12.6. EVIDENCE BASE:

Should NURSES perform vasectomy?

***Problem**:* Poor access to contraception
***Option**:* Nurses performing vasectomy
***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 (Polus 2012a) searched for studies that assessed the effects and safety of task shifting for family planning delivery in low and middle income countries. Another systematic review searched for studies that assessed the effects of nurse-led primary care compared to care that was given by primary care doctors (Laurant 2012). However, none of these reviews identified any studies that specifically assessed the effects of nurses performing vasectomy. **We are therefore unable to draw any conclusions about the desirable or undesirable effects of this intervention.** **Indirect evidence**: One of these reviews (Polus 2012a) identified one study from Thailand where the effects of postpartumtubal ligation performed by midwives was compared to the same intervention performed by doctors. This study shows that there may be little or no difference between midwives and doctors with regard to complications during surgery or postoperative morbidity (low certainty evidence). **Annex:** page 62 (Polus 2012a – Table 3)	
	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 nurses already provide other care
Training	Practice-based training in vasectomy techniques. Nurses are not normally trained in surgical techniques during their graduate studies. Training needs may therefore be relatively substantial
Supervision and monitoring	Regular supervision by senior midwife or doctor
Supplies	Surgical instruments, antiseptic solution, sutures, surgical facility / theatre, resuscitation equipment
Referral	To a referral centre for failed vasectomies and / or complications

	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 insufficient evidence on effectiveness. **Indirect evidence** from the review referred to above (Laurant 2012) suggests that, compared to doctor-led care: • Overall, studies showed lower costs for nurse-led care • Consultation length was longer for nurses • For the frequency of consultations, results were mixed • For most studies there were no differences in the use of healthcare services and prescriptions	
ACCEPTABILITY	**Is the option acceptable to most stakeholders?**	*No* ☐ *Probably no* ☐ *Uncertain* ☑ *Probably yes* ☐ *Yes* ☐ *Varies* ☐	A systematic review of doctor-nurse substitution (Rashidian 2012) did not identify any studies that evaluated the acceptability of vasectomy when performed by nurses. **We are therefore uncertain about the acceptability of this intervention to key stakeholders.** **Indirect evidence:** For other maternal and child health interventions, the same review suggests that: • Nurses may be motivated to offer advanced care by increased recognition and job satisfaction (moderate certainty evidence). • Recipients may regard nurses as more accessible and better at listening and caring than doctors (moderate certainty evidence). However, some recipients may have concerns about nurses' competence and willingness to provide high quality care compared to doctors (low certainty evidence). In addition, for tasks that are more "medical" in nature, recipients may prefer doctors over nurses (low certainty evidence). • Doctors were generally satisfied with the contribution of nurses to maternal and child health care, although some concerns were raised (low certainty evidence). Doctors may welcome the contribution of nurses where it reduces doctors' workloads (moderate certainty evidence). Doctor acceptance may be influenced by level of nurse experience (low certainty evidence). However, an increase in nurse autonomy may negatively affect other professions or produce negative reactions among these professions, including doctors and midwives, who for instance may be unwilling to relinquish final responsibility for patient care. A lack of clarity about nurse roles and responsibilities in relation to other health workers may also be a challenge (low certainty evidence). A review of country case studies of task shifting for family planning (Polus 2012b), which mainly included LHW programmes, suggests that some health workers may introduce their own criteria when determining who should receive contraceptives, including criteria tied to the recipient's marital status and age. Other factors that may affect the uptake of the intervention are primarily tied to the contraceptives themselves rather than the use of specific types of health workers, including a lack of knowledge about different methods of contraception; religious and other beliefs regarding family planning; a fear of side effects and service fees. **Annex**: page 43 (Rashidian 2012)**;** page 63 (Polus 2012b)	
FEASIBILITY	**Is the option feasible to implement?**	*No* ☐ *Probably no* ☐ *Uncertain* ☑ *Probably yes* ☐ *Yes* ☐ *Varies* ☐	The interventions require relatively well-equipped facilities, including access to surgical instruments, surgical facility / theatre and resuscitation equipment. In addition, changes to norms or regulations may be needed to allow nurses to perform vasectomy. Training and regular supervision is also needed, and adequate referral to a higher level of care for further management may be necessary. However, a systematic review (Rashidian 2012) suggests that nurses may be unprepared or not adequately trained or supervised when they are given advanced and substitution roles (low certainty). **Annex**: page 43 (Rashidian 2012)	