

Annex 2D Surgical procedures required to treat the GBD 2010 causes included in the basic surgical care scale-up model

Supplemental material for: Bickler SW, Weiser TG, Kassebaum NJ, Higashi H, Chand D, et al. 2015. Global burden of surgical conditions. In: *Essential Surgery*, edited by Debas HT, Donkor P, Gawande A, Jamison DT, Kruk ME, and Mock CN. Volume 1 of *Disease Control Priorities, third edition*. Washington, DC: World Bank.

The surgical procedures were identified by reviewing Surgical Care for the District Hospital (http://www.who.int/surgery/publications/scdh_manual/en/)

Major Category	GBD 2010 Cause	Surgical procedures required to treat GBD 2010 Cause	
Digestive Diseases	Appendicitis	Appendectomy Drainage of appendiceal abscess	
	Gall bladder and bile duct disease	Cholecystectomy Cholecystostomy	
	Hernia	Elective repair of inguinal hernia Emergency repair of strangulated inguinal hernia	
	Paralytic ileus & bowel obstruction	Nasogastric decompression Exploratory laparotomy Enterolysis Small bowel resection Colostomy (loop and end) Reduction of sigmoid volvulus (operative and non-operative)	
Maternal-fetal	Maternal haemorrhage	Dilation and curettage Culdocentesis Colpotomy Salpingostomy or salpingectomy for ectopic pregnancy Repair of ruptured uterus Repair of bladder injury Manual removal of placenta Repair of cervical, vaginal and perineal tears Uterine inversion Uterine and utero-ovarian artery ligation Total and sub-total hysterectomy Bimanual compression of uterus	
		Obstructed labor	Assisted vaginal delivery with forceps or vacuum Caesarean section Craniotomy & craniocentesis
		Abortion	Manual vacuum aspiration
		Neonatal encephalopathy	Assisted vaginal delivery with forceps or vacuum Caesarean section

Injuries

Road injury	Trauma resuscitation
Other transport injury	Airway management (tracheostomy, orotracheal intubation, cricothyroidotomy)
Falls	Venous Access (venous cut-down, intraosseous)
Fire, heat and hot substances	Chest drain/tube
Exposure to mechanical forces	Pericardiocentesis
Adverse effects of medical treatment	Burr hole
Animal contact (non-venomous)	Wound management (primary closure, secondary closure and delayed primary closure)
Unintentional injuries not classified elsewhere	Amputations (guillotine, definitive)
Interpersonal violence	Diagnostic peritoneal lavage
	Laparotomy
	Repair of ruptured bladder
	Burr hole (cranial)
	Fracture management (cast application/removal, splint, skeletal traction, skull traction, external fixation, fasciotomy)
	Burn management (split thickness skin graft, escharotomy)
