Institutionalizing Community Health Conference

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Background

- Integrated Community Case Management (iCCM) of childhood illness is an evidence-based strategy to extend the treatment of leading causes of death in children to hard-to-reach areas, under-served by health facilities to increase timely access to & use of lifesaving treatments.

Kenyan iCCM Package:

1) Diagnosis and Treatment of Malaria
2) Diagnosis and Diarrhea;
3) Referral of Suspected Pneumonia; Malnourished Children* and Newborn sepsis

Many countries include treatment for pneumonia

iCCM Implementation Research in Bondo

Rationale: Lessons learned to inform ICCM scale-up to other areas in Kenya and inform policy at national level

Specific objectives (1)

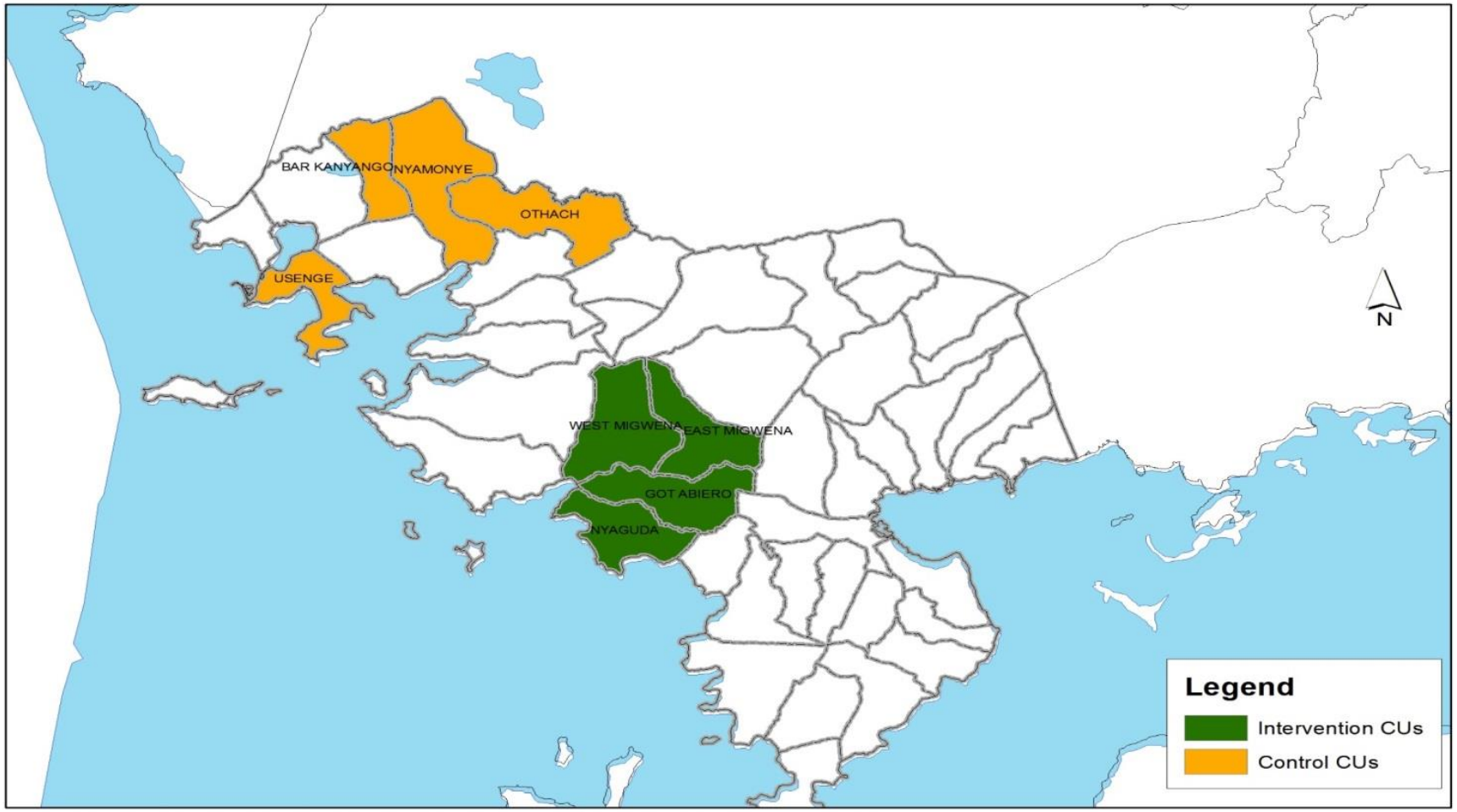
1. To determine changes in the **community's knowledge and practices** including **care-seeking** behaviour

2. To document the feasibility of iCCM implementation through the **assessment of CHV performance**, **CHV satisfaction, client satisfaction** and **implementation challenges**

Specific objectives (2)

3. To document the extent to which **community health extension workers** (CHEWs) provide **support** to CHVs and **challenges** the CHEWs face
4. To document the extent to which **Sub-County health management committees** (SHMTs), and **community leaders** were able to **support implementation** of the iCCM package and the challenges faced
5. To document the **cost** of implementing iCCM in Bondo Sub-County over an 18-month period of implementation

Map of Study Area- Bondo



Study Area & Selection Criteria

- There were 4 intervention & 4 comparison CUs identified based on:
    - Distance
    - Link facility operational for less than 24 hours daily
    - Poverty
    - Poor infrastructure/lack of reliable transportation
    - Religious/cultural issues affecting care seeking behaviour

Study Design

- Quasi-experimental pretest-posttest design, without randomization to intervention and comparison groups
- Evaluation methods included:
  1. household surveys
  2. direct observation of CHVs during case management,
  3. key informant interviews, and
  4. analysis of implementation monitoring program data (including direct costs)

Household Survey – Identification of Sick Child

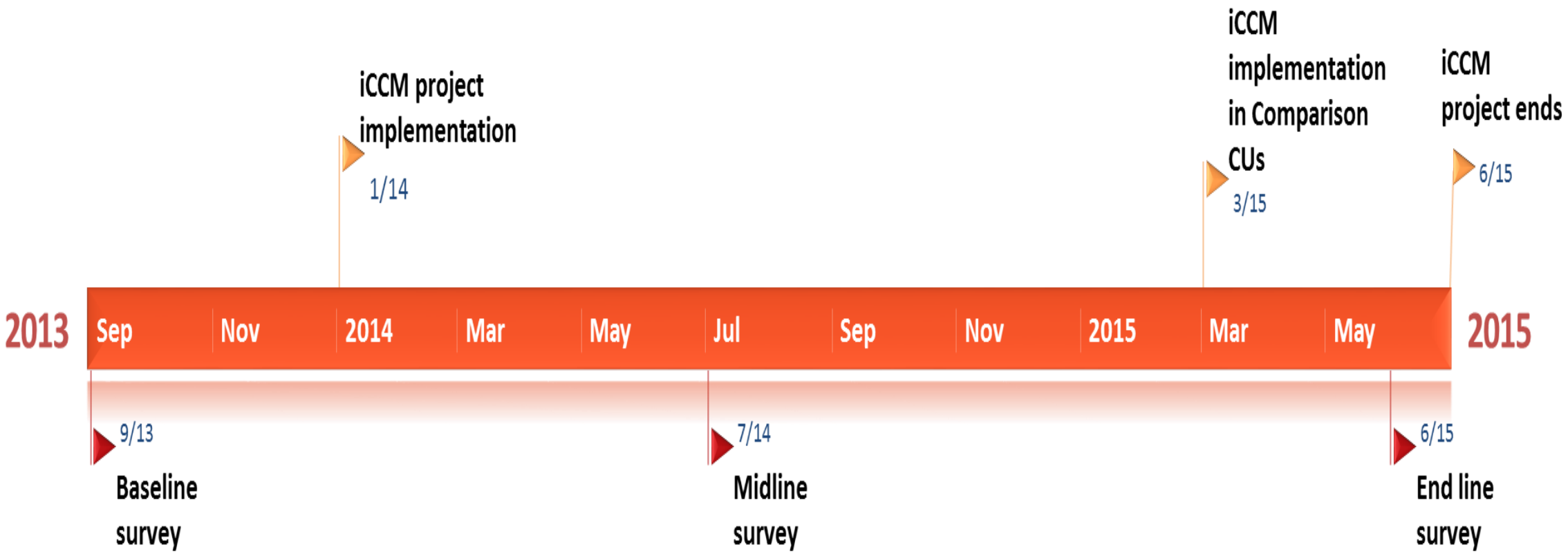
- Household (HH) selection was through a two stage cluster sampling with villages within the CU being the "clusters"

Intervention and Comparison Package

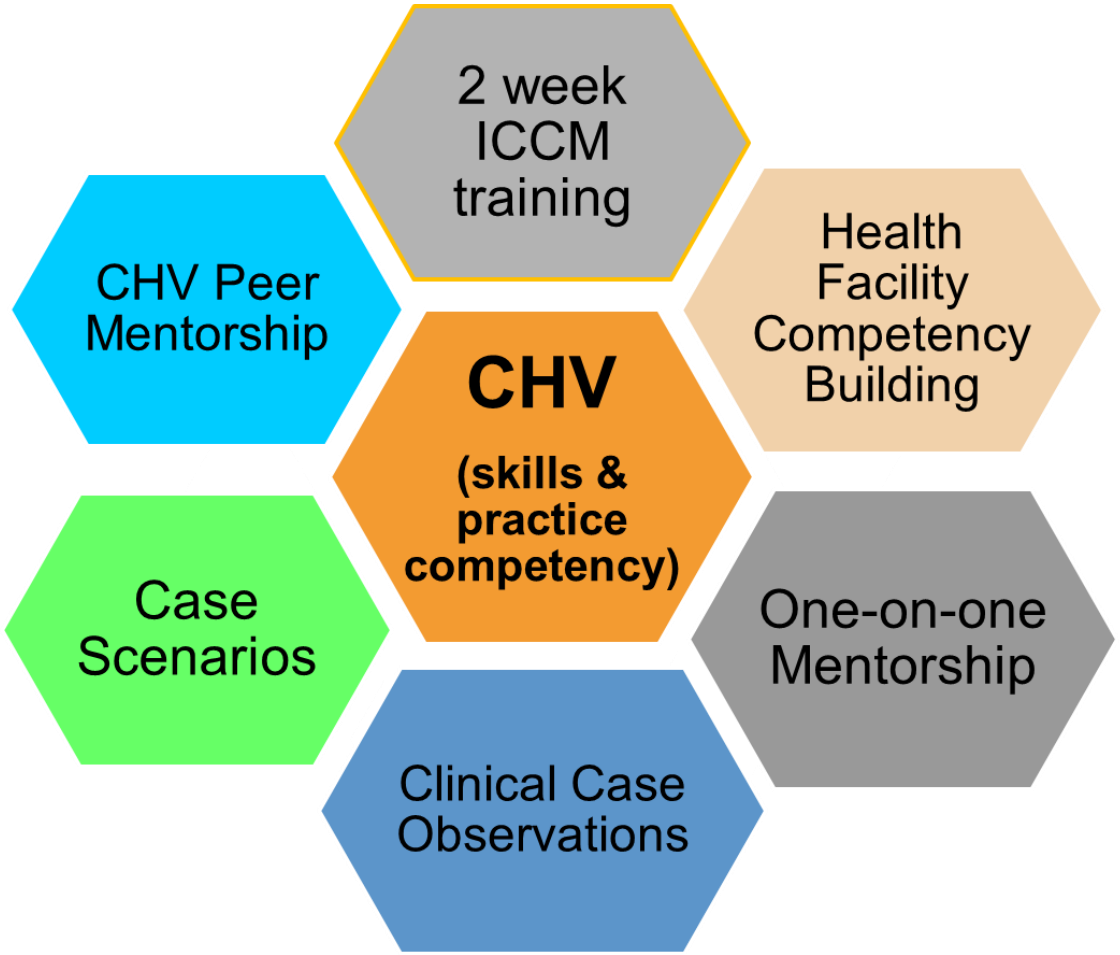
Table 2: packages implemented

Service package to CHVs and CHEWs	Intervention CUs (Experimental)	Comparison CUs (Usual care)
BCC training and provided tools (e.g. gum boots, torch, and bags – to carry data tools and supplies) to all CHVs	x	x
Provided CHVs basic monthly stipend to CHVs	x	x
Support monthly meeting between CHEWs/ CHVs/ CHCs (e.g. to distribute M&E tools and transport reimbursement)	x	x
Provided CHVs with basic CHVs kit: ITNs, Vitamin A, deworming tablets, condoms, torch, registers and health promotion materials.	x	x
Provided basic CHVs kit PLUS iCCM commodities- ORS, zinc, RDTs, ACTs	x	
Trained CHVs in iCCM	x	
Trained CHEWs on iCCM and IMCI	x	

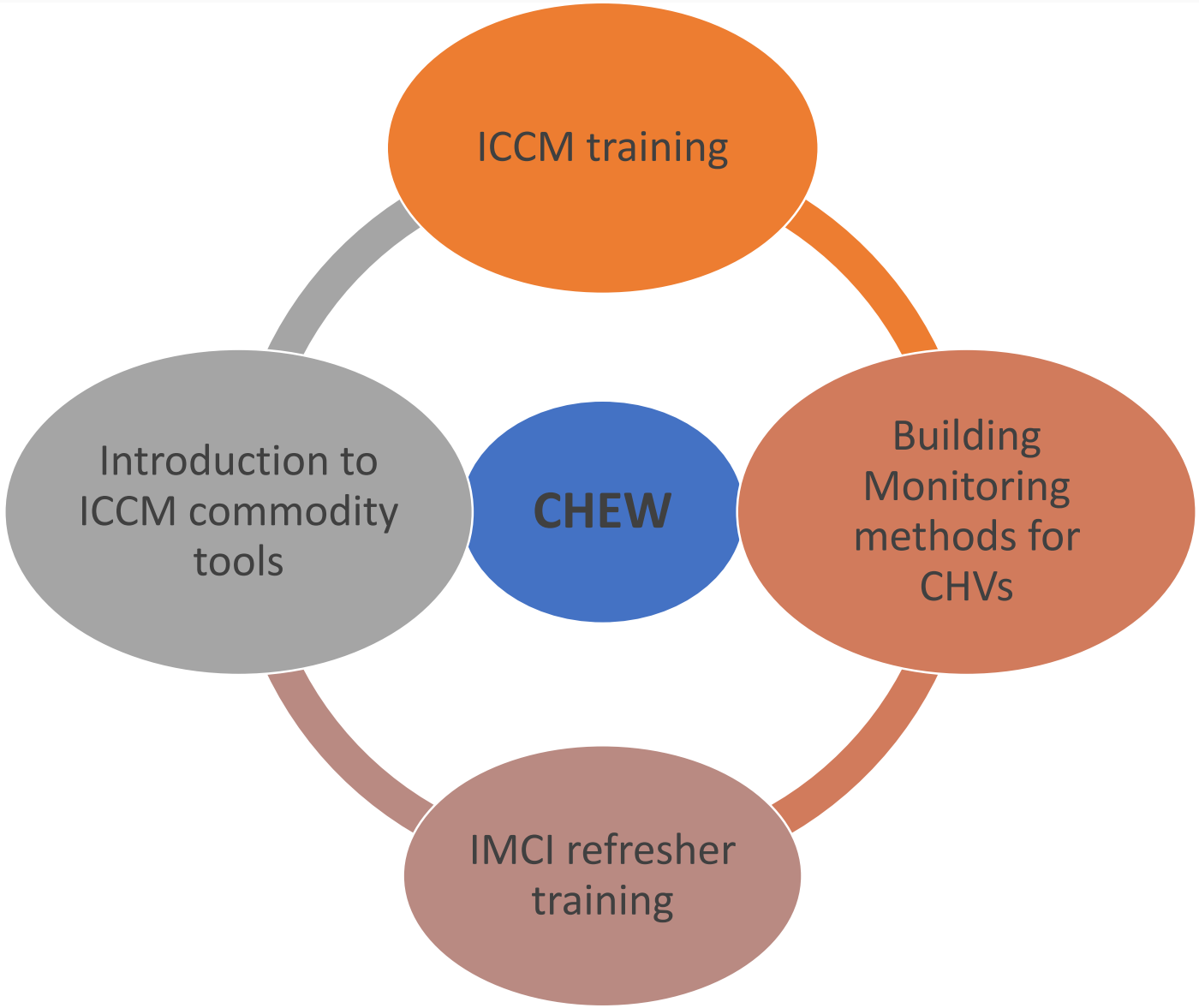
Study Timeline



CHV capacity building for ICCM at Intervention CU



CHEW capacity building for iCCM at Intervention CU



Changes in the Comparison Group during the study period

Over 18 months

- Some villages and CHVs in the comparison CUs were involved in a **malaria incidence and surveillance cohort study** from November 2013 to November 2015 and were trained to provide diagnosis and treatment for malaria using RDTs and ACTs.

6 months to end line survey

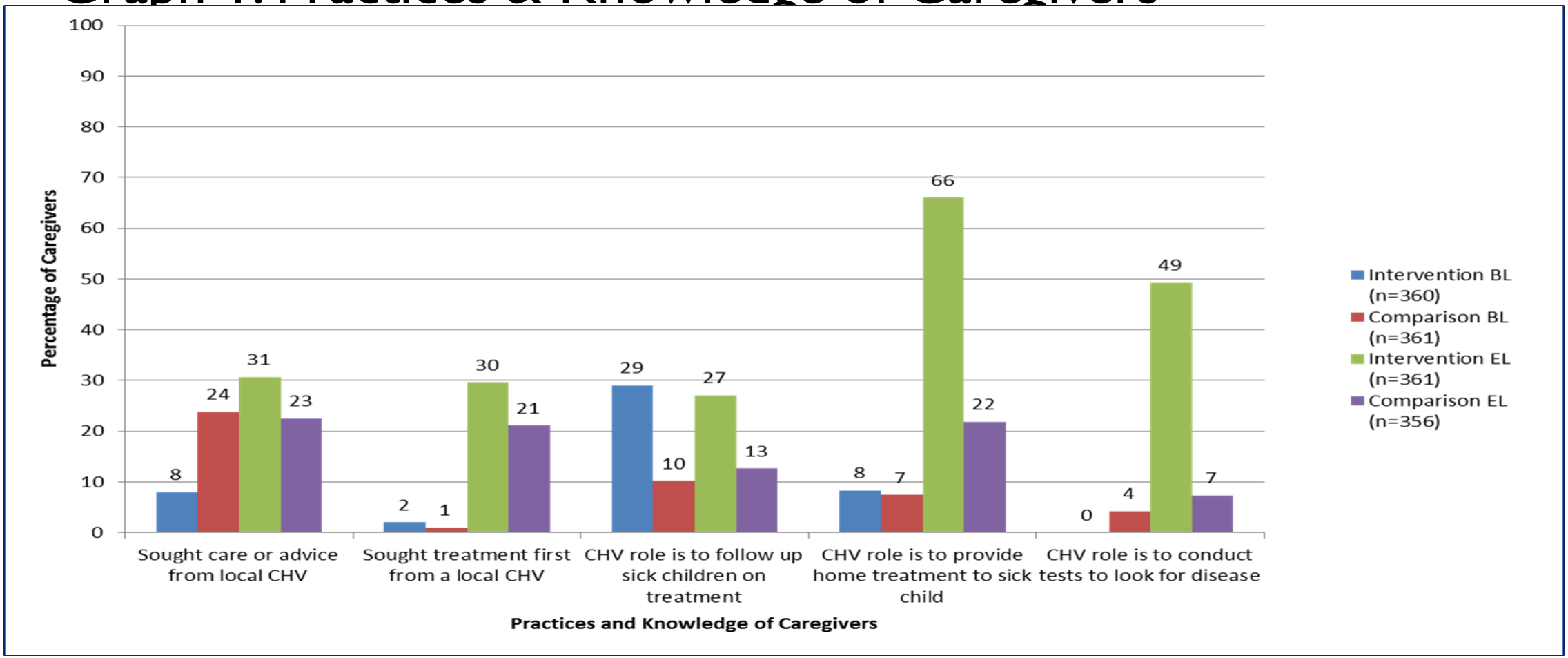
- Training of CHVs on iCCM in the comparison group begun **6 months** prior to the end line survey, as part of Siaya County iCCM roll out plan

3 months to end line survey

- **3 months** before the end line survey, CHVs in the comparison CUs commenced community case management of diarrhea and management of malaria, as part of Siaya county roll out of iCCM

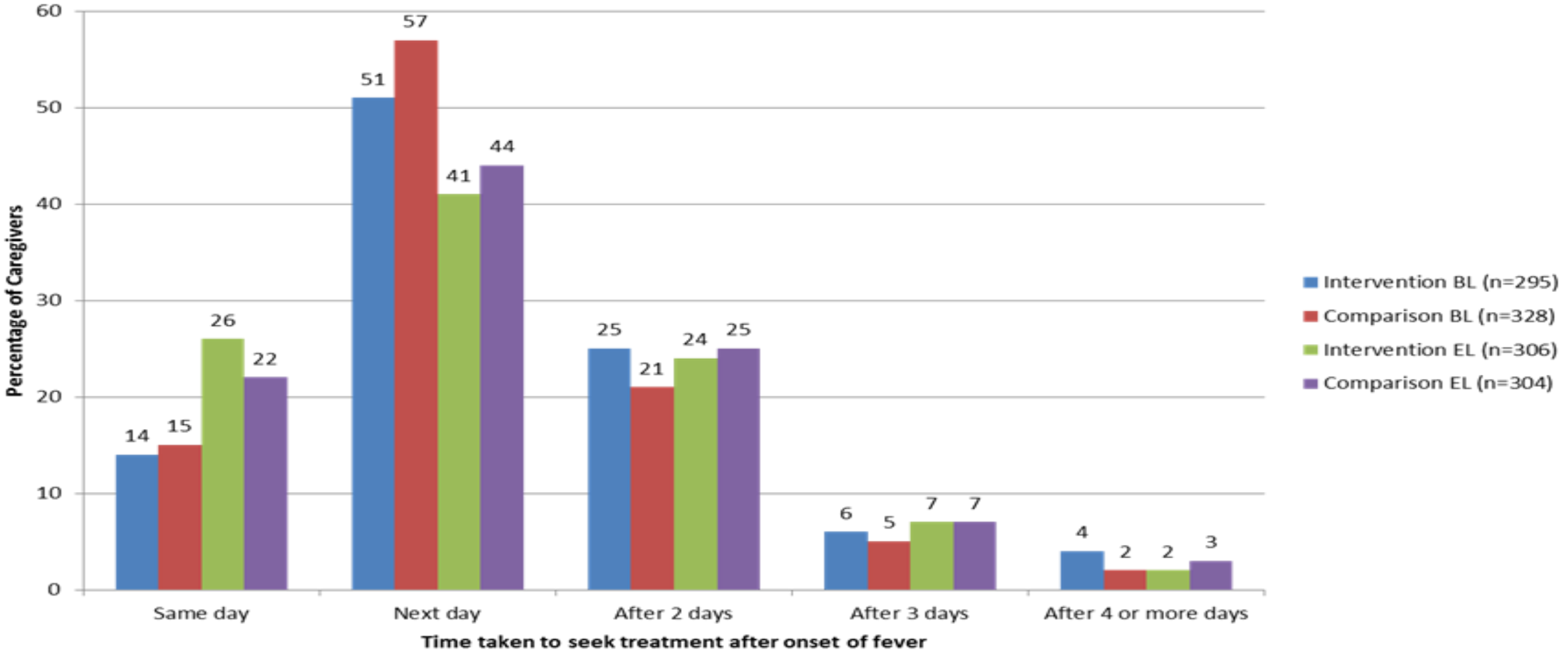
Key finding: Changes in Care giver Knowledge and Practice

Graph 1: Practices & Knowledge of Caregivers



Key finding: Changes in Care seeking Behavior

Graph 2: Time taken by care giver to seek treatment



Key finding : CHV Competence (1)

Graph 3: Identification of Danger Signs

Introduction and history taking	Baseline		End line		
	N=115	percent	N=206	percent	P**
CHV asked caregiver for the following danger signs					
Convulsions with this illness	38	33.0	197	95.6	<0.001
Difficulty in drinking, feeding or breastfeeding	54	47.0	202	98.1	<0.001
Not able to drink or eat	34	29.6	202	98.1	<0.001
Vomiting everything	39	33.9	195	94.7	<0.001
Lethargic or unusually sleepy or unconscious	18	15.7	162	78.6	<0.001

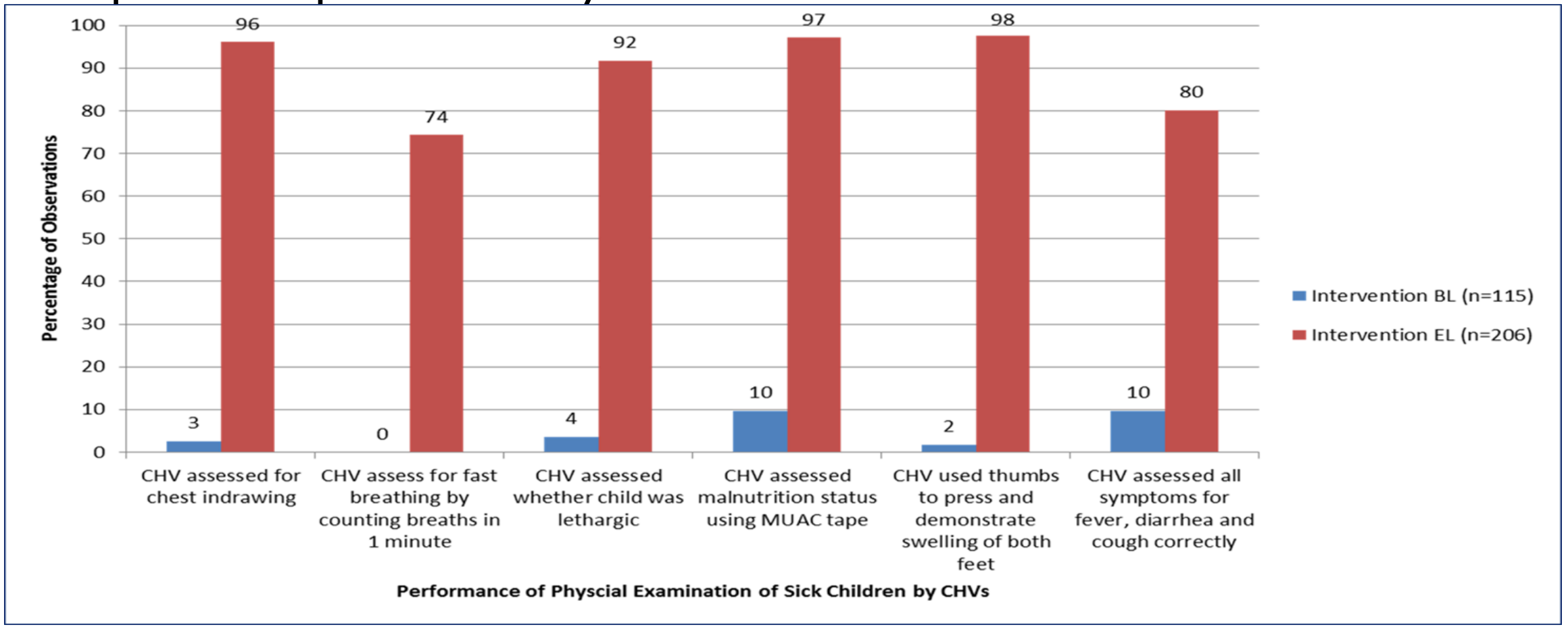
Key Finding : CHV Competence (2)

Graph 4: Conducting malaria Rapid Diagnostic Test

Assessment & Conducting RDT	Baseline		End line		P**
	N = 115	percent	N=206	percent	
Acute respiratory infection					
CHV asked if child had cough	102	88.7	205	99.5	<0.001
CHV asked about the duration of cough*	82	87.2	139	99.3	<0.001
Diarrhoea					
CHV asked if child had diarrhoea	86	74.8	203	98.5	<0.001
CHV asked for duration of the diarrhoea illness*	37	49.3	61	93.8	<0.001
Asked for presence of blood in the diarrhoea*	28	37.3	52	80.0	<0.001
Fever					
CHV asked if child had fever	110	95.7	206	100.0	0.006
CHV asked for duration of fever*	81	80.2	195	100.0	<0.001
Performed an RDT test	0.0	0.0	**189**	**96.9**	**<0.001**
Wiped finger using sterile swab/spirit swab before pricking	0.0	0.0	189	100.0	<0.001
CHV collected blood using capillary tube 45 degree angle	0.0	0.0	187	98.9	<0.001
CHV added buffer solution drops correctly to test cassette	0.0	0.0	189	100.0	<0.001
CHV timed duration prior to reading the test results	0.0	0.0	188	99.5	<0.001
CHV reads RDT test results	0.0	0.0	181	95.8	<0.001
Assessor agrees with CHV interpretation of test result	0.0	0.0	*181*	*100.0*	*<0.001*

Key Finding: CHV Competence (3)

Graph 5: Competence in Physical Assessment of sick child



Summary of CHV's Competences

Community Health Volunteers

- There was a *significant improvement in CHV knowledge* of common causes of death in children under five years of age, particularly knowledge of pneumonia,
- *CHV clinical skill improved* as follows:
  - assessment of danger signs
  - performance of physical examination
  - correct performance and interpretation of malaria RDT

Qualitative Results : CHEWs Perspectives

- CHEWs were knowledgeable about iCCM and saw it as their primary responsibility to mentor/supervise CHVs.
- CHEWs recommended scaling up, strengthening training and mentorship, and ensuring a steady supply of commodities

Qualitative Results - SCHMTs

The Bondo Sub-County health committee members said:

- implementing iCCM had improved the structure of supportive supervision of CHVs by the CHEWs and strengthened collaborations and partnership among community health stakeholders in the Sub-County.

- *It [iCCM] has been useful. It has reduced workload at the health facility and there has been improvement in treatment seeking behaviour by the community. SHMT member #4*

Qualitative Results - Community Leaders

- *Quote…In my church today, I rarely hear of death of children under five, [which] means that some good work is being done by the CHVs and iCCM. Most women deliver in health facilities*

  Religious leader #7 (Comparison)

- *CHCs are CHVs supervisors in the community, but one can only supervise what she/he knows or understands better than the supervisee.*

  CHC #9 (Intervention)

CONCLUSIONS & RECOMMENDATIONS

Conclusions

- CHVs can implement iCCM with appropriate training, mentorship, supervision & support from health managers and community leaders
- Trained CHEWs provided mentorship and supportive supervision for CHVs implementing iCCM.
- Role of SCHMT is critical in ensuring sufficient commodities to provide iCCM services
- Community leaders supported iCCM implementation and perceived iCCM to have a positive impact on health of children
- Bondo SCHMT using best practices from this iCCM study to inform scale up to the rest of Bondo sub county

Recommendations (1)

iCCM Service delivery

- Expand iCCM to all underserved communities in the County
- Ensure a steady supply of medicines and test kits for iCCM
- Integrate iCCM into routine M&E to document service utilization and quality of care

Management and administration

- Pay stipends regularly to motivate CHVs
- Provide CHVs with tools e.g. bicycles to facilitate household visits in addition to the medicine kits
- Allocate resources at county level for SCHMT and CHEWs to do regular supportive supervision and mentorship

Recommendations (2)

Community engagement

- Strengthen community mobilization activities to create more awareness of iCCM services and continue to engage local leaders in the planning, social mobilization and implementation of iCCM.
- Reorient CHC members on their roles and responsibilities as outlined in the community health strategy implementation guide

Additional studies and analysis

- Develop and use appropriate tools to enable determination of actual implementation costs for iCCM programs
- Review of community referral system and counter referral system to ensure “no missed opportunity”

Acknowledgement

- Ministry of Health, Kenya
- County Health Management Committees (Siaya, Kisumu, Migori)
- USAID, UNICEF,
- MCSP/Washington; MCSP Kenya
- Community & Religious Leaders
- CHVs & CHEWs in Bondo & Siaya
- Partners in Siaya, Migori & Bondo

Thank You

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