360 BIOMETRICS

PersonID used for an HIV Research Project in South Africa

Situation

Researchers from a leading university are doing a survey in South Africa, looking for HIV markers in a sample of men who have sex with other men.

Because the participants are paid an incentive, a major concern was that they would enroll multiple times, a real possibility in countries with low per-capita incomes. To make sure the study results are valid, the researchers needed to ensure that participants were counted only once, and needed a reliable way to identify enrolled participants when they return for subsequent visits.

Solution

To achieve these goals, the researchers are using the PersonID fingerprint identification system from 360 Biometrics. They chose PersonID for four major reasons:

- Biometrics seemed to be an appropriate technology for this application.
- The PersonID software can be customized.
- PersonID is very easy to use, and
- Another leading university (University of San Francisco, UCSF) had used PersonID for a similar project.

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PersonID effectively ensures that each participant is unique and is correctly identified on follow-up visits. The system also helps track an incentive program that is helping expand the field of study.

Here is how it works. Participants are enrolled in the system by capturing three fingerprints. When people come to enroll, their fingerprints are compared against the enrolled fingerprints to make sure they have not previously participated.

Two rapid HIV tests are performed on each participant and the data is entered into the system. If the results from the tests do not match, a third test is performed in a lab and this result is entered in a third field.

To enlarge their field of study, the researchers ask the participants to refer three to five other people. The participants are given coupons to distribute. Each coupon's unique serial number is noted in a special field of the participant's PersonID record.

When someone who has received a coupon enrolls, the system tracks the serial number to identify the referrer, the original participant who qualifies for an incentive award. The PersonID fingerprint identification system also confirms the identity of participants who return to receive their incentives and get the results of their HIV tests. After the initial enrollments, only people with coupons will be allowed to participate.

The PersonID developers incorporated export functionality into the system for this project, enabling the staff in South Africa to export data from the PersonID database to an Excel spreadsheet each day. This file is shared with the team members in the United States, allowing them to constantly monitor recruitment.

Results

PersonID has enabled the researchers to capture the project-specific information they need from each participant. The researchers have expressed their confidence that each participant is unique, and that the incentives and test results are being given to the right people.