## **Supplementary File 2. CASE STUDY 2.**

# WHO Guideline (2012) Optimizing health worker roles for maternal and newborn health through task shifting

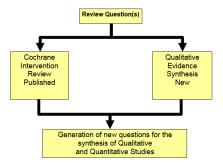
### Web reference:

http://www.who.int/reproductivehealth/publications/maternal\_perinatal\_health/978924504843/en /

**Source reviews:** 14 intervention reviews, 3 commissioned new qualitative evidence syntheses looking at implementation. Country-specific case studies.

**Review methods:** 1. Cochrane intervention review and meta-analysis. 2. Qualitative Framework synthesis. 3. Post hoc logic model. GRADE and GRADE CERQual.

**Specific mixed-method example:** Findings from the new qualitative evidence synthesis of the barriers and facilitators to implementation of lay health worker programmes was subsequently integrated with the results of the published Cochrane intervention review of lay health workers.



Types of studies: Qualitative and quantitative

**Types of Synthesis:** Statistical (inferential) and qualitative: Cochrane intervention review methods and Framework Synthesis.

Mode of analysis: Theory testing AND theory building.

**Review question**: Example: Quantitative review: What are the effects of lay health worker interventions in primary and community health care on maternal and child health and the management of infectious diseases? Qualitative evidence synthesis: What factors affect the implementation of lay health worker (LHW) programmes for maternal and child health?

**Review designs:** A combination of a segregated approach and sequential synthesis design were used. Several published quantitative reviews were used (eg Cochrane review of lay health worker interventions). Additional new qualitative evidence syntheses were commissioned (segregated). The quantitative and qualitative review findings on lay health workers were brought together several DECIDE frameworks. The integration of the quantitative lay health worker review with the qualitative evidence synthesis design is an example of mixed-method synthesis, although it was only following completion of the guideline that a post logic model was used to integrate the qualitative and quantitative evidence (sequential).

**Assessment of methodological limitations**: The Quantitative reviews used the Cochrane risk of bias tool. The qualitative reviews used a modified version of the Critical Appraisal Skills Programme (CASP 2013) Instrument for qualitative studies.

**Data extraction methods:** The qualitative and quantitative reviews were undertaken in different timeframes and method specific data extraction forms were used. There was no integration across the quantitative and qualitative reviews at the level of data extraction. All the qualitative reviews undertaken by different but overlapping teams used the same a priori data extraction form based on a theoretical framework of implementation factors.

**Points of data integration:** Joint team members, integration of cross-cutting themes across reviews, post hoc data integration of findings with logic model after completion of both reviews, evidence to recommendation stage. Used GRADE and GRADE CERQual. Integration of findings in PICO specific DECIDE Frameworks.

### Citations to the reviews contributing to the guidance:

- Colvin CJ, de Heer J, Winterton L, Glenton C, Lewin S, Rashidian A, Noyes J.
   A systematic review of barriers and facilitators to the implementation of task-shifting in midwifery programmes.

   Review in progress 2012
- Glenton C, Colvin C, Carlsen B, Swartz A, Lewin S, Noyes J, Rashidian A.
   A systematic review of barriers and facilitators to the implementation of lay health worker programmes for maternal and child health. Review in progress 2012
- Glenton C, Khanna R, Morgan C, Nilsen ES. The effects, safety and acceptability of compact, prefilled, autodisabled injection devices such as UnijectTM when delivered by lay health workers: A systematic review. Review in progress 2012
- Gopinathan U, Lewin S, Glenton C.
   A review of large-scale programmes for scaling up human resources for health in low- and middle-income countries. Review in progress, 2012
- Gülmezoglu AM, Forna F, Villar J, Hofmeyr GJ.
   Prostaglandins for preventing postpartum haemorrhage.
   Cochrane Database of Systematic Reviews 2007, Issue 3.
- Hatem M, Sandall J, Devane D, Soltani H, Gates S.
   Midwife-led versus other models of care for childbearing women.
   Cochrane Database of Systematic Reviews 2008, Issue 4
- 7. Hodnett ED, Gates S, Hofmeyr GJ, Sakala C, Weston J.
  Continuous support for women during childbirth.
  Cochrane Database of Systematic Reviews 2011, Issue 2
- Cochrane Database of Systematic Reviews 2011, Issue 2

  8. Hofmeyr GJ. Kulier R.
- External cephalic version for breech presentation at term. Cochrane Database of Systematic Reviews 1996, Issue 1. (Review content assessed as up-to-date: 7 December 2010).
- Lassi ZS, Bhutta ZA.
   Mid-level health workers for improving the delivery of health services. Cochrane Database of Systematic Reviews (review in progress 2012)
- Laurant M, Wijers N, Watananirun K, Kontopantelis E, Sibald B. Substitution of nurses for physicians in primary care. Cochrane Database of Systematic Reviews. (update in progress 2012)
- 11. Lewin S, Munabi-Babigumira S, Glenton C, Daniels K, Bosch-Capblanch X, van Wyk BE, Odgaard-Jensen J, Johansen M, Aja GN, Zwarenstein M, Scheel IB.

Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases.

Cochrane Database of Systematic Reviews (update in progress 2012)

12. Oladapo OT, Fawole B, Blum J, Abalos E.

Advance misoprostol distribution for preventing and treating postpartum haemorrhage. Cochrane Database of Systematic Reviews 2012, Issue 2

Oladapo OT, Khanna R, Lewin S, Gülmezoglu M.
 Lay health workers for delivery of injectable contraceptives.
 Cochrane Database of Systematic Reviews (review in progress 2012)

14. Polus S, Lerberg PM.

Optimization of the health workforce for contraceptive delivery. Review in progress 2012.

15. Polus S.

An analysis of large scale programmes for scaling up human resources for health to deliver contraceptives in low and middle income countries. Review in progress 2012

- Rashidian A, Karimi-Shahanjarini A, Shakibazadeh E, Glenton C, Noyes J, Lewin S, Colvin CJ.
   A systematic review of barriers and facilitators to the effectiveness and implementation of doctor-nurse substitution programmes. Review in progress 2012
- 17. Sibley LM, Sipe TA, Diallo MM, Barry D.

  Traditional birth attendant training for improving health behaviours and pregnancy outcomes.

  Cochrane Database of Systematic Reviews (awaiting publication 2012)
- 18. Wilson A, Lissauer D, Thangaratinam S, Khan KS, MacArthur C, Coomarasamy A.

  A comparison of clinical officers with medical doctors on outcomes of caesarean section in the developing world: meta-analysis of controlled studies. *BMJ* 2011;342.

#### References:

Critical Appraisal Skills Programme (CASP). (2013). *CASP qualitative checklist*. Retrieved from <a href="http://www.casp-uk.net/casp-tools-checklists">http://www.casp-uk.net/casp-tools-checklists</a>.

Higgins, J. P. T., Altman, D. G., Gotzsche, P. C., Juni, P., Moher, D., ... Oxman, A. D. (2011). The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. BMJ, 343(oct18 2), d5928–d5928. doi:10.1136/bmj.d5928