

# Computer-based Prevention Counseling for HIV-infected Persons

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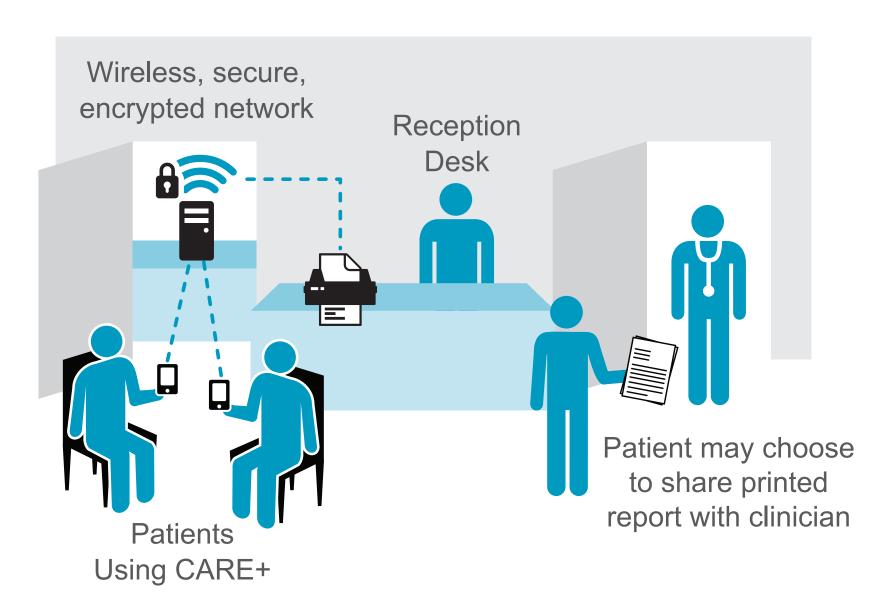
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# BACKGROUND

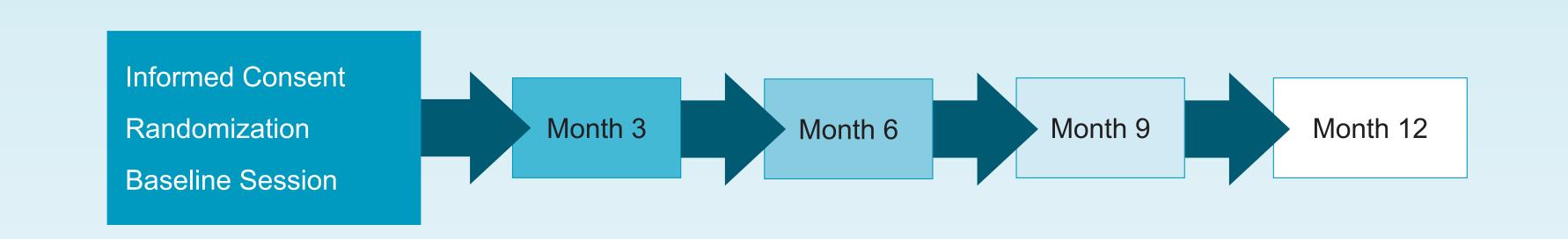
- HPTN 065, a large study funded by NIAID, NIH and conducted by the HIV Prevention Trials Network (HPTN), examined the feasibility of a test, link-to-care, plus treat strategy for HIV prevention in the Bronx, NY and Washington, DC. One component of the study evaluated a computer-based prevention counseling intervention (CARE+) for HIV-infected persons in care, to determine its effect on reducing unprotected sex.
- CARE+, an intervention designed and evaluated in prior HIV prevention and adherence studies, was adapted for HPTN 065. The software:
- is delivered on computer tablets and headphones
- is available in English and Spanish with audionarration for all text (see screens below where avatars may be chosen in English or Spanish)
- provides tailored feedback based on participant input to those randomized to the intervention arm
- participants randomized to the intervention arm may print out a care plan (see below).





# **METHODS**

- HIV patients at 10 study clinics (6 in DC, 4 in NY) were randomized 1:1 to either the intervention arm of CARE + ACASI risk assessment and intervention plus standard of care (SOC) prevention counseling or to the control arm of CARE + ACASI risk assessment only plus SOC prevention counseling.
- Participants completed the assigned computer-based session at baseline and months 3, 6, 9, and 12.
- Generalized estimating equation models were used to analyze the proportion of participants reporting condomless vaginal or anal sex the last time they had sex. Of 948 enrolled participants, 894 (94%) completed at least one follow-up visit and were included in the longitudinal statistical modeling.



### **RESULTS**

## **Participant Characteristics**

- Participant characteristics are described in Table 1 and Figure 1.
- Retention at month 12 was 75% (n=354) in the CARE+ arm and 78% (n=370) in the control arm.

#### **Self-Reported Condomless Sex Acts**

- At baseline, 499 (53%) participants reported having any sex in the last 3 months (236 [50%] CARE+ intervention arm participants and 263 [55%] control arm participants).
- Nearly half of participants reported no sex in the prior 3 months (Figure 2) (43% and 39%) at baseline and (45% and 38%) at month 12 in the CARE+ and control arms, respectively.
- 33% and 27% of CARE+ and control participants, respectively, reported not having any sex throughout the study duration (Figure 3).
- The proportion of reported condomless sex with any partner did not change over time in CARE+ participants (13% at baseline, 12% at 12 months, odds ratio (OR): 0.995 (95% CI: 0.91, 1.1), p=0.91) (Figure 4).
- There was no significant difference between CARE+ and control participants in rates of condomless sex with any partner over time (OR comparing time trends, control versus CARE+: 1.03 (95% CI: 0.91, 1.2), p=0.67). (Figure 4).
- At baseline, 33/471 (7%) of CARE+ participants reported condomless sex with an HIV-negative or unknown status partner compared to 35/477 (7%) among control participants. At 12 months, the numbers were 26/354 (7%) among CARE+ and 34/370 (9%) among controls (difference not significant) (Figure 4).

#### **TABLE 1.** Participant Characteristics.

Characteristics N=894	Intervention Arm N=417	Control Arm N=477
Median Age (range)	51 years (19–76)	52 years (18–77)
Gender	317 (67%) male	326 (68%) male
Race	282 (60%) black	299 (63%) black
Hispanic/Latino	102 (22%)	88 (18%)
Household Income below \$10,000	129 (27%)	137 (29%)
Taking ART at baseline	409 (87%)	425 (89%)

FIGURE 1. Self-Reported HIV Transmission Risk Factors.

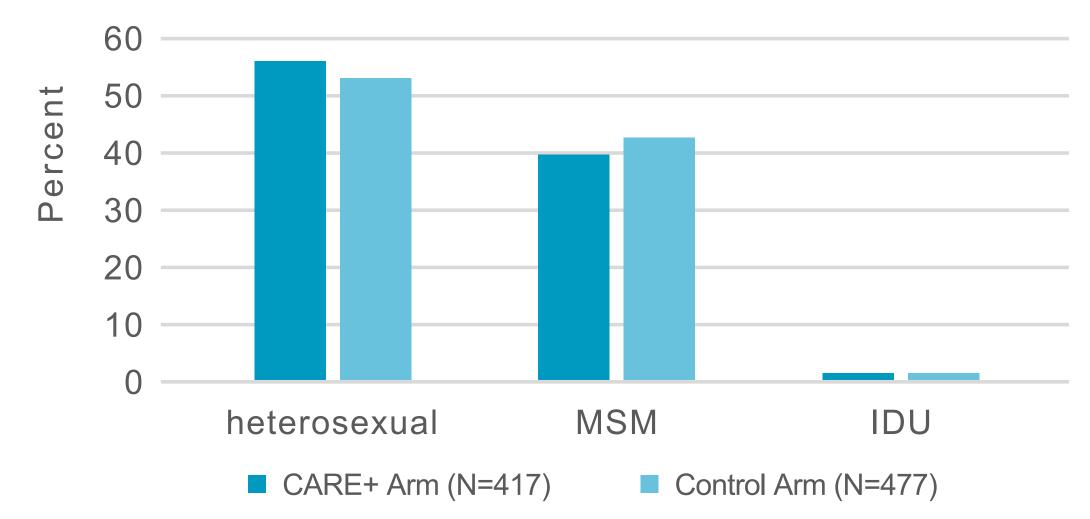


FIGURE 2. Frequency of Participants Reporting Having No Sex in the Past Three Months.

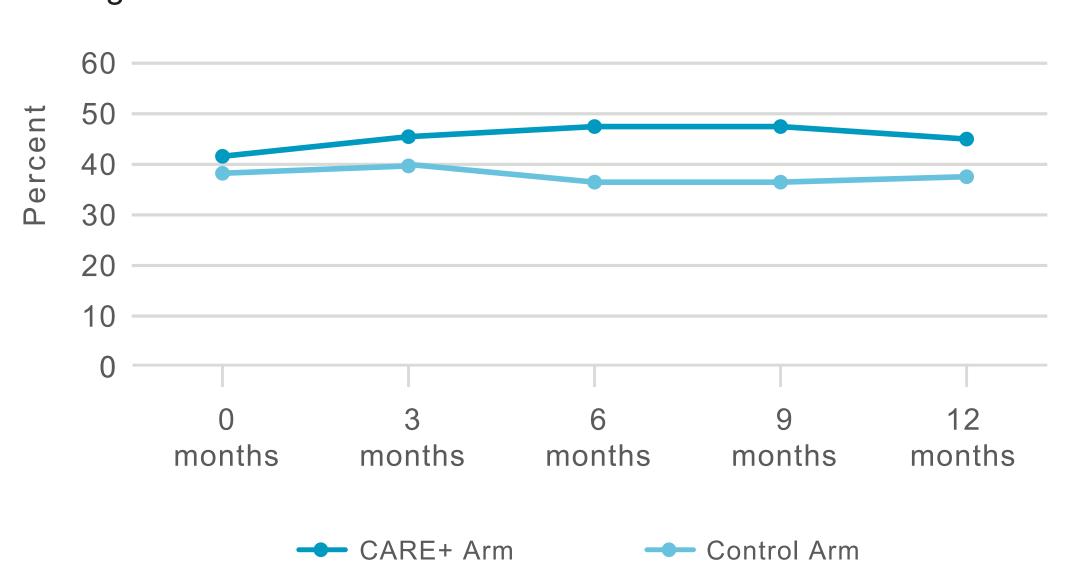
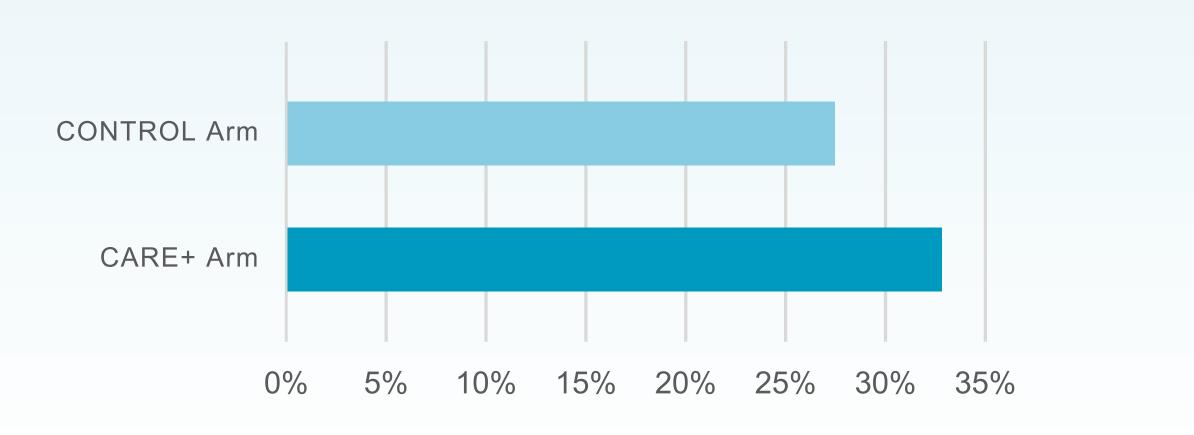
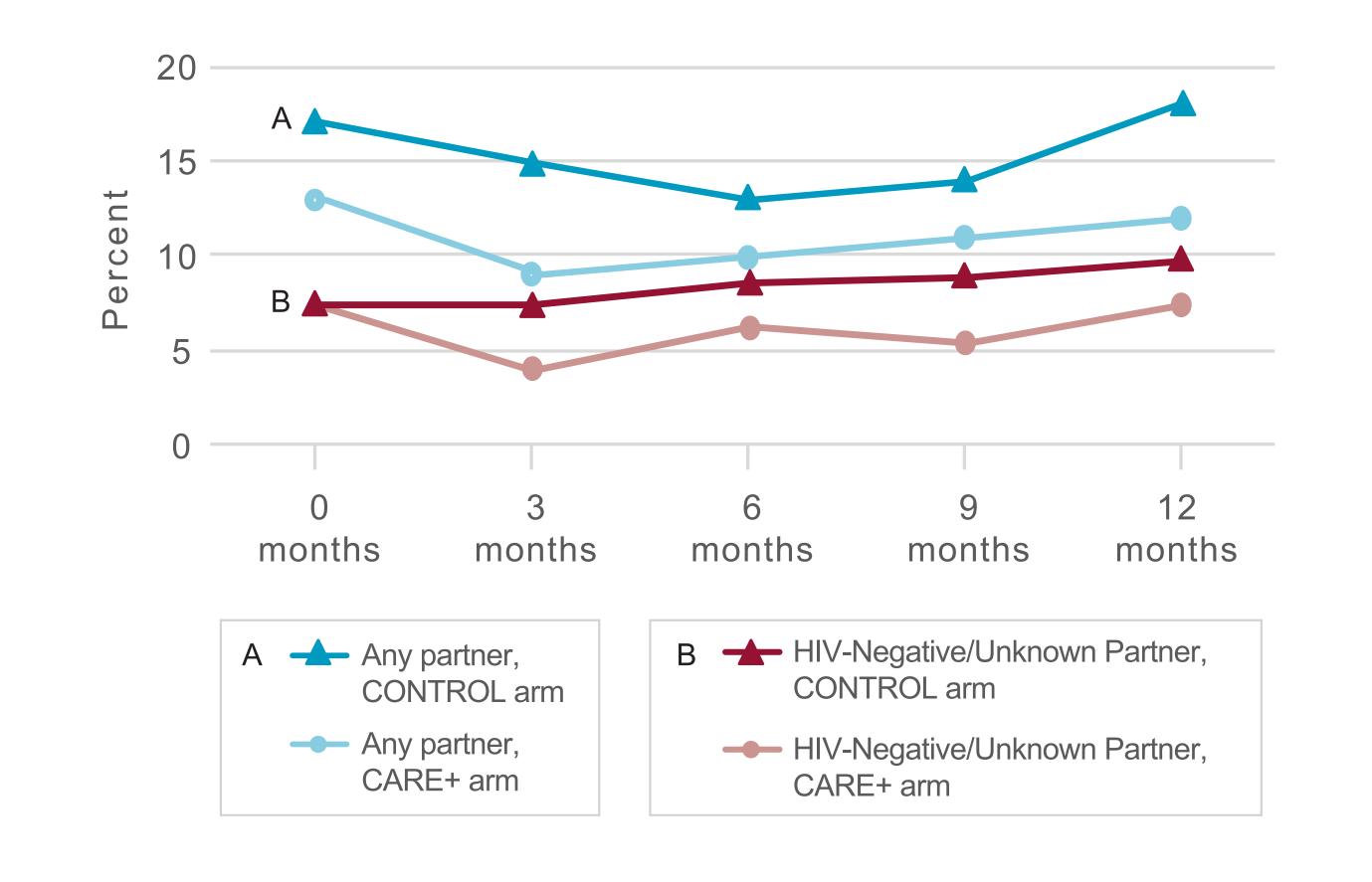


FIGURE 3. Participants Reporting No Sex Throughout the Study Duration.



**FIGURE 4.** Proportion of participants reporting condomless sex during last sex act with (A) any partner and with (B) a partner who is either HIV-negative or of unknown status.



# CONCLUSIONS

- We successfully recruited HIV infected persons in care, largely Black and Hispanic men, with about 40% reporting as MSM.
- The CARE+ computer-based intervention did not reduce the proportion of HIV-infected patients in care who reported condomless sex.
- Reported sexual activity was relatively low in this study population, with 41% reporting no sex during the last three months before baseline. High transmission-risk-sexual activity (i.e., condomless sex with HIV-negative or unknown status partner) also was low throughout study duration. A substantial proportion of participants in both arms did not report having sex throughout the study.
- This intervention was not found to have an effect on reported sexual transmission risk behaviors.
   The study included a diverse group of HIV-infected individuals, largely consistent with HIV-infected population in the US.

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