



Sustaining ICCM: focus on costing

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Background and rationale – ICCM-inSCALE economic evaluations in Uganda and Mozambique

- ➔ In the first wave of community-based care programmes in the 1980-1990 following the Alma Alta conference many community health worker (CHW) programmes failed partly because of insufficient resources dedicated to supporting and sustaining the programmes
- ➔ It is critical to assess how to best use limited public health resources to reduce under-five mortality in low and middle income countries - **the introduction of large-scale programmes for CHWs requires evaluation to document the impact on child survival, costs and cost-effectiveness, as well as factors associated with success and sustainability**
- ➔ As part of the inSCALE project, the LSHTM evaluation team, together with Malaria Consortium, is assessing the costs and cost-effectiveness of the ICCM implementation in Uganda and Mozambique

ICCM cost analyses

- ➔ The cost analyses of the ICCM implementation in Uganda and Mozambique will assess start up costs versus yearly operational costs of ICCM and investigate the potential for economies of scale
- ➔ Final analyses are expected to be ready by August 2013 – today, I will present preliminary data from the start-up phase

ICCM programme costs

Start up costs:

- ➔ Training and capacity building
 - ➔ Training of CHW supervisors at the health facilities
 - ➔ CHW training
 - ➔ Uganda: 6 days of iCCM training (for CHW that had previously received 1 week of basic Village Health Team (VHT) training) ~6587 CHWs trained with support from Malaria Consortium
 - ➔ Mozambique: 16 weeks (9 weeks health promotion + 5 weeks iCCM + 2 weeks practice - residential training which added to training costs) ~183 CHWs trained with support from Malaria Consortium
- ➔ Community outreach
 - ➔ Community sensitisation and behavioural change communication
- ➔ CHW supplies and logistics
 - ➔ CHW start-up medicines and tools kit
- ➔ Planning and programme coordination

ICCM programme costs

Recurring costs:

- ➔ Training and capacity strengthening
 - ➔ Regular CHW supervision
 - ➔ Refresher training
 - ➔ Training of new CHWs to replace drop-outs
- ➔ CHW supplies and logistics
 - ➔ Supply of medicines, diagnostics, consumables to CHW
- ➔ Community outreach
 - ➔ Community sensitisation and behavioural change communication
 - ➔ Remuneration to CHWs (in Mozambique)
- ➔ Planning and programme coordination
- ➔ Monitoring
 - ➔ Patient data management

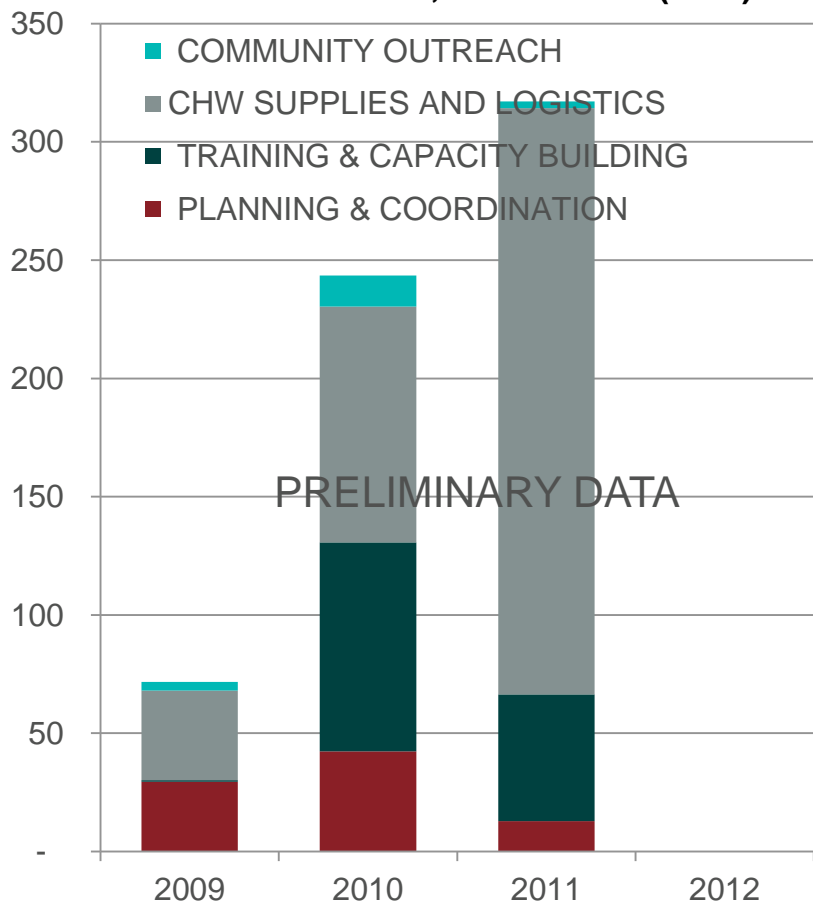
ICCM programme costs

Sources of expenditure:

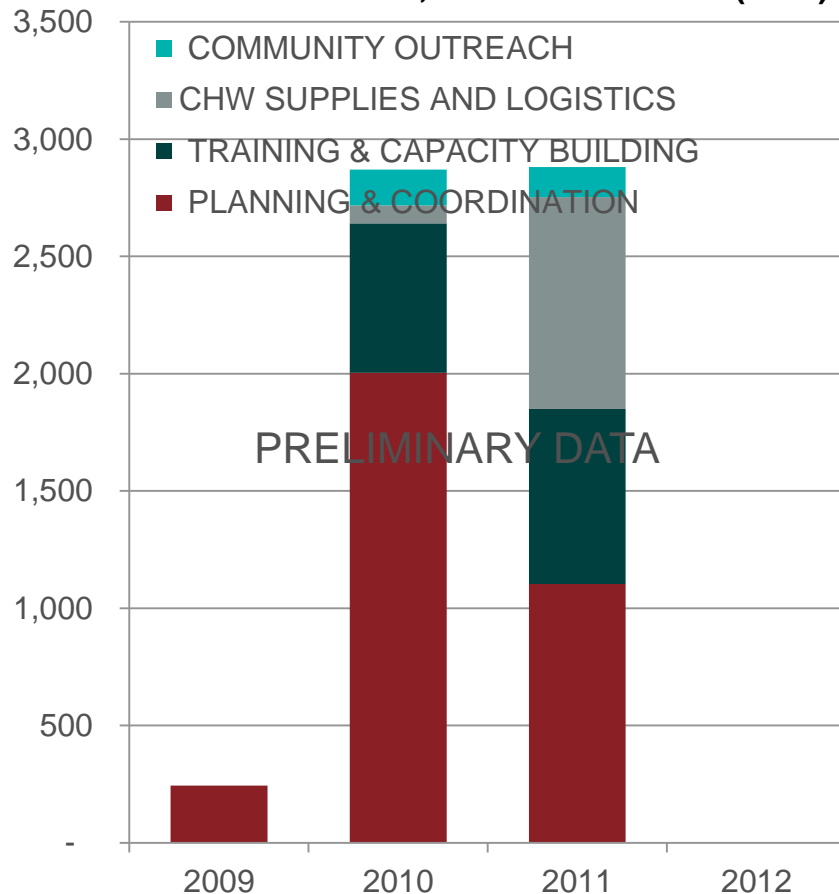
- ➔ Implementation partner (in this case Malaria Consortium (MC))
- ➔ Ministry of Health
 - ➔ Staff involvement during implementation
 - ➔ Recurring expenditure to sustain programme following implementation phase
 - ➔ Changes in resource utilisation at the health facility level
- ➔ CHWs and communities
 - ➔ The opportunity cost value of time for the CHWs, when volunteers (in Uganda)
 - ➔ Other community contributions to the programme

ICCM Uganda/Mozambique - interim MC cost analysis

FINANCIAL COST BY ACTIVITY, PER CHW TRAINED, IN UGANDA (USD)



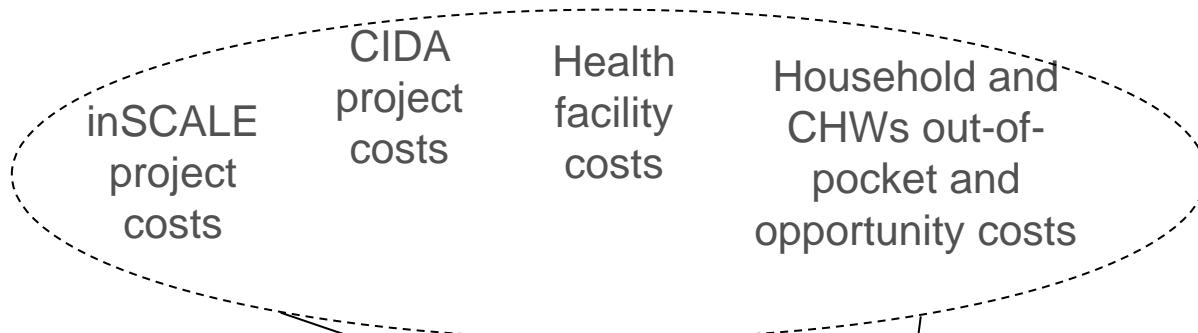
FINANCIAL COST BY ACTIVITY, PER CHW TRAINED, IN MOZAMBIQUE (USD)



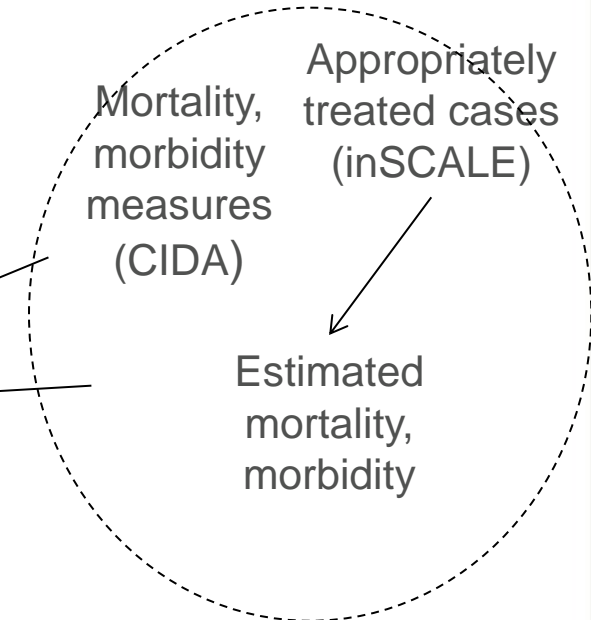
In Uganda the start-up phase was 2009 to early 2011 (thus most of 2011 expenditure is recurring cost), in Mozambique the start-up phase was from 2009 continuing into 2012

Cost-effectiveness model

INTERVENTION COSTS



INTERVENTION HEALTH OUTCOMES



Cost/DALY averted

CHW work time estimated value (Uganda) CHW remuneration (Mozambique)

➔ Uganda:

- ➔ The average CHW in Uganda diagnosed and treated 10 children per month in 2011, other principal work activities included household visits and visits to the health facilities for drug supply and reporting
- ➔ CHW reported weekly workload at a median of 4½ hours (range ½-15 hours), valued at USD 1 – 2 per week - depending on time valuation method - opportunity costs versus replacement cost. (In-depth interviews with 45 CHWs in February 2012)

➔ Mozambique:

- ➔ In Mozambique, CHWs are paid a monthly stipend of USD 40
- ➔ Each CHW covers a larger population and the CHW work is expected to be more of a full time work than in Uganda

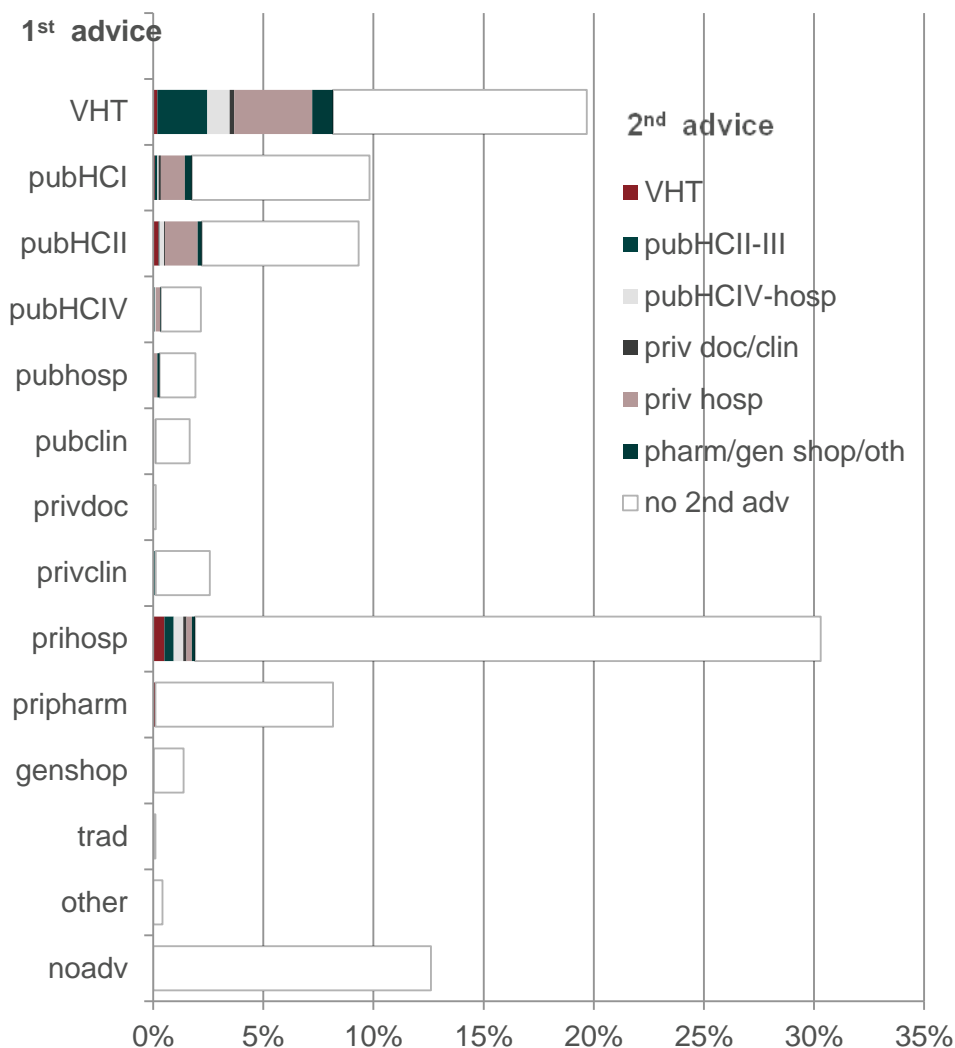
Costs from the user perspective - households

Societal costs – households:

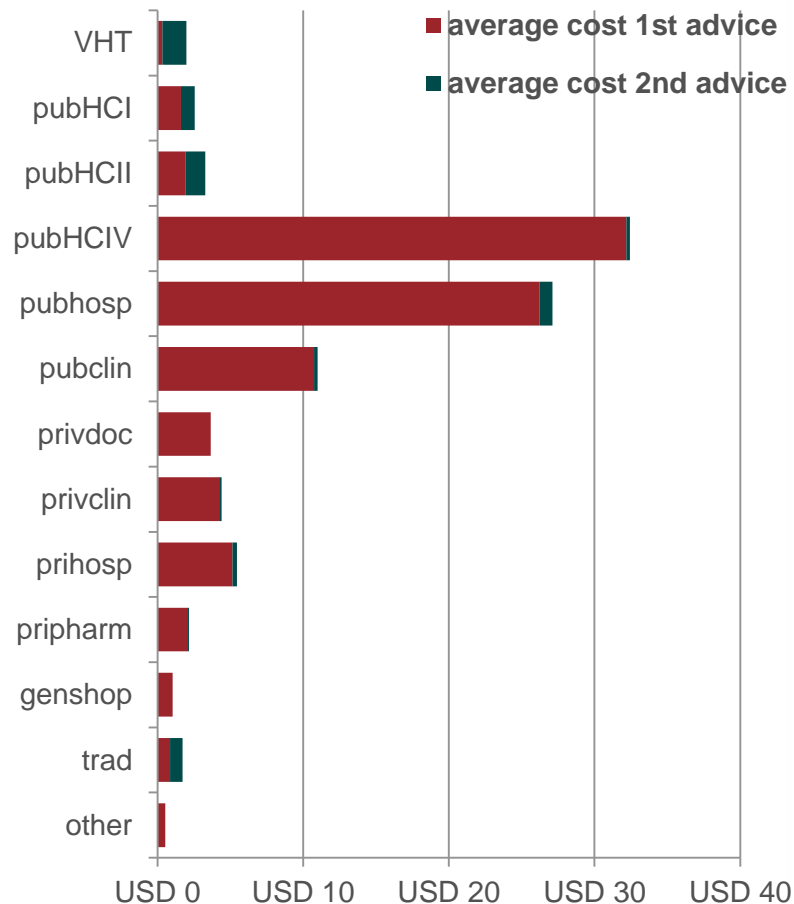
- ➡ The cost and cost consequences of care seeking for and treatment of ill children under 5 years old:
 - ➡ Care seeking pattern for childhood illnesses
 - ➡ Out-of-pocket expenditure (medical (e.g. drugs or clinical fees), as well as non-medical (e.g. transportation to healthcare))
 - ➡ We will also estimate the opportunity cost of care-givers (due to lost production) in relation to an illness episode in a child and the associated care seeking.

Care seeking for children <5 years – Uganda, mid-2011

Care seeking pattern (n=4119)



Direct cost of care seeking (n=3609)



The economic evaluation of ICCM – learning points

- ➔ For a rigorous economic evaluation it is important to set up systems for collection of cost data at the beginning of the programme implementation
- ➔ Including opportunity and societal costs in the costing and cost-effectiveness analyses is critical to understand the true value of the programme and the shift in costs and savings at different level of the health system
- ➔ While collecting cost data is a complex and labour intensive activity, it is crucial for understanding necessary inputs and cost drivers and to appreciate returns on investments



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Thank you

