Iwala community alliance

Leveraging Organizational-Academic Partnerships for Data Collection and Impact Demonstration in Rural Kenya

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When Communities lead, Change is Drastic & Lasting

- Milton and Fred Ochieng’ grew up in the village of Lwala
- Studied at Vanderbilt Medical School
- Their father started a community-wide effort to build a health clinic. After his death, Milton & Fred carried forward his dream, founding Lwala.
Who we are

• Affiliated partner of Vanderbilt Institute of Global Health

• Work through partnership with Kenya Ministry of Health

• Reducing maternal & child mortality through holistic, community-led initiatives

• Ambitious vision to expand model to hotspots of poor health outcomes throughout Kenya
Maternal mortality is twice the national average

1 in 2 women who want contraception don’t have access

6.2% of youth 15-24 are HIV positive

1 in 12 children die before their 5th birthday
• Engage communities in holding health systems accountable & implementing their own solutions

• Track and treat every pregnant mother, child under 5 & person living HIV positively within the population

• On-site coaching to improve facility quality

• Creating a “Model County” to reach a population of 1 million people
Community Committees
Design, implement & evaluate health initiatives. Hold health systems accountable

Community Health Workers
Track & provide care to every pregnant mother, child under 5, person living with HIV

Health Centers
On-site training & coaching for quality improvement

Data
Individual-level, real-time data, plus rigorous evaluation
Our Current Reach

- Population of 30,000
- 85 Community Health Workers
- 5,000 children enrolled
- 47,000 patient visits & 550 deliveries / year at Lwala Community Hospital
- 5,700 couple years of protection / year
- Support 2 additional government health facilities
Reducing Maternal & Child Mortality

Key Behaviors

• 97% skilled delivery rate

• 80% completion of prenatal visits

• 300% increase in contraceptive uptake

• 94% immunization coverage
Systems Change

Future
Expand our technical assistance across health crisis hotspots

Model County – 1,000,000
Expand the model to establish a “model county”. 3-pronged: Government, Peer Institution & Direct Service

Expand – 150,000
Direct service expansion w/ government adoption pilots

Core - 30,000
Sustain, Improve, Research and Development

*These numbers are in addition to the replication pilots
Potential Projects: Model Evaluation

• Task shifting and Community Health Worker model
  • Assessment of maternal/child outcomes of CHW’s & support of primary care at government facilities
  • Working with (Carolyn & Troy on Grand Challenges Canada proposal)

• HIV/Water, Sanitation, and Hygiene integrated programming
  • Integrated vs. non-integrated programming
Potential Projects: Scaling Efforts

• Facility quality assessment and improvement
  • CHW model relies on referral to high-quality and reliable facilities
  • Developing locally contextualized tool to assess quality and drive improvement as we expand (under draft with Essential Skills course)

• Costing study
  • Cost savings and benefits of implementing CHW programs in Migori county
  • Far-reaching potential policy effects for health of > 1,000,000 people
Survey Background

• Lwala has been working with the community for 10 years
• Increasingly focused on systematic evaluation and data collection
  • No data available disaggregated to the level of the catchment area from national or other surveys
• Survey has four primary aims:
  • Understand current health, socioeconomic, and education metrics among community members
  • Evaluate effect of current Lwala programming to the extent possible in a cross-sectional study
  • Identify potential areas for improvement and future research
  • Provide evidence and baseline data for ongoing scaling activities
Sampling Methodology

- Catchment area broken into grid cells based on days of administration
- 8.4% of households within each grid cell surveyed to obtain 500
  - Calculated via previous GIS mapping project
- “Spin the bottle” method with random number skipping to select households
- Random adult over 18 in the household selected
Survey Administration

• 10 interviewers selected from local community
• 4-day training on tablet use, survey administration, ethical considerations, and communication skills
• Administered using CommCare application on tablet
• Data checked line by line each evening by Lwala research fellow from Vanderbilt
Survey Tool

- 273 questions covering 12 main areas
- Developed by an interdisciplinary staff of researchers and implementers
- Drew heavily from existing survey tools such as SCIP and DHS
- Piloted extensively in Lwala with appropriate modifications

Question areas:
1. Demographics – 5 questions
2. Household – 17 questions
3. Family Planning – 12 questions
4. HIV – 34 questions
5. Water, Sanitation, and Hygiene – 13 questions
6. Child Health – 27 Questions
7. Mental Health – 9 questions
8. Education – 12 questions
9. Economic – 28 questions
10. Lwala Community Alliance – 9 questions
11. Vaccination – 14 questions
12. Observation – 25 questions
Projects

• Preliminary results report ongoing

• Current and planned student projects
  • Factors associated with care seeking by caregivers of children under 5 – Joey Starnes, MD/MPH student
  • Effect of mental health on care seeking – Rui Wang, MEd/MPH student
  • Mixed methods study of family planning – Kaitie Geck, MD student

• Other potential projects and manuscripts
  • HIV stigma and its effects
  • Association of Community Health Workers and health behaviors
  • Predictors of vaccination in children under 5
  • Child mortality and its predictors
  • HIV and Water, Sanitation, and Hygiene integrated programming
  • Education and economic evaluations
Preliminary Results

• HIV test rate was 97% (97.28% of women and 94.96% of men)
  • Migori average is 90.8% for women and 86% for men

• 92.6% of households have at least 1 mosquito net
  • Migori average is 78%

• 69.2% of households have been visited by a CHW
  • 40.7% have been visited in the last month
  • 51.4% have been visited in the last 3 months

• Average number of antenatal visits was 4.33
  • 73.4% had 4 or more
  • In Nyanza only 58.7% have 4 or more
Preliminary Results: Child Health

- Under-5 mortality rate is 29.5/1000 over last 5 years
  - 82/1000 is average rate in surrounding region
- 89.7% had a skilled attendant at most recent birth
  - 53.4% had skilled attendant in Migori
- 90.9% of most recent births occurred at a health facility
  - 53.3% in Migori County delivered at a health facility
80% completion of prenatal Visits
40% at Control Sites
300% Increase in Family Planning visits

5,770 Couple years of protection in 2016
Nearly 100% Facility Delivery

Births delivered by a skilled provider

- Pre-2011: 26%
- 2011: 47%
- 2012: 92%
- 2013: 96%
- 2014: 94%
- 2015: 97%
- 2016: 97%
- Comparison Facilities: 53%
- 2014 County Average: 70%
Thank You
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