So HIVST costs more than HTS in early introductionwhat can we do about it for scale up?

Fern Terris-Prestholt/ Gesine Meyer-Rath LSHTM/ HE2RO

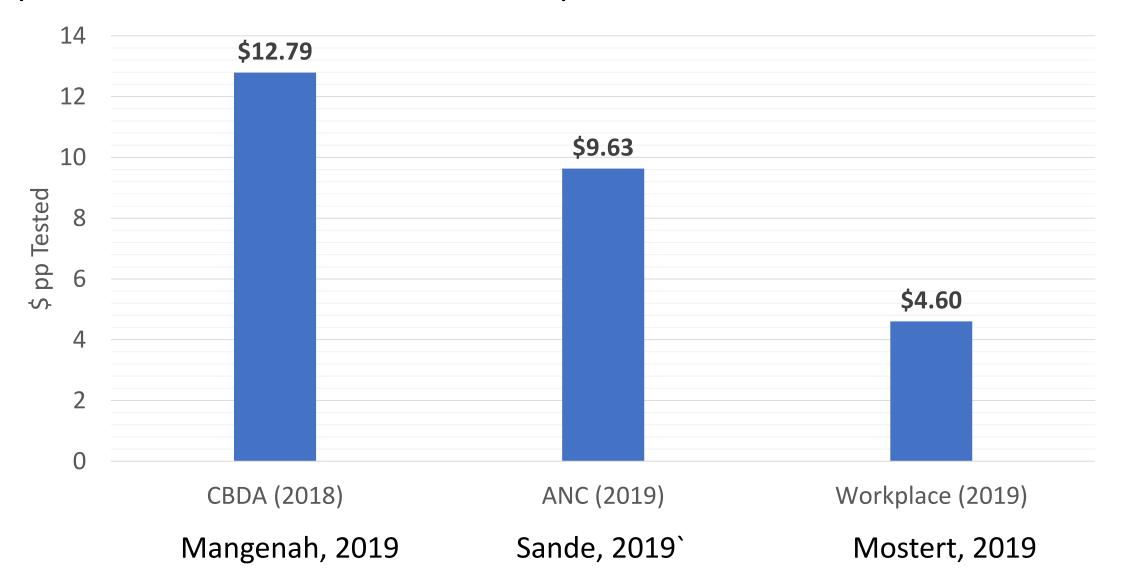
ICASA Conference, Kigali, Rwanda 3 December 2019



1. The costs we found across models, countries and STAR phases

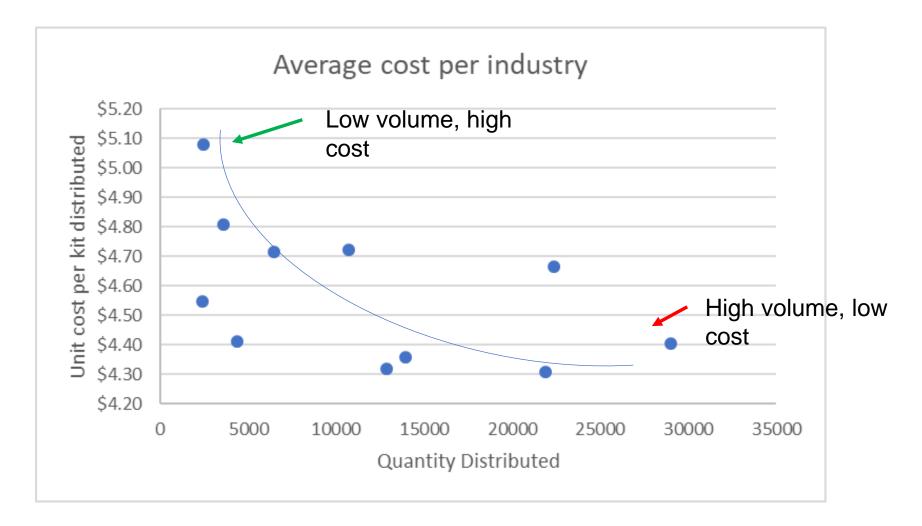
- Cost ^ product maturity
- Cost ^ scale
- Cost ^ yield
- Cost ^ baseline knowledge of status
- Cost ^ incentives (incl. targets)

Cost ^ product maturity: Costs evolve along the product introduction lifespan



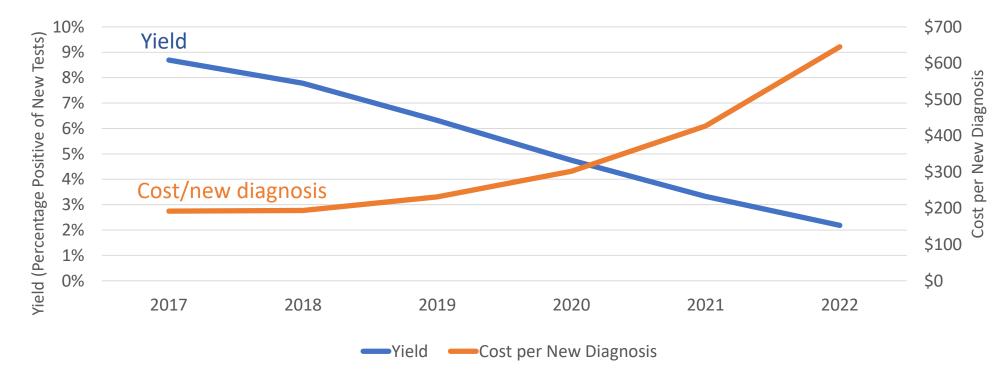
Cost ^ scale:

Results of workplace cost analysis (SA, Ph. 2) suggest economies of scale



Cost ^ yield:

Yield declines and cost per new diagnosis increases as knowledge approaches 90% Nigeria



Yield declines as most PLHIV are diagnosed and on ART. At the limit, new diagnoses will represent new infections since most existing infections will already be diagnosed.

From: J. Stover and E. Korenromp and the Goals Testing Model, <u>http://www.goalshivtestingmodel.org/</u>

Some efficient models

- Large scale distribution is easier in spaces with lots of people
 - Workplaces after everyone has been brought into one large room
 - Taxi ranks
 - OPD waiting rooms
- Models with repeated testing of individuals
 - ANC (South Africa now calls for monthly HIV testing)
 - PrEP (once we have more sensitive HIVST kits!!)
 - Key pop programmes

In summary,

- Across phase 1 and 2 countries, HIVST costs between \$4 and \$16 per kit distributed (not including the cost of confirmatory testing in people screening positive)
- Wide variation in unit costs within models and countries
- Large economies of scale (lower costs with higher outputs)
- But scale up will lead to fewer PLHIV identified per kit distributed
- Expect higher unit costs \rightarrow trade off between
 - implementation efficiency (cost per PLHIV) & cost-effectiveness
 - identifying those last PLHIV as we approach 1st 90 across all pops
- Think sustainability at the start of intervention design.

2. Challenges and lessons learned

across models, countries and STAR phases

- Costing of early implementation/ proof of concept vs routine implementation
 - Above-implementation costs
 - Tension between full expenditure (top-down costs) and micro-costing (bottom-up costing)
 - Programmes aiming for efficacy or feasibility need to quickly transition into aim of sustainability.
- Prevalent demand/ incident demand
- Capital vs recurrent costs
 - What is the saturation point for explanation/ training by distributors?
 - Should first contact w new HIVST-er be treated as training cost and annualised?

3. Points to consider in budgeting for your country's HIVST programme

- Collect cost per kit distributed across a range of models at a representative scale and implementation maturity (or adjust ours to your locally relevant prices and salaries)
- Estimate the number of people likely approachable in each distribution model and their likely uptake
- Assume replacement effects (ie, how many people will no longer access regular HTS after self-testing)
- Calculate follow-on costs
 - Confirmatory testing and ART for PLHIV
 - MMC, PrEP, etc for HIV negs

→ Calculate annual budget for HIVST programme

Health Economists Wanted @ HE²RO



Senior and mid-level health economists needed!

http://www.heroza.org/opportunities/

vacancy@heroza.org

Health Economics and Epidemiology Research Office Wits Health Consortium, Johannesburg, South Africa

