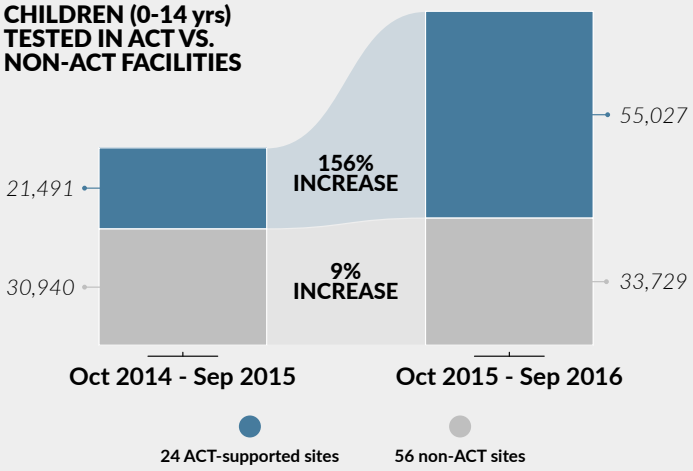
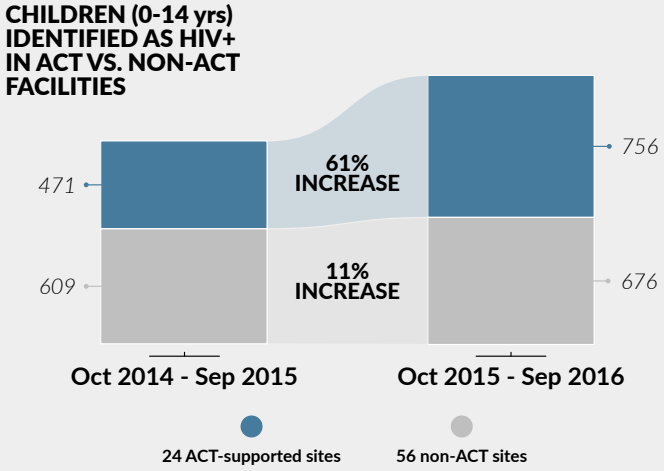
A SMARTER WAY TO FIND CHILDREN WITH HIV

Gold miners know the richest veins of a river are at the source — in the mother lode. To find HIV-positive children who need life-saving treatment, the same wisdom should apply: test the children of positive parents or siblings of other infected children, and follow the stream to points in the health system where vulnerable children are likely to show up. Yet, that logic rarely prevails. Most national HIV programmes tend to passively screen children like anyone else in the general population: by waiting for them to walk in the clinic door and ask for a test. That's like stretching a net at the mouth of a river and hoping to catch a few loose nuggets.

Now Kahama District Hospital is going for the gold. Since August 2015 this bustling government facility in the northern Tanzanian region of Shinyanga has radically overhauled the way it finds HIV-positive children. The approach is two-pronged. First, Kahama started listing all of the children of HIV-positive adults, known as 'index' patients, in a clinic logbook, and launched Family Day testing events on Tuesdays and Saturdays when children are out of school. Nurses relentlessly cajole parents to bring their untested kids to hospital for testing, or opt for home-based care workers to test them in their local villages if transport is a burden. Second, the hospital began demanding that all departments where high-risk children turn up offer HIV tests – especially paediatric in-patient wards, the outpatient department and tuberculosis unit. The Tanzanian government, in fact, has had such a policy in place for years, but Kahama and most other facilities had never fully enforced it before.

Kahama is now one of 24 health facilities in Shinyanga using this new approach, which is funded by the Accelerating Children's HIV Treatment (ACT) Initiative. Between October 2015 and September 2016, the number of children tested in the ACT-funded Shinyanga facilities soared 156% to 55,027 tests compared to the year before. The targeting approach helped to increase the number of children testing HIV-positive by 61%. By contrast, 56 facilities in the same area not supported by ACT managed testing growth of a mere 9%, with only an 11% increase in new HIV cases identified.





This new approach is not only more effective but also far more efficient. The strategy of seeking out children of HIV-positive adults identified new HIV-positive children at a rate of 3.7% — four times greater than the 0.9% yield from general testing. "We've had some quick wins to commence more children on treatment", says Dr. Ntuli Kapologwe, Shinyanga Regional Medical Officer.

Berta Nicolas is a typical target of the scheme. The mother of three was diagnosed with HIV in 2007, a year after her husband died of HIV, but she never tested her youngest son Richard, 10 — until a recent Saturday Family Day. "I was afraid to bring him," she admits, despite clear messages from Kahama nurses over the years about the importance of testing children. The fear of bad news put her off until July, when nurses wrote Richard's name in their logbook of untested children and encouraged her to bring him for a test. "They were more serious than ever before, and it scared me," Berta says. "I didn't want my son to die." Happily, Richard tested negative.

Berta Nicolas and her son, Richard, 10, receive the good news of his HIV-negative test from a nurse

TEXT & PHOTOS BY JONATHAN B. LEVINE

Kahama's proactive testing campaign offers a measure of relief, even when the news is bad. Although Halima Jumanne, a bubbly 6-year-old, tested negative at birth, her HIV-positive mother, Amina Hogola, became suspicious earlier this year when the girl developed an ear infection that wouldn't go away. The Kahama nurses' constant coaxing to test children finally convinced Hogola to re-test Halima, when she was diagnosed as HIV-positive after all. Hogola says, "I'm happy to know Halima's HIV status now, so she can be on HIV treatment and stay healthy."

The ACT Initiative's focus on targeted testing is driven by a stark reality. UNAIDS recently cut its estimate of the number of children in Tanzania living with HIV by 35%, to 91,000 — a trend seen across Africa. One of the reasons for the re-estimate is Tanzania's increasing success with preventing mother-to-child transmission in recent years. But this reduction has a darker side — many children with HIV are dying before they are able to access treatment. That makes it all the more urgent to better target testing of all sick children with high risk for HIV wherever they enter the health system.

The in-patient paediatric wards in ACT-supported Shinyanga facilities are now testing more than 90% of admitted children, up from less than 50% before ACT. TB patients, who are at higher risk for HIV but were never routinely tested before, are also now all tested consistently. Outpatient departments have found it harder to test all children, averaging a paediatric testing rate of only about 40%. This is due to the limited trained staff available to handle larger numbers of patients. But some small victories have emerged. After dedicating a separate room and staff for paediatric testing last April, Shinyanga Regional Hospital, the area's largest, increased its testing rate from 3.7% of children to 56.5% two months later.

A family listens to pre-test counselling during a Family Day at Kahama District Hospital.

These successes can be explained by a simple maxim: "What gets measured gets managed." Thanks to a push by the Ariel Glaser Pediatric AIDS Healthcare Initiative (AGPAHI), ACT's implementing partner in Shinyanga, the region's facilities have incorporated paediatric testing metrics into their morning management meetings. Hospital officials rarely concerned themselves with child testing before ACT, but the sudden visibility of the numbers "created awareness from top to bottom," says Flora Mwinuka, the lead clinical officer for Kahama District Hospital's HIV treatment unit. "Now they ask us if we've tested all the children, and if not, we're in trouble." With that kind of ownership by top management, the new testing strategies are likely to endure in Shinyanga well beyond the support from ACT. "There's no way we'll stop finding the children now," Mwinuka says. "It's in our hearts."

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DECEMBER 2016

*The **Accelerating Children's HIV/AIDS Treatment (ACT)** Initiative is an ambitious $200 million programme to put 300,000 children living with HIV on life-saving treatment in nine African countries within two years. The programme is supported by the **US President's Emergency Plan for AIDS Relief (PEPFAR)** and the **Children's Investment Fund Foundation (CIFF)**. These short cases and videos offer a mere glimpse into the complex cascade of strategies, logistics and psychology required to save children from a life-threatening disease. While all of the stories are drawn from one region, Shinyanga in northern Tanzania, and the work of only one of ACT's dozens of implementing partners around the continent – the **Ariel Glaser Pediatric AIDS Healthcare Initiative (AGPAHI)**, an indigenous Tanzanian organisation – they show the kinds of activities led by partners across the initiative.*