Small, Fast, Accurate

A new HIV test is the size of a credit card—with results PDQ.

December 12, 2011 By Tim Murphy

In August, a Columbia University engineering team introduced the mChip, a cheap, credit card–sized device that uses a blood-prick to detect HIV, syphilis and other infections in 15 minutes.

The mChip was tested on hundreds of Rwandans, with almost 100 percent accuracy. “The idea is to make tests accessible to patients in any setting rather than forcing them to go to a clinic,” developer Samuel K. Sia told *Nature Medicine*.

The device uses a microchip formed by injection molding and holds miniature test tubes and chemicals. “It’s really clever,” says Rowena Johnston, PhD, research director at amfAR, The American Foundation for AIDS Research. “It’s as quick as the current HIV rapid-test, but cheaper—and it tests for other things. I can see this being used in the U.S.”

Johnston expects docs to use the mChip primarily to test pregnant women in poor countries for HIV and syphilis. This will determine who needs treatment and will prevent mother-to-child transmission. But the real challenge will be to get the women treated.

Says Johnston: “At this point, drugs to prevent mother-to-child transmission of HIV [are cheap], but still only 15 percent of women who need them are getting them.”

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http://beta.docker.realhealthmag.com/article/HIV-mChip-Test-21571-5095