

11.13. RECOMMENDATIONS:

Should ADVANCED LEVEL ASSOCIATE CLINICIANS perform caesarean sections?

Problem: Poor access to caesarean section
Option: Advanced level associate clinicians performing caesarean section
Comparison: Caesarean section delivered by other cadres
Setting: Health care facilities in LMICs

Recommendation	<i>We recommend against the option</i>	<i>We suggest considering the option 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 use of advanced level associate clinicians to perform caesarean sections with targeted monitoring and evaluation			
Justification	The available evidence of effectiveness of advanced level associate clinicians performing caesarean section is of very low certainty. We are also uncertain about the feasibility of this intervention in many settings. However, the intervention may reduce inequalities by extending care to underserved populations. We therefore suggest that this option be considered in the context of targeted monitoring and evaluation. We suggest that this intervention be used in settings where advanced level associate clinicians are working as the only cadre with surgical skills and it is not routinely possible to access cadres with higher levels of training.		
Implementation considerations	<p>The following should be considered when using advanced level associate clinicians to perform caesarean section:</p> <ul style="list-style-type: none"> - The relevant professional bodies should be involved in the planning and implementation of the intervention to ensure acceptability among affected health workers - Clear scopes of practice are needed, and these need to be implemented at all levels of the health system. Linked to this, the distribution of roles and responsibilities between advanced level associate clinicians and other health workers needs to be made clear - 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 - Career progression may be an important motivator - Referral systems need to function well, i.e. financial, logistical (e.g. transport) and relational barriers need to be addressed - Supplies of surgical instruments and other commodities need to be secure - Responsibility for supervision needs to be clear and supervision needs to be regular and supportive <p>Advanced level associated clinicians and their supervisors need to receive appropriate initial and ongoing training</p>		
Monitoring and evaluation	In settings where this cadre is trained for conducting caesarean sections close monitoring of operation-related complications including maternal death, infant death and other less severe complications such as wound dehiscence and infections should be monitored.		
Research priorities	Implementation studies to assess the effects of advanced level associate clinicians performing caesarean section on important immediate health outcomes and process outcomes such as hospital stay and their impact on other aspects of care received by the women.		

11.13. 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 compared clinical officers (unclear what level of training they had) with medical doctors for caesarean section (Wilson 2011). The review identified 6 studies from low and middle income countries, but the evidence is of very low certainty and we are therefore unable to draw conclusions on the effects of using clinical officers for caesarean section.</p> <p>Annex: page 18 (Wilson 2011)</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 checked="" type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> No direct evidence <input 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 checked="" type="checkbox"/> Probably no <input 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 advanced level associate clinicians already provide other care</th> </tr> </thead> <tbody> <tr> <td>Training</td> <td>Several months of practice-based training in caesarean section</td> </tr> <tr> <td>Supervision and monitoring</td> <td>Advanced level associate clinicians may operate without supervision but the procedure related morbidity and mortality should be regularly monitored. In addition, advanced level associate clinicians should have access to a doctor or highly experienced associate clinician for support</td> </tr> <tr> <td>Supplies</td> <td>Facility with surgical and anaesthesia capacity, surgical instruments and supplies, drugs, resuscitation equipment</td> </tr> </tbody> </table>	Resource	Settings in which advanced level associate clinicians already provide other care	Training	Several months of practice-based training in caesarean section	Supervision and monitoring	Advanced level associate clinicians may operate without supervision but the procedure related morbidity and mortality should be regularly monitored. In addition, advanced level associate clinicians should have access to a doctor or highly experienced associate clinician for support	Supplies	Facility with surgical and anaesthesia capacity, surgical instruments and supplies, drugs, resuscitation equipment	
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		<i>Referral</i>	Referral essential in case of complications	
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	CRITERIA	JUDGEMENT	EVIDENCE	COMMENTS AND QUERIES												
	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 as there is no direct evidence on effectiveness	
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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 rapid review of literature on associate clinician / advanced level associate clinician programmes suggests that:</p> <ul style="list-style-type: none"> - There may be a lack of acceptance of associate clinicians / advanced level associate clinicians among other professionals and professional bodies in a number of settings, and these bodies may block the development of the cadre or attempt to restrict what they can do. Acceptance appears to vary across procedures that they are trained to deliver - Associate clinicians / advanced level associate clinicians may not be given recognition and respect from doctors and health administrators, despite doing work similar to that done by doctors, and this is seen as problematic - There may be discrepancies between acceptance at national ministry level, existing regulations for registration of associate clinicians / advanced level associate clinicians, the training they receive and clinical practice. Consequently, they may only be able to undertake a proportion of what they were trained to do in relation to emergency and comprehensive obstetric care or may be perform services without regulatory authorisation <p>The certainty of this evidence is unclear as the quality of the contributing studies and the generalisability of the findings are unclear.</p> <p>Annex: page 25 (Daniels 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"/>	The intervention requires well equipped facilities, including access to a surgical facility / theatre, surgical instruments and resuscitation equipment. In addition, changes to norms, regulations and scopes of practice are likely to be needed to allow associate clinicians to perform these procedures. Significant training and regular supervision is also necessary, and adequate referral to a higher level of care for management may be required.	
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