

Appendix 1: Excluded studies – Rapid HIV testing- with reasons

Author	Study	Method used	Why excluded?
Bateganya et al. 2009	Home-based HIV voluntary counseling and testing in developing countries	Systematic Review	These was a systematic review of home-based HIV testing and did not include a comparator
Bateganya et al. 2010	Home-based HIV voluntary counselling and testing (VCT) for improving uptake of HIV testing	Systematic Review	This was a follow-up to the earlier systematic review and thus did not meet our inclusion criteria
Grusky et al. 2009	Staff Strategies for Improving HIV Detection Using Mobile HIV Rapid Testing,	observational	The total sample size was less than 100 (n=93) and this looked at administrative and program methods about staff strategies thus the study did not meet our inclusion criteria. In addition the outcomes were different.
Khumalo-Sakutukwa et al. 2008	A Community-Based Intervention to Reduce HIV Incidence in Populations at Risk for HIV in Sub-Saharan Africa and Thailand	Randomised controlled trial	This study used the same data which was already used by Sweat et al. 2011
Lorenc et al. 2011	Promoting the uptake of HIV testing among men who have sex with men: systematic review of effectiveness and cost-effectiveness	Systematic Review	This was a systematic review that looked at approaches used in increasing uptake of HIV testing among men who have sex with men. It considered the options more from an evaluation standpoint.
Menzies et al. 2009	The costs and effectiveness of four HIV counselling and testing strategies in Uganda,	observational	Focused on cost effectiveness of HIV counselling and testing options but did not meet our outcome requirements
Pai et al. 2012	Head-to-head comparison of accuracy of a rapid point-of-care HIV test with oral versus whole-blood specimens: a systematic	Systematic review and meta-analysis (oral vs blood-based specimens in adults)	Study performed comparison between rapid to rapid HIV testing strategies rather than

	review and meta-analysis		rapid to conventional,
Topp et al. 2011	Opt-out provider-initiated HIV testing and counselling in primary care outpatient clinics in Zambia	observational	Although shows some aspects of the uptake of care this article does not compare results between rapid and conventional testing
Wilkinson et al. 1997	On-site HIV testing in resource-poor settings: Is one rapid test enough?	observational	Outcomes considered included Sensitivity, Specificity of tests; Test order - Post-test counselling duration; Cost-effectiveness and these did not meet the eligibility criteria

Appendix 2: Additional excluded studies with reasons

Author	Study	Method used	Why excluded?
Bartholow 2006	A comparison of consumer-controlled and traditional HIV counseling and testing: Implications for screening and outreach among injection drug users.	Randomised controlled prospective field trial design	Dissertation that considered the use of use of self administered home HIV test kits without the active facilitation of the process that is pivotal in our definition of rapid/facilitated testing
Bates et al. 2007	The RARE mode of rapid HIV risk assessment	Rapid assessment, response and evaluation (RARE) qualitative method	This article highlights the critical insights and dynamics of factors that leads to HIV infection, which does not consist with our inclusion criteria
Bonita et al. 2011	Rapid HIV tests in acute care settings in an area of low prevalence in Canada	used the INSTITM HIV-1/HIV-2 Rapid Antibody Test (bioLytical Laboratories, Richmond, British Columbia)	This paper considers no comparator, but only looking at the use of rapid tests in Alberta over a period of three years
Branson, 2003	Point-of-care rapid tests for HIV antibodies	Review, but not a systematic review	Based on our inclusion criteria, we agreed that the results could be biased
Doughty, 2003	New rapid diagnostic tests for HIV infection	Description of issues	No use of any scientific methods: systematic review or RCT or any survey data analyses
Facente et al. 2009	False positive rate of rapid oral fluid HIV tests increases as kits near expiration date	Service statistics of multiple testing sites in California	Measures the effectiveness of OraQuick ADVANCE test kits close to their expiration date rather comparison between rapid and standard test
Fiscus et al. 2007	Rapid, real-time detection of acute HIV infection in patients in Africa	Cross-sectional	Compares between two rapid tests
Gleason-Comstock et al. 2006	Development of a community-based participatory research effort to evaluate Conventional	Read title and abstract , may be eligible to include	Article not found

	HIV Testing (CHR) and HIV Rapid Testing (HRT).		
Gordon et al 2013	Rapid Testing in Parole and Probation offices vs Rapid Testing in health facility	Used trained testers, oral rapid tests, and linked HIV positive to treatment	Preselected those who would be tested, used oral HIV tests which then required confirmation elsewhere
Granade et al. 2004	Performance of the OraQuick(registered trademark) and Hema-Strip(registered trademark) rapid HIV antibody detection assays by non-laboratorians	Cross-sectional design	N= 99, one of our exclusion criteria is sample size less than 100
Greensides et al. 2003	Alternative HIV Testing Methods among Populations at High Risk for HIV Infection	Cross-sectional study – HIV testing survey	This study focuses on overall awareness and use of the alternative tests, but does not compare the effectiveness of rapid vs standard testing.
Holguin et al. 2009	Performance of OraQuick Advance(registered trademark) Rapid HIV-1/2 Antibody Test for detection of antibodies in oral fluid and serum/plasma in HIV-1+ subjects carrying different HIV-1 subtypes and recombinant variants	Service Statistics	Comparison between two rapid testing options
Martin et al. 2010	Expanded HIV screening in the United States: what will it cost government discretionary and entitlement programs? A budget impact analysis	Simulation model of HIV screening	No comparison between rapid vs standard testing approaches
McCollum et al 2014 (J Acquir Immune Defic Syndr 2014;66:e23–e30)	Clinical Versus Rapid Molecular HIV Diagnosis in Hospitalized African Infants: A Randomized Controlled Trial Simulating Point-of-Care Infant Testing	Infants exposed to HIV positive mother with tested with Rapid PCR or Conventional PCR to study uptake of ARV and rate of inappropriate ARV	Simulated Point of Care testing approach, used Rapid PCR that functionally required 2 visits over 48 hours.
Myers et al. 2009	Routine rapid HIV screening in six community health centers serving populations at risk	Service statistics (using analysis as of cross-sectional data)	No comparison between rapid and conventional strategies
O'Connell et al. 2007	Multispot HIV-1/HIV-2 Rapid	Cross-sectional	Compares between two

	Test: advantages over other rapid HIV tests		rapid tests
Parisi et al. 2009	Offer of rapid testing and alternative biological samples as practical tools to implement HIV screening programs	Cross-sectional	This paper considered as its own outcomes the specificity and sensitivities of three rapid tests in Italy, but no specification that the study was conducted with member of vulnerable populations
Sekandi et al. 2011	High acceptance of home-based HIV counseling and testing in an urban community setting in Uganda	Cross-sectional	Examines the acceptance of rapid testing and its associates with no comparison to standard VCT approaches
Stringer et al. 2012	Evaluation of a new testing policy for human immunodeficiency virus to improve screening rates	Systematic review and meta-analysis (oral vs blood-based specimens in adults)	Study performed comparison between rapid to rapid HIV testing strategies rather than rapid to standard
Suarez et al. 2009	Human immunodeficiency virus testing uptake and risk behaviours in Spain	A combination of face-to-face and computer-assisted self-interview was used, and bivariate and multivariate logistic regression analyses were performed	This study was to estimate the prevalence of HIV testing in the general population and to analyse associate factors but not to compare effectiveness of rapid and conventional testing strategies
Veloso et al. 2010	HIV rapid testing as a key strategy for prevention of mother-to-child transmission in Brazil.	Based on a convenience sample of women unaware of their HIV serostatus when they were admitted to delivery in public maternity hospitals in Rio de Janeiro and Porto Alegre, Brazil	Assessed the feasibility of HIV rapid testing for pregnant women at maternity hospital admission rather comparing effectiveness between rapid and conventional testing
Viani et al. 2007	Performance of rapid HIV testing using Determine HIV-1/2 for the diagnosis of HIV infection during	Hospital service statistics- blood samples from pre-natal or women	Measures whether rapid testing diminishes time of diagnosis to enable

	pregnancy in Tijuana, Baja California, Mexico	came in labor	delivery of antiretroviral but does not measure the effectiveness of testing: rapid vs standard
Wolpaw et al. 2010	The failure of routine rapid HIV testing: a case study of improving low sensitivity in the field	Case study	Included outcomes sensitivity of various rapid testing approaches with no comparison to standard VCT approaches.
Wright et al. 2004	Rapid testing strategies for HIV-1 serodiagnosis in high-prevalence African settings	Cross-sectional design: Conditional probability models	No comparison between rapid vs standard testing

Appendix 3: Pubmed via National Library of Medicine (NLM)

Search	Most Recent Queries
<u>#1</u>	Search rapid test*[tiab] OR rapid HIV test*[tiab] OR rapid human immunodeficiency virus test*[tiab] OR point of care[tiab] OR point-of-care-systems[mh] OR POCT[tiab] OR POC[tiab]
<u>#2</u>	Search HIV Infections[MeSH] OR HIV[MeSH] OR hiv[tw] OR hiv-1*[tw] OR hiv-2*[tw] OR hiv1[tw] OR hiv2[tw] OR hiv infect*[tw] OR human immunodeficiency virus[tw] OR human immunodeficiency virus[tw] OR human immuno-deficiency virus[tw] OR human immune-deficiency virus[tw] OR ((human immun*) AND (deficiency virus[tw])) OR acquired immunodeficiency syndrome[tw] OR acquired immunodeficiency syndrome[tw] OR acquired immuno-deficiency syndrome[tw] OR acquired immune-deficiency syndrome[tw] OR ((acquired immun*) AND (deficiency syndrome[tw])) OR "sexually transmitted diseases, viral"[MESH:NoExp]
<u>#3</u>	Search #1 AND #2
<u>#4</u>	Search (randomized controlled trial [pt] OR controlled clinical trial [pt] OR randomized [tiab] OR placebo [tiab] OR drug therapy [sh] OR randomly [tiab] OR trial [tiab] OR groups [tiab] OR comparative study[pt] OR "evaluation studies as topic"[mh] OR research design[mh:noexp] OR pre test[tiab] OR pretest[tiab] OR post test[tiab] OR posttest[tiab] OR time series[tiab] OR intervention studies[mh] OR experiment*[tiab] OR intervention*[tiab] OR evaluat*[tiab] OR impact[tiab] OR follow-up studies [mh] OR prospective studies [mh] OR prospectiv* [tw] OR volunteer* [tw] OR effect*[tw] OR chang*[tw] OR cohort studies[mh] OR cohort*[tw] OR epidemiologic methods[mh]) NOT (animals [mh] NOT humans [mh])
<u>#5</u>	Search #3 AND #4
<u>#6</u>	Search #3 AND #4 Limits: Publication Date from 2001/01/01 to 2014/06/05