

2.1 and 2.2. RECOMMENDATION:
Should LAY HEALTH WORKERS administer oxytocin to (a) prevent and (b) treat postpartum haemorrhage using a standard syringe?

Problem: Poor access to prevention and treatment of postpartum haemorrhage
Option: LHWs administering oxytocin using a standard syringe
Comparison: Care delivered by other cadres or no care
Setting: Community/primary health care settings in LMICs with poor access to health professionals

Balance of consequences	Undesirable consequences <i>clearly outweigh</i> desirable consequences in most settings <input type="checkbox"/>	Undesirable consequences <i>probably outweigh</i> desirable consequences in most settings <input type="checkbox"/>	The balance between desirable and undesirable consequences is uncertain <input checked="" type="checkbox"/>	Desirable consequences <i>probably outweigh</i> undesirable consequences in most settings <input type="checkbox"/>	Desirable consequences <i>clearly outweigh</i> undesirable consequences in most settings <input type="checkbox"/>
Recommendation	<i>We recommend against the option</i> <input type="checkbox"/>		<i>We suggest considering the option only in the context of rigorous research</i> <input checked="" type="checkbox"/>	<i>We recommend the option</i> <input type="checkbox"/>	
<p>We suggest considering this option only in the context of rigorous research.</p> <ul style="list-style-type: none"> For <u>prevention</u> of postpartum haemorrhage, we suggest evaluating this intervention where a well-functioning LHW programme already exists and where LHWs are already familiar with injection techniques and materials For <u>treatment</u> of postpartum haemorrhage, we suggest evaluating this intervention where a well-functioning LHW programme already exists, where LHWs are already familiar with injection techniques and materials, and where referral to more specialised care is available or can be put in place. 					
Justification	There is insufficient evidence on the effectiveness and acceptability of using LHWs to administer oxytocin to prevent and to treat postpartum haemorrhage using a standard syringe. Possible undesirable effects include use that is not timely for prevention of haemorrhage; failure to diagnose a second foetus prior to administration; and inappropriate use for other purposes. However, the panel feels that the benefits probably outweigh the harms; that minimal clinical decision making is required; and that the intervention is probably acceptable and feasible. This intervention may also reduce inequalities by extending care to underserved populations.				
Implementation considerations	Not applicable				
Monitoring and evaluation					
Research priorities	Studies assessing the effects and the acceptability of using lay health workers to administer oxytocin are needed.				

2.1 and 2.2. EVIDENCE BASE:

Should LAY HEALTH WORKERS administer oxytocin to (a) prevent and (b) treat postpartum haemorrhage using a standard syringe?

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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. However, this review did not identify any studies that assessed the effects of lay health workers to administer oxytocin. We are therefore unable to draw any conclusions about the desirable or undesirable effects of this intervention.</p> <p>Indirect evidence: The same review (Lewin 2012) identified a number of trials from LMIC settings where packages of care were delivered by LHWs. In one of these trials, the packages included LHWs injecting procaine penicillin and gentamicin to treat sick neonates, apparently using a standard syringe. The trial did not report any adverse effects of LHWs using injectable antibiotics. Overall, the trials suggest that these packages of care may lead to a reduction in neonatal (moderate certainty evidence) and child mortality (low certainty evidence).</p> <p>Annex: page 10 (Lewin 2012 – Table 2)</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>1-2 weeks of practice-based training in injection techniques, safe delivery and in diagnosing and managing postpartum haemorrhage.</td> </tr> <tr> <td>Supervision and monitoring</td> <td>Regular supervision by midwife or nurse</td> </tr> <tr> <td>Supplies</td> <td>Oxytocin, syringes, sterile solution, robust supply chain</td> </tr> <tr> <td>Referral</td> <td>Transportation to a centre where comprehensive emergency obstetric care (CeMOC) is available</td> </tr> </tbody> </table>	Resource	Settings in which LHW programmes already exist	Training	1-2 weeks of practice-based training in injection techniques, safe delivery and in diagnosing and managing postpartum haemorrhage.	Supervision and monitoring	Regular supervision by midwife or nurse	Supplies	Oxytocin, syringes, sterile solution, robust supply chain	Referral	Transportation to a centre where comprehensive emergency obstetric care (CeMOC) is available	
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RESOURCE USE	Is the incremental cost small relative to the benefits?	<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"/>	Uncertain due to lack of evidence on effectiveness of the intervention	
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"/>											
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 (Glenton, Colvin et al 2012) found no studies that evaluated the acceptability of oxytocin or any other medicine delivered by LHWs using a standard syringe. We are therefore uncertain about the acceptability of this intervention to key stakeholders.</p> <p>The same review found that 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).</p> <p>LHW involvement in deliveries requires an effective referral system. However, a number of challenges with referral of women in labour were seen, including logistics and poor treatment of trained TBAs and women at facilities (moderate certainty evidence).</p> <p>Indirect evidence: Another systematic review (Glenton, Khanna 2012) explored the acceptability of the use of compact prefilled autodisable devices (CPAD) by LHWs. This review suggests that recipients, LHWs and other health workers find the delivery of drugs and vaccines by LHWs through this device to be acceptable. The importance of training and supervision was emphasised (low certainty evidence). 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>Annex: page 26 (Glenton, Colvin 2012) and page 33 (Glenton, Khanna 2012)</p>	
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<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
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 type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </table>	No	Probably no	Uncertain	Probably yes	Yes	Varies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Significant additional work may be needed to add this intervention to an existing LHW programme. It is likely to require changes in regulations; and significant changes to drug supplies and training. Also, where oxytocin is being used to treat PPH, 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 were often insufficient in LHW programmes (moderate certainty evidence).</p> <p>Annex: page 26 (Glenton, Colvin 2012)</p>	
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