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Piloting the Global Subsidy: The impact of subsidized distribution of ACT through private drug shops in rural Tanzania

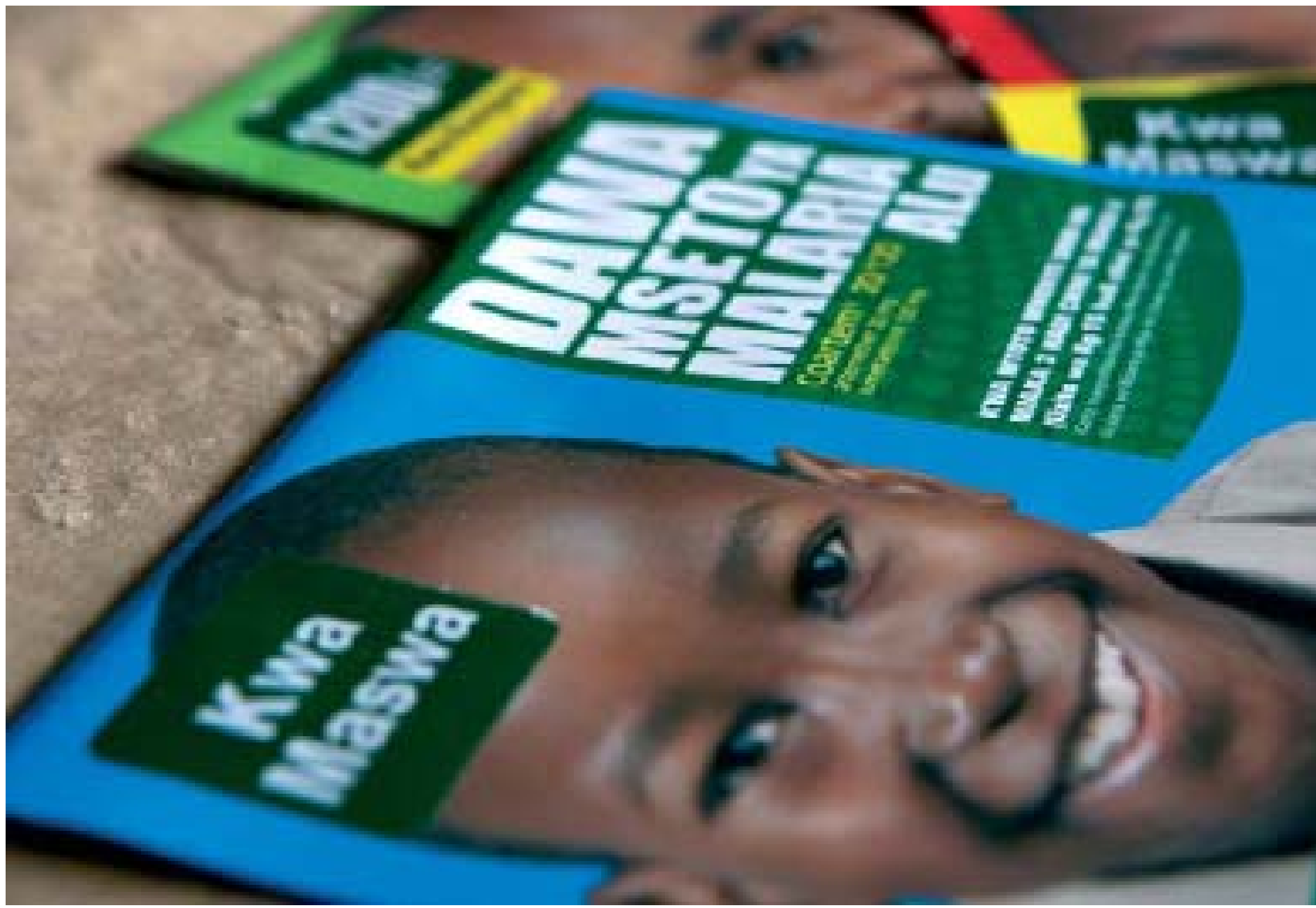
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The Tanzania Pilot



- GoT & Clinton Foundation pilot in 2 rural districts, Oct 07-Nov 08
- Clinton Foundation procured ACT (artemether-lumefantrine), PSI placed in specially designed packs (4 age groups)



Kiwa Maswa

DAMA MSETOTO MALABIA ALU

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The Tanzania Pilot

- GoT & Clinton Foundation pilot in 2 rural districts, Oct 07-Nov 08
- Clinton Foundation procured ACT (artemether-lumefantrine), PSI placed in specially designed packs (4 age groups)
- Sold to national wholesaler at average \$0.11 per dose
- Wholesaler delivered drugs through own distribution networks to private drug shops called duka la dawa baridi

MEDICAL STORE
& COUNSELLING
DUKA LA DAWA
NA USHAURI

DUKA
LA
DAWA

DUKA
LA
DAWA
BARIDI

USHAURI BURE



DUKA
LA
DAWA
BARIDI

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 Intervention

 Control



Study Design

	Subsidy	OTC Status	<i>Supporting interventions</i>		
			Repackaging	Social Marketing	SRP
Maswa Explores effects of a subsidy without SRP	✓	✓	✓	✓	
Kongwa Explores effects of a subsidy with SRP	✓	✓	✓	✓	✓

SRP ranges from US\$0.25 to \$1.00 based on dose



Data collection methods

- Data collected Aug 07 (baseline), Nov 07, March, Aug & Nov 08 – Focus on Aug 07 & 08 today
- All drug stores and public/NGO facilities surveyed, including new entrants
- Retail audits – estimate AM sales volumes over one month by visiting shop at start and end of month and recording stock levels, wholesale deliveries, and drugs disposed of (n=210 in '07, 216 in '08)
- Exit interview – interview all AM or antipyretic drug store customers during one day (n=580 '07; 573 in '08)
- Public/NGO facility audits – review records on ACT dispensed and stockouts (n=105 '07; 107 in '08)



Measuring Competition

- Fixed radius approach for geographical market definition
- Based on GPS coordinates, each drug store assigned a category depending on the number of other drug stores within a 1 km radius
- Classified as:
 - none
 - one
 - two to three
 - four to five
 - more than five



Results



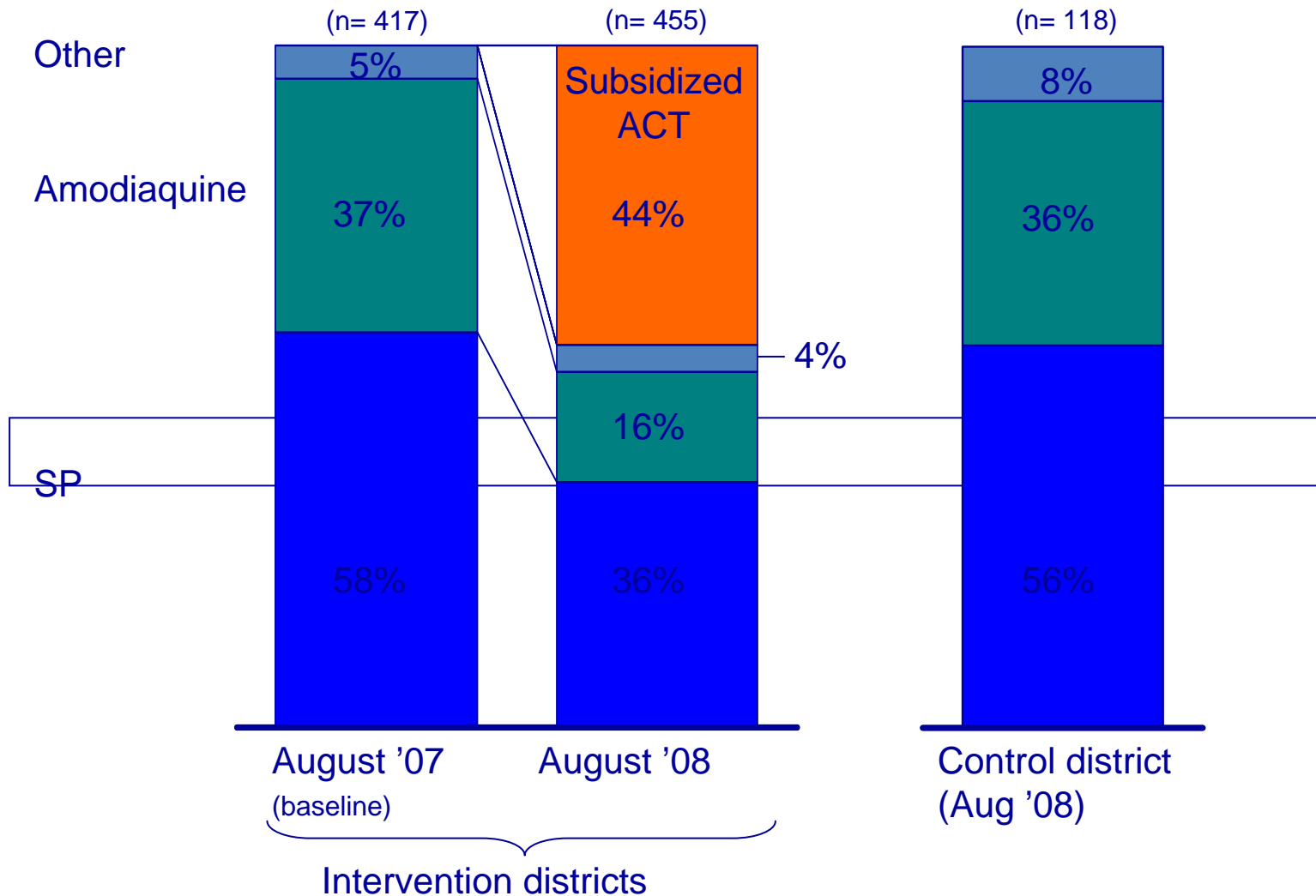
ACT stocking

- Pronounced increase in % drug stores stocking ACT in intervention districts, from 0 in Aug 07 to 72% in Aug 08 (No change in control district (1% - 0))
- Shops with two or more other shops in their competition radius were significantly more likely to stock ACTs (81.2%) than those with 0 or 1 competitor (54.0%) (Aug 08)

Anti-malarials purchased



% of all exit interviews

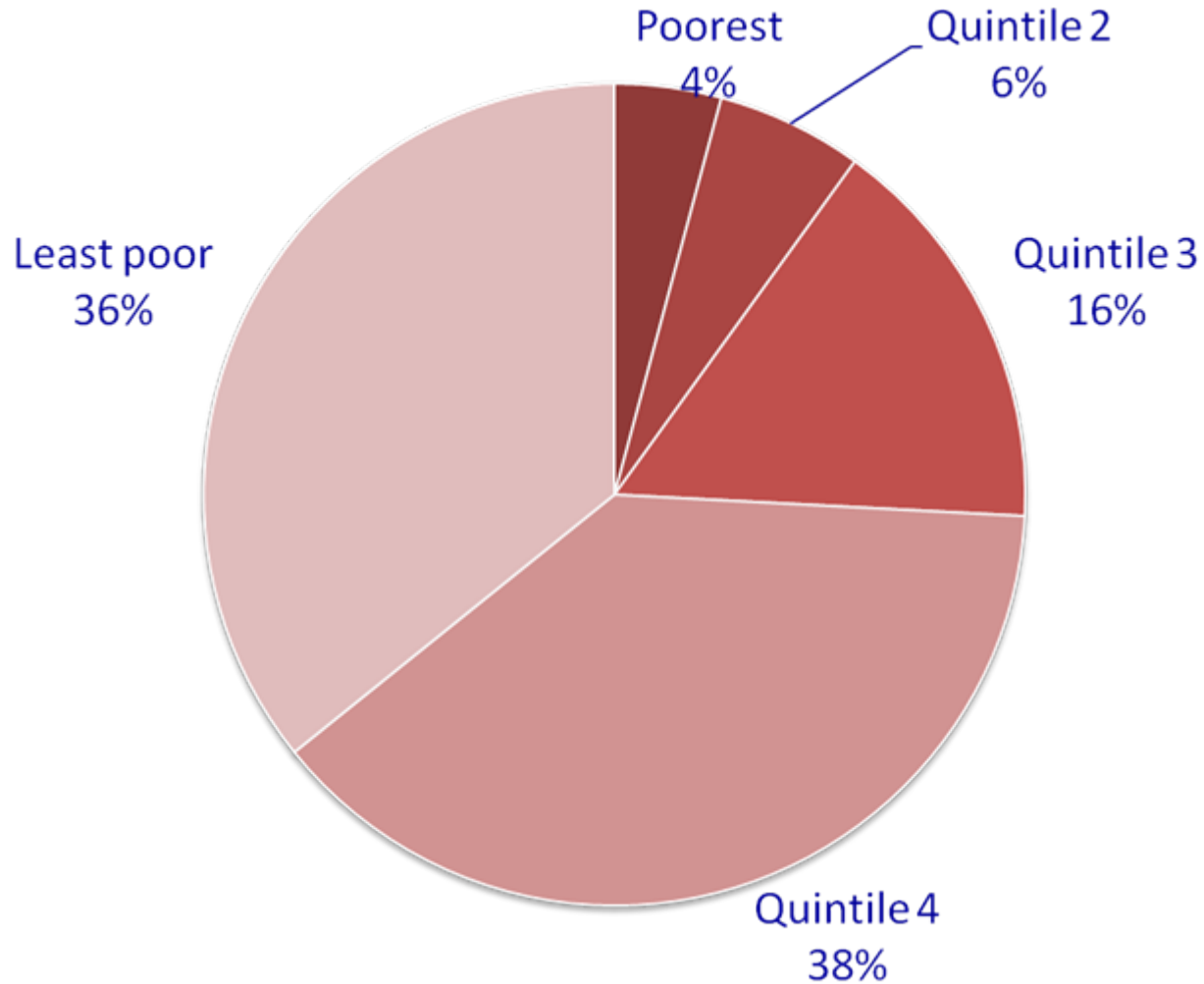




Assessing Equity

- Collected information on household structure and assets from exit interviews using set of questions from nationwide HIV/AIDS Indicator Survey
- Asset data from AIDS Indicator Survey analysed using principal components analysis to generate weights for each asset, and divide population into 5 quintiles
- These weights applied to assets owned by exit interviewees, in order to classify them into nationwide quintiles

Socio-economic status of exit interviewees (Aug 08)



Implications for AMF-m - 1



- Subsidies can lead to rapid and dramatic increases in ACT use
- Subsidies were passed onto consumers, and prices were not significantly higher at more remote stores
- Results may differ at scale:
 - greater reliance on the private sector distribution chain
 - greater potential to use mass media
- Generalise with caution to other countries
 - In Cambodia, retail prices frequently exceeded recommended levels, and artemisinin monotherapy use remained high

Implications for AMF-m - 2



- SRP should be used with caution, to avoid artificial price inflation
- Additional interventions may be needed to increase ACT access among poorer individuals who are less likely to seek care from drug stores
- Additional incentives should be considered to encourage distribution to remote outlets



**PARTNERSHIP TO BRING
EFFECTIVE MALARIA DRUGS TO
ALL WHO NEED THEM**

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BLIND OPTIMISM