Table 2: Summary of Study Quality

Author (Year)	Title	Design Final	Design Final Comments	Magnitude	Sample Size	Applicability Final	Applicability Final Comments	Overall
Abdurahman (2015)	Factors affecting acceptance of provider-initiated HIV testing and counseling services among outpatient clients in selected health facilities in Harar town, Eastern Ethiopia	Moderate	No significant inclusion/exclusion criteria; systematic random sampling technique; no control/baseline test rate of clinic clients	Moderate	520	Moderate	Outpatient clinic clients in selected health facilities; good mix of rural and urban population	Moderate
Abtew (2015)	Acceptability of provider-initiated HIV testing as an intervention for prevention of mother to child transmission of HIV and associated factors among pregnant women attending at Public Health Facilities in Assosa town, Northwest Ethiopia	Low	Cross-sectional; no comparison group	Low	386	Moderate	ANC patients, two health facilities; minimal eligibility criteria	Low
Adebajo (2015)	Evaluating the effect of HIV prevention strategies on uptake of HIV counselling and testing among male most-at-risk-populations in Nigeria; a cross-sectional analysis	High	Well-specified study population; clear design and rational; sequential strategy roll-out in different states to limit washover effect	High	31,609	High	inclusive definitions for MSM and male PWID; real world setting	High
Ahmed (2015)	Improved identification and enrolment into care of HIV-exposed and -infected infants and children following a community health	Moderate	interventions ran subsequently, unknown number of tests offered/declined	High	7,658	High	included door-to-door recruitment and CHW utilized in outreach, counselling and testing; real-world setting	High

	worker intervention in Lilongwe, Malawi.							
Ahmed (2017)	Index case finding facilitates identification and linkage to care of children and young persons living with HIV/AIDS in Malawi	Moderate	Prospective intervention study, no comparison group, well-described methods	Moderate	711	Moderate	65.7% of patients screened for eligibility, single center study; index cases	Moderate
Ansa (2014)	Delivering TB/HIV services in Ghana: a comparative study of service delivery models	Low	Retrospective for HIV testing rates; no controls or randomization	Moderate	590	Moderate	Based on what delivery model the facilities used, included all TB patients; no significant exclusions	Moderate
Asiimwe (2014)	Accuracy of un-supervised versus provider-supervised self-administered HIV testing in Uganda: a randomized implementation trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Low	246	Moderate	individuals presenting for testing recruited; rural setting only (3 fishing community)	Moderate
Ayieko (2018)	Mobile, population-wide, hybrid HIV testing strategy increases number of children tested in rural Kenya and Uganda	High	Census conducted; prospective cohort; robust testing algorithm; well described intervention	High	87,700	High	Many rural communities (32) in 2 countries with wide reach of children; census conducted prior	High
Azuogu (2018)	Effect of multiple intervention models on uptake of HIV testing services and sexual behavior among residents of military cantonments in south-east Nigeria	Moderate	Control group recruited from different area than intervention; baseline data 2011, intervention in 2016	Moderate	700	Moderate	civilians randomly sampled. About 50% of study participants soldiers; all participants living in military cantonments	Moderate

Baisley (2012)	Uptake of voluntary counselling and testing among young people participating in an HIV prevention trial: comparison of opt-out and opt-in strategies	High	Cross-sectional study describing effect of RCT; clear rationale; clear inclusion criteria	High	12,590	Moderate	Young people who had attended 1 or more years of primary school between 1999–2002 within specific region	High
Baisley (2019)	Findings from home-based HIV testing and facilitated linkage after scale-up of test and treat in rural South Africa: young people still missing	High	Prospective cohort with specified inclusion criteria; triannual household-based surveys; no control	High	51,380	High	all residents aged 15+	High
Becker (2010)	Comparing couples' and individual voluntary counseling and testing for HIV at antenatal clinics in Tanzania: a randomized trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	1,521	High	Pregnant women up to 6 months at first ANC visit	High
Bhattacharjee (2018)	Micro-planning at scale with key populations in Kenya: Optimizing peer educator ratios for program outreach and HIV/STI service utilization	Low	Routine data gathering and reporting on quarterly basis	High	FSW: 133,675 (estimated). MSM: 18,460 (estimated)	Moderate	Real-world data, however, participants are not well-described or characterized; key populations (FSW and MSM) in various settings and locales	Moderate
Bianchi (2019)	Evaluation of a routine point-of-care intervention for early infant diagnosis of HIV: an observational study in eight African countries	Moderate	Observational study with retrospective analysis of data prior to and after POC analysis; no control group; pre-intervention data not randomized	High	21,095	High	Infants and children in real-world setting; used national EID guidelines (8 countries); rural and urban environment, high throughput and low throughput sites	High
Bochner (2019)	Strengthening provider-initiated testing and counselling in Zimbabwe by deploying supplemental providers: a time series analysis	High	Well described pre/post intervention study with control group; routine reporting systems	High	468,858	Low	Real-world data, however, participants are not well-described or characterized;	Moderate

Brown (2011)	HIV partner notification is effective and feasible in sub-Saharan Africa: Opportunities for HIV treatment and prevention	High	Clearly described design; specific inclusion criteria; RCT	Low	302	Moderate	Effective for patients with newly diagnosed HIV with locatable sexual partners; requires willingness to share partner information	Moderate
Brunie (2016)	Expanding HIV testing and counselling into communities: Feasibility, acceptability, and effects of an integrated family planning/HTC service delivery model by Village Health Teams in Uganda	High	Clearly described design and method; specific inclusion criteria; pair matched RCT	Low	137	Low	Mostly women who use family planning services; Limited external validity with small sample size and narrow geographic focus; real-world data	Moderate
Byamugisha (2010)	Dramatic and sustained increase in HIV-testing rates among antenatal attendees in Eastern Uganda after a policy change from voluntary counselling and testing to routine counselling and testing for HIV: a retrospective analysis of hospital records, 2002-2009	Moderate	Retrospective analysis of routinely collected data in the antenatal clinic; no control	High	54,898	Moderate	Real-world data, however, participants are not well-described or characterized; real-world data, antenatal care attendees & partners, single center study	Moderate
Byamugisha (2011)	Male partner antenatal attendance and HIV testing in eastern Uganda: a randomized facility-based intervention trial	High	Clearly described design and methods; specific inclusion criteria; pair matched RCT	Moderate	1,060	Moderate	willing to provide letter to partner/spouse; real-world setting; ANC attendees	Moderate
Cham (2019)	Methods, outcomes, and costs of a 2.5-year comprehensive facility- and community-based HIV testing intervention in Bukoba Municipal Council, Tanzania, 2014-2017	Low	observational after implementation of several interventions	High	133,695	Moderate	real-world data, however, participants are not well-described or characterized; both rural and urban settings	Moderate

Chamie (2018)	Comparative effectiveness of novel non-monetary incentives to promote HIV testing: a randomized trial	High	Clearly described design and methods; specific inclusion criteria; pair matched RCT	Moderate	2,532	Moderate	stable community members; adults living in rural area for > 6 months with no intention of relocation in the next 3 months	Moderate
Chanda (2017)	HIV self-testing among female sex workers in Zambia: A cluster randomized controlled trial	High	Clearly described design and methods; specific inclusion criteria; pair matched RCT	Moderate	965	Moderate	peer educators (current or former FSW) recruit members of their social network via direct contact, but needed phone access for eligibility screening; real-world setting	Moderate
Choko (2015)	Uptake, Accuracy, Safety, and Linkage into Care over Two Years of Promoting Annual Self-Testing for HIV in Blantyre, Malawi: A Community-Based Prospective Study.	High	enumeration before, included quality assurance sample	High	16,660 (estimate)	High	residents age 16+; representative of real-world settings	High
Choko (2018)	A pilot trial of the peer-based distribution of HIV self-test kits among fishermen in Bulisa, Uganda	Moderate	well-described, quality assurance; prospective study no comparison	Low	116	Low	no description of how seeds were recruited trial; fishermen receiving ART & other services or within community and their peers	Low
Choko (2019)	HIV self-testing alone or with additional interventions, including financial incentives, and linkage to care or prevention among male partners of antenatal care clinic attendees in Malawi: An adaptive multi-arm, multi-stage cluster randomized trial	High	Clearly described design and methods; specific inclusion criteria; pair matched RCT	Moderate	2,091	Moderate	Pregnant women presenting for first antenatal care visit with male partner not on ART; 25% not eligible	Moderate

Church (2017)	Impact of Integrated Services on HIV Testing: A Nonrandomized Trial among Kenyan Family Planning Clients	Low	nonrandomized, pair-wise matching difficulty ensuring program implementation	Moderate	882	Low	clients of family planning clinics, excluded participants with loss to follow-up/missing data; excluded women tested prior to recruitment regardless of test results	Low
Coleman (2017)	Effectiveness of an SMS-based maternal mHealth intervention to improve clinical outcomes of HIV-positive pregnant women	Low	retrospective; non-randomized	Moderate	839	Low	HIV+ pregnant women, delivered in specified centers, first prenatal care visit, access to cell phone and delivered in one of the facilities	Low
Conkling (2010)	Couples' voluntary counselling and testing and nevirapine use in antenatal clinics in two African capitals: a prospective cohort study	Low	Prospective cohort with no comparison; limited testing capacity; 1054 lost to follow-up	Moderate	3,625	Low	Only two antenatal clinics in each city selected, could not accommodate all women in clinic; excluded pregnant women with pregnancy complications and who desired to deliver at a non-participating clinic or hospital	Low
Courtenay-Quirk (2018)	Increasing partner HIV testing and linkage to care in TB settings: findings from an implementation study in Pwani, Tanzania	Moderate	Convenience selection of clinics; stepped-wedge design	Moderate	1,288	Moderate	Geographically limited; persons with TB	Moderate
Dalal (2011)	Provider-initiated HIV testing and counseling: increased uptake in two public community health centers in South Africa and implications for scale-up	Moderate	Clear design and rational; Systematic selection of study participants described	Moderate	912	Moderate	single province; non-pregnant adults below 50; many exclusion criteria	Moderate

Dalal (2013)	Home-based HIV testing and counseling in rural and urban Kenyan communities	High	Prospective, large trial; no control group	High	24,450	High	Few exclusions, home to home; inclusive of most members in general population; rural and urban setting	High
Daniels (2017)	Shout-It-Now: A Mobile HCT Model Employing Technology and Edutainment in South Africa	High	Prospective, large trial; no control group	High	72,220	High	Few exclusions, home to home; inclusive of most members in general population; rural and urban setting	High
Darbes (2019)	Results of a couples-based randomized controlled trial aimed to increase testing for HIV	High	Clearly described design and methods; specific inclusion criteria; RCT	Low	334	Low	Volunteers, and unmarried couples in long term relationships; many eligibility requirements	Moderate
DeTolly (2012)	Investigation into the use of short message services to expand uptake of human immunodeficiency virus testing, and whether content and dosage have impact	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	2,533	Low	Individuals who participated in mobile-based radio and TV competitions; randomly selected phone numbers	Moderate
Do (2014)	Impacts of four communication programs on HIV testing behavior in South Africa	Moderate	Detailed and justification of study design and analysis	High	6,004	Moderate	Multistage cluster sampling from 2012 National AIDS Communication Survey; Effect visible in households with access to mass media	Moderate
Doherty (2013)	Effect of home-based HIV counselling and testing intervention in rural South Africa: cluster randomized trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	4,154	Moderate	Some loss to follow-up; representative of average member in a real-world community setting	Moderate

Dube (2012)	Implementing early infant diagnosis of HIV infection at the primary care level: experiences and challenges in Malawi	Moderate	Prospective cohort without control; no pre-intervention data detailed study protocol	Moderate	1,214	Moderate	Infants of HIV+ mothers; rural and urban setting; No major exclusion criteria; high rates of loss to follow up	Moderate
Ekouevi (2012)	Feasibility and acceptability of rapid HIV screening in a labor ward in Togo	Low	Prospective cohort without control; no pre-intervention data	Moderate	508	Moderate	Single center; pregnant women admitted for labor	Moderate
Ezeanolue (2015)	Effect of a congregation-based intervention on uptake of HIV testing and linkage to care in pregnant women in Nigeria (Baby Shower): a cluster randomized trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	3,002	High	Pregnant women; No major exclusion criteria. Must attend church, but 90% of population attends	Moderate
Ferrand (2016)	Implementation and Operational Research: The Effectiveness of Routine Opt-Out HIV Testing for Children in Harare, Zimbabwe	Moderate	Pre-/post-intervention design.	High	10,673	High	Some exclusion criteria, children aged 6–15 years attending primary health care clinic for any reason	High
Finocchario-Kessler (2015)	Lessons learned from implementing the HIV infant tracking system (HITSystem): A web-based intervention to improve early infant diagnosis in Kenya	Moderate	Control data limited; pre-/post-intervention	Moderate	estimated 2,625	Moderate	Real world data, limited description of infants included; mother-infant pairs who enroll in EID at facilities; no significant exclusions	Moderate
Flick (2019)	The HIV diagnostic assistant: early findings from a novel HIV testing cadre in Malawi	Moderate	Pre-/post-implementation design. Routinely collected data.	High	457 facilities received intervention	Moderate	Real world data, limited description of testers; adults testing for HIV	Moderate
Floyd (2018)	Towards 90-90: Findings after two years of the HPTN 071 (PopART) cluster-randomized trial of a universal testing-and-	Moderate	Subset of large RCT; no control	High	120,272	High	ages 15+, no major exclusions, 2 countries, multiple centers	High

	treatment intervention in Zambia							
Fylkesnes (2013)	Strong effects of home-based voluntary HIV counselling and testing on acceptance and equity: A cluster randomized trial in Zambia	High	Clearly described design and methods; specific inclusion criteria; Cluster RCT	Moderate	1,702	High	All households included, no major restrictions; several rural settings, men & women aged 16+	High
George (2018)	Costing analysis of an SMS-based intervention to promote HIV self-testing amongst truckers and sex workers in Kenya	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	2,262 truckers and 2,196 FSWs	Low	Needed to be registered by North Star clinics, valid phone number listed; male truckers & female sex workers registered in EHR system of particular health service provider	Moderate
Gichangi (2018)	Impact of HIV self-test distribution to male partners of ANC clients: results of a randomized controlled trial in Kenya	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	1,410	Moderate	Pregnant women attending ANC for first time; exclusion on basis of concern for IPV	Moderate
Girault (2015)	Piloting a Social Networks Strategy to Increase HIV Testing and Counseling Among Men Who Have Sex with Men in Greater Accra and Ashanti Region, Ghana	Low	Prospective cohort without control; possible selection bias in seed recruitment	Low	166	Low	Seeds were hand-selected; no descriptive or demographic variables of participants	Low
Golden (2018)	HIV retesting in pregnant women in South Africa: Outcomes of a quality improvement project targeting health systems' weaknesses	Moderate	Quality Improvement Project; comparison group	High	16 facilities	Moderate	Real world data, minimal information about testers	Moderate

Govender (2018)	Effects of a Short Message Service (SMS) Intervention on Reduction of HIV Risk Behaviors and Improving HIV Testing Rates Among Populations located near Roadside Wellness Clinics: A Cluster Randomized Controlled Trial in South Africa, Zimbabwe and Mozambique	High	Clearly described design and RCT; specific inclusion criteria; Cluster RCT	Moderate	1,783	Low	Many eligibility requirements; must have access to phone; multiple countries	Moderate
Hansoti (2018)	HIV testing in a South African Emergency Department: A missed opportunity	Low	Prospective cohort without control; possible bias in participants approached	Moderate	2,355	Low	Minimal exclusion criteria, however only 24.6% approached by study staff; few exclusion criteria, single center, ED patients 18+	Low
Hayes (2017)	A universal testing and treatment intervention to improve HIV control: One-year results from intervention communities in Zambia in the HPTN 071 (PopART) cluster-randomized trial	Moderate	Subset of large RCT; no control here	High	121,130	High	General population; Minimal exclusion criteria; 2 countries, multiple centers	High
Hector (2018)	Acceptability and performance of a directly assisted oral HIV self-testing intervention in adolescents in rural Mozambique	Moderate	Cohort without comparison group; well described protocol with sound rationale	Low	496	Low	Adolescents aged 16-20 recruited at schools; one center in rural setting	Low
Henley (2013)	Scale-Up and Case-Finding Effectiveness of an HIV Partner Services Program in Cameroon: An Innovative HIV Prevention Intervention	Moderate	Prospective program evaluation; no controls	Moderate	1607	Low	Real world data, no information about number of HIV+ individuals offered partner services	Moderate

	for Developing Countries						
Herce (2018)	Achieving the first 90 for key populations in sub-Saharan Africa through venue-based outreach: challenges and opportunities for HIV prevention based on PLACE study findings from Malawi and Angola	Moderate	Cohort without comparison group; good rational; methods well-described; protocol adapted to each country's local context	Moderate	1,924	Moderate	real world setting; several rural and urban venues, 2 counties, MSM, FSW, TGW	Moderate
Hewett (2016)	Randomized evaluation and cost-effectiveness of HIV and sexual and reproductive health service referral and linkage models in Zambia	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	3,963	Low	Multiple eligibility criteria, patients accessing family planning, HIV testing and counseling, and male circumcision services	Moderate
Hu (2018)	The impact of lay counselors on HIV testing rates: quasi-experimental evidence from lay counselor redeployment in KwaZulu-Natal, South Africa	Low	monthly data after pre-/post- loss of counselors	High	24,526 tests	Moderate	Real world data, little information about testers or tests offered, peri-urban & urban; multiple centers	Moderate
Ijadunola (2011)	Provider-initiated (Opt-out) HIV testing and counselling in a group of university students in Ile-Ife, Nigeria	Low	Prospective study; no control group; 2-week period of serial recruitment and data collection	Low	252	Moderate	Students presenting to university clinic, serially recruited, minimal eligibility criteria	Low
Jefferys (2015)	Official invitation letters to promote male partner attendance and couple voluntary HIV counselling and testing in antenatal care: an implementation study	Moderate	Prospective study, provides reasoning for study site selection, no control group	Low	318	Moderate	Pregnant women attending ANC for the first time, minimal exclusion criteria; multiple sites	Moderate

	in Mbeya Region, Tanzania							
Jobson (2019)	Bridging the gap: reaching men for HIV testing through religious congregations in South Africa	Low	routine program data; no control group; possible bias in participants attending church	Moderate	1,971	Moderate	Male members who attended church services on designated HTS campaign days	Moderate
Joseph Davey (2019)	HIV positivity and referral to treatment following testing of partners and children of PLHIV index patients in public sector facilities in South Africa	Moderate	programmatic data, no control group; convenience sampling	High	16,033	Moderate	Real world data, limited description of testers included; index patients	Moderate
Jubilee (2019)	HIV index testing to improve HIV positivity rate and linkage to care and treatment of sexual partners, adolescents and children of PLHIV in Lesotho	Moderate	Prospective study, provided reasoning for study site selection, no control group	High	14,986	Moderate	Some health facilities not included for finding index patients	Moderate
Jurgensen (2013)	The seven Cs of the high acceptability of home-based VCT: results from a mixed methods approach in Zambia	Moderate	Subset of large cluster RCT	Moderate	1,220	Moderate	Some loss to follow-up; real-world setting; adults (18+), minimal exclusion	Moderate
Kababu (2018)	Use of a counsellor supported disclosure model to improve the uptake of couple HIV testing and counselling in Kenya: a quasi-experimental study	Moderate	Pre/post design with intervention and comparison arm	Low	276	Low	Many eligibility criteria	Low
Kahabuka (2017)	Addressing the first 90: a highly effective partner notification approach reaches previously undiagnosed	Moderate	Hospitals selected for high test volume, prospective, no control; well described	Low	438	Moderate	40.3% contacted did not enroll in study, eligibility criteria not clearly described;	Moderate

	sexual partners in Tanzania						real-world data; index patients	
Katbi (2018)	Effect of clients Strategic Index Case Testing on community-based detection of HIV infections (STRICT study)	Moderate	Prospective study without control	Moderate	888	Moderate	68.3% agreed to participate; minimal exclusions; real-world data, index patients	Moderate
Kelvin (2018)	Offering self-administered oral HIV testing to truck drivers in Kenya to increase testing: a randomized controlled trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Low	305	Low	Truck drivers recruited from clinics, needed cell phone to receive payment; extensive exclusion criteria	Moderate
Kelvin (2019) A	A randomized controlled trial to increase HIV testing demand among female sex workers in Kenya through announcing the availability of HIV self-testing via text message	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	2,196	Low	Registered clinic patients, valid phone number on record; extensive exclusion criteria	Moderate
Kelvin (2019) B	Announcing the availability of oral HIV self-test kits via text message to increase HIV testing among hard-to-reach truckers in Kenya: A randomized controlled trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	2,262	Low	truck drivers; extensive exclusion criteria, required valid cell phone number, registered clinic patients	Moderate
Khumalo-Sakutukwa (2008)	Project Accept (HPTN 043): a community-based intervention to reduce HIV incidence in populations at risk for HIV in sub-Saharan Africa and Thailand	High	Subset of large RCT	High	11,655	Moderate	Eligibility criteria and descriptions of testers not included HPTN CHW utilized in outreach, counselling and testing; real world data	High

Kose (2018)	Impact of a comprehensive adolescent-focused case finding intervention on uptake of HIV testing and linkage to care among adolescents in Western Kenya	Moderate	Pre-/post-intervention design; unknown number of tests offered	High	139 health care facilities, 103,164 tests	Moderate	Unknown number of individuals offered tests; adolescents aged 10-19; multiple facilities; minimal eligibility criteria	Moderate
Kranzer (2018)	Economic incentives for HIV testing by adolescents in Zimbabwe: a randomized controlled trial	High	RCT nested within household survey	Moderate	2,050 households	High	1703/2050 households participated in household survey. urban; minimal eligibility criteria	High
Labhardt (2014)	Home-based versus mobile clinic HIV testing and counseling in rural Lesotho: a cluster-randomized trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	2,562	High	Minimal exclusion criteria; urban community; real-world setting	High
Labhardt (2019)	Effect and cost of two successive home visits to increase HIV testing coverage: a prospective study in Lesotho, Southern Africa	Moderate	Subset of large RCT; no control group	High	18,336	High	Minimal exclusion criteria, broad definition of household member, return to catch missed individuals; several households	High
Lafort (2018)	Effect of a 'diagonal' intervention on uptake of HIV and reproductive health services by female sex workers in three sub-Saharan African cities	Moderate	pre-/post-intervention cross-sectional surveys; respondent-driven sampling; potential for selection and reporting bias	Moderate	1,207	Moderate	FSW; Respondent-driven sampling; multiple countries	Moderate
Liambila (2009)	Feasibility and effectiveness of integrating provider-initiated testing and counselling within family planning services in Kenya	Moderate	Pre-/Post-intervention. Health facilities purposively selected	Low	424	Low	Family planning clients; Sequential sampling, eligibility criteria not well described	Low

Lindgren (2011)	Using mobile clinics to deliver HIV testing and other basic health services in rural Malawi	Low	Routine program data, no comparison	High	38,647 contacts	Low	Real world data, minimal information on participants and HIV testing outcomes; minimal eligibility criteria	Moderate
Lippman (2017)	Community mobilization for HIV testing uptake: results from a community randomized trial of a theory-based intervention in rural South Africa	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	1,181	Moderate	Random sample from census data, moderate eligibility criteria; real-world setting, need to be resident for 1 year +	Moderate
Lugada (2010) A	Comparison of home and clinic-based HIV testing among household members of persons taking antiretroviral therapy in Uganda: results from a randomized trial	High	RCT- sub study of a large RCT for homebased ART	High	7,184	Moderate	Household members of larger trial's participants, all household members were eligible regardless of age or relationship	High
Lugada (2010) B	Rapid implementation of an integrated large-scale HIV counseling and testing, malaria, and diarrhea prevention campaign in rural Kenya	High	Large implementation study; well described methods	High	51,178	High	Persons aged 15-49; used census data to estimate population size. Minimal eligibility requirements;	High
Lyatuu (2018)	Engaging community leaders to improve male partner participation in the prevention of mother-to-child transmission of HIV in Dar es Salaam, Tanzania	High	Selected facilities for intervention, other facilities as comparison group	High	35,822	Moderate	Real world data, little information about testers; purposive selection of intervention sites with favorable conditions	High
Lyons (2019)	Use and acceptability of HIV self-testing among first-time testers at risk for HIV in Senegal	Moderate	Pilot study, no control group	Moderate	1,839	Low	Convenience sampling	Moderate

Mabuto (2014)	Four models of HIV counseling and testing: utilization and test results in South Africa	Low	Program data, retrospective	High	121,032	Moderate	Real world data, little information on testers, no information on number offered tests; minimal eligibility criteria; rural and urban setting	Moderate
Madsen (2019)	Acceptance and feasibility of partner notification to HIV infected individuals in Guinea-Bissau	Low	Prospective feasibility study, no control	Moderate	547	Moderate	Clinic patients 15+ with HIV; single center	Moderate
Mahachi (2019)	Sustained high HIV case-finding through index testing and partner notification services: experiences from three provinces in Zimbabwe	Low	Retrospective project monitoring data	High	55,149	High	Real world data, includes information about number accepting partner notification; index cases; rural and urban populations	Moderate
Mandala (2019)	HIV retesting of HIV-negative pregnant women in the context of prevention of mother-to-child transmission of HIV in primary health centers in rural Zambia: what did we learn?	Moderate	Implementation, routinely collected data; 10 facilities	High	16,838	High	pregnant women & their infants, previously tested HIV negative, 10 clinics, minimal eligibility requirements	High
Marwa (2019)	The effects of HIV self-testing kits in increasing uptake of male partner testing among pregnant women attending antenatal clinics in Kenya: a randomized controlled trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	1,410 women and 1,033 men	Moderate	71% eligible. Some exclusion criteria;	Moderate
Masyuko (2019)	Index participant characteristics and HIV assisted partner services efficacy in Kenya: results of a cluster randomized trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	1,286	Moderate	PLHIV; some eligibility criteria	Moderate

McGovern (2016)	Do gifts increase consent to home-based HIV testing? A difference-in-differences study in rural KwaZulu-Natal, South Africa	Moderate	Well-explained, control group, non-randomized	High	18,478	High	uses census data, includes all residents 15+ years old in analysis; rural setting	High
McNaghten (2015)	Implementation and operational research: Strengthening HIV Test Access and Treatment Uptake Study (Project STATUS): a randomized trial of HIV testing and counseling interventions	High	Clearly described design and methods; specific inclusion criteria; RCT	High	35,853 (age eligible)	Moderate	Clinic patients, Ages 18-49 ; must not have tested for HIV (regardless of result) in the past year	High
Mohlala (2011)	The forgotten half of the equation: randomized controlled trial of a male invitation to attend couple voluntary counselling and testing	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	1,000	Low	Single facility, not randomly selected	Moderate
Moore (2019)	Comparing youth-friendly health services to the standard of care through "Girl Power-Malawi": a quasi-experimental cohort study	High	Selected 4 similar health centers and randomized. Well-described	Moderate	1,000	Moderate	female, 15-24 years old willing to participate for a year; high level of screened are eligible (1080/1109) and enrolled. Recruitment by community outreach, participant referral, and self-referral	Moderate
Muhula (2016)	Uptake and linkage into care over one year of providing HIV testing and counselling through community and health facility testing modalities in urban informal settlement of Kibera, Nairobi Kenya	Low	Retrospective program data	High	18,591	Moderate	Real world data, little information on testers or on number offered tests	Moderate

Mulubwa (2018)	Community based distribution of oral HIV self-testing kits in Zambia: a cluster-randomized trial nested in four HPTN 071 (PopART) intervention communities	High	Clearly described design and methods; specific inclusion criteria; nested cluster RCT	High	26,973	High	all adolescents and adults aged 16+, minimal eligibility criteria	High
Musarandega (2018)	Scaling up pediatric HIV testing by incorporating provider-initiated HIV testing into all child health services in Hurungwe District, Zimbabwe	Moderate	Before and after study and data; routine program data	High	12,556	High	33 health facilities; children 0-5; real-world data; some without testing information	High
Mwenda (2018)	Significant patient impact observed upon implementation of Point-Of-Care early infant diagnosis technologies in an observational study in Malawi	Moderate	Retrospective pre-intervention, prospective post-intervention; infants included consecutively	Moderate	1752	Moderate	Implemented in 7 facilities, sequential recruitment; infants suspected of HIV exposure	Moderate
Ndondoki (2013)	Universal HIV screening at postnatal points of care: which public health approach for early infant diagnosis in Côte d'Ivoire?	Low	Intervention with no control or pre-intervention data	Moderate	3,013 children born to 2,986 mothers	Moderate	children aged 6-26 weeks attending postnatal point of care in 3 community health centers; several parents declined consent for infants	Moderate
Ndori-Mharadze (2018)	Changes in engagement in HIV prevention and care services among female sex workers during intensified community mobilization in 3 sites in Zimbabwe, 2011 to 2015	Moderate	Routine clinical data; respondent-driven sampling surveys	Moderate	915	Low	respondent-driven sampling; FSW aged 18+ working at the study site and reported exchanging sex for money in the past 30 days	Moderate

Njuguna (2018)	Financial incentives to increase pediatric HIV testing: a randomized trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Low	452 Caregivers	Moderate	19 facilities, goal of screening every adult; HIV-positive adult in HIV care with children aged 0-12 of unknown HIV status	Moderate
Nsirim (2018)	Effectiveness of provider-initiated testing and counseling in increasing HIV testing and counselling utilization and HIV detection rates in Ebonyi State, South-Eastern Nigeria	Moderate	Prospective pre-/post-intervention design without control	High	Pre-intervention: 50,898 post-intervention: 22,153	Moderate	Clinic patients and outreach in public places; several facilities; real-world setting	Moderate
Nuwagaba-Biribonwoha (2010)	Introducing a multi-site program for early diagnosis of HIV infection among HIV-exposed infants in Tanzania	Low	Pilot program, no pre-intervention data	Moderate	510	Moderate	4 health facilities, real-world setting, HIV-exposed infants	Moderate
Nuwaha (2012)	Effect of home-based HIV counselling and testing on stigma and risky sexual behaviors': serial cross-sectional studies in Uganda	Moderate	Pre-/postintervention; random selection	Moderate	2964	High	Randomly selected adults from 30 villages, all households eligible	Moderate
Odeny (2018)	Participation in a clinical trial of a text messaging intervention is associated with increased infant HIV testing: A parallel cohort randomized controlled trial	High	Clearly described design and methods; specific inclusion criteria; parallel cohort RCT	Moderate	1,115	Low	Only 35% of those screened are eligible; women required access to mobile phone, among other eligibility requirements	Moderate
Ogbo (2017)	Assessment of provider-initiated HIV screening in Nigeria with sub-Saharan African comparison	Low	Ineffective comparison of both VCT and PITC approaches and group; feasibility study	Low	212	Low	One facility, out of pocket expense; all patients aged 13+	Low

Oldenburg (2018)	Effect of HIV self-testing on the number of sexual partners among female sex workers in Zambia	High	Clearly described design and methods; specific inclusion criteria; cluster RCT	Moderate	965	Low	Peer recruited; some eligibility criteria for FSW	Moderate
Orne-Gliemann (2013)	Increasing HIV testing among male partners	High	Clearly described design and methods; specific inclusion criteria; RCT	Low	484	Moderate	4 urban health centers; women attending first prenatal care visit; minor eligibility criteria	Moderate
Ortblad (2017)	Direct provision versus facility collection of HIV self-tests among female sex workers in Uganda: A cluster-randomized controlled health systems trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	960	Low	FSW recruited by peers; real world setting; must plan to continue work as FSW for at least 4 months	Moderate
Parker (2015)	Feasibility and effectiveness of two community-based HIV testing models in rural Swaziland	Moderate	Routine program data, provides eligible number of participants for one method; no control	High	12,269	Low	Only 26% of houses visited - non-randomized; rural setting; all individuals over 18 months eligible	Moderate
Rollins (2009)	Universal HIV testing of infants at immunization clinics: an acceptable and feasible approach for early infant diagnosis in high HIV prevalence settings	Low	observational cohort with intervention; no control or comparison	Moderate	646	Moderate	Infants attending any of the first 3 immunizations	Moderate
Rosenberg (2016)	Recruiting the social contacts of patients with STI for HIV screening in Lilongwe, Malawi: process evaluation and assessment of acceptability	Moderate	Random recruitment of seeds; 3 groups with matched controls	Low	135	Moderate	Seeds randomly selected from clinic roster; participants peer recruited by STI patients	Moderate

Sarna (2019)	Cell phone counseling improves retention of mothers with HIV infection in care and infant HIV testing in Kisumu, Kenya: a randomized controlled study	High	RCT	Low	404	low	404/2176 pregnant women with HIV that were screened participated.; high refusal rate; single center	Moderate
SEARCH Collaboration (2017)	Evaluating the feasibility and uptake of a community-led HIV testing and multi-disease health campaign in rural Uganda	Low	Feasibility study, no controls	Moderate	3,016	High	Performed census; single center; real world data	Moderate
Shah (2018)	A pilot study of "peer navigators" to promote uptake of HIV testing, care and treatment among street-connected children and youth in Eldoret, Kenya	Moderate	Pilot study; routinely collected clinical care data from the PN; no control or comparison group	Moderate	781	Moderate	Young persons who spend work or live on the streets; peer recruitment	Moderate
Shamu (2019)	Comparison of community-based HIV counselling and testing (CBCT) through index client tracing and other modalities: Outcomes in 13 South African high HIV prevalence districts by gender and age	Moderate	Retrospective program data; large cohort	High	1,282,369	Moderate	Real world data, unknown number offered testing, limited information about testers; minimal eligibility criteria	Moderate
Shamu (2018)	Social franchising of community-based HIV testing and linkage to HIV care and treatment services: an evaluation of a pilot study in Tshwane, South Africa	Moderate	Pilot study; Cohort with comparison; based on routinely collected data (some incomplete)	High	84,556	Moderate	Real world data, little information on testers or number offered testing	Moderate
Shanaube (2017) A	Community intervention improves knowledge of HIV status of adolescents in Zambia: findings from	Moderate	Subset of large RCT; no comparison group	High	15,465	High	Enumerated eligible participants before; 2 countries, multiple centers	High

	HPTN 071-PopART for youth study							
Shanaube (2017) B	What works - reaching universal HIV testing: lessons from HPTN 071 (PopART) trial in Zambia	Moderate	Subset of large RCT; no comparison group	High	121,130	High	Enumerated eligible participants before; 2 countries, multiple centers	High
Singh (2012)	A venue-based approach to reaching MSM, IDUs and the general population with VCT: a three-study site in Kenya	High	Intervention, no comparison group. Well-described methods	Moderate	Total: 2,238. MSM: 262. PWID: 154.	Moderate	Venue-based, randomized sampling for interview; real world setting, all 18+	Moderate
Sutcliffe 2017	Use of mobile phones and text messaging to decrease the turnaround time for early infant HIV diagnosis and notification in rural Zambia: an observational study	Low	Pilot study, no comparison group	Low	419	Moderate	Only 30% report ever using a cell phone; rural health center contacted for mothers without cellphones	Low
Tembo (2019)	Enhancing an HIV index case testing passive referral model through a behavioral skills-building training for healthcare providers: a pre-/post-assessment in Mangochi District, Malawi	Moderate	36 facilities received training. Pre/post intervention; monthly programmatic data abstraction	High	36 testing facilities	Moderate	Multiple health facilities; real world data; little known about testers	Moderate
Theron (2010)	Rapid intrapartum or postpartum HIV testing at a midwife obstetric unit and a district hospital in South Africa	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	542	Low	Only 7.5% of women approached were eligible, of those, 63% consented. Two facilities	Moderate

Theuring (2016)	Increasing Partner Attendance in Antenatal Care and HIV Testing Services: Comparable Outcomes Using Written versus Verbal Invitations in an Urban Facility-Based Controlled Intervention Trial in Mbeya, Tanzania	High	Subset of larger implementation study, randomized to intervention or control	Low	199	Moderate	73% of screened were eligible. Single facility; divorced or widowed women excluded	Moderate
Thurman (2016)	Promoting uptake of child HIV testing: an evaluation of the role of a home visiting program for orphans and vulnerable children in South Africa	Moderate	Cohort receiving intervention, cohort signed up and waiting to receive intervention. Used propensity score matching to adjust for differences	Moderate	1,324	Low	Enrolled in program. Noted differences between two groups; Orphans and vulnerable children; participation bias on enrollment basis	Moderate
Tih (2019)	Assisted HIV partner notification services in resource-limited settings: experiences and achievements from Cameroon	High	Large scale implementation study	High	21,057	Moderate	Unknown number offered intervention; index persons	High
Topp (2012)	Does provider-initiated counselling and testing (PITC) strengthen early diagnosis and treatment initiation? Results from an analysis of an urban cohort of HIV-positive patients in Lusaka, Zambia	Moderate	Programmatic data comparing pre-/post-intervention	High	10,919	Moderate	Real world data, PITC only certain hours, urban population; no significant exclusion	Moderate
Truong (2019)	Implementation of a community-based hybrid HIV testing services program as a strategy to saturate testing coverage in Western Kenya	High	Large scale implementation study	High	28,885	High	Conducted census first; representative of average member in the community	High

Tun (2018)	Uptake of HIV self-testing and linkage to treatment among men who have sex with men (MSM) in Nigeria: A pilot program using key opinion leaders to reach MSM	Moderate	Pilot study and post-intervention survey; HIVST uptake and test result were self-reported	Low	319	Moderate	MSM recruited by peers; extensive eligibility requirements; 20% lost to follow-up	Moderate
Uwimana (2013)	Community-based intervention to enhance provision of integrated TB-HIV and PMTCT services in South Africa	Moderate	Pre-/Post-intervention design	Moderate	3,584	Low	Sampling not described; eligibility criteria not described	Moderate
van Rooyen (2013) A	High HIV testing uptake and linkage to care in a novel program of home-based HIV counseling and testing with facilitated referral in KwaZulu-Natal, South Africa	Low	Cohort with no comparison group	Moderate	739	High	Census performed first, all adults eligible testing	Moderate
van Rooyen (2013) B	Mobile VCT: reaching men and young people in urban and rural South African pilot studies (NIMH Project Accept, HPTN 043)	Moderate	Pilot study for larger trial; cohort without comparison	Moderate	1,015	Moderate	Minimal eligibility criteria; self-selected population	Moderate
Wall (2019)	HIV testing and counselling couples together for affordable HIV prevention in Africa	Moderate	Program data; large cohort	High	414,856	Moderate	Real world data, minimal description of testers, unknown number declined	Moderate
Wanyenze (2013)	Abbreviated HIV counselling and testing and enhanced referral to care in Uganda: a factorial randomized controlled trial	High	Clearly described design and methods; specific inclusion criteria; RCT	Moderate	3,415	Moderate	65% of screened were enrolled. Single facility. Inpatient and outpatient	Moderate
Wroe (2018)	Delivering comprehensive HIV services across the HIV care continuum: a comparative analysis of survival and progress	Low	Observational, retrospective data collection	High	Intervention group: 13 facilities. Control: 682 facilities.	High	Real-world data, compared number tested to total population	Moderate

	towards 90-90-90 in rural Malawi							
Yumo (2018)	Active case finding: comparison of the acceptability, feasibility and effectiveness of targeted versus blanket provider-initiated-testing and counseling of HIV among children and adolescents in Cameroon	Low	Cohort with comparison and data; Implementation strategy differed in 1 hospital	Moderate	4,719	Moderate	3 hospitals. Parents receiving HIV care or children presenting to outpatient; minimal exclusion	Moderate
Yumo (2019)	Effectiveness of symptom-based diagnostic HIV testing versus targeted and blanket provider-initiated testing and counseling among children and adolescents in Cameroon	Moderate	pre-and post-intervention study; 6-month intervention; clearly described	High	10,534	High	Children of HIV+ parents; all children/adolescents seen for any medical reason in OPDs	High