#### From Crate to Community: The ColaLife Model



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# iCCM 2014

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### iCCM Context in Zambia

- Population: 13.5M
- Population living in rural areas: 61%
- 36% of deaths in children <5 due to malaria, pneumonia and diarrhea = 21,600 deaths (2010)
- In 2010 diarrhoea was the 3rd leading cause of childhood mortality (9%)
- Pop density: 13.5/km sq. (SSA avg = 25; Global avg = 45)
- HRH crisis w/ only 7.8 nurses/midwives per 10K pop.
- No seaport access
- Frequent stock-outs of essential meds including ORS & Zinc

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### **ColaLife's iCCM Focus**



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#### Why the difference?



#### **Rural Health Centre**



#### Private, Community-level Shop

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#### Kit Yamoyo Anti-Diarrhea Kit

- Attractive
- Affordable
- Co-packages ORS and Zinc
- Soap for hand-washing
- Graphical Instructions/branding
- 4.2g (200ml) sachets of flavored ORS
- Packaging is also:
  - A measuring device for the water
  - A mixing device
  - A cup
  - A storage device (the soap tray is a lid)
  - Can be re-used
  - Originally designed to fit in empty spaces between crated bottles





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#### **Health Promotion**











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### **Simplified Results**



**Availability** = ADK in stock in retail outlets at community level

Mothers/care-givers demonstrate **awareness** of ADKs and the benefits of the contents (ORS, Zinc and Soap) Access = ADK in the hand of an aware mother/care-giver



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# **Study Design**

- Quasi-experimental pretestposttest design with matched comparators
- Data collection in Aug-12 & Aug-13, midline in Mar-13
- 2 rural intervention districts (Kalomo & Katete); matched comparators (Monze & Petauke)
- Eastern Province (Katete & Petauke) & Southern Province (Kalomo & Monze), Zambia





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#### **Methods**



Over 2400 Household Surveys (>600 per district)



~ 180 Retailer Surveys (~45 per district)



**30 Focus Group Discussions** 

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**20 Health Centre Impact Assessments** 



# **Some Key Findings From the Trial**



In 12 months retailers serving remote rural communities bought over 25,000 Kit Yamoyo anti-diarrhoea kits.



At baseline <1% of children with diarrhoea were given ORS & Zinc. At endline, of those with diarrhoea in previous 2 weeks, 45% used both ORS and Zinc.



We reduced the distance caregivers travel to access ORS/Z from ~7 km (to a health centre), to ~2 km (to a local retail shop).



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93% of Kit Yamoyo users prepared ORS in the correct concentration, compared to ~
60% using 1 litre sachets from RHCs.





**62% shift in point of access** of ORS/Z, from formal health centres to private shops. Implications for decreased work load at RHCs.



We reduced the treatment delay – time from onset of diarrhea to treatment administration – from  $\sim$ 2 days to  $\sim$ 1 day.

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Across our intervention districts, 95% of Kit Yamoyo retailers said they plan to continue selling the product going forward.



Only 8% of retailers put the kits in crates to transport them to the community-level.



Only 33% of care-givers gave Zinc for the full 10 days.



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# **Key Considerations**

- With appropriate stakeholder development, a private sector ORS/Z product is acceptable at all levels.
- Linking messaging around ORS/Z treatment with a specific product can improve uptake
- Multi-sectoral partnerships and integrated innovation → scale



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# **Key Considerations**

- The concept of developing value-chains for simple public health commodities (vs. supply-chains) can compliment existing systems
- Demand-driven vs. supply led distribution: We can get products or services to anywhere in the world if we can create and sustain a demand for them and make it profitable to fulfill that demand
- Leveraging existing local networks, as opposed to developing parallel systems, has numerous advantages



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# **Key Considerations**

- To address issues of affordability in remote/rural, under-served markets, some level of subsidy (e.g. through vouchers) may be required until product costs are sufficiently low
- The need for task shifting from primary health facilities to the community level has the potential of being partially fulfilled by private shops (at least for simple commodities)
- Application of this model to other simple PH commodities?



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