## Appendix A: Ovid MEDLINE Search Strategy

Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

#	Searches	Results
1	Allied Health Personnel/ or Community Health Workers/ or (Health Resources/ and Geography/) or Home Health Aides/ or Home Nursing/ or Nurses' Aides/ or Psychiatric Aides/	28942
2	("barefoot doctor?" or ((birth or childbirth) adj (attendant? or assistant?)) or cadres or "church based" or (community adj (aide or aides or "health promoter?" or helper? or leader? or mentor? or paramedic or paramedics or paramedical or personnel or rescuer or rescuers or responder or responders or visit* or volunteer or volunteers or worker or workers or workforce or caregiver? or "care giver?")) or "community based health care worker?" or "community based health worker?" or "community case management" or "expert patient?" or "health care worker training" or "health extender?" or "health extension" or "health visitor?" or "lay health worker training" or "home visitor?" or "lay expert?" or "lay health counsellor?" or "lay health counselor?" or "lay health counsellor?" or "lay health influencer?" or "lay health worker?" or "lay led" or "lay man" or "lay men" or "lay people" or "lay person*" or "lay public" or "lay run" or "lay volunteer?" or layman or laymen or laypeople or layperson* or "link worker?" or linkworker? or "local paramedic*" or monitrice? or "natural helper?" or "non specialist health care worker?" or "non specialist health worker?" or "task sharing" or "task shift*" or (train* adj3 mother?) or (train* adj3 volunteer?) or "village based" or "volunteer led").ab,kf,kw,ti. or ("community health worker?" or "community health care worker?").kf,kw,ti. or ("community health worker?" or "CHW or CHWs or CHCWs).ab. /freq=2	20661
3	(("allied health" or ancillary or auxiliary or bystander* or church* or citizen? or civilian? or "community health" or	18868

"community based" or lay or ((member or members) adj2 (communit\* or "the? public\*")) or nondoctor\* or ("not" adj doctor\*) or "non doctor\*" or nongraduate\* or ("not" adj graduate\*) or "non graduate\*" or nonmedical\* or ("not" adi medical\*) or "non medical\*" or nonnurs\* or ("not" adj nurs\*) or "non nurs\*" or nonphysician\* or ("not" adj physician\*) or "non physician\*" or nonprofessional\* or ("not" adj professional\*) or "non professional\*" or semiprofessional\* or "semi professional" or "para professional?" or paraprofessional? or nonspecialist? or ("not" adj specialist\*) or "non specialist\*" or supplementary or unlicensed or nonlicensed or ("not" adj licensed) or "non licensed" or uncertified or noncertified or ("not" adj certified) or "non certified" or unskilled or nonskilled or ("not" adj skilled) or ((less\* or lack\* or fewer) adj (skills or skilled)) or "non skilled" or semiskilled or "semi skilled" or untrained or nontrained or (("not" or "no formal" or "not formally" or lack\* or less\*) adj train\*) or "non trained" or unqualified or nonqualified or (("not" or "no formal" or lack\* or less\* or fewer) adj (qualified or qualifications)) or "non qualified" or village\*) adj3 (advisor or advisors or aide or aides or assistant? or attendant? or caregiver? or "care giver?" or carer or carers or consultant? or counselor? or counsellor? or counselling or counselling or educator? or employee? or "health promoter?" or helper? or leader? or mentor? or midwife or midwives or doula\* or navigator or navigators or paramedic or paramedics or paramedical or personnel or provider? or ((provid\* or provision or deliver\*) adj3 (service\* or care\* or treat\* or assist\*)) or rescuer or rescuers or responder or responders or staff or therapist? or visit\* or worker or workers or workforce)).ab,kf,kw,ti.

4 ((volunteer or volunteers) adj3 (advisor or advisors or aide or aides or assistant? or attendant? or caregiver? or "care giver?" or carer or carers or consultant? or counselor? or counseling or counselling or educator? or employee? or "health promoter?" or helper? or intervention or leader? or mentor? or midwife or midwives or doula\* or navigator or navigators or paramedic or paramedics or paramedical or personnel or provider? or ((provid\* or provision or deliver\*)

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adj3 (service\* or care\* or treat\* or assist\*)) or rescuer or rescuers or responder or responders or staff or therapist? or visit\* or worker or workers or workforce or "allied health" or ancillary or auxiliary or bystander\* or citizen? or civilian? or "community health" or "community based" or lay or ((member or members) adj2 (communit\* or "the? public\*")) or nondoctor\* or ("not" adj doctor\*) or "non doctor\*" or nongraduate\* or ("not" adj graduate\*) or "non graduate\*" or nonmedical\* or ("not" adj medical\*) or "non medical\*" or nonnurs\* or ("not" adj nurs\*) or "non nurs\*" or nonphysician\* or ("not" adj physician\*) or "non physician\*" or nonprofessional\* or ("not" adj professional\*) or "non professional\*" or semiprofessional\* or "semi professional" or "para professional?" or paraprofessional? or nonspecialist? or ("not" adj specialist\*) or "non specialist\*" or supplementary or unlicensed or nonlicensed or ("not" adj licensed) or "non licensed" or uncertified or noncertified or ("not" adj certified) or "non certified" or unskilled or nonskilled or ("not" adj skilled) or ((less\* or lack\* or fewer) adj (skills or skilled)) or "non skilled" or semiskilled or "semi skilled" or (("not" or "no formal" or "not formally" or lack\* or less\*) adj train\*) or unqualified or nonqualified or (("not" or "no formal" or lack\* or less\* or fewer) adj (qualified or qualifications)) or "non qualified" or village\*)).ab,kf,kw,ti.

5 ((nondoctor\* or ("not" adj doctor\*) or "non doctor\*" or nongraduate\* or ("not" adj graduate\*) or "non graduate\*" or nonmedical\* or ("not" adj medical\*) or "non medical\*" or nonnurs\* or ("not" adj nurs\*) or "non nurs\*" or nonphysician\* or ("not" adj physician\*) or "non physician\*" or nonprofessional\* or ("not" adj professional\*) or "non professional\*" or semiprofessional\* or "semi professional" or "para professional?" or paraprofessional? or nonspecialist? or ("not" adj specialist?) or "non specialist\*" or unlicensed or nonlicensed or ("not" adj licensed) or "non licensed" or uncertified or noncertified or ("not" adj certified) or "non certified" or unskilled or nonskilled or ("not" adj skilled) or ((less\* or lack\* or fewer) adj (skills or skilled)) or "non skilled" or semiskilled or "semi skilled" or (("not" or "no formal" or "not formally" or lack\* or less\*) adj train\*) or unqualified or

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	nonqualified or (("not" or "no formal" or lack* or less* or fewer) adj (qualified or qualifications)) or "non qualified" or village*) adj3 (person or persons or people or individuals)).ab,kf,kw,ti.	
6	("peer educat*" or (peer adj (advisor or advisors or aide or aides or assistant? or attendant? or caregiver? or "care giver?" or carer or carers or consultant? or counselor? or counsellor? or counseling or counselling or educator? or "health promoter?" or helper? or leader? or mentor? or navigat* or provider? or rescuer or rescuers or responder or responders or therapist? or worker or workers)) or "peer navigat*" or "peer facilitat*" or "peer led" or "peer to peer" or "peer2peer" or "peer 2 peer" or "peer promoter?" or "lay peer?" or "peer based").kf,kw,ti. or ("peer educat*" or (peer adj (advisor or advisors or aide or aides or assistant? or attendant? or caregiver? or "care giver?" or carer or carers or consultant? or counselor? or counsellor? or counseling or educator? or "health promoter?" or helper? or leader? or mentor? or navigat* or provider? or rescuer or rescuers or responder or responders or therapist? or worker or workers)) or "peer navigat*" or "peer facilitat*" or "peer led" or "peer to peer" or "peer2peer" or "peer 2 peer" or "peer promoter?" or "lay peer?" or "peer based").ab. /freq=2	1868
7	1 or 2 or 3 or 4 or 5 or 6	65627
8	(Randomized Controlled Trial or Clinical Trial or Controlled Clinical Trial or Pragmatic Clinical Trial).pt.	796646
9	("randomized controlled trial" or "randomised controlled trial" or "randomized clinical trial" or "randomised clinical trial" or "randomized control trial" or "randomised community trial" or "randomised community trial" or "randomized community intervention trial" or "randomised community intervention trial" or "randomized controlled treatment" or "randomised controlled treatment" or "randomised controlled treatment" or "randomized trial" or (randomized adj3 trial) or (randomized adj3 trial) or (randomized or condition? or control or intervention or pilot or study or design or experiment)) or	449146

	"community controlled trial" or "controlled community trial" or "clinical controlled trial" or "controlled clinical trial" or "randomized to?" or "randomised to?").ti,ab. or (random* adj3 (allocat* or assign*) adj3 (group? or intervention or care)).ab. or (trial adj15 intervention adj15 control).ab. or trial.ti.	
10	(meta analysis or "review" or systematic reviews).pt.	2395834
11	(8 or 9) not 10	925673
12	7 and 11	4415
13	limit 12 to yr="2004 -Current"	3274
14	remove duplicates from 13	2604
15	exp animals/ not humans/	4669483
16	14 not 15	2599

## **Appendix B: Studies for Search Validation**

The following studies meet the task shifting, vulnerable population, RCT and date limiter criteria for inclusion in this review.

- 1. Chang LW, Kagaayi J, Nakigozi G, Ssempijja V, Packer AH, Serwadda D, et al. Effect of peer health workers on AIDS care in rakai, uganda: A clusterrandomized trial. PLoS One 2010;5(6):e10923.
- 2. Chang LW, Kagaayi J, Arem H, Nakigozi G, Ssempijja V, Serwadda D, et al. Impact of a mhealth intervention for peer health workers on AIDS care in rural uganda: A mixed methods evaluation of a cluster-randomized trial. AIDS and Behavior 2011;15(8):1776-84.
- 3. Fairall L, Bachmann MO, Lombard C, Timmerman V, Uebel K, Zwarenstein M, et al. Task shifting of antiretroviral treatment from doctors to primary-care nurses in south africa (STRETCH): A pragmatic, parallel, cluster-randomised trial. The Lancet 2012;380(9845):889-98.
- 4. Joshi R, Chow CK, Raju PK, Raju KR, Gottumukkala AK, Reddy KS, et al. The rural andhra pradesh cardiovascular prevention study (RAPCAPS): A cluster randomized trial. J Am Coll Cardiol 2012;59(13):1188-96.
- 5. Kiweewa FM, Wabwire D, Nakibuuka J, Mubiru M, Bagenda D, Musoke P, et al. Noninferiority of a task-shifting HIV care and treatment model using peer counselors and nurses among ugandan women initiated on ART: Evidence from a randomized trial. JAIDS Journal of Acquired Immune Deficiency Syndromes 2013;63(4):e125-32.
- 6. Mendis S, Johnston SC, Fan W, Oladapo O, Cameron A, Faramawi MF. Cardiovascular risk management and its impact on hypertension control in primary care in low-resource settings: A cluster-randomized trial. Bull World Health Organ 2010, Jun;88(6):412-9.
- 7. Petersen I, Hancock JH, Bhana A, Govender K. A group-based counselling intervention for depression comorbid with HIV/AIDS using a task shifting approach in south africa: A randomized controlled pilot study. Journal of Affective Disorders 2014;158:78-84.
- 8. Sanne I, Orrell C, Fox MP, Conradie F, Ive P, Zeinecker J, et al. Nurse versus doctor management of hiv-infected patients receiving antiretroviral therapy (CIPRA-SA): A randomised non-inferiority trial. The Lancet 2010;376(9734):33-40.
- 9. Williams AV, Marsden J, Strang J. Training family members to manage heroin overdose and administer naloxone: Randomized trial of effects on knowledge and attitudes. Addiction 2014, Feb;109(2):250-9.
- 10. Spencer MS, Rosland A-M, Kieffer EC, Sinco BR, Valerio M, Palmisano G, et al. Effectiveness of a community health worker intervention among african american and latino adults with type 2 diabetes: A randomized controlled trial. Am J Public Health 2011;101(12):2253-60.