Accelerating Adults’ Entry into HIV Care in South Africa

Could more adults who test positive at mobile HIV counseling and testing (HCT) units link to care after learning their CD4 count alone or in combination with other interventions?

A CRITICAL PROBLEM
In many regions of the world, many or most people living with HIV (PLHIV) are not accessing care. Substantial attrition occurs between testing positive for HIV, linking to care services, and remaining in care and on treatment. The success of a test and start model depends on PLHIV’s early and sustained engagement in care and treatment.

SPOTLIGHT ON SOUTH AFRICA
• 86% of PLHIV in South Africa know their status.
• Yet, only one-third of those eligible for antiretroviral therapy (ART) are accessing care to receive life-saving treatment.

THE THOL’IMPILO STUDY
“Thol’impilo” means “to receive health” in isiZulu and other southern African languages.

HIV-positive persons were recruited from 7 mobile HCT units. These units were deployed in communities, transport hubs, workplaces and community events in rural, peri-urban and urban areas of Gauteng and Limpopo provinces. Nearly 2,400 study participants were randomized to 1 of 4 intervention arms:

**Intervention Arm 1**
Standard of care*  

**Intervention Arm 2**
Point of care (POC) CD4 testing and explanation of results

**Intervention Arm 3**
POC CD4 testing and explanation of results plus 3 transport reimbursements to a care facility

**Intervention Arm 4**
POC CD4 testing and explanation of results plus 5 care facilitation counseling sessions via phone or in-person by a social worker

* Consisted of counseling on the importance of HIV care and referral to the care facility closest to the participant.

These interventions address important individual barriers to care engagement:
• Lack of perceived illness (CD4 testing);
• Long distance from home to the clinic (transport reimbursements); and
• Lack of self-efficacy, internalized stigma and fear (care facilitation counseling).

Study participants
Most were women (61%)

Entered care at over 200 public, NGO-run and private clinics

Median age: 33 years  
(range: 27-41 years)
RESULTS

The CD4 testing plus care counseling intervention engaged the most participants in care.

Verified proportion of participants entering care by 90 days

INTERVENTION ARM 1: Standard of care 29%
INTERVENTION ARM 2: POC CD4 testing 31%
INTERVENTION ARM 3: POC CD4 testing + transport reimbursement 31%
INTERVENTION ARM 4: POC CD4 testing + care facilitation 38%

* p < 0.001 compared to the standard of care arm

Regardless of the intervention, rates of entry into care were extremely low.

Fewer than 2 in 5 participants in any of the intervention groups had verified entry into care within 90 days. This is consistent with prior reports from mobile HCT units, but lower than from clinic-based HCT units.

ENTRY INTO CARE: WHY SO LOW?

Participants gave many reasons for not accessing care, including fear of stigma, need to meet basic needs (food, employment) and opportunity costs associated with accessing care. But many were health system barriers:

- Non-empathetic care;
- Long waiting times;
- Need for repeat visits; and
- Fear of lack of confidentiality.

The cost per additional documented case in care was lowest in the CD4 testing plus care facilitation counseling arm, yet still expensive.

Compared to the standard of care, care facilitation counseling cost an additional US$1,723 per person who verifiably entered into care.

FROM EVIDENCE TO ACTION

Neither CD4 testing alone or in combination with transport reimbursement was an effective strategy to improving linkage to care in this setting. Strengths-based care facilitation counseling may modestly have improved entry into care, but at a relatively high cost. However, costs could be lowered by task-shifting, reducing the number of sessions and reaching patient capacity for each care facilitator.

Further studies to identify effective, pragmatic and cost-effective approaches to improve participation in the HIV care continuum are urgently needed. Such studies should go beyond addressing individual barriers by examining strategies that reduce clinic barriers to care as well.