



THE REPUBLIC OF UGANDA - MINISTRY OF HEALTH

Cold Chain Equipment Maintenance System

15th TechNet Conference

Key Figures



- **People: 37,673,800***
- **Growth rate: 3.03%**
- **Birth cohort: 1,827,179**
- **Districts: 116**
- **Counties: 277**
- **Sub-counties: 1,364**
- **Parishes: 7,101**
- **Villages: 56,080**
- **Health centers: 6,628****

*Uganda Bureau of statistics (UBOS)

**Ministry of Health - Health Facility Inventory 2016

CCE System



Equipment

01 NVS
17 WICRs
2 WIFRs
10 refrigerated trucks

Personnel

8 cold chain technicians

Region

116 DVS
100% with CCE*

57 DCCTs
64 DCCAs

>3,443 HCs
52% of HCs have CCE

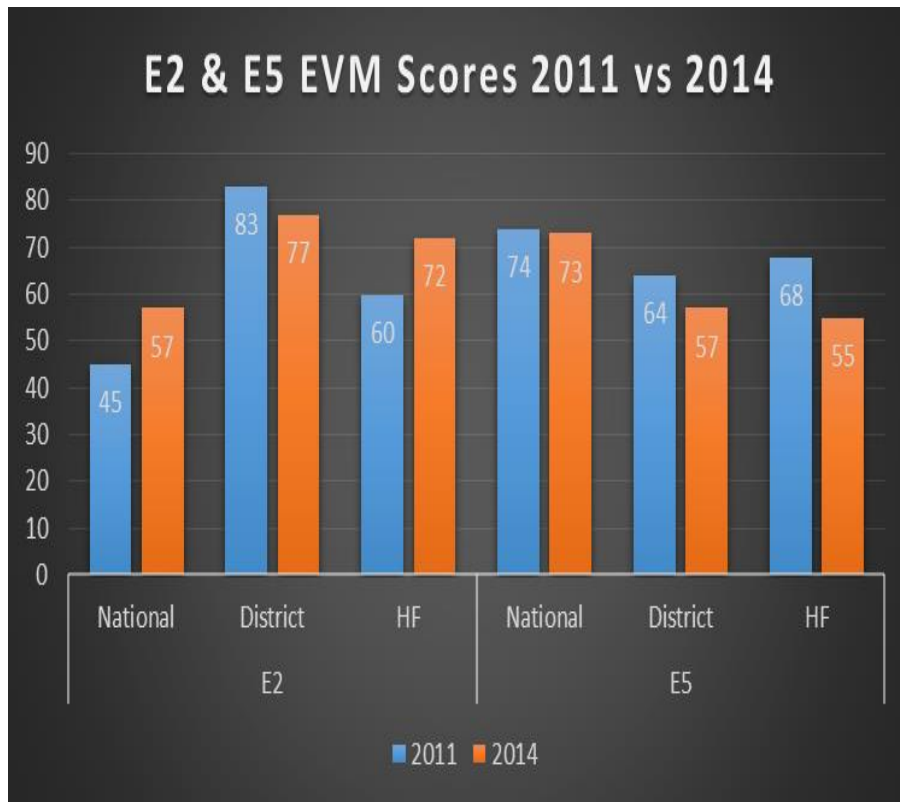
1 EPI focal person

Outreaches



*Financial Year (FY) 2016/17. New districts coming on board this FY

Previous Cold Chain Maintenance System (2014)



- CCE maintenance support relied on 4 national technicians.
- Less than 40% of districts had skilled cold chain technicians.
- Combined centralized training – mostly theoretical.
- No CCE/spares inventory.
- Cold chain working in isolation from national – district level.
- Use of stem thermometers at the subnational level.
- Slow response to CCE breakdowns.

Averagely, 4 new districts are created each year, mostly politically driven with little infrastructure & HR support – high implications for CCE maintenance at district level

Changes in CCE Maintenance System



- CCE maintenance reorganization
- Some integration with MoH Biomedical department
- Training approach
- Advocacy for needed changes at district

Technical CCE Maintenance

EPI Operations and Administration



Central CCE Maintenance Workshops

- More demanding corrective tasks
- Capacity development, training, and supervision
- Specialized CCE tests

MoH—UNEPI Cold Chain Technicians

- Support work at central workshop
- Link regions and districts with central workshop
- Mentor and train

Regional CCE Maintenance

- Hosted at regional referral hospitals
- Work with the EPI focal person and biomedical technician
- Coordinate CCE maintenance and reporting in assigned districts
- Quick link to central team
- Infrastructural support
- Regional EVM tracking and monitoring
- Storage and issuing of spare parts

District health officer

District EPI focal person

District cold chain technician

District CCE Maintenance

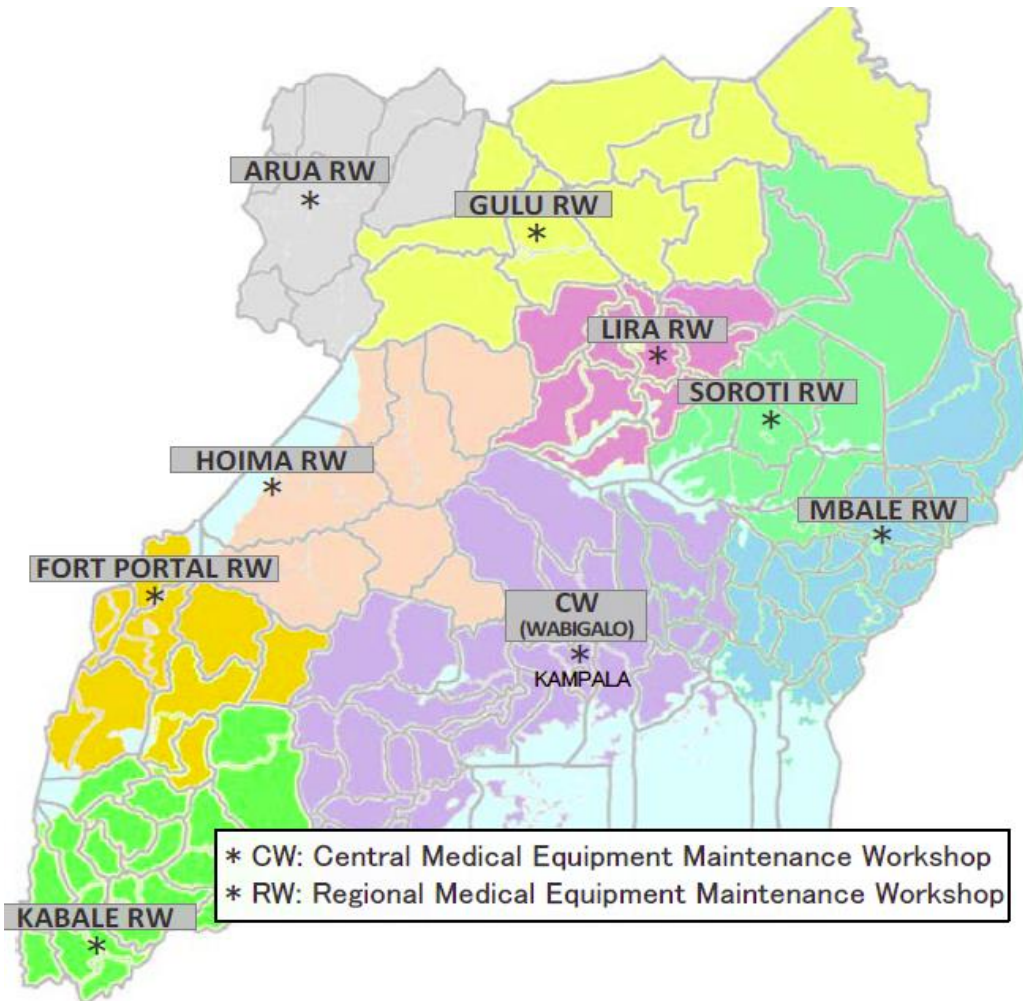
- DCCTs/DCCAs
- Support health center CCE maintenance and reporting
- Links to central team through region

Health Center

- Preventive maintenance
- Reporting; temperature and CCE
- Manned by EPI focal person
- Supported by district technician

Current CCE Maintenance Model

Regional Model of CCE Maintenance



Opportunities

- 10 operational bio-medical equipment maintenance workshops at regional referral hospitals.
- Full time bio-medical engineering technicians in each workshop – not working on EPI CCE.
- Existing supervisory oversight of RRH to district facilities

Regional CCE Maintenance – Process



- Engagements between MoH Infrastructure Division and EPI to secure buy -in.
- Mapping DCCT/A within catchment of the regional workshops
- Formed regional clusters for skilled technicians to provide maintenance support.
- Orientation & official roll out of this planned at regional level – funding secured.

Regional Teaming for DCCT/A					
Regional	District	Name	Tel: contact	Designation	Regional Leader
Mbale A	Budaka	Manyonyi Allan	0702363471	DCCT	Malunda Gerald
	Bududa	Kitakuyi Tadeo	0774773060	DCCT	
	Namutumba	Malunda Gerald	0775871422	DCCT	
	Kibuku	Muneko Joseph Paul	0774242602	DCCT	
	Pallisa	Ikwaras Bernard	0782465546	DCCT	
	Tororo	Onamuna Steven	0782444540	DCCT	
Mbale B	Butaleja	Hasahya Aggrey	0772902319	DCCA	Mutambo Alfred
	Bukwo	Soyekwo Julius	0776601411	DCCA	
	Kapchorwa				
	Kween	Sabero John Bosco	0773887585	DCCA	
	Manafwa	Busiku Wamutu Moses	0782929933	DCCT	
	Mbale	Mutambo Alfred	0704085448	DCCT	
Moroto	Bulambuli	Wolimbwa Johnson	0777881016	DCCT	Owili John Tabu
	Sironko	Rabongi Munak	0704323584	DCCA	
	Abim	Owili John Tabu	0778133610	DCCT	
	Amudat	Asuba Moses	0773360564	DCCA	
	Kaabong	Ilukunyang Cornelius	0774861882	DCCA	
	Moroto	Lomongin John Bosco	0772418258	DCCA	
Soroti	Napak	Lokwang Anthony	0782559663	DCCA	Ochom Joseph
	Amuria	Ekadu Martin	0778478687	DCCA	
	Bukedea	Opesen John	0705863440	DCCA	
	Katakwi	Amali Samuel	0782315747	DCCA	
	Ngora	Ochom Joseph	0777667843	DCCT	
Isingiro	Bugiri	Mutebe Richard	0773851988	DCCT	
	Isingiro	Rwekwaso Patrick	0776657708	DCCA	

National CCE maintenance workshop



- Secured space at central biomedical workshop
- One EPI technician posted
- 2 fellows completed 2 week 2 week training;
 - Included supervised field (HC) posting
 - Tour of NVS
 - Overview of EPI
- Support center for CCE repair referrals from districts

Key Lessons and Achievements



- Empowered districts to mobilize cross-district technical support for CCE maintenance through the region
- Quick maintenance response time in districts without qualified technicians
- Regional supportive supervision to health centers now includes CCE maintenance issues
- Complicated repairs done at central workshop – opportunity for interpersonal hands-on mentorship
- Two newly appointed district technicians trained and equipped with tool kits to maintain and repair CCE; it's an incentive for performance

Challenges & Way forward



- It's just the start. A framework for implementation of the regional model still needs to be put in place.
- System leverages biomedical staff at regional workshops. High level engagement is needed to extend work to these technicians.
- High turnover of qualified DCCTs – not well-motivated exacerbated by the slow recruitment process by local governments. MOH to continue to advocate for recruitment at LG level.
- Strengthen temperature monitoring system at subnational level to inform maintenance decisions.
- Leverage regional model to track and update CCE inventory



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THANK YOU