11.4. EVIDENCE BASE:

Should AUXILIARY NURSE MIDWIVES administer antihypertensives for severe high blood pressure in pregnancy

Problem: Poor access to treatment
Option: Auxiliary nurse midwives administering antihypertensives for severe high blood pressure during pregnancy
Comparison: Care delivered by other cadres or no care
Setting: Community/primary health care settings in LMICs with poor access to health professionals

	CRITERIA	JUDGEMENT	EVIDENCE	COMMENTS AND QUERIES
BENEFITS & HARMS OF THE OPTIONS	**Are the anticipated desirable effects large?**	*No* ☐ *Probably no* ☐ *Uncertain* ☑ *Probably yes* ☐ *Yes* ☐ *Varies* ☐	A systematic review searched for studies that assessed the effects of midlevel providers, including auxiliary nurse midwives, in improving the delivery of health care services (Lassi 2012). However, this review did not identify any studies that assessed the effects of using auxiliary nurse midwives for this intervention. **We are therefore unable to draw any conclusions about the desirable or undesirable effects of this intervention.**	
	Are the anticipated undesirable effects small?	*No* ☐ *Probably no* ☐ *Uncertain* ☑ *Probably yes* ☐ *Yes* ☐ *Varies* ☐		
	What is the certainty of the anticipated effects?	*Very low* ☐ *Low* ☐ *Moderate* ☐ *High* ☐ *No direct evidence* ☑ *Varies* ☐		
	Are the desirable effects large relative to the undesirable effects?	*No* ☐ *Probably no* ☐ *Uncertain* ☑ *Probably yes* ☐ *Yes* ☐ *Varies* ☐		
RESOURCE USE	**Are the resources required small?**	*No* ☐ *Probably no* ☐ *Uncertain* ☐ *Probably yes* ☑ *Yes* ☐ *Varies* ☐	***Main resource requirements***	

Resource	Settings in which auxiliary nurse midwives already provide other care
Training	E.g. 2 weeks of practice-based training in diagnosing and managing hypertension in pregnancy
Supervision and monitoring	Regular supervision by midwife or doctor
Supplies	Antihypertensives, blood pressure measurement device
Referral	Transportation to a centre where comprehensive emergency obstetric care (CeMOC) is available

	CRITERIA	JUDGEMENT	EVIDENCE	COMMENTS AND QUERIES
	Is the incremental cost small relative to the benefits?	*No* ☐ *Probably no* ☐ *Uncertain* ☑ *Probably yes* ☐ *Yes* ☐ *Varies* ☐	Uncertain as there is no direct evidence on effectiveness	
ACCEPTABILITY	**Is the option acceptable to most stakeholders?**	*No* ☐ *Probably no* ☐ *Uncertain* ☐ *Probably yes* ☑ *Yes* ☐ *Varies* ☐	We are not aware of any systematic reviews that considered the acceptability of auxiliary nurse midwife interventions. **We are therefore uncertain about the acceptability of this intervention to key stakeholders.** **Indirect evidence:** A systematic review (Rashidian 2012) exploring factors that influence the success of doctor-nurse substitution suggests that the acceptability of this intervention to key stakeholders may be mixed: • Nurses may be motivated to take on new tasks by increased recognition and job satisfaction (moderate certainty evidence). • Recipients may regard nurses as more accessible and better at listening than doctors (moderate certainty evidence), but may prefer doctors for some medical tasks (low certainty evidence). • Doctors may welcome the contribution of nurses where it reduces doctors' workloads (moderate certainty evidence) and may be comfortable with nurse prescribing, believing that it improves continuity of care (low certainty evidence). • However, doctors and other health workers may be unwilling to relinquish final responsibility for patient care (low certainty evidence). Also, a lack of clarity about nurse roles and responsibilities in relation to other health workers may be a challenge (low certainty evidence). **Annex**: page 43 (Rashidian 2012)	
FEASIBILITY	**Is the option feasible to implement?**	*No* ☐ *Probably no* ☐ *Uncertain* ☑ *Probably yes* ☐ *Yes* ☐ *Varies* ☐	The intervention requires some supplies (drugs and simple diagnostic tools). Also, adequate referral to a higher level of care for further management may also be necessary. While training, clinical experience and supervision are needed, systematic reviews of lay health worker, nurse and midwife programmes suggest that sufficient training and supervision is often lacking (Glenton, Colvin 2012; Rashidian 2012; Colvin 2012). In some settings, changes to norms or regulations may be needed to allow auxiliary nurse midwives to prescribe and administer drugs. **Annex**: page 26 (Glenton, Colvin 2012); page 20 (Colvin 2012); page 43 (Rashidian 2012)	