

9.1. RECOMMENDATION:

Should LAY HEALTH WORKERS deliver neonatal resuscitation?

Problem: Poor access to neonatal care
Option: LHWs delivering neonatal resuscitation
Comparison: Care delivered by other cadres or no care
Setting: Community/primary health care settings in LMICs with poor access to health professionals

Recommendation	<i>We recommend against the option</i>	<i>We suggest considering the option only in the context of rigorous research</i>	<i>We recommend the option</i>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	We suggest considering this option only in the context of rigorous research. We suggest evaluating this intervention where a well-functioning LHW programme already exists and where referral to a more specialised cadre is available or can be put in place.		
Justification	There is insufficient evidence on the effectiveness of this intervention, and its acceptability is uncertain. However, it may be feasible and may reduce inequalities by extending care to underserved populations.		
Implementation considerations	Not applicable		
Monitoring and evaluation			
Research priorities	Studies are needed to assess the effects and the acceptability of using lay health workers to deliver neonatal resuscitation. An additional important issue is how to maintain competence in a context of low volume of deliveries.		

9.1. EVIDENCE BASE:

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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 checked="" type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p>	<p>A systematic review (Lewin 2012) searched for studies that assessed the effects of lay health worker programmes for maternal and child health. No trials in the review assessed the provision by LHWs of neonatal resuscitation. We are therefore unable to draw any conclusions about the desirable or undesirable effects of this intervention.</p>											
	<p>Are the anticipated undesirable effects small?</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>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 checked="" type="checkbox"/> Probably yes <input 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 checked="" type="checkbox"/> Uncertain <input type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/></p>	<p>Main resource requirements</p> <table border="1"> <thead> <tr> <th>Resource</th> <th>Settings in which LHW programmes already exist</th> </tr> </thead> <tbody> <tr> <td>Training</td> <td>2 weeks of practice-based training in neonatal resuscitation</td> </tr> <tr> <td>Supervision and monitoring</td> <td>Regular supervision by midwife or nurse</td> </tr> <tr> <td>Supplies</td> <td>Resuscitation bag and mask</td> </tr> <tr> <td>Referral</td> <td>Transportation, adequate referral centre offering neonatal care</td> </tr> </tbody> </table>	Resource	Settings in which LHW programmes already exist	Training	2 weeks of practice-based training in neonatal resuscitation	Supervision and monitoring	Regular supervision by midwife or nurse	Supplies	Resuscitation bag and mask	Referral	Transportation, adequate referral centre offering neonatal care	
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<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
ACCEPTABILITY	Is the option acceptable to most stakeholders?	<table border="0"> <tr> <td>No</td> <td>Probably no</td> <td>Uncertain</td> <td>Probably yes</td> <td>Yes</td> <td>Varies</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>A systematic review of LHW programmes (Glenton, Colvin 2012) did not identify any studies that evaluated the acceptability of neonatal resuscitation when delivered by LHWs. We are therefore uncertain about the acceptability of this intervention to key stakeholders.</p> <p>Indirect evidence: In another review (Glenton, Khanna 2012), LHWs delivering other healthcare interventions, including vaccines and antibiotics, appear to be motivated by positive responses from the community and increased social respect (low certainty evidence). However, some LHWs voiced concerns about possible social or legal consequences if something went wrong. These concerns were at least partly addressed through support and supervision (low certainty evidence).</p> <p>Activities that demand that the LHW is present at specific times, for instance during labour and birth, lead to irregular and unpredictable working conditions. This may have direct implications for LHWs' expectations regarding incentives (low certainty evidence). LHWs may also be concerned about personal safety when working in the community and some LHWs were reluctant to visit clients at night because of safety issues (moderate certainty evidence) (Glenton, Colvin 2012).</p> <p>While LHW involvement in deliveries requires an effective referral system, the review also pointed to a number of challenges with referral of women in labour, including logistics and poor treatment of trained TBAs and women at facilities (moderate certainty evidence) (Glenton, Colvin 2012).</p> <p>Annex: page 26 (Glenton, Colvin 2012); page 33 (Glenton, Khanna 2012).</p>	
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FEASIBILITY	Is the option feasible to implement?	<table border="0"> <tr> <td>No</td> <td>Probably no</td> <td>Uncertain</td> <td>Probably yes</td> <td>Yes</td> <td>Varies</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>Significant additional work may be required to add the intervention to an existing LHW programme. It is likely to need changes in regulations; significant changes to supplies and training; and development of appropriate treatment algorithms. Also, implementation would require access to a referral system with trained and equipped healthcare professionals and facilities. Implementation may additionally require consideration of factors affecting referral by LHWs (see under 'Acceptability').</p> <p>Significant training and supervision provided by skilled health cadres would likely be needed. However, a systematic review (Glenton, Colvin 2012) suggests that ongoing support, training and supervision was often insufficient in LHW programmes (moderate certainty evidence).</p> <p>Annex: page 26 (Glenton, Colvin 2012)</p>	
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