This emergency response costs 1.6 cents per person per month, but is a free service with no cost to the citizens that use it.
- It has a single toll-free number '108'
- It is a non-profit NGO but the private sector brings in leadership, innovation, execution and technological capabilities.
- Started with small pilot project of privately owned ambulances that provide a free service to the public. This pilot project proved to the government the concept can work and they got their support - within one year the state government decided to partner with it and has been expanding ever since.
- There are only 15 centres nationwide – this keeps the system homogenised and integrated
- They use boats and specially adapted vehicles for hard to reach areas

GVK EMRI Ambulance

Relationship with the Community

The workshop acknowledged that an emergency transport system must have the support of the community and there is a strong need for community ownership. There is evidence to show that using existing transport means from the community as emergency transport, for example, developing formal partnerships with existing transport unions, can be an important complement to existing government schemes.

Innovations to improve emergency transport and tackle maternal mortality are most successful when they have a multi-sectoral approach and do not just target one component. It's vital to build trust between the emergency transport providers and the community. Associations and co-operatives can help with the building of trust as well as improving the organisation of emergency transport drivers.

Where to go for more information…

- Workshop Resources Page: http://www.transaid.org/projects/april:-transaid-organises-international-workshop-in-tanzania-to-improve-emergency-transport-in-africa
- AFCAP website: http://afcap.org/SitePages/Home.aspx
- MoH South Africa: http://www.health.gov.za/
- MoH Ghana: http://www.moh-ghana.org/
- London Ambulance Service: http://www.londonambulance.nhs.uk/Default.aspx
- Ghana Ambulance Service: http://www.ghanaambulance.org/
- 'The effectiveness of referral for emergency maternity care in developing countries: A systematic review and meta-analysis': http://goo.gl/Ju4YDZ
- 'Linking rural communities with health services' (tools for evaluation of effect of improved transport on maternal health in West Africa): http://goo.gl/M90E0H
- 'National Assessment for Emergency Obstetric and Newborn Care' (Ghana Emergency Referral Auditing Tools): http://goo.gl/S7y852
- HelpAge International: http://www.helpage.org/
- 'Transport and Mobility Constraints in an aging population': http://r4d.dfid.gov.uk/Output/193797/
- Mobilising Access to Maternal Health Services in Zambia: http://www.healthpartners-int.co.uk/our_projects/mamaz.html
- NURTW, Nigeria: http://www.accessng.com/nurtw/
- ETS working to reduce maternal mortality in Nigeria: http://goo.gl/Fw12it
- GVK EMRI: http://www.emri.in/
- Ghana Essential Health Intervention Programme: http://ghs-gehip.org/
- Ghana Health Service: http://www.ghanahealthservice.org/
- Developing Technologies (AFCAP funded Motorcycle Ambulance Study): http://goo.gl/dKGWdf
- Trialling Boda Bodas for emergency transport in Uganda: http://goo.gl/vf7Lpt
- IFRTD: http://www.ifrtd.org/en/index.php

Delegates who attended the Transaid/AFCAP Emergency Transport Workshop March 2014