

12.5. EVIDENCE BASE:

Should MIDWIVES perform tubal ligation (post-partum and interval)?

**Problem:** Poor access to contraception  
**Option:** Midwives performing tubal ligation  
**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                                                                                                                                                                                                                                                                             | <p><b>Are the anticipated desirable effects large?</b></p> <p>No <input type="checkbox"/> Probably no <input type="checkbox"/> Uncertain <input type="checkbox"/> Probably yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p> | <p>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. The review identified one study from Thailand where the effects of postpartum tubal ligation performed by midwives was compared to the same intervention performed by doctors. This study shows that there is little or no difference between midwives and doctors with regard to complications during surgery or postoperative morbidity (low certainty evidence). While the midwives spent more time performing the operation, this difference was not clinically important (moderate certainty evidence).</p> <table border="1"> <thead> <tr> <th>Outcomes</th> <th>Impacts</th> <th>Certainty of the anticipated effect</th> </tr> </thead> <tbody> <tr> <td><i>Length of operation</i></td> <td>Midwives probably spend more time than doctors, but the difference is not clinically important</td> <td>⊕⊕⊕○<br/>Moderate</td> </tr> <tr> <td><i>Complications during surgery</i></td> <td>There may be little or no difference between midwives and doctors</td> <td>⊕⊕○○<br/>Low</td> </tr> <tr> <td><i>Postoperative morbidity</i></td> <td>There may be little or no difference between midwives and doctors</td> <td>⊕⊕○○<br/>Low</td> </tr> </tbody> </table> <p>Annex: page 62 (Polus 2012a – Table 3)</p> | Outcomes                                                                                       | Impacts                                               | Certainty of the anticipated effect | <i>Length of operation</i>                                                                                                                                                                           | Midwives probably spend more time than doctors, but the difference is not clinically important | ⊕⊕⊕○<br>Moderate                                | <i>Complications during surgery</i> | There may be little or no difference between midwives and doctors                                              | ⊕⊕○○<br>Low     | <i>Postoperative morbidity</i>                                   | There may be little or no difference between midwives and doctors | ⊕⊕○○<br>Low |  |
|                                                                                                                                                                                                                                                                                                             | Outcomes                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Impacts                                                                                        | Certainty of the anticipated effect                   |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
|                                                                                                                                                                                                                                                                                                             | <i>Length of operation</i>                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Midwives probably spend more time than doctors, but the difference is not clinically important | ⊕⊕⊕○<br>Moderate                                      |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
|                                                                                                                                                                                                                                                                                                             | <i>Complications during surgery</i>                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | There may be little or no difference between midwives and doctors                              | ⊕⊕○○<br>Low                                           |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| <i>Postoperative morbidity</i>                                                                                                                                                                                                                                                                              | There may be little or no difference between midwives and doctors                                                                                                                                                                                                                   | ⊕⊕○○<br>Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| <p><b>Are the anticipated undesirable effects small?</b></p> <p>No <input type="checkbox"/> Probably no <input type="checkbox"/> Uncertain <input type="checkbox"/> Probably yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p>                       |                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| <p><b>What is the certainty of the anticipated effects?</b></p> <p>Very low <input type="checkbox"/> Low <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> No direct evidence <input type="checkbox"/> Varies <input type="checkbox"/></p>                |                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| <p><b>Are the desirable effects large relative to the undesirable effects?</b></p> <p>No <input type="checkbox"/> Probably no <input type="checkbox"/> Uncertain <input checked="" type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p> |                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| RESOURCE USE                                                                                                                                                                                                                                                                                                | <p><b>Are the resources required small?</b></p> <p>No <input type="checkbox"/> Probably no <input checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p>            | <p><b>Main resource requirements</b></p> <table border="1"> <thead> <tr> <th>Resource</th> <th>Settings in which midwives already provide other care</th> </tr> </thead> <tbody> <tr> <td><i>Training</i></td> <td>Practice-based training in tubal ligation techniques. Midwives are not normally trained in surgical techniques during their graduate studies. Training needs may therefore be relatively substantial</td> </tr> <tr> <td><i>Supervision and monitoring</i></td> <td>Regular supervision by senior midwife or doctor</td> </tr> <tr> <td><i>Supplies</i></td> <td>Surgical instruments, local anaesthetic, suture material, surgical facility / theatre, resuscitation equipment</td> </tr> <tr> <td><i>Referral</i></td> <td>To a referral centre for failed ligations and / or complications</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Resource                                                                                       | Settings in which midwives already provide other care | <i>Training</i>                     | Practice-based training in tubal ligation techniques. Midwives are not normally trained in surgical techniques during their graduate studies. Training needs may therefore be relatively substantial | <i>Supervision and monitoring</i>                                                              | Regular supervision by senior midwife or doctor | <i>Supplies</i>                     | Surgical instruments, local anaesthetic, suture material, surgical facility / theatre, resuscitation equipment | <i>Referral</i> | To a referral centre for failed ligations and / or complications |                                                                   |             |  |
|                                                                                                                                                                                                                                                                                                             | Resource                                                                                                                                                                                                                                                                            | Settings in which midwives already provide other care                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| <i>Training</i>                                                                                                                                                                                                                                                                                             | Practice-based training in tubal ligation techniques. Midwives are not normally trained in surgical techniques during their graduate studies. Training needs may therefore be relatively substantial                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| <i>Supervision and monitoring</i>                                                                                                                                                                                                                                                                           | Regular supervision by senior midwife or doctor                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| <i>Supplies</i>                                                                                                                                                                                                                                                                                             | Surgical instruments, local anaesthetic, suture material, surgical facility / theatre, resuscitation equipment                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |
| <i>Referral</i>                                                                                                                                                                                                                                                                                             | To a referral centre for failed ligations and / or complications                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                |                                                       |                                     |                                                                                                                                                                                                      |                                                                                                |                                                 |                                     |                                                                                                                |                 |                                                                  |                                                                   |             |  |

|               | CRITERIA                                                              | JUDGEMENT                                                                                                                                                                                                                | EVIDENCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | COMMENTS AND QUERIES |
|---------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|               | <p><b>Is the incremental cost small relative to the benefits?</b></p> | <p>No <input type="checkbox"/> Probably no <input type="checkbox"/> Uncertain <input checked="" type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p> | <p>We are uncertain about whether the desirable effects are large relative to the undesirable effects. In addition, the resources required are relatively large.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |
| ACCEPTABILITY | <p><b>Is the option acceptable to most stakeholders?</b></p>          | <p>No <input type="checkbox"/> Probably no <input type="checkbox"/> Uncertain <input checked="" type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p> | <p>A systematic review of task-shifting in midwifery programmes (Colvin 2012) did not identify any studies that evaluated the acceptability of tubal ligation when performed by midwives. <b>We are therefore uncertain about the acceptability of this intervention to key stakeholders.</b></p> <p><b>Indirect evidence:</b> For <u>other midwife-delivered interventions</u>, the same review suggests the following:</p> <ul style="list-style-type: none"> <li>• Midwives and their supervisors and trainers generally felt midwives had no problem learning new medical information and practicing new clinical techniques (moderate certainty evidence). 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).</li> <li>• However, midwives may be unwilling to take on tasks that requires them to move beyond obstetric care, such as tasks related to family planning and sexual health, possibly because this is not viewed as part of their role and may entail an increased workload (moderate certainty evidence)</li> <li>• Doctors may be skeptical about the extension of midwifery roles in obstetric care, although doctors who worked closely with midwives tended to have better attitudes towards them (low certainty evidence)</li> <li>• 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).</li> </ul> <p>A review of country case studies of task shifting for family planning (Polus 2012b), which mainly included <u>LHW programmes</u>, appreciate the use of female health workers in the delivery of contraceptives. However, the review also 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, service fees; and a lack of support from husbands.</p> <p><b>Annex:</b> page 20 (Colvin 2012); page 63 (Polus 2012b)</p> |                      |
| FEASIBILITY   | <p><b>Is the option feasible to implement?</b></p>                    | <p>No <input type="checkbox"/> Probably no <input type="checkbox"/> Uncertain <input checked="" type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p> | <p>The interventions require relatively well-equipped facilities, including access to surgical instruments, surgical facility and resuscitation equipment. In addition, changes to norms or regulations may be needed to allow midwives to perform tubal ligation. 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 (Colvin 2012) suggests that ongoing support, training and supervision was often insufficient in midwife taskshifting programmes (moderate certainty evidence).</p> <p><b>Annex:</b> page 20 (Colvin 2012)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      |