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Safe Phlebotomy Training: A Comparison of two Training Approaches

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Introduction (I)

- Phlebotomy exposes health care workers (HCWs) to blood-borne infections
- Strongest risk factor for needle-stick injuries has been associated with not having attended any training session (Nsubuga et al., 2005)
- Preventive measures: skill-based training to improve blood-drawing practices

Introduction (2)

- Effective in-service training, targeting all HCWs who draw blood in all facilities, is key
- Facility-based training model was developed by NASCOP in 2011 for high-volume facilities
- With decreased funding, need to maximize effectiveness and efficiency of training
- Training approach centered on CD4 testing networks introduced by MSH/SPHLS in 2012

Methodology

Objective:

- To compare two in-service training approaches for determination of effectiveness and efficiency of training

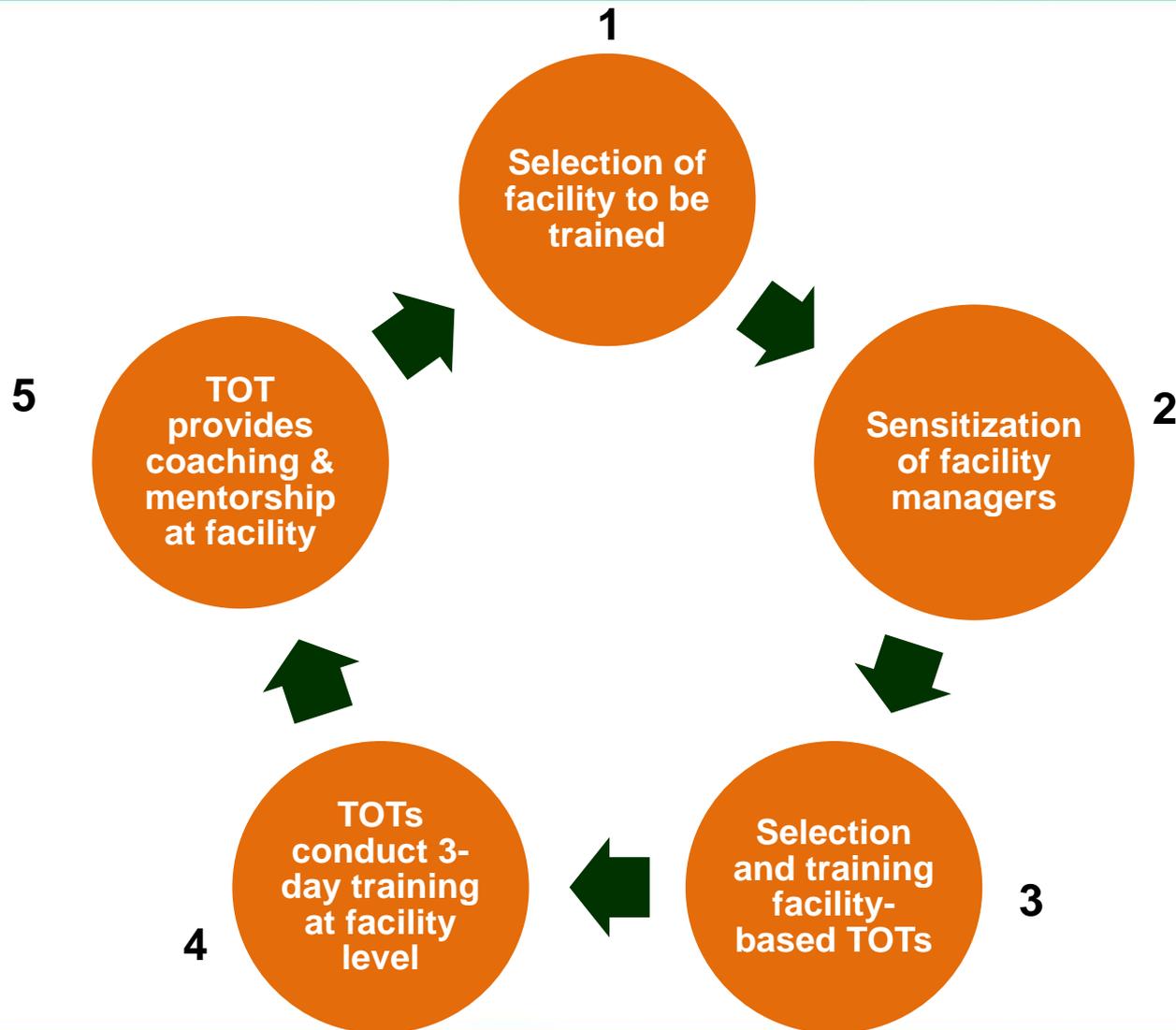
Study period:

- 2012-2013

Training approaches compared:

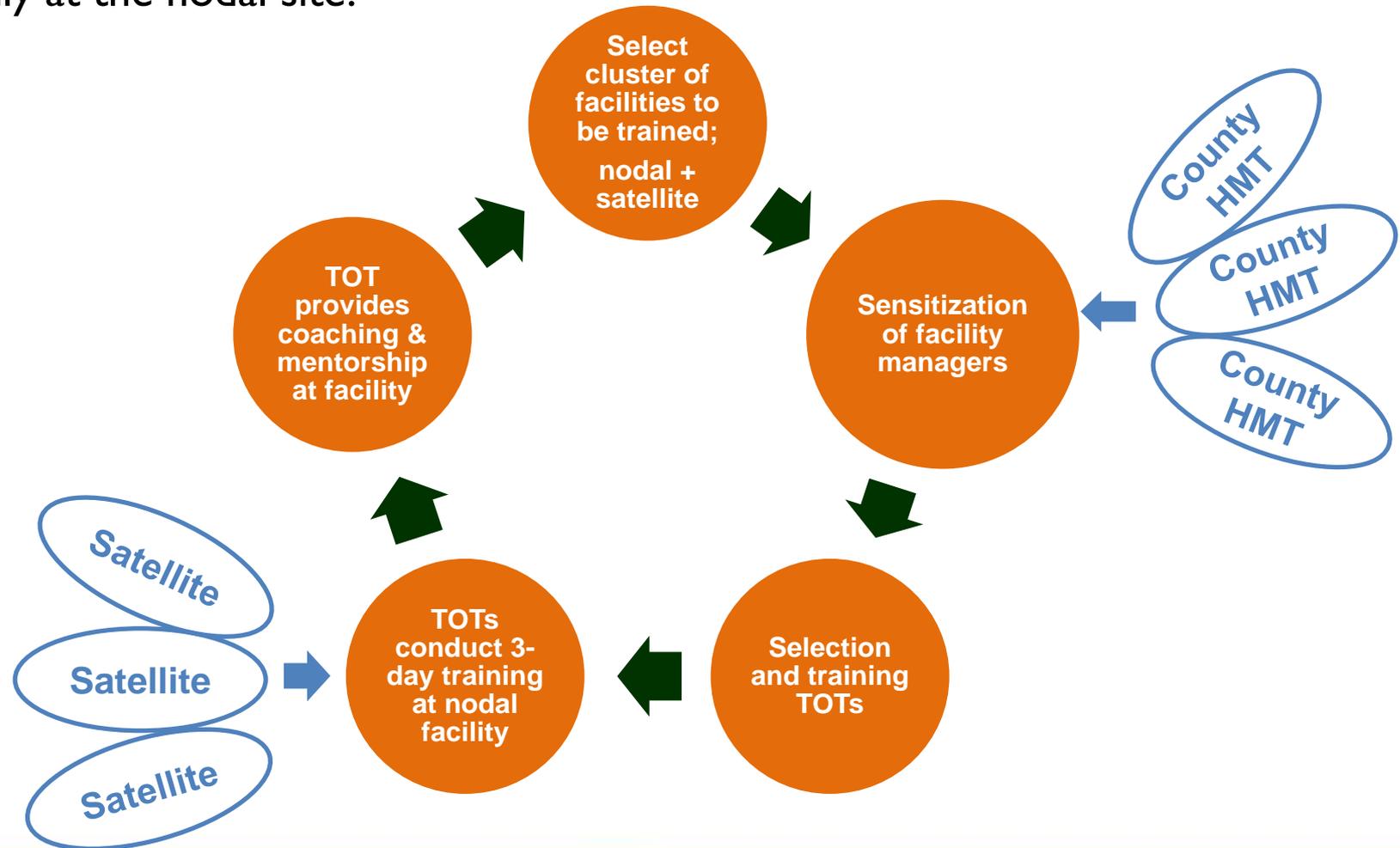
- Traditional in-service facility-based
- Network approach

Facility-Based Training Design



Network Training Design

Participants were drawn from the several CD4-testing network clusters and trained centrally at the nodal site.



Results- Comparison of the Two Models (I)

Facility-based training

- Average unit cost per participant = Kshs 9,265 (\$ 109)
- Coverage: Health facility only
- Saturation: Achieved
- Local effect on specimen rejection
- DMLTs not involved

Network approach

- Average unit cost per participant = Kshs 11,817 (\$ 139)
- Coverage: Regional networks
- Saturation: Achieved
- Effect on specimen rejection beyond nodal facility
- DMLTs involved for follow-up

Results-Comparison of the Two Models (2)

Facility-based training

- Less logistic and administrative requirements
- Return on investment: 1-year staff turnover
- Easy to address specimen issues from inpatient section
- Improves lab-clinical interface

Network approach

- More logistic/admin requirements, participant travel
- Return on investment: Long duration (low staff turnover)
- Address specimen issues from entire network
- Improves nodal-networks interaction

Other measures taken to improve training efficiency

- Utilization of mobile money-transfer technology to reduce administrative and logistic costs
- Utilization of TOTs from the region where training is taking place
- Utilization of government institutions during training

Conclusions

- Upfront cost of nodal training is higher than facility based
- Both training approaches achieved coverage in target areas (across all levels of care in the target sites)
- Facility-based approach suitable for large clinical facilities
- Network approach suitable for public health services
- In-depth cost/benefit analysis of the two approaches needed using training outcomes

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