

# Factors affecting adherence in resource-poor areas of sub-Saharan Africa



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# Agenda

- Background
- Research findings
- Who's to blame?
- What could pharmaceutical manufacturers do?
- Conclusions







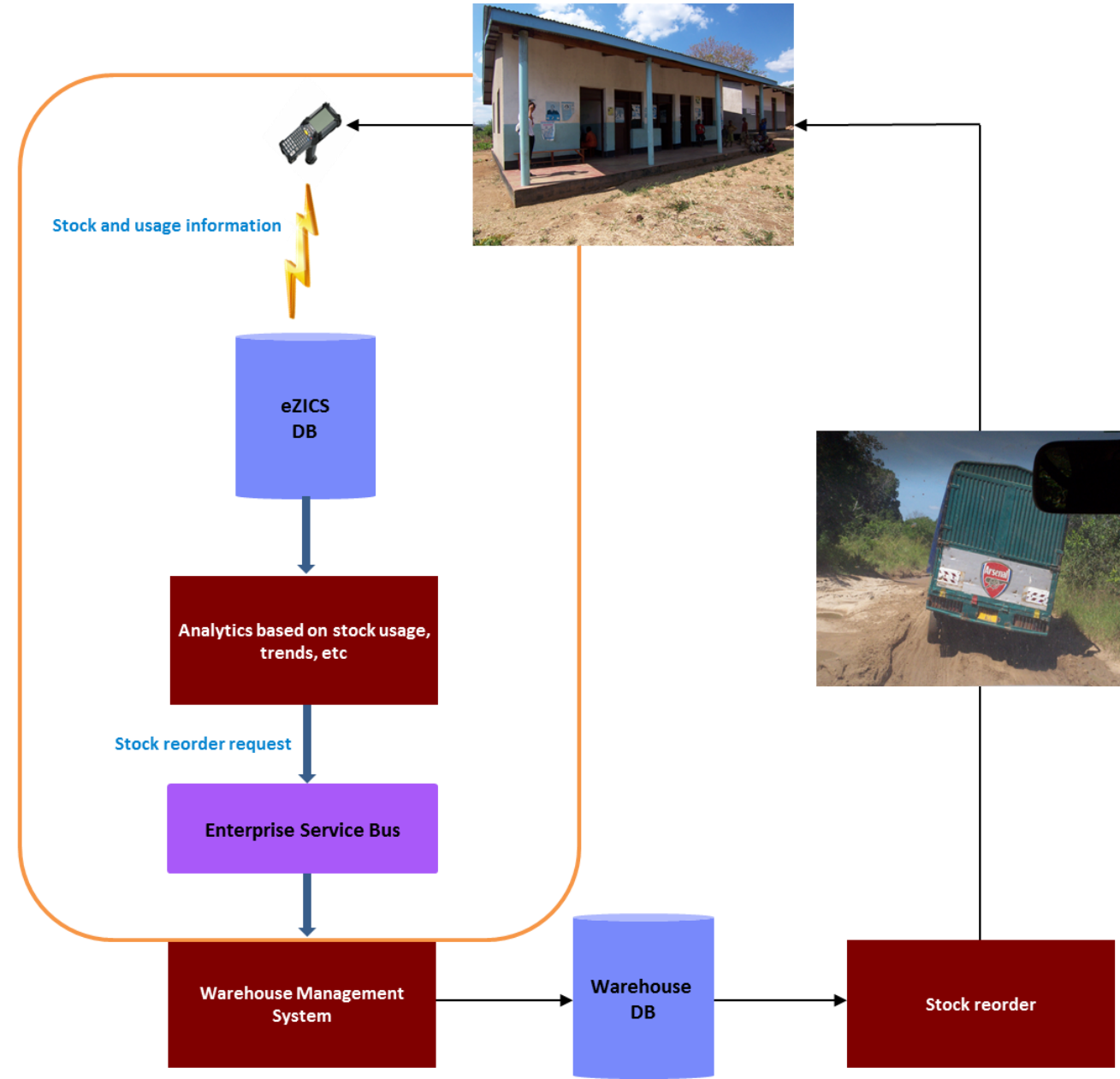






# Background

- Health supply chain projects in Tanzania, Zambia
  - SMS for Life
    - ACT stock reporting by text message
  - eZICS
    - The “stockout eliminator”
- Proved it’s theoretically possible to get medicines to populations in sub-Saharan Africa
- So what’s inhibiting adherence?



# Research findings: example inhibitors



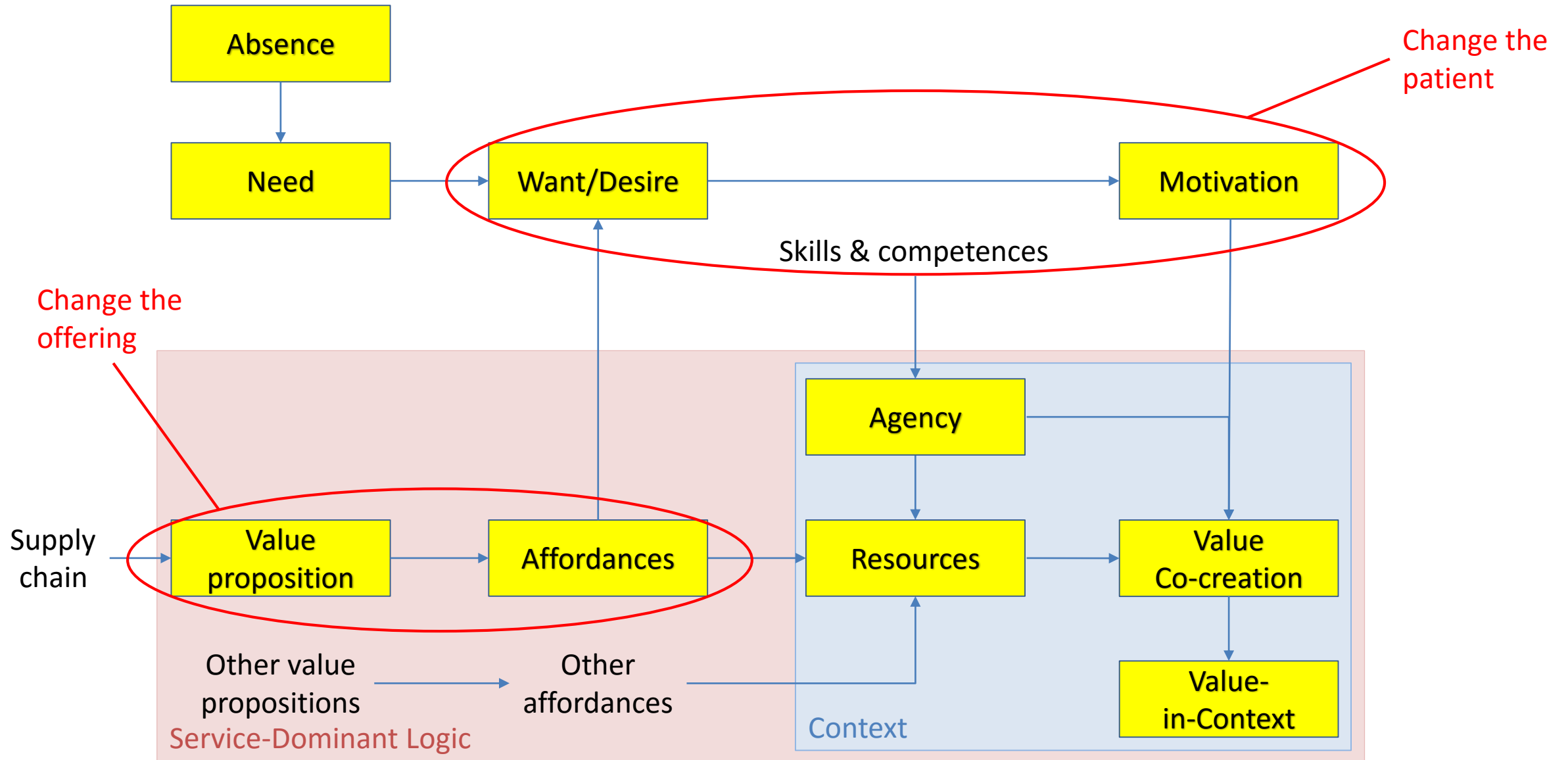
- “I lacked water for taking medicine”
- “We are poor, we can't afford most of the requirements. Sometimes we have single meal a day”
- “The side effects were a bit too much for me”
- “If you don't have money you can just take some local medicine”
- “...too many [malaria] tablets. So I took my pawpaws that I heard about on the radio”
- “I feared for stigma... you are viewed in a different manner by community members”
- “I hate the bitterness and largeness of the tabs”
- “I stop when I feel better... I keep it just in case I get a recurrence of same symptom”

# Research findings: ORS inhibitors



- “One litre is too much so I take a spoon of ORS and put it in a glass of water”
- “My child is not able to drink the full litre in 24 hours so I have to throw away the left over. It’s such a waste”
- “I don’t know what is one litre”
- “I don’t have clean water at hand”
- “I just heat the water, it’s too costly to boil it for 15 minutes”
- “The product is disgusting and sometimes my child vomits it”

# What is adherence? And who's to blame?





# What can be done?



- Improved value propositions may include:
  - Water with medicine
  - Food with medicine
  - Shorter regimens
  - Relaxed scheduling constraints
  - Clearer instructions
  - Reduced tablet size
  - Improved medicine taste
  - Enhanced packaging appeal
  - Clarification of instructions
  - Reminders set in app based on barcode
- How many of those would we welcome as reverse innovations?



# ORS results to date



New Indian ORS sachet



New Ugandan ORS sachet

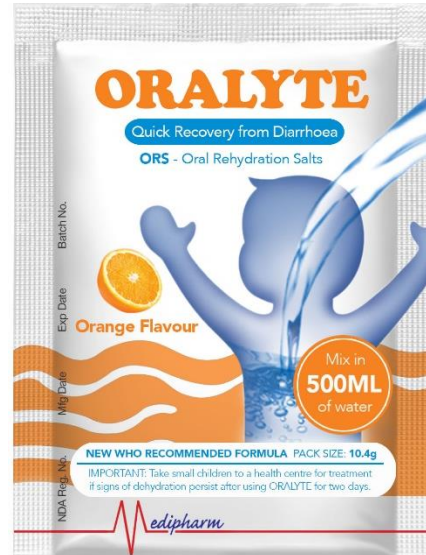


New Nigerian co-pack

Opinions of 630 caregivers in 3 countries

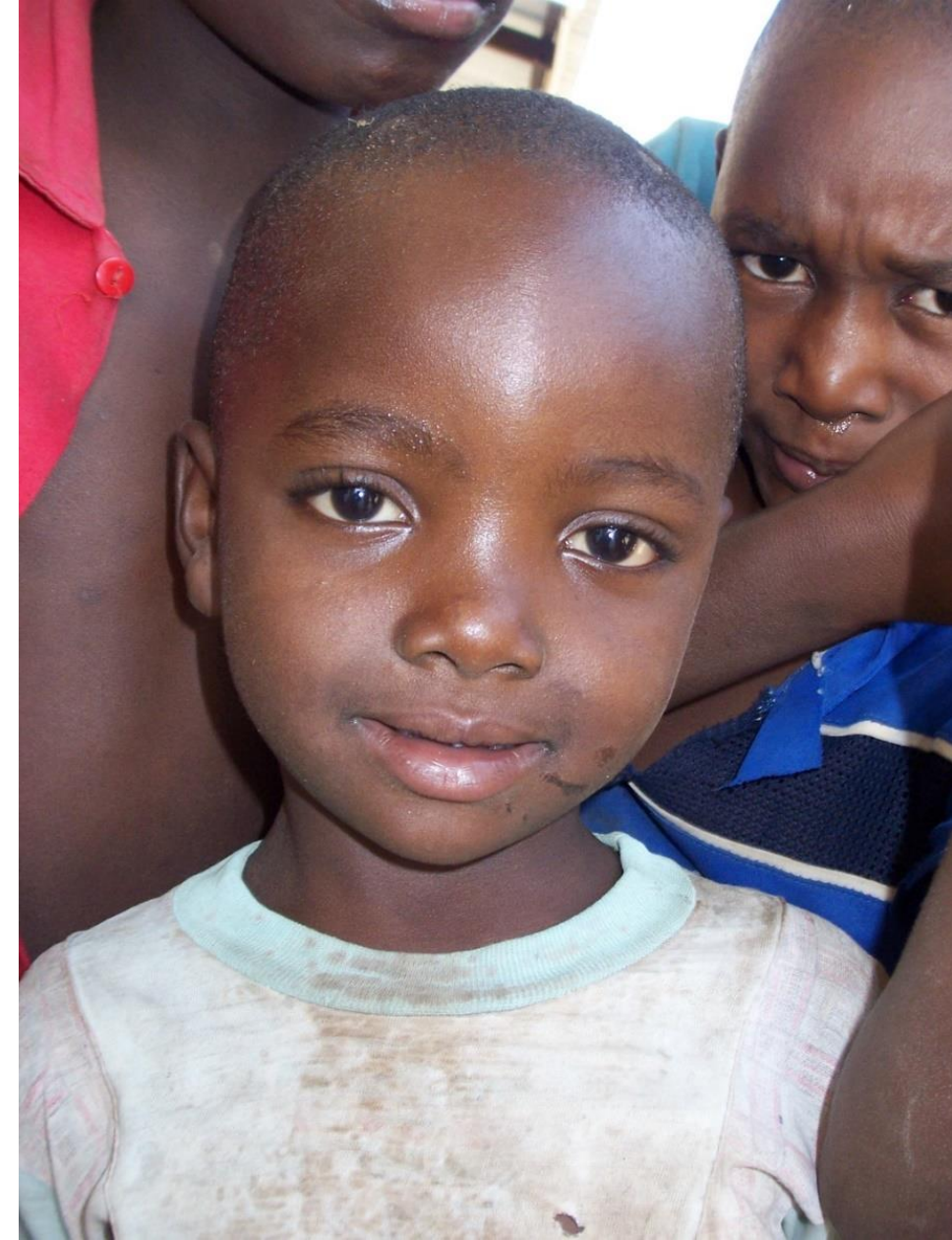


Smaller sachets, orange-flavoured, with brighter and more attractive packs





- Pharmaceutical manufacturers “...are going to be paid on patient outcomes”
  - Joseph Jimenez, CEO of Novartis, 2013
- Which means improving adherence
- I am convinced that making medicines easier to consume can be a significant contributor
- Doing that for sub-Saharan Africa could benefit all of us





**Thank you!**



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'Making Medicine Easier to Take in Sub-Saharan Africa'