

**7.1 and 7.2. RECOMMENDATION:**  
**Should AUXILIARY NURSE MIDWIVES (a) initiate and (b) maintain kangaroo mother care for low birth weight infants?**

**Problem:** Low utilisation of kangaroo mother care for low birth weight infants  
**Option:** Auxiliary nurse midwives initiating and maintaining kangaroo mother care  
**Comparison:** Usual care  
**Setting:** Community/primary health care settings in LMICs

Recommendation	<i>We recommend against the option</i>	<i>We suggest considering the option with targeted monitoring and evaluation</i>	<i>We recommend the option</i>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	We suggest considering the option with targeted monitoring and evaluation. We suggest using this intervention where auxiliary nurse midwives are already an established cadre.		
<b>Justification</b>	There is insufficient evidence on the effectiveness and feasibility of auxiliary nurse midwives initiating kangaroo mother care for low birth weight infants. However, the intervention may have important benefits and is probably feasible and acceptable. It may also reduce inequalities by extending care to underserved populations. We therefore suggest considering the option with targeted monitoring and evaluation, with particular attention given to different birthweight subgroups.		
<b>Implementation considerations</b>	<p>The following should be considered when using auxiliary nurse midwives to initiate and maintain kangaroo mother care:</p> <ul style="list-style-type: none"> <li>- The relevant professional bodies should be involved in the planning and implementation of the intervention to ensure acceptability among affected health workers</li> <li>- Local beliefs and practical circumstances related to the health conditions in question should be addressed within the programme design</li> <li>- The distribution of roles and responsibilities between auxiliary nurse midwives and other health workers needs to be made clear, including through regulations and job descriptions</li> <li>- Changes in regulations may be necessary to support any changes in auxiliary nurse midwives' scope of practice</li> <li>- Implementation needs to be in the context of a comprehensive remuneration scheme, in which salaries or incentives reflect any changes in scope of practice. Giving incentives for certain tasks but not for others may negatively affect the work that is carried out</li> <li>- Referral systems need to function well, i.e. financial, logistical (e.g. transport) and relational barriers need to be addressed. Specifically, local health systems need to be strengthened to improve quality of care at the first referral facility</li> <li>- Supplies of drugs and other commodities (e.g. delivery kits) need to be secure</li> <li>- Responsibility for supervision needs to be clear and supervision needs to be regular and supportive</li> <li>- Auxiliary nurse midwives and their supervisors need to receive appropriate initial and ongoing training</li> </ul>		
<b>Monitoring and evaluation</b>	Monitoring and evaluation should focus on different weight categories to ensure that babies with birth weight less than 1500 grams are not adversely affected.		
<b>Research priorities</b>			

7.1 and 7.2. EVIDENCE BASE:

Should AUXILIARY NURSE MIDWIVES (a) initiate and (b) maintain kangaroo mother care for low birth weight infants?

**Problem:** Low utilisation of kangaroo mother care for low birth weight infants

**Option:** Auxiliary nurse midwives initiating and maintaining kangaroo mother care

**Comparison:** Usual care

**Setting:** Community/primary health care settings in LMICs

CRITERIA	JUDGEMENT	EVIDENCE	COMMENTS AND QUERIES										
BENEFITS & HARMS OF THE OPTIONS	<p>Are the anticipated desirable effects large?</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 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. <b>We are therefore unable to draw any conclusions about the desirable or undesirable effects of this intervention.</b></p> <p><b>Indirect evidence</b></p> <p>A systematic review of the effects of lay health workers (Lewin 2012) identified three trials from Bangladesh and India that assessed the effectiveness of promotion of kangaroo care or skin-to-skin care after birth, although promotion was not specifically targeted at low birth weight babies. In two of the trials, LHWs promoted the intervention as part of a package of maternal and newborn care while, in one study, LHWs taught kangaroo care to expectant mothers and their families. One trial suggests that the intervention probably leads to an increase in the use of skin-to-skin care within 24 hours after birth, compared to usual care (moderate certainty evidence). Two trials suggest that the overall package of maternal and newborn care may reduce neonatal mortality (low certainty evidence)</p> <p><b>Annex:</b> page13 (Lewin 2012 – Table 4)</p>	<p>Although direct evidence on effects is lacking, there is some evidence that lay health workers can deliver this intervention, it is simple to implement, is likely to have benefits and is not likely to have significant undesirable effects. We have therefore judged the desirable effects as probably large relative to the undesirable effects.</p>										
	<p>Are the anticipated undesirable effects small?</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>What is the certainty of the anticipated effects?</p> <p>Very low <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> No direct evidence <input checked="" type="checkbox"/> Varies <input type="checkbox"/></p>												
	<p>Are the desirable effects large relative to the undesirable effects?</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>												
RESOURCE USE	<p>Are the resources required small?</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>Main resource requirements</b></p> <table border="1"> <thead> <tr> <th>Resource</th> <th>Settings in which auxiliary nurse midwives already provide other care</th> </tr> </thead> <tbody> <tr> <td>Training</td> <td>Training in the technique is necessary and may take 1-2 weeks</td> </tr> <tr> <td>Supervision and monitoring</td> <td>Regular supervision by an experienced kangaroo care practitioner</td> </tr> <tr> <td>Supplies</td> <td>Minimal: promotional and demonstrational materials; carrying pouches for babies</td> </tr> <tr> <td>Referral</td> <td>To a health facility if any health problems are detected</td> </tr> </tbody> </table>	Resource	Settings in which auxiliary nurse midwives already provide other care	Training	Training in the technique is necessary and may take 1-2 weeks	Supervision and monitoring	Regular supervision by an experienced kangaroo care practitioner	Supplies	Minimal: promotional and demonstrational materials; carrying pouches for babies	Referral	To a health facility if any health problems are detected	
Resource	Settings in which auxiliary nurse midwives already provide other care												
Training	Training in the technique is necessary and may take 1-2 weeks												
Supervision and monitoring	Regular supervision by an experienced kangaroo care practitioner												
Supplies	Minimal: promotional and demonstrational materials; carrying pouches for babies												
Referral	To a health facility if any health problems are detected												

	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 type="checkbox"/>    Probably yes <input checked="" type="checkbox"/>    Yes <input type="checkbox"/>    Varies <input type="checkbox"/></p>	<p>Although there is no direct evidence on effectiveness, the benefits are likely to be large in relation to the incremental costs</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 type="checkbox"/>    Probably yes <input type="checkbox"/>    Yes <input checked="" type="checkbox"/>    Varies <input type="checkbox"/></p>	<p>We are not aware of any systematic reviews that considered the acceptability of auxiliary nurse midwife interventions. <b>We are therefore uncertain about the acceptability of this intervention to key stakeholders.</b></p> <p><b>Indirect evidence:</b> A systematic review (Rashidian 2012) explored factors that influence the success of task-shifting to <u>nurses</u>. This review suggest that:</p> <ul style="list-style-type: none"> <li>• Nurses may be motivated to take on new tasks by increased recognition and job satisfaction (moderate certainty evidence)</li> <li>• Recipients may prefer nurses, compared to doctors, for issues that require more attention and time (low certainty evidence)</li> </ul> <p><b>Annex:</b> page 43 (Rashidian 2012)</p>	
FEASIBILITY	<p><b>Is the option feasible to implement?</b></p>	<p>No <input type="checkbox"/>    Probably no <input type="checkbox"/>    Uncertain <input type="checkbox"/>    Probably yes <input type="checkbox"/>    Yes <input checked="" type="checkbox"/>    Varies <input type="checkbox"/></p>	<p>The intervention is relatively simple, requires no supplies and is unlikely to require changes to norms or regulations.</p> <p>Some training and supervision is needed, and adequate referral to a higher level of care for further management may also be necessary. 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).</p> <p><b>Annex:</b> page 26 (Glenton, Colvin 2012); page 20 (Colvin 2012); page 43 (Rashidian 2012)</p>	