4.1. EVIDENCE BASE:

Should MIDWIVES diagnose preterm pre-labour rupture of membranes (pPROM) and deliver initial treatment of injectable antibiotics, using a standard syringe, before referral?

***Problem**:* Poor access to injectable antibiotics for preterm PROM
***Option**:* Midwives delivering injectable antibiotics
***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 midwives, in improving the delivery of health care services (Lassi 2012). However, this review did not identify any studies that assessed the effects of midwives delivering injectable antibiotics for preterm PROM. **We are therefore unable to draw any conclusions about the desirable or undesirable effects of this intervention.** **Indirect evidence**: The review (Lassi 2012) did identify a number of studies, all from high income settings. In these studies, midwives delivered antenatal, intrapartum and postpartum care, but it is not clear precisely what services this care included. The review suggests that midwife-led care may improve several health outcomes while it may make no difference to other outcomes. However, the certainty of this evidence varies. Similar findings were seen in another systematic review on the effects of midwife care (Hatem 2008). **Annex**: page 4 (Lassi 2012)	
	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 midwives already provide other care** *Training* — As midwives should be able to diagnose pregnancy, assess gestational age and leakage of amniotic fluid through observation and simple pH testing, little training on this is required,.e.g. less than one week of training for midwives to diagnosis and manage, including diagnosis of amniotic fluid volume by ultrasound where available. *Supervision and monitoring* — Regular supervision by senior midwife or doctor *Supplies* — Antibiotics, equipment needed for diagnosis, e.g. litmus paper. Ultrasound equipment in some settings	

			Referral Transportation, adequate referral centre	
	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* ☐	A systematic review of task-shifting in midwifery programmes (Colvin 2012) did not identify any studies that evaluated the acceptability of injectable antibiotics for preterm PROM when delivered by midwives. **We are therefore uncertain about the acceptability of this intervention to key stakeholders.** **Indirect evidence:** For other midwife-delivered interventions, the same review suggests the following: • Mothers and midwives are more likely to accept task-shifting initiatives if these increase the midwives' ability to provide more holistic and continuous care. Midwives may also be motivated by being "upskilled" as it can potentially lead to increased status, promotion opportunities and increased job satisfaction (moderate certainty evidence) • However, midwives may not readily accept a mode of care that is technology-focused and that views pregnancy as risky and uncertain (moderate certainty evidence) • A lack of clarity in roles and responsibilities between midwives and other health worker cadres, as well as status and power differences may also lead to poor working relationships and 'turf battles' (moderate certainty evidence) **Annex**: page 20 (Colvin 2012)	
FEASIBILITY	**Is the option feasible to implement?**	*No* ☐ *Probably no* ☐ *Uncertain* ☐ *Probably yes* ☐ *Yes* ☑ *Varies* ☐	The intervention requires relatively few supplies (antibiotics and simple diagnostic tools). In addition, it is simple to deliver and requires only a small amount of training. Regular supervision needs to be in place, and adequate referral to a higher level of care for further management may also be necessary. However, a systematic review (Colvin 2012) suggests that ongoing support, training and supervision was often insufficient in midwife taskshifting programmes (moderate certainty evidence). In addition, in some settings, changes to norms or regulations may be needed to allow midwives to prescribe and deliver injectable antibiotics. **Annex**: page20x (Colvin 2012)	