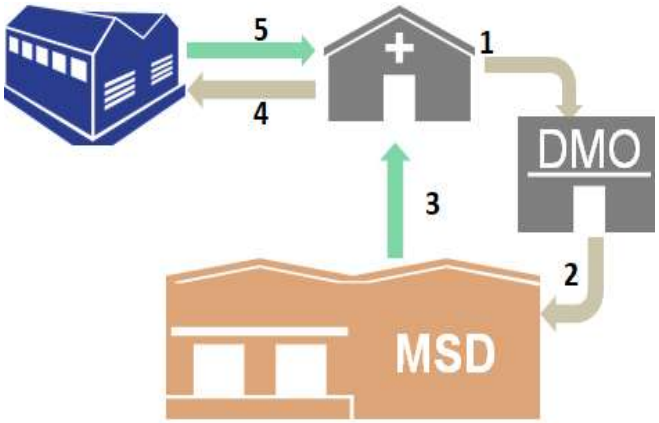
IFAKARA HEALTH INSTITUTE
research | training | services

How does PEP supply work in a decentralised country: Experience from Tanzania

Joel Changalucha, Jubilate Bernard

Supply chain



- Transitioned from MoH role to LGA responsibility in 2011
- Supply chain in Tanzania organized through the Medical Stores Department (MSD), within the MoH
- Distribution models guided by program needs (ILS, routine vaccine, vertical program etc.)
- PEP among the medical supplies categorised in ILS system
- Private sector actively involved
- PEP prequalification regulated by the Tanzania food and Drug Authority (TFDA)

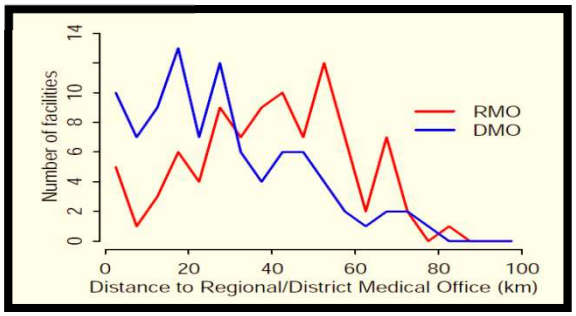
- PEP is not predetermined in priority list items
- PEP procurement depend on other source of funds
- Supply is limited to specific facility levels (NEMLIT&STG)
- LGA & health facility who are responsible for PEP provision have no ring-fenced PEP budget

Ministry of Health. Standard Treatment Guidelines (STG) and National Essential Medicines List (NEMLIT) 2017, 2017; 5th Ed, National Medicines and Therapeutic Committee (NMTC), Dar es salaam Tanzania.
Ministry of Health and Social Welfare. Integrated Logistic System (ILS) Procedure Mannual Dar es salaam: September 2008.

Tanzania PEP Position

Cost limits PEP access (no responsive but budget dependant)

PEP is centralized & only available at district hospitals



Tanzania health policy recognizes immunisation as free service

Predominant use of 3 dose IM regimen

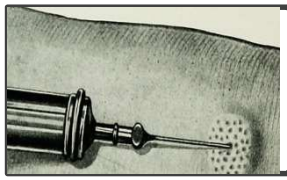
TFDA Imported Rabies Vaccine ampules	
Year	Imported Rabies vaccine doses
2008	100
2009	68,003
2010	43,804
2011	40,420
2012	20,400
2013	25,068
2014	62,327
2015	15,500
2016	3,200

Decrease in imported quantity due to budget constraints

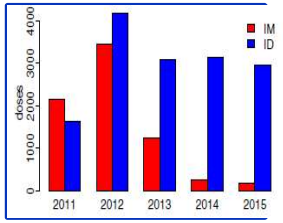
Tanzania PEP Position

Both MSD & Private suppliers are responsible for PEP

Predominant Use of CCEEVs since 2008



Essen & updated TRC indicated in NEMLIT & STG 2013, 2017



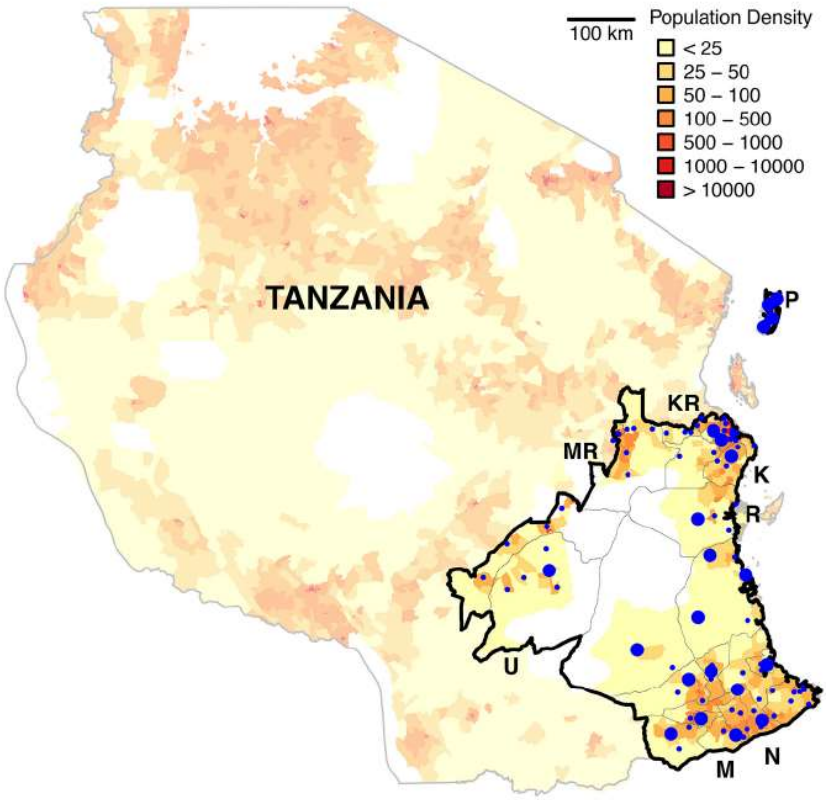
Successful shift to ID route of administration since 2011 in Gates project areas (+ new districts in 2018)

Extensive EPI infrastructure (primary facilities refrigerators >90%) could accelerate wide spread PEP supply

Mpolya EA, Lembo T, et al. *Toward elimination of Dog-Mediated human rabies: experiences from implementing a large-scale Demonstration Project in southern Tanzania.* Frontiers in veterinary science, 2017; **4**: 21

Ministry of Health [Tanzania Mainland]. Expanded Program on Immunization; Tanzania Mainland EPI Review, 2010; Immunisation and Vaccination, Dar es salaam, Tanzania, Ministry of Health and Social Welfare

Decentralisation of PEP



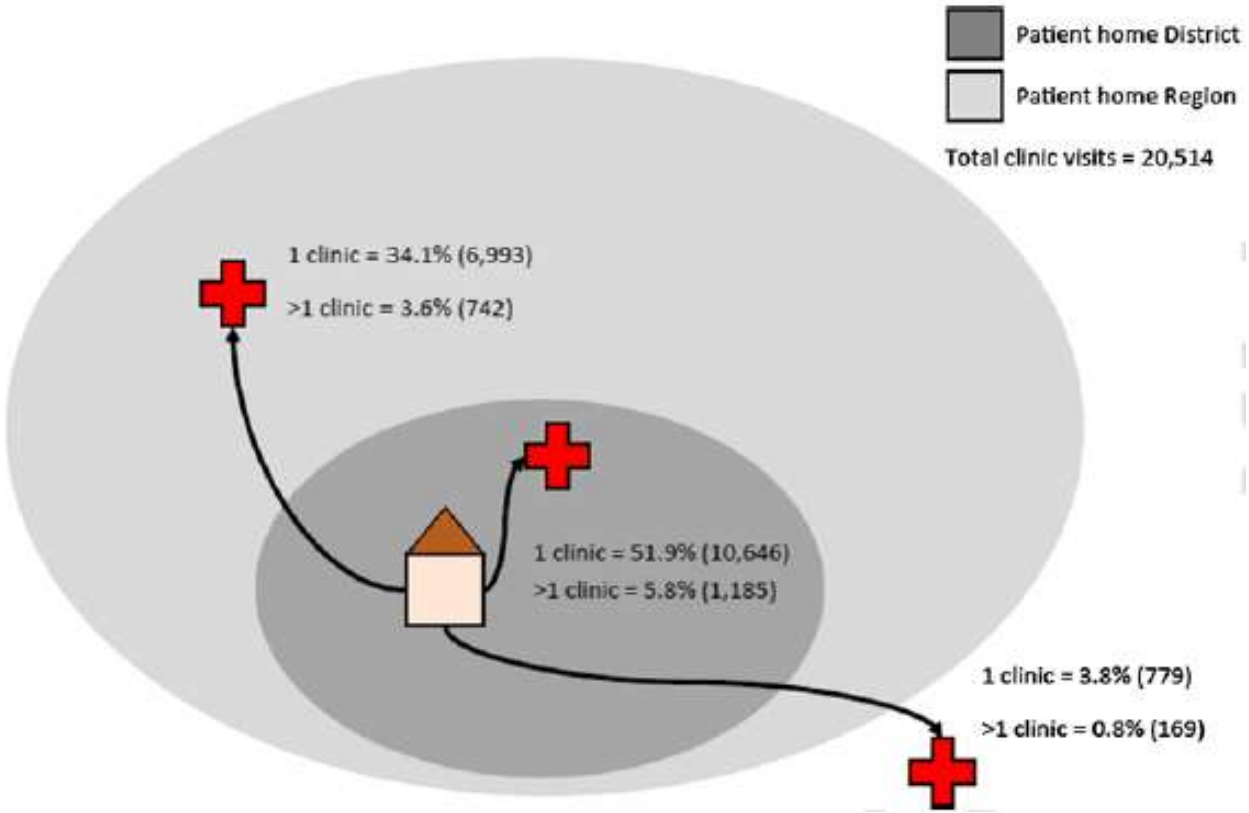
- Trialled as part of Gates/WHO rabies project
- 4 health facilities per district selected (33Disp, 43HC, 20Hosp) for free provision of ID PEP
- Mobile phone based surveillance to integrate sectors, monitor PEP demand & logistics
- Free PEP partly embedded within routine vaccination system (monitoring, staff & infrastructure)
- Distribution on demand (no calendar & order when stock is ~10%)
- Supply to LGA authorised by MoH rabies coordinator
- shortage mainly due to procurement and requisition challenges
- ID route occasionally lacked insulin syringes

Mtema Z, Changalucha J, et al. *Mobile phones as surveillance tools: implementing and evaluating a large-scale intersectoral surveillance system for rabies in Tanzania.* PLoS medicine, 2016; **13**(4)

Mpolya EA, Lembo T, et al. *Toward elimination of Dog-Mediated human rabies: experiences from implementing a large-scale Demonstration Project in southern Tanzania.* Frontiers in veterinary science, 2017; **4**: 21.

Decentralisation of PEP

- Even with improved provision, 34% of patients attended a clinic outside their home district but in the same region, 10% had to visit at least 2 clinics for PEP



- Free provision **increased attendance and reduced delays** to PEP
- However currently patients typically pay >$10 per dose which is a major obstacle for prompt PEP provision

General lessons

- Cost is the major barrier for PEP access – both for patients and for LGAs (no central budget)
- Infrastructure for larger scale supply does exist
- Countrywide training of ID required despite existing NEMLIT&STG indication
- ID route reduces cost to bite victims by 50%
- Limited (veterinary) surveillance to influence PEP decision making
- RIG is not available
- Inadequate tools to track PEP immunisation status
- Lack of experience in effective management of PEP stocks

Acknowledgements

IFAKARA HEALTH INSTITUTE
research | training | services

World Health Organization

University of Glasgow

BILL & MELINDA GATES foundation

wellcome

UBS

UBS Optimus Foundation