Designing Service Hours to Maximize Home-Based HIV Testing of Men—Mozambique, 2016

Erin M. Parker[1], Isabelle Casavant[1], Stélio S. Tamele[2], Adelino Juga[1], Inacio Malimane[1], Stanley C. Wei[1]

[1]CDC Division of Global HIV and Tuberculosis, [2]Chokwe District Health Department

Background

- **Identifying HIV positive individuals** is the first step toward linking them to life-saving antiretroviral therapy, which reduces onward transmission.
- In **Mozambique**, where men are less likely than women to be on HIV treatment, **HIV testing among men can be challenging**.
- **Extending testing hours** has been proposed as a way to increase accessibility of services for men, but doing so adds expense and logistical complexity.
- We describe **women's reports of their male sex partners' availability** for a home visit from the health department to determine the most high-yield HIV testing hours.

Methods

- The ***2016 Chokwe Combination Prevention* survey** is a large, cross-sectional HIV prevalence and practices survey administered to 3026 randomly sampled households in the Chokwe district of **Gaza Province**.
- We analyzed responses from a series of questions about **partner availability at different times of day and days of week**.
- Because surveys were conducted primarily during regular business hours, **information from female partners** was considered more generalizable than from male respondents.
- Data are not adjusted for non-response.

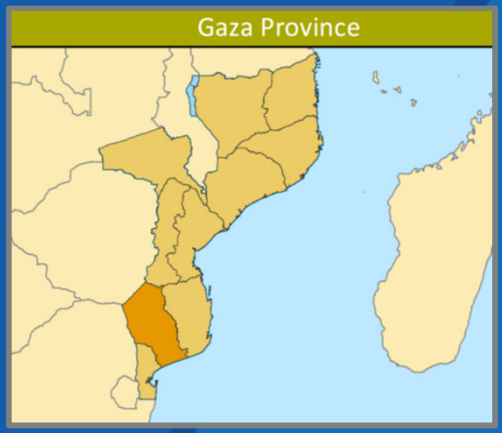

Table. Incremental Benefit of Extending HIV Testing Hours for Reaching Men Starting from Three Different Core Hour

	Work Hours 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	# Men	% Men	Max Staff Hours Per Day	Days Per Week
Scenario 1: Standard workday					
Start weekday 6-12	■ ■ ■ ■ ■ ■ ■	912	39.1%	6	5
add weekday 12-14	■ ■ ■ ■ ■ ■ ■ ■ ■	1,300	55.7%	8	5
add weekday 14-18	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	1,733	74.3%	12	5
add weekday 18-22	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	2,249	96.4%	16	5
Scenario 2: Afternoon/evening					
Start weekday 14-18	■ ■ ■ ■	1,551	66.5%	4	5
add weekday 18-22	■ ■ ■ ■ ■ ■ ■ ■	2,041	87.5%	8	5
add weekday 12-14	■ ■ ■ ■ ■ ■ ■ ■ ■ ■	2,190	93.9%	10	5
Scenario 3: Add weekend					
Start weekday 12-14	■ ■	1,228	52.6%	2	5
add weekday 14-18	■ ■ ■ ■ ■ ■	1,711	73.3%	6	5
add Saturday 12-14	x x ■ ■ ■ ■	1,794	76.9%	6	6
add Saturday 14-18	x x x x x x ■ ■	1,838	78.8%	6	6
add Sunday 12-14	x,y x,y x x x x ■ ■	1,913	82.0%	6	7
add Sunday 14-18	x,y x,y x,y x,y x,y x,y ■ ■	1,940	83.2%	6	7

Legend
■ Weekday
x Saturday
y Sunday

*Of 2726 women who had sex in the past 12 months whose last partner was male, 2333 women (86%) reported that their partner could be reached at home at least one day of the week from 5:00-22:00.

Results

Scenario 1

- Of the 2333 women (86%) who reported that their partner could be reached at home at least one day of the week from 5:00-22:00, 1300 (56%) could be reached during core work hours (6:00-14:00).
- Extending testing hours from 8 to 12 or 16 hours would increase the proportion reached to 74% and 96%, respectively.

Scenario 2

- Alternatively, late work schedules of 14:00-22:00, or 12:00-22:00 would reach 88% and 94%, respectively, while maintaining a workday of 8-10 hours.

Scenario 3

- A late work schedule of 12:00-18:00 would reach 73% with a workday of 6 hours.
- Addition of Saturday and Sunday hours to a 12:00-18:00 afternoon weekday schedule increased the proportion reached from 73 to 83%.

Conclusions

- Female partner reports indicate that shifting the 8-hour work day from 6:00-14:00 to 14:00-22:00 would **increase the proportion of men reached from 55 to 88% with no additional work hours**.
- Adding **weekend hours has comparatively modest incremental benefit**.
- This analysis suggests **adding late afternoon and evening work hours to home-based testing programs** such as community index-case testing **could substantially increase the reach of HIV testing among men**.
- **Findings warrant corroboration through programmatic implementation.**

CONTACT INFO

For additional information please contact Dr. Stanley Wei at bge3@cdc.gov.

Center for Global Health
CDC Mozambique