SU-12
Community mHealth Integrated Care (ComHIC) to manage hypertension/diabetes in Tanzania’s overburdened health system

mHealth: health messaging by mobile phone

GACD Annual Scientific Meeting, November 13th, 2019
Kaoruko Seino, Department of Global Health Entrepreneurship
Tokyo Medical and Dental University
Community mHealth Integrated Care (ComHIC) to manage hypertension/diabetes in Tanzania’s overburdened health system

Topics to be covered:

- How stakeholders are/will be involved in designing the program and scale-up strategies, implementation and evaluation.
- How do we conceptualize “scale-up” in our project?
[1] Stakeholder meetings
- Study design, scale-up planning

[2] Evaluation of NCD-care resources
- Context Analyses
  - 2-1. Resource assessment
  - 2-2. Patient database

[3] Pilot study of NCD mHealth
- 3. System designing

[4] Assessment of readiness of CHWs
- FGDs
  - CHWs

[5] Two-arm cluster randomised control trial (RCT)
- ComHIC: text messaging + CHWs for HT/DM management
  - Patient database
  - Baseline survey
  - Mid-point survey
  - End-point survey
  - Health facility/community enrollment
  - Patient recruitment
  - Randomisation
  - Usual care + ComHIC
  - Usual care + Usual care + ComHIC

- [Effectiveness, efficiency, safety, and equitability]
  - Analysis of impact on HT/DM management
  - Analysis of increase in community capacity
  - Analysis of reduction in social cost

[7] Developing scaling-up strategies
- Forming strategies for scale-up
Implementation Research Team

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Co-PI: **Dr. Stephen Kibusi**
College of Health Sciences, The University of Dodoma

Tokyo Medical and Dental University (TMDU)

The University of Dodoma (UDOM)

Tanzania Diabetes Association (TDA)

Muhimbili University of Health and Allied Health Sciences (MUHAS)

Nagasaki University (NU)

Government Stakeholders

President Office, Regional Administration and Local Government (PORALG)

Ministry of Health, Community Development, Gender, Elderly, and Children (MoHCDGEC)

Dodoma Regional Medical Office (RMO)
Identified relevant stakeholders and key players (section/unit) – Policy makers, Government

**National**
- Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC): Chief Medical Officer, Deputy Minister, Coordinator Adult NCD and National cancer coordinator, NCD focal person, Coordinator of Telemedicine, Director, Human Resource Development & Training
- President’s office – Regional Administration and Local Government (PO-RALG): Director of Health; Health System Management; Basket Fund & NCD coordinator; ICT unit

**Dodoma Regional level:** Regional Medical Officer- Dodoma; Microbiologist & lab in charge; Epidemiologist; Regional NCD Coordinator; 
**District level:** District Medical Officers; District NCD coordinator, Medical Doctor in charge; mHealth team

**Others:** Former Director General, Tanzania Commission for Science and Technology, Chair of E-health policy); Assistant Lecturer, Col Informatics and Virtual Education (CIVE), Dpt Computer Science, UDOM

The 1st ComHIC Multi-stakeholders meeting, Oct 8, 2019
Stakeholders’ engagement and their interests/concerns

1) National, regional and district governments
   ● Designing: program & scale-up strategy
   ● Implementation: direct resource mobilization
   ✓ Feasibility, Appropriateness, Capacity-building, Mutual-benefit, **Sustainability**

2) Local health officers
   ● Implementation: Recruitment (staff, patents); Empower and collaborate with community partners (village volunteer)
   ✓ Acceptability, **Sustainability** to utilize existing community scheme

3) Community partners
   ● Implementation: Involve; Collaborate; Disseminate
Conceptualization of “scale-up” in our project

Identified “Sustainability” the key concept among research team and stakeholders

✓ Integrate ComHIC program into the existing service and community scheme
  • Mobilize Village volunteer worker
✓ Harmonize with on-going/launched activities to strengthen and drive forward NCDs control program
  • Training guidelines for village health volunteers to work on NCDs
  • mHealth manuals for Hypertension/DM patients and for the local health professionals
National NCD Implementation Plan 2016-2020

National NCD Conference: Multisectoral engagement in prevention, care, and management of NCDs in Tanzania (NCD week Nov. 11-15th, 2019. National Institute for Medical Research)

Tanzania NCD Strategic Plan 2016-2020

Implementation Research on Community mHealth Integrated Care (ComHIC) + Community engagement + mHealth/ eHealth
How can a program applying Hybrid 1 (untested implementation strategy) be scaled up?