Supplementary Appendix
Filters applied to initial search results with number of records identified

Aids 7	Community 163	Intermittent preventive treatment 20	Pharmacokinetic 8	tubercu 6
Anthrax 4	Cystic fibrosis 10	Iron deficiency 3	Plasmodium 30	Tuberculosis 135
ART 29	Dengue 20	Leishmaniasis 37	Pneumococc 59	Typhoid 11
Arthritis 6	Diarrh 41	Leukemia 5	Polio 6	Viral 31
Bone 4	Diphtheria 8	Malaria 490	Refug 6	Virus 280
Bronchiolitis 2	Ebola 3	Mass drug 3	Rubella 23	Worm 4
Buruli 2	Enteric 9	Measles 75	Sexua 7	Zoo 3
Cancer 19	Filari 3	Meningococcal 20	Shisto -8	
Case report 40	Helminth 9	Morrhagic 6	Sickle 18	
Cellulitis 3	Hepatitis 173	Nevirapine 6	Sleeping 5	
Chlamydia 23	HIV 541	Onycho 7	Surge 24	

Cholera 15	Household 6	Orthopaedic 2	Surgi- 47	
Circumcision 15	Hypospadias 6	Parasite 15	Toxoplasmosis 9	
Clostridium 23	Influenza 65	Pertussis- 18	Trachoma 5	

Supplementary Table 1: ICROMS Quality Criteria applied for each study, by study design (from Zingg *et al.,* 2016)[1]

Quality Criteria		Study design						
Dimension	Specific criteria	RCT	CBA	CITS	NCITS	NCBA	CS	QUAL
1. Clear aims and justification	a. Clear statement of aims	++	++	++	++	++	++	++
	b. Rationale for number of pre- and post-intervention points or adequate baseline measurement			+	++	++		
	c. Explanation for lack of control group				+	+		
	d. Appropriateness of qualitative methodology							+
	e. Appropriate Study design							++

2. Managing bias in sampling or between groups	a. Sequence generation	++						
	b. Allocation concealment	++						
	c. Justification for sample choice				++	++		
	d. Intervention and control group selection designed to protect against systematic difference/selection bias		++					
	e. Comparabilty of groups						++	
	f. Sampling and recruitment							++
3. Managing bias in outcome measurements and blinding	a. Blinding	++						
	b. Baseline measurement – protection against selection bias		++					
	c. Protection against contamination		++					
	d. Protection against secular changes			++				
	e. Protection against detection bias: blinded assessment of primary outcome measures	+	+	+	+	+	+	

	f. Reliable primary outcome measures	+	+	+	+	+	+	+
	g. Comparabilty of outcomes						++	
4. Managing bias in follow up	a. Follow up of subjects (protection against exclusion bias	+						
	b. Follow up of patients or episodes of care	+						
	c. Incomplete outcome data addressed	+	+	+	+	+	++	+
5. Managing bias in other study aspects	a. Protection against detection bias: intervention unlikely to affect data collection	+	+	+	+	+		
	b. Protection against information bias						+	
	c. Data collection appropriate to address research aims							+
	d. Attempts to mitigate effects of no control				++	++		
6. Analytical Rigour	a. Sufficient data points to enable reliable statistical inference			++				
	b. Shaping of intervention effect specified			+				

	c. Analysis sufficiently rigorous/free from bias	+	+	+	+	+	+	+
7. Managing bias in reporting/ethical considerations	a. Free of selective outcome reporting	+	+	+	+	+	+	+
	b. Limitations addressed	+	+	+	+	+	+	+
	c. Conclusions clear and justified	+	+	+	+	+	+	+
	d. Free of other bias	+	+	+	+	+	+	+
	e. Ethics issues addressed	+	+	+	+	+	+	+

[a]Applicability of quality criteria to each study design: + = Criteria to be included in quality assessment for study design; ++ = Mandatory criteria to be met in quality assessment; blank: criteria not to be applied in quality assessment for study design.
[b] Study designs: RCT: randomised controlled trial; CBA: controlled before-after; CITS: controlled interrupted time series; CS: cohort study; NCITS: non-controlled interrupted time series; NCBA: non-controlled before-after; QUAL: qualitative

Supplementary Table 2: ICROMS Decision matrix: mandatory criteria and minimum score for study type to be included in review (from Zingg *et al.,* 2016)[1]

Study design	Mandatory criteria[a]	Minimum score
RCT, cRCT	1A, 2A, 2B and 3A	22
CBA	1A, 2D, 3B and 3C	18

CITS	1A, 3D and 6A	18
NCITS	1A, 1B, 2C and 5D	22
NCBA	1A, 1B, 2C and 5D	22
Cohort	1A, 2E, 3G and 4C	18
Qualitative	1A, 1E and 2F	16

RCT, randomized controlled trial; CBA, controlled before–after; CITS, controlled interrupted time series; cRCT, cluster-randomized controlled trial; NCITS, non-controlled interrupted time series; NCBA, non-controlled before–after.

[a]Scores applicable to each criteria: yes (criterion met) = 2 points; unclear (unclear whether or not the criterion is met), 1 point; no (criterion not met), 0 points.

1. Zingg W, Castro-Sanchez E, Secci FV *et al.* Innovative tools for quality assessment: integrated quality criteria for review of multiple study designs (ICROMS). *Public Health* 2016; **133**: 19-37.