with a rapid test and a second test using an enzyme immunoassay (EIA) was developed (average turnaround time of 2 weeks). Given the changes in the market since 2003, we present results of a second rapid test validation to update the Guatemalan algorithm.

**Methods** Validation was performed in 2012–2013, evaluating a total of 10 rapid tests in two phases: 1) with serum, HIV-negative samples were obtained from blood banks, and positive samples from HIV care units; 2) with whole blood, negative samples were obtained from antenatal care services and positive samples from HIV care units. We tested 452 serum samples [244 HIV+, 208 HIV-] and 432 whole blood samples (10 HIV positive, 422 HIV negative) using two EIA (Roche ELECSYS HIV Combi and Abbott AXSYM HIV Ag/Ab Combo). Discordant results were evaluated with HIV-1 Western Blot. For fourth generation rapid tests, only antibody was evaluated. Data was analysed using OpenEpi.

**Results** Six HIV rapid tests were included for both phases. All tests (except Double Check Gold) reported sensitivity higher than 99% and specificity higher than 95%. Determine HIV 1/2 and HIV Ag/Ab reported the highest results for sensitivity (100%). Hexagon HIV (100%) and Accu-Tell (99.5%) reported the highest results for specificity. All rapid tests that also included HIV-2 detection, showed cross-reactivity, ranging from 37% of HIV cases for Anraprid HIV 1/2/O Tri-line to 15% for Rapid HIV 1/2/O Tri-Line.

**Conclusion** Our results show that Determine HIV½ and HIV Ag/Ab should be recommended as a screening test while Hexagon HIV and Accu-Tell should be recommended as second test. Rapid test validation provides valuable information for on-site confirmation of reactive results improving diagnosis turnaround time.

**Disclosure of interest statement** We declare that we have no conflicts of interest.

**P17.02 ORAQUICK® IN-HOME HIV TEST KIT IN PERU: AVAILABILITY AND ACCEPTABILITY AMONG MEN WHO HAVE SEX WITH MEN AND TRANSGENDER WOMEN**

**Background** In Peru an estimated 70% of people who are HIV positive do not know their status. Knowing one’s HIV status is critical in HIV prevention. Oraquick® in-home HIV test is the first rapid HIV self-test U.S FDA-approved for home use. We aimed to assess its availability and the willingness of men who have sex with men (MSM) and transgender women (TW) to use it in Peru.

**Methods** Four Pharmacy chains in Peru were surveyed to ascertained commercial availability of the Oraquick® in-home HIV test kits. High-risk MSM and TW who attended either of two STI clinics in Lima from June 2013 to May 2014 were surveyed. Data on demographics and willingness to use Oraquick® IN HOME HIV TEST kit were collected using an interviewer administered computer-based questionnaire.

**Results** The Oraquick® Rapid HIV-1/2 test kit was available for purchase for home use by 4 (100%) pharmacy chains, 3 in Lima and one in northern Peru. The average test kit cost was $4 soles (18 USD); kits were available to clients 18 years or older for over-the-counter purchase. Of the 137 interviewed survey participants, 85% (n = 117) reported they would use a rapid home HIV test at least twice yearly. Respondents reported willingness to pay up to $21 soles ($7 USD) for the test and in the event of positive results, to do the confirmatory blood test in a clinic. Also, 78% (n = 117) of participants reported being comfortable getting an HIV self-test kit by mail or for home use from a clinic.

**Conclusion** Our findings show the potential utility for home HIV self-testing to enhance HIV serostatus awareness in Peru.