



Caring for sick children in the community: Experiences from Malawi



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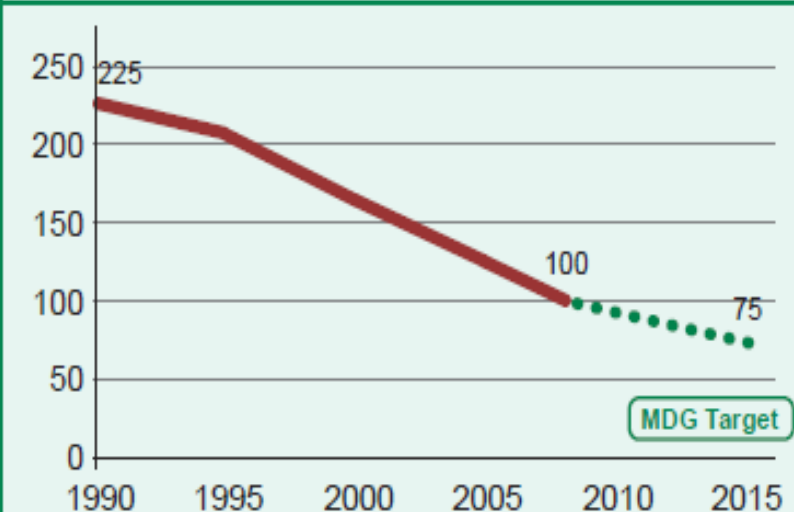
Outline of the presentation

- Rationale for community case management of childhood illness (CCM) in Malawi
- Characteristics of the approach
- Status of implementation
- Results of quality of care assessment
- What has worked and tackling challenges

Progress in improving child survival, Malawi

Under-five mortality rate

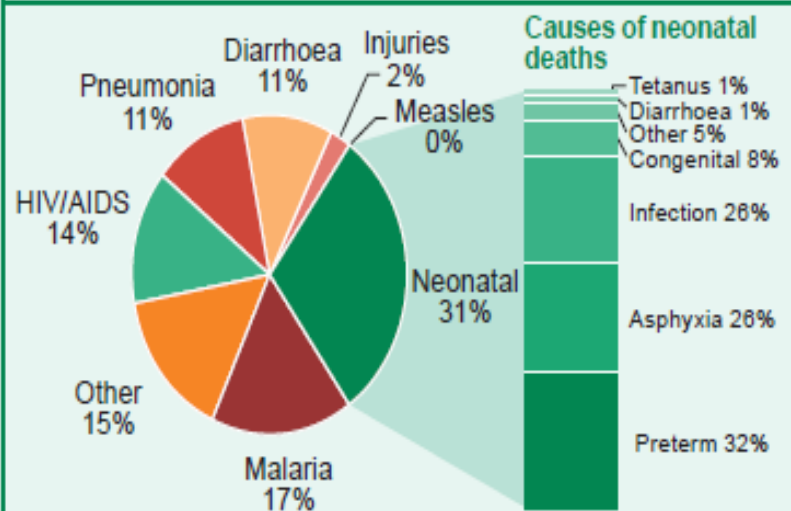
Deaths per 1000 live births



Source: IGME 2009

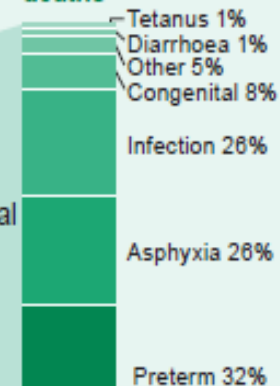
Causes of under-five deaths, 2008

Globally more than one third of child deaths are attributable to undernutrition



Source: WHO/CHERG 2010

Causes of neonatal deaths

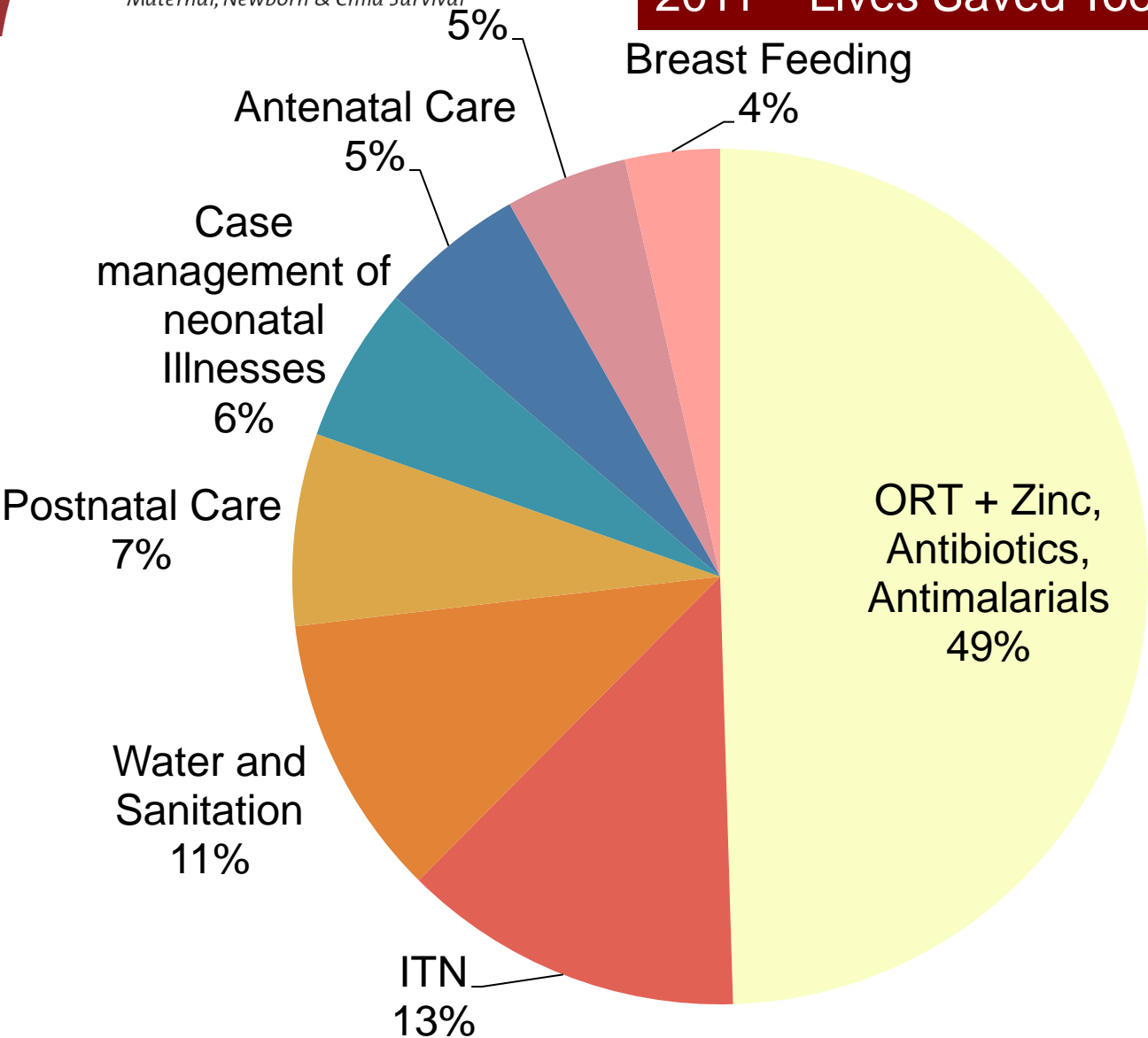


Source: WHO/CHERG 2010

Rationale for CCM in Malawi

- 30-35% of the population lives more than 8 km from a health facility
- Coverage of treatment for pneumonia (30%), malaria (25%) and diarrhoea (27%) - this is too low
- 10,451 Health Surveillance Assistants are part of the health workforce - approximately 1:1000 population
- The national Essential Health Package includes community-based treatment of common childhood conditions (CCM)

Estimates of preventable deaths in Malawi by 2011 – Lives Saved Tool (LiST)



**Overall 36%
reduction in
U5 mortality**

Essential features of CCM

HSAs trained to manage sick children aged 2-59 months with simplified WHO IMCI algorithm

- Assess symptoms
- Classify illness
- Treat or refer (severe cases)
 - Pneumonia → antibiotics
 - Fever / malaria → antimalarials
 - Diarrhea → ORS and zinc
 - Danger signs/severe illness → refer

Sick Child Recording Form
(for community-based treatment of child age 2 months up to 5 years)

Date: ____/____/____ (Day / Month / Year) HSA: _____

Child's First Name: _____ Surname: _____ Age: ____ Years / ____ Months Boy / Girl

Caregiver's name: _____ Relationship: Mother / Father / Other: _____

Physical Address: _____ Village / TA: _____

1. Identify problems

ASK and LOOK	Any DANGER SIGN?	SICK but NO Danger Sign?
ASK: What are the child's problems? If not reported, then ask to be sure: _____ YES, sign present → Tick <input checked="" type="checkbox"/> NO sign → Circle <input checked="" type="checkbox"/>		
<input type="checkbox"/> Cough? If yes, for how long? ____ days	<input type="checkbox"/> Cough for 21 days or more	
<input type="checkbox"/> Diarrhoea (loose stools)? IF YES, for how long? ____ days.	<input type="checkbox"/> Diarrhoea for 14 days or more	<input type="checkbox"/> Diarrhoea (less than 14 days AND no blood in stool)
<input type="checkbox"/> Blood in stool?	<input type="checkbox"/> Blood in stool	<input type="checkbox"/> Fever (less than 7 days)
<input type="checkbox"/> Fever (reported or now)? If yes, started ____ days ago.	<input type="checkbox"/> Fever for last 7 days	
<input type="checkbox"/> Convulsions?	<input type="checkbox"/> Convulsions	
<input type="checkbox"/> Difficulty drinking or feeding? IF YES, not able to drink or feed anything? <input type="checkbox"/>	<input type="checkbox"/> Not able to drink or feed anything	
<input type="checkbox"/> Vomiting? If yes, vomits everything? <input type="checkbox"/>	<input type="checkbox"/> Vomits everything	
<input type="checkbox"/> Red eyes? If yes, for how long ____ days.	<input type="checkbox"/> Red eye for 4 days or more	<input type="checkbox"/> Red eye (less than 4 days)
<input type="checkbox"/> Difficulty in seeing? If Yes for how long ____ days	<input type="checkbox"/> Red eye with visual problem	
<input type="checkbox"/> Any other problem I cannot treat (E.g. problem in breast feeding, injury)? See 5 If any OTHER PROBLEMS, refer.	<input type="checkbox"/> Other problem to refer:	
LOOK:		
<input type="checkbox"/> Chest indrawing? (FOR ALL CHILDREN)	<input type="checkbox"/> Chest indrawing	
<input type="checkbox"/> IF COUGH, count breaths in 1 minute: ____ breaths per minute (bpm) Fast breathing: Age 2 months up to 12 months: 50 bpm or more Age 12 months up to 5 years: 40 bpm or more		<input type="checkbox"/> Fast breathing
<input type="checkbox"/> Very sleepy or unconscious?	<input type="checkbox"/> Very sleepy or unconscious	
<input type="checkbox"/> Palmar pallor	<input type="checkbox"/> Palmar pallor	
For child 6 months up to 5 years, MUAC tape colour:	<input type="checkbox"/> Red on MUAC tape	
<input type="checkbox"/> Swelling of both feet?	<input type="checkbox"/> Swelling of both feet	

2. Decide: Refer or treat child
(tick decision)

☐ If ANY Danger Sign, refer to health facility

☐ If NO Danger Sign, treat at home and advise caregiver

Essential Elements for effective CCM implementation

ELEMENTS

Train HSAs in CCM

Procure drug boxes; ORT equipment, bicycles

Provide support for DEC's and TWG's meetings

Support for orientation of Health Centre In-Charges

Support orientation of village health clinic committees

Support HSA quarterly review meetings

Support Mentorship program

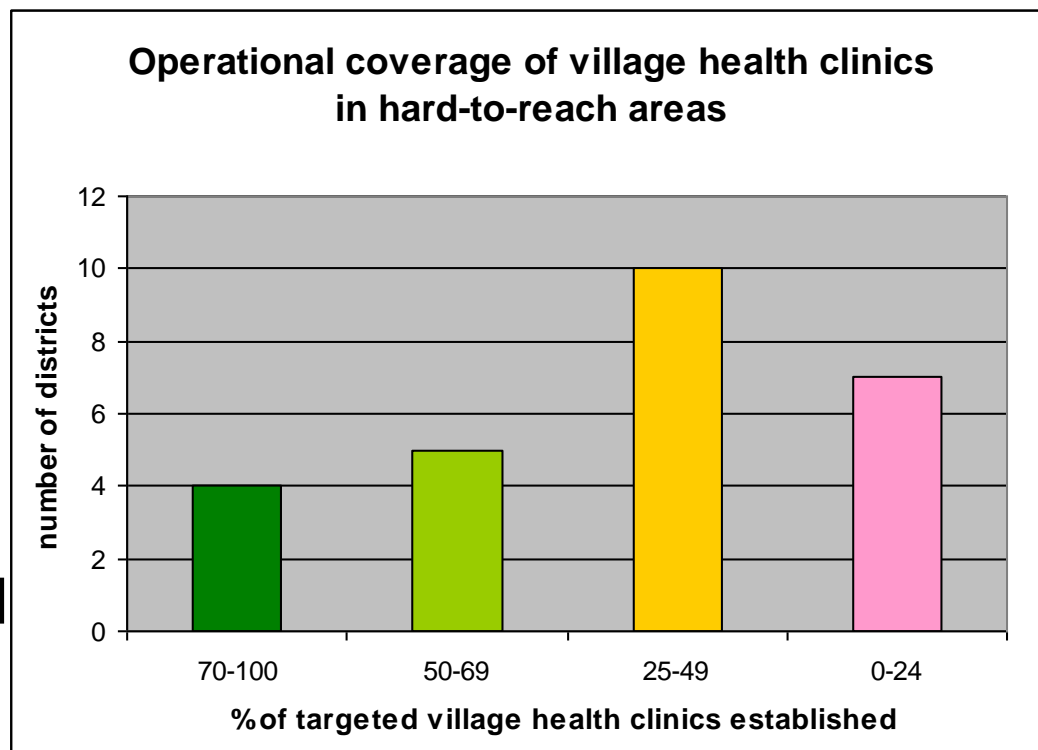
Support training of senior HSA's as VC supervisors

Strengthen drug management system

Strengthen M&E system

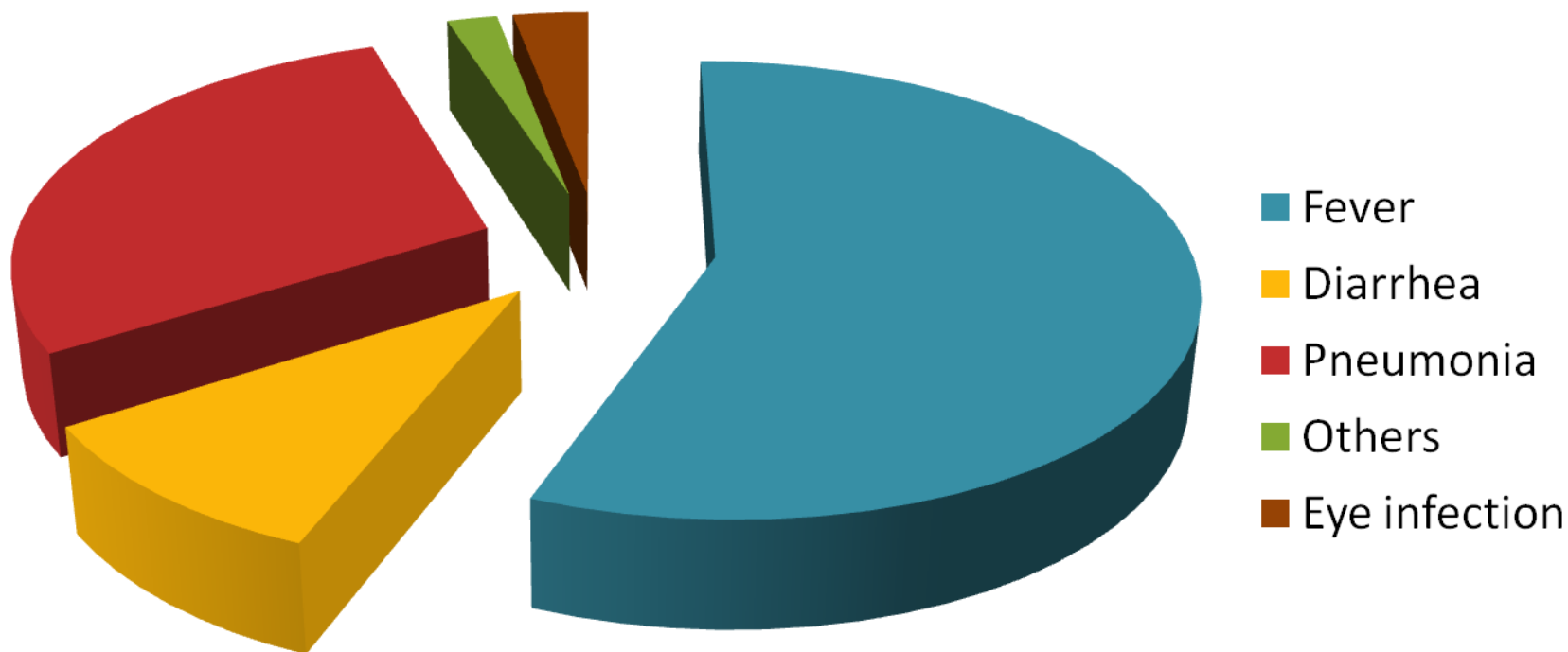
Progress in scaling-up of CCM

- **National target 2011:**
2971 Village Health Clinics established
- **Currently achieved:**
 - 1077 HSAs trained,
 - 978 VHCs established



Reasons for seeking care

Cases Seen by HSAs Jan Mar 2010



Average number of cases treated per month per village clinic:
46 children

Can HSAs deliver services with quality?



Picture taken by J Callaghan, with permission, during practice observations in training of evaluation team

Assessment of quality of care

June – Nov 2009

- Objective 1: To determine the quality of care provided to sick children for pneumonia, diarrhea and malaria by HSAs in Malawi
- Objective 2: To describe the processes in place to ensure the quality of CCM services provided by HSAs, including training, drug supply, and supervision

Use of multiple methods

Clinical

**Direct
observation
with
Re-exam**

*Quality of
assessment,
classification,
& treatment
actions*

**Case
scenarios**

*HSA
knowledge
in severe
cases*

**Register
review**

*Cases
seen;
treatment
& referral
decisions*

Systems

**Caretaker
Exit
Interview**

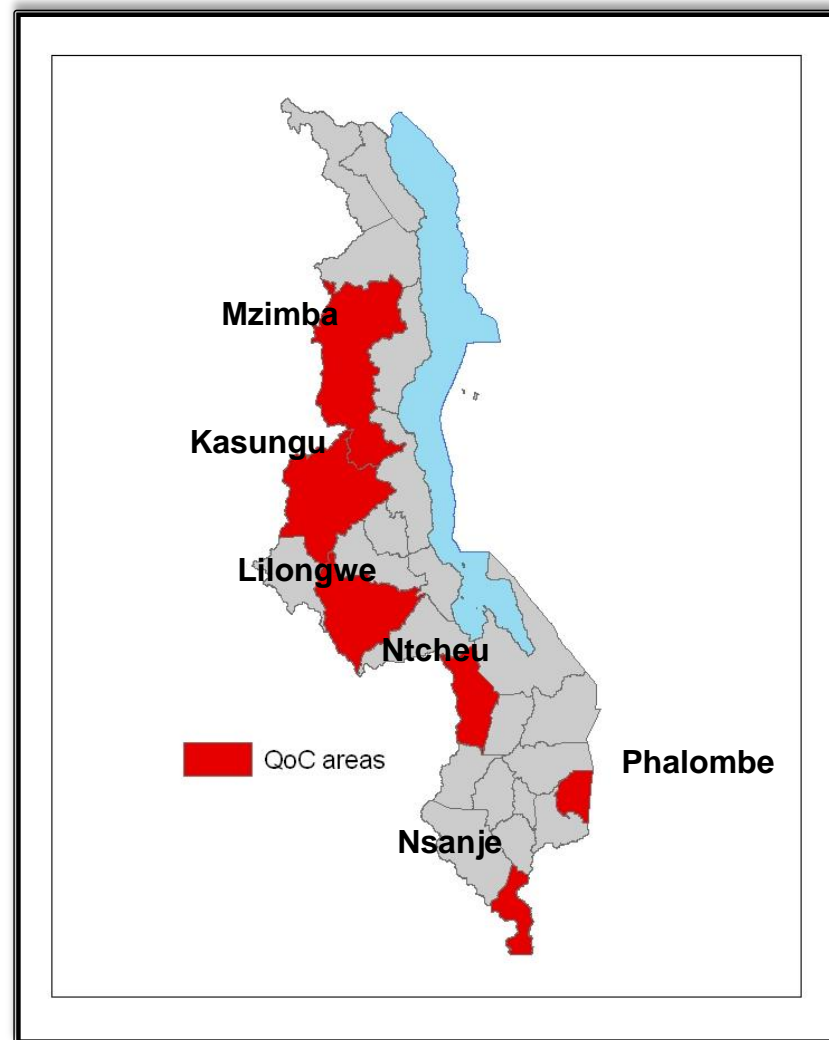
*Client
satisfaction;
counseling
messages;
costs*

**HSA
Interviews**

*Drugs;
supplies;
supervision
& training*

Methodology

- Six districts
 - HSAs trained in CCM
 - Initial drugs available (functioning VHC)
- HSAs randomly sampled
 - 22 per district
- Data collection
 - 6 evaluation teams visited 131 HSAs
 - Average of 1 HSA per day
 - Average of 3.9 sick child observations per HSA

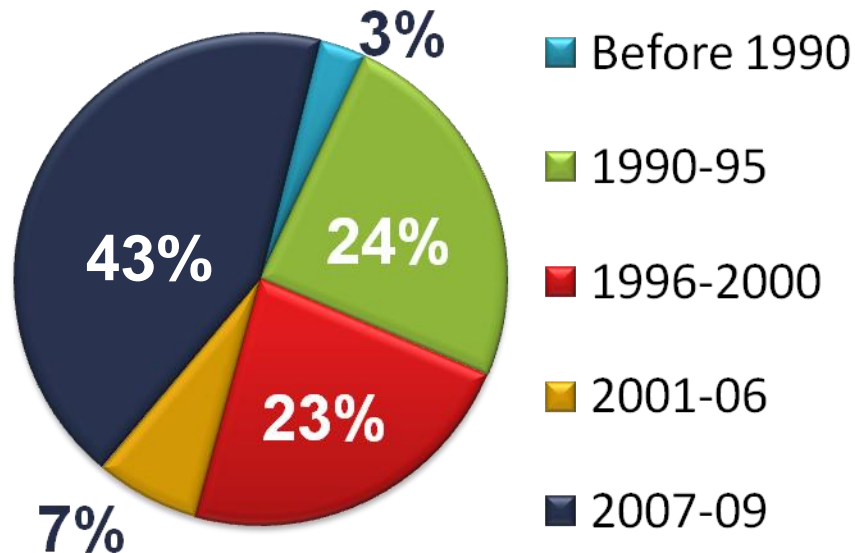


HSAs included in the sample

131 HSAs visited

Average Age = 34

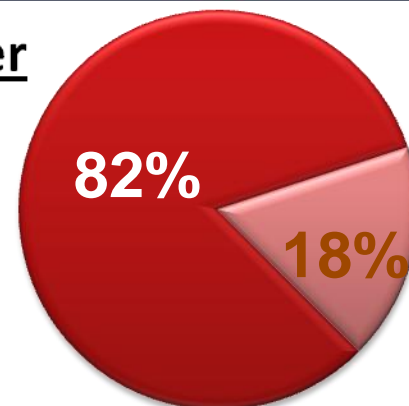
Time of HSA Recruitment



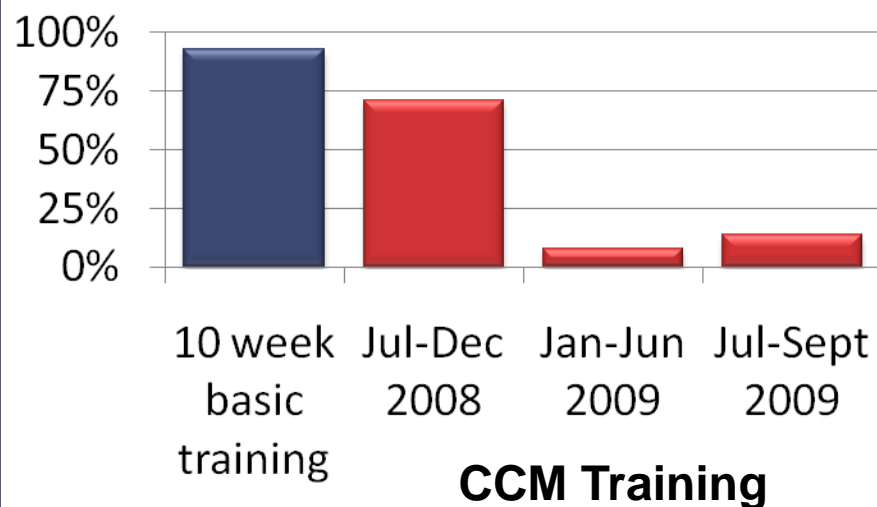
HSA Gender

Male

Female



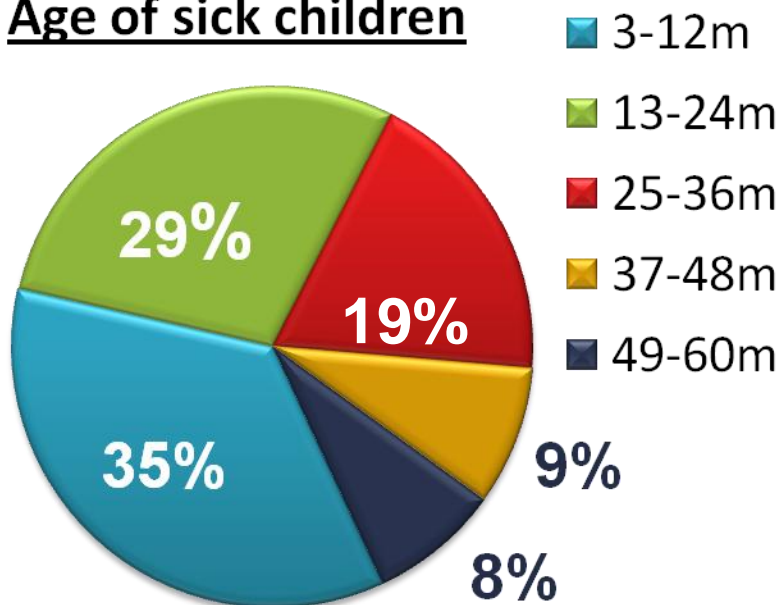
HSA Training



Sick children and caretakers included in the sample

TOTAL Sick Children Observed = 385

Age of sick children



Sex of Child

~47% Girls

~51% Boys

Sex of Caretaker

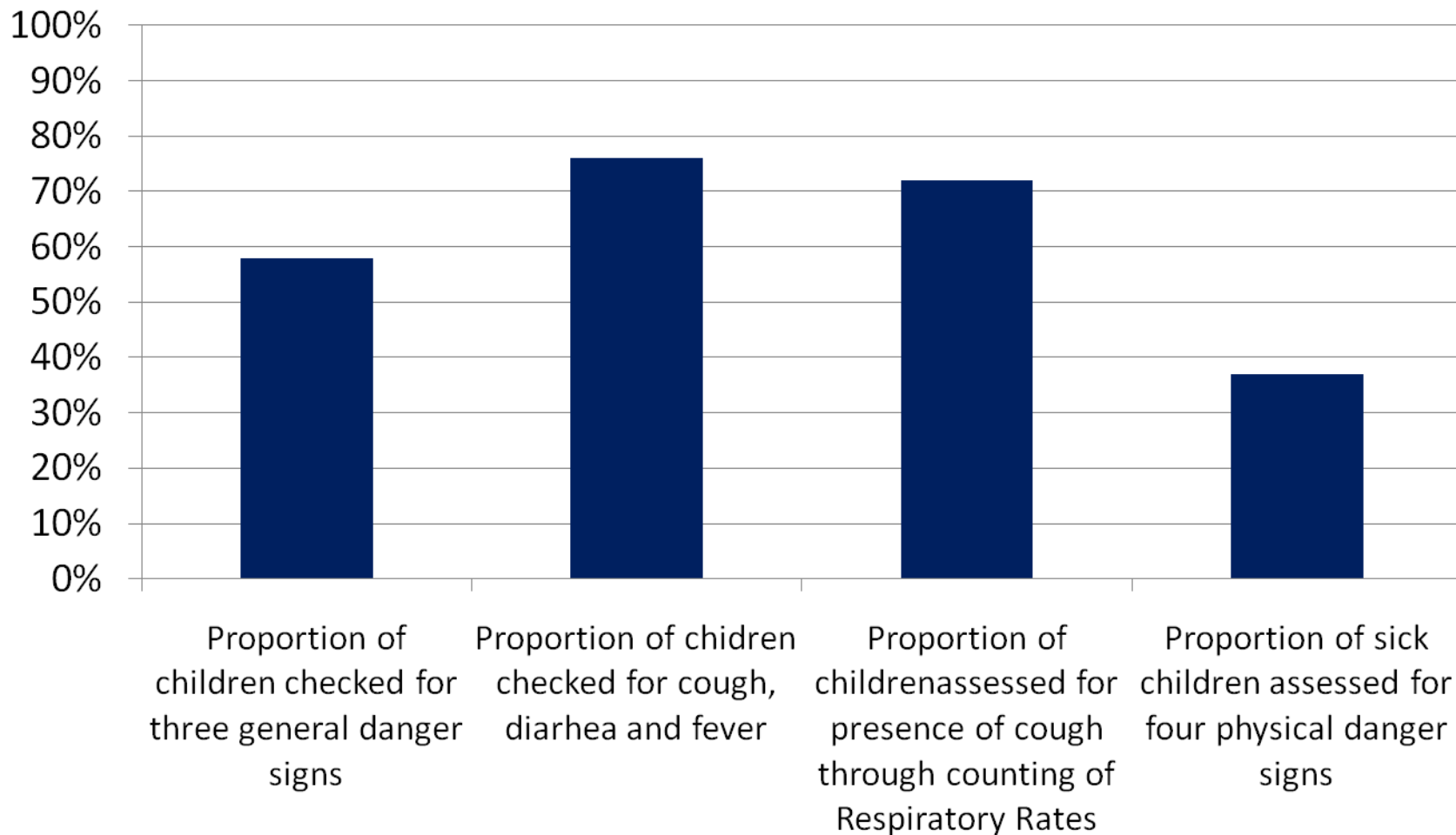
95% Female

5% Male

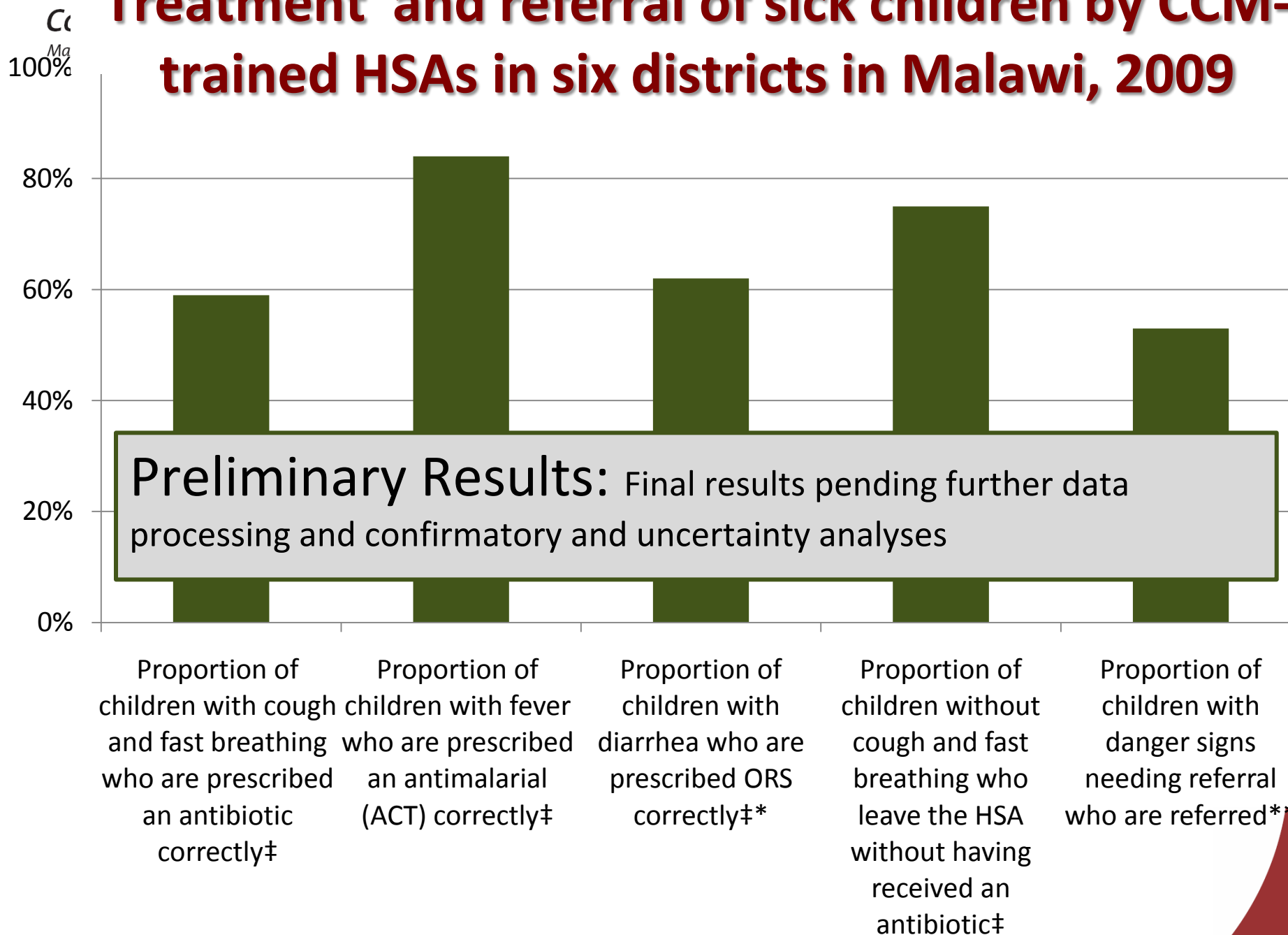
Gold Standard Classifications

Diarrhoea < 14d	28%
Blood in stool	2%
Fever <7d	67%
≥ 7d	4%
Convulsions	2%
Vomits everything	2%
Red eye < 4d	8%
≥ 4 d	2%
Fast Breathing	26%
Palmar Pallar	2%
MUAC Tape Red	2%
Yellow	3%
Swelling both feet	2%
Other problems – refer	12%

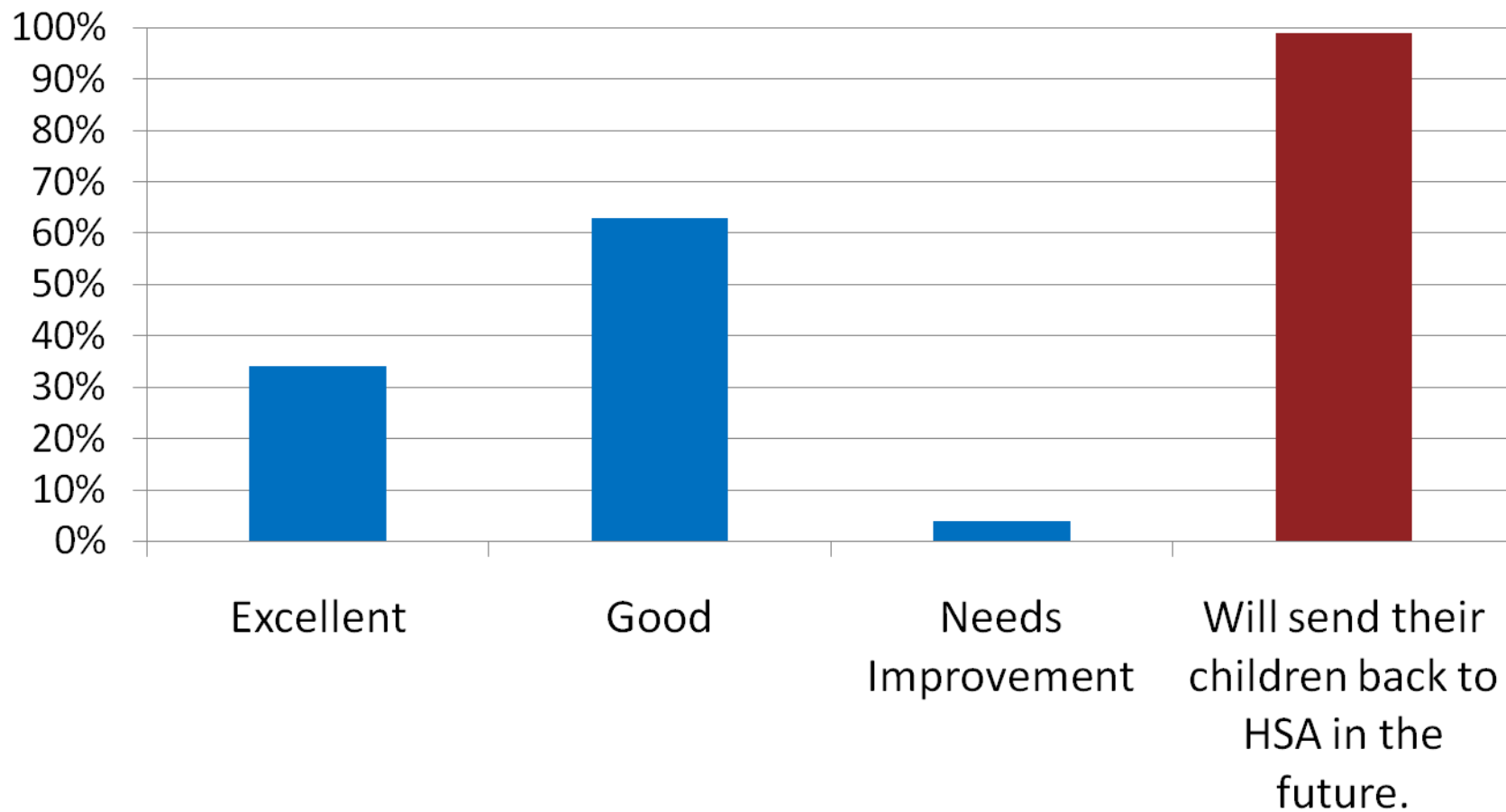
Assessment of sick children by CCM-trained HSAs



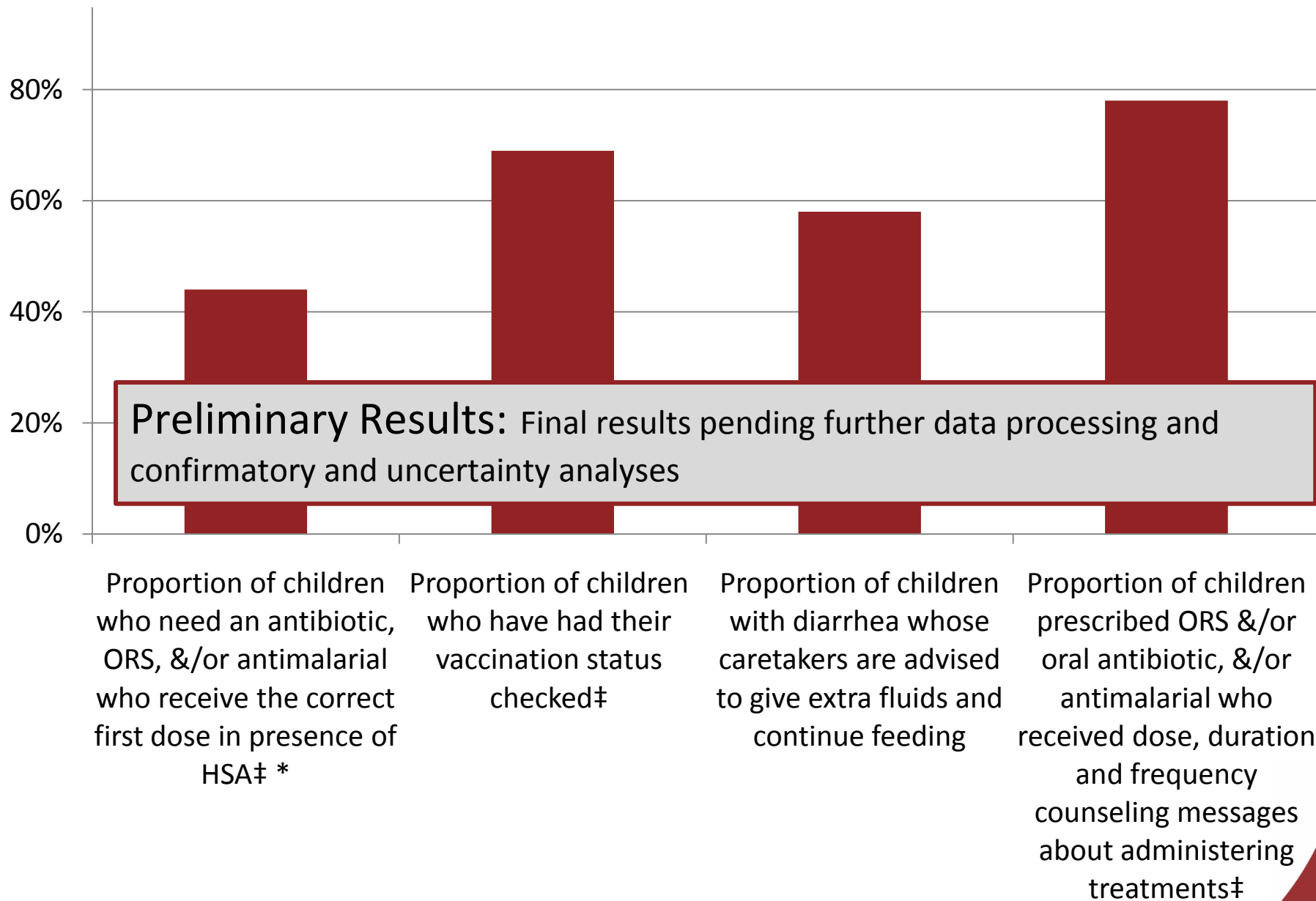
Treatment and referral of sick children by CCM-trained HSAs in six districts in Malawi, 2009



Proportion of caregivers who report satisfaction with HSA services



Counseling of caretakers of sick children by CCM-trained HSAs in six districts in Malawi, 2009



Drug supplies among CCM-trained HSAs with functional VHC in six districts in Malawi, 2009

VHC with ORS, Cotrim, and two formulations of LA

Antibiotic eye ointment

Paracetamol

LA 2x6

LA 1x6

Cotrimoxizole

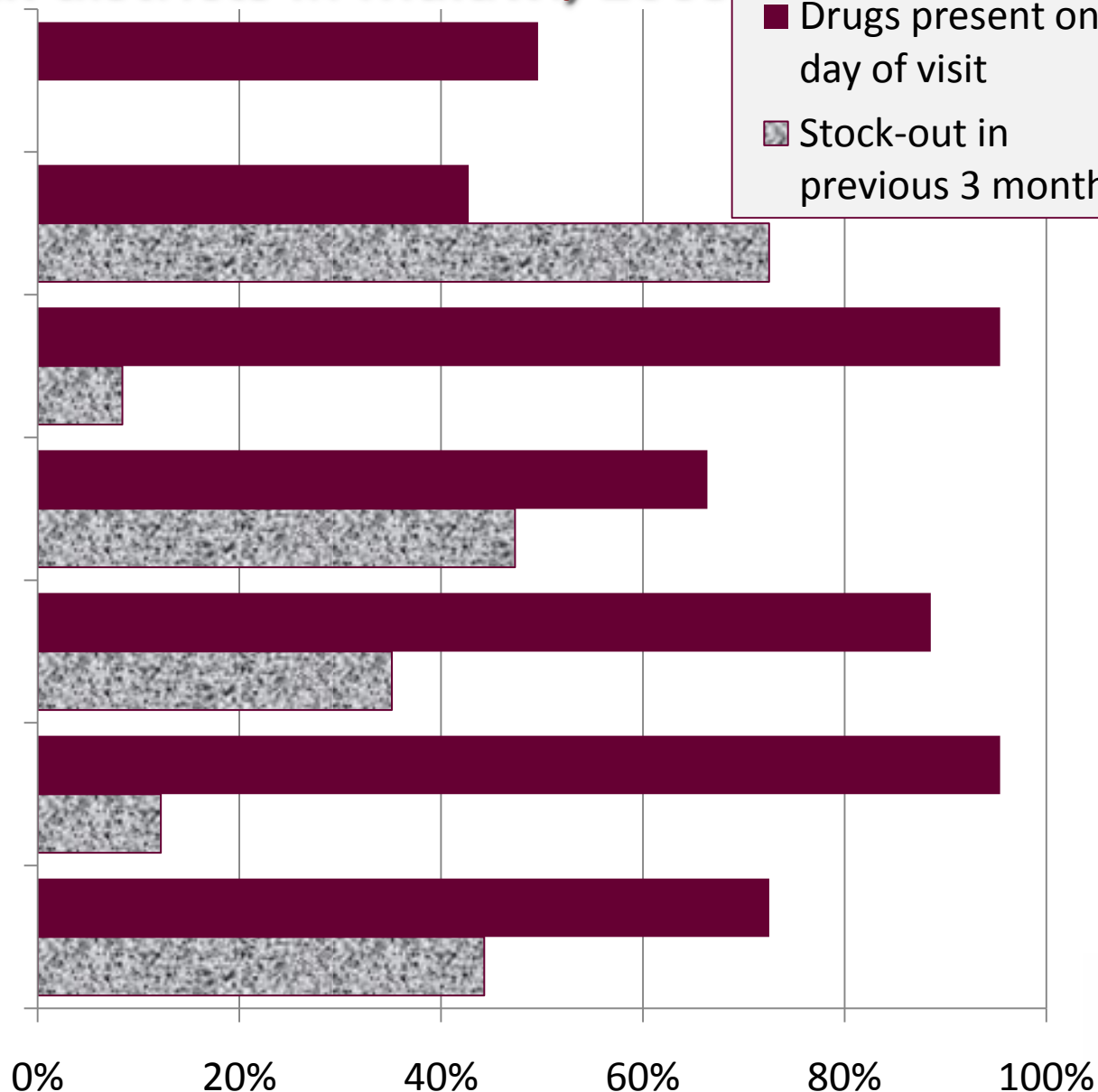
ORS

■ Drugs present on day of visit
■ Stock-out in previous 3 months

Preliminary Results:

Final results pending further data processing and confirmatory and uncertainty analyses

Final results pending further data processing and confirmatory and uncertainty analyses



Supervision of CCM-trained HSAs in six districts in Malawi, 2009

HSA received a CCM supervision visit within eight weeks of CCM training



HSA received at least one routine CCM supervisory visit in the previous 3 months



HSA received a supervisory visit in the previous 3 months that included observation of sick child management



0%

20%

40%

60%

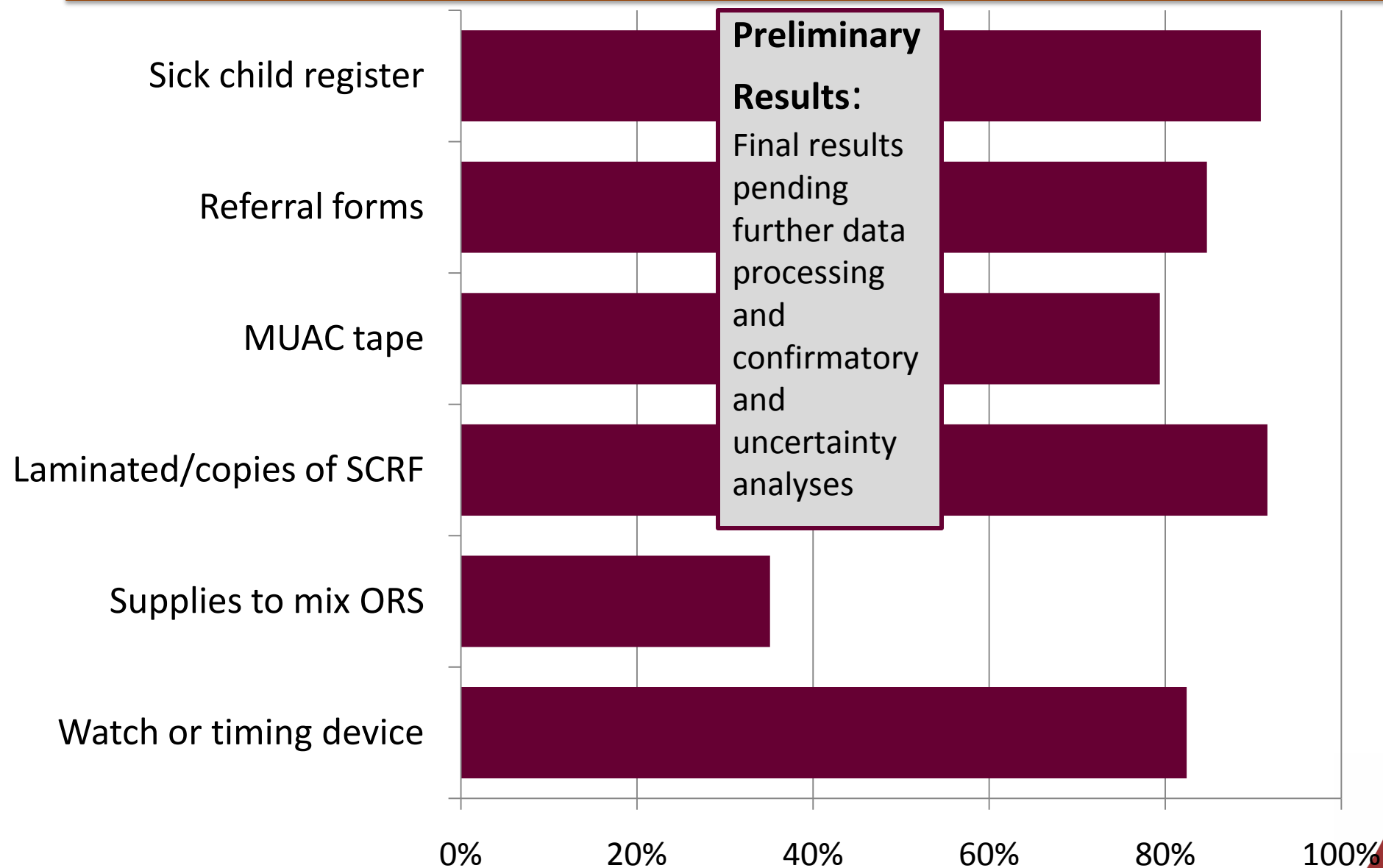
80%

100%

Preliminary Results:

Final results pending further data processing and confirmatory and uncertainty analyses

CCM supplies among CCM-trained HSAs with functional VHC in six districts in Malawi, 2009



Summary of preliminary findings

- **Quality of assessment and treatment**
 - Relatively high, even in comparison to other surveys
- **Assessment of and referral for danger signs**
 - Need improvement
- **Counseling and communication**
 - Done well
 - HSAs have more time for counseling than other workers
- **Systems supports (supervision, drugs & supplies)**
 - Need great improvements
 - Still under development

What worked in Malawi?

- MoH leadership and partner coordination
- National guidelines and training materials derived from WHO/UNICEF generic package
- Focus on hard-to-reach areas
- District level orientation and joint planning
- Community participation and ownership of the VHCs
- Designation of referral facility and use of referral notes
- Adoption of CCM register and monitoring system
- SMS-based reporting of treatments provided

Tackling challenges

- Introduction of programme management training, joint planning, and quarterly review meetings with DHMTs
- Collaboration in MoH and with partners to strengthen forecasting, procurement and uninterrupted supply of medicines at the point of delivery
- Institutionalizing mentorship program for HSAs in health centres
- Creation on integrated supervision of HSAs by various cadres, and including observed case management

Acknowledgements

Malawi-MoH with:

MoWCD

WHO

UNICEF

Johns Hopkins University, IIP

USAID/BASICS

PSI

Save the Children

Bill and Melinda Gates

Foundation

Canadian International

Development Agency

The HSAs, district health teams, caregivers and children in Malawi



Picture taken by J Callaghan, with permission, during practice observations in training of evaluation team