
Disease Control Priorities 3rd Edition

CARE OF THE INJURED

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EMRO DCP3 Policy Forum

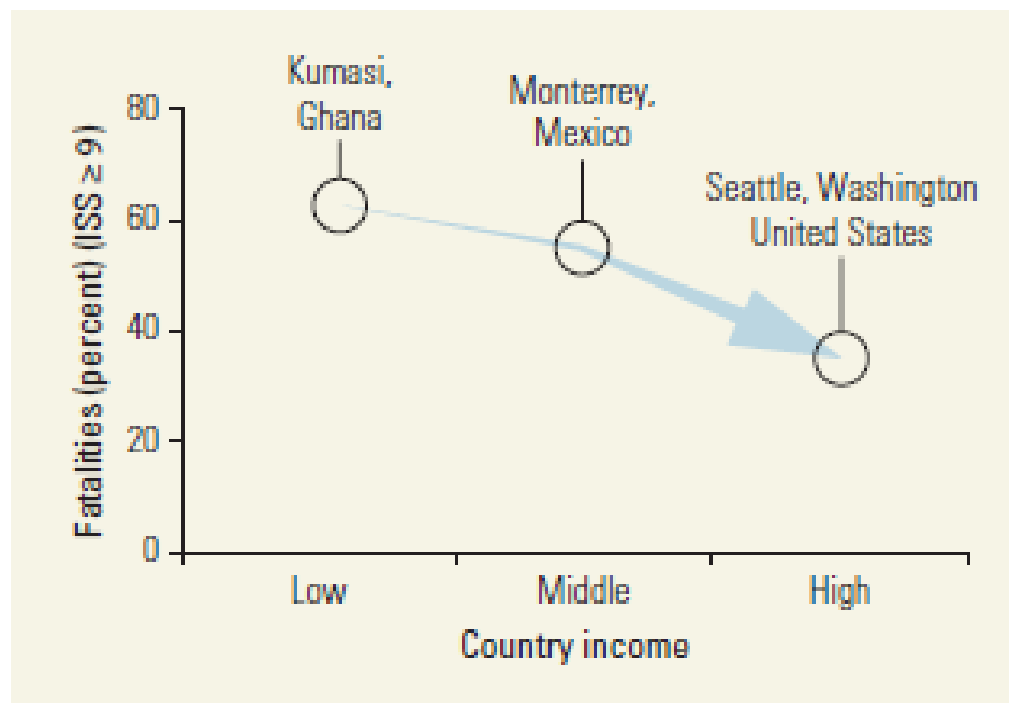
22 February, 2016

Disease Control Priorities, 3rd Edition

DCP3 Volume Topics

1. Essential Surgery – PUBLISHED MARCH 2015
2. Reproductive, Maternal, Newborn and Child Health – March 2016
3. Cancer – PUBLISHED NOVEMBER 2015
4. Mental, Neurological, and Substance Use Disorders – Feb. 2016
5. Cardiovascular, Respiratory and Related Disorders - 2016
6. HIV/AIDS, STIs, Tuberculosis and Malaria - 2016
7. Injury Prevention and Environmental Health - 2016
8. Child and Adolescent Development - 2016
9. Disease Control Priorities : Improving Health & Reducing Poverty 2016

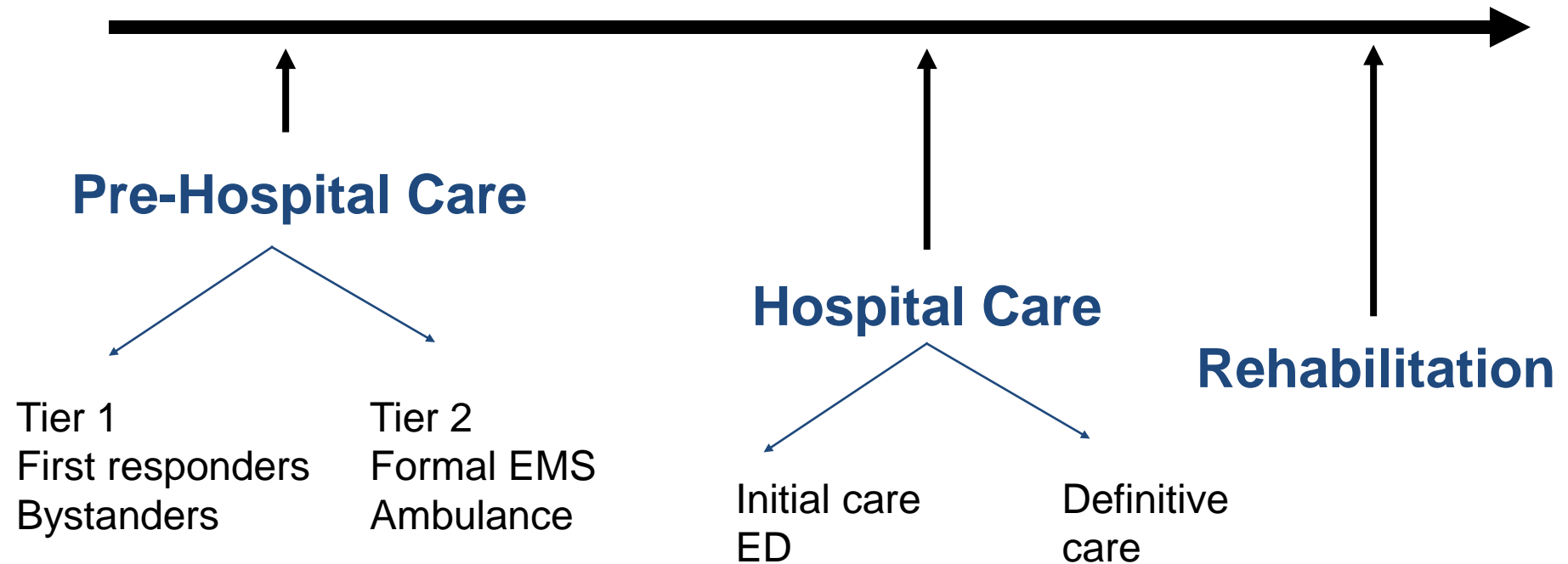
Figure 3.1 Case Fatality Rates for Severely Injured People, 1998



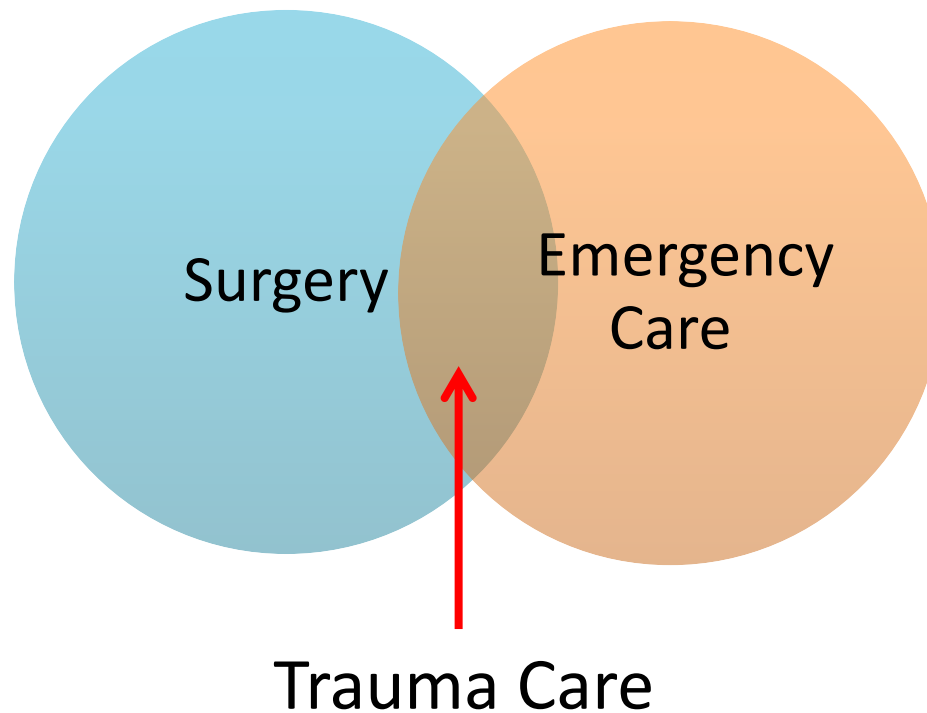
Source: DCP3, Volume 1

If we could eliminate these inequities, we could save the lives of 2,000,000 of the 5,000,000 injury deaths

Trauma System: All that a country or area has in place for care of the injured, across the spectrum of prehospital care, hospital care, and long-term rehabilitation (WHO).



- DCP3 IDENTIFYING MOST CE INTERVENTIONS



Prehospital Care

- Strengthen basic ambulance services when they exist.
- But around 70% of world's population not covered.
- How to proceed?
 - Start new ambulance services.
 - Expensive
 - Build on base of first responders

Improving Prehospital Care in Absence of Formal EMS

Northern Iraq and Cambodia, mine infested areas.

Intervention:

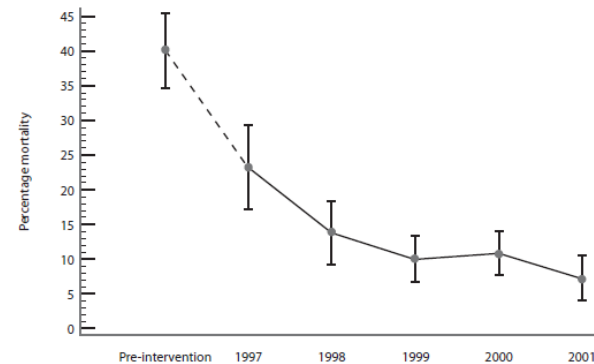
- Two tier system instituted:
 - 5000 lay first responders with 1st aid training.
 - Paramedics with 450 hour formal training.

Effect:

- Mortality decreased: **40% to 9%.**

Source: Husum et al. J Trauma 54: 1188; 2003

Figure 1 Mortality among injured people cared for by the Village University trauma system in Cambodia and Iraq



Results are expressed as yearly means, with 95% confidence interval bars (a measure of statistical accuracy).
Source: Hans Husum (with permission).

- Cost effectiveness of prehospital care:
 - Dollars per DALY averted
- First responder training: \$7
- Basic ambulance (urban): \$94
- Basic ambulance (rural): \$284

Facility-based care

- Delivery of emergency care in general
 - Trauma care in particular
- Need for strengthening of delivery in most environments.
- UHC – Essential packages
 - Meet biggest population needs
 - Cost-effective
 - Feasible to promote globally

Facility-based care

Table 1.1 The Essential Surgery Package: Procedures and Platforms^{a,b}

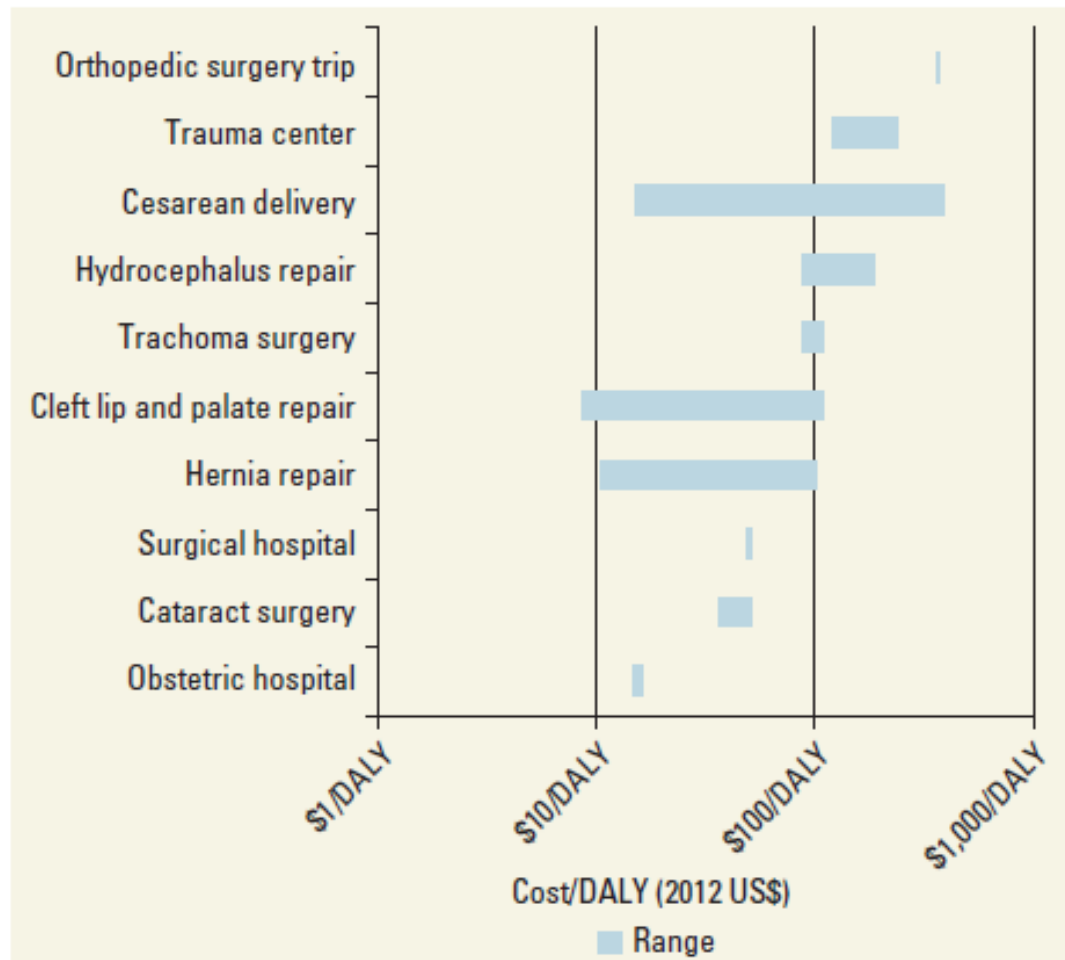
Type of procedure	Platform for delivery of procedure ^c		
	Community facility and primary health center	First-level hospital	Second- and third-level hospitals
Dental procedures	1. Extraction 2. Drainage of dental abscess 3. Treatment for caries ^d		
Obstetric, gynecologic, and family planning	4. Normal delivery	1. Cesarean birth 2. Vacuum extraction/forceps delivery 3. Ectopic pregnancy 4. Manual vacuum aspiration and dilation and curettage 5. Tubal ligation 6. Vasectomy 7. Hysterectomy for uterine rupture or intractable postpartum hemorrhage 8. Visual inspection with acetic acid and cryotherapy for precancerous cervical lesions	1. Repair obstetric fistula
General surgical	5. Drainage of superficial abscess 6. Male circumcision	9. Repair of perforations: for example, perforated peptic ulcer, typhoid ileal perforation 10. Appendectomy 11. Bowel obstruction 12. Colostomy	

Facility-based care

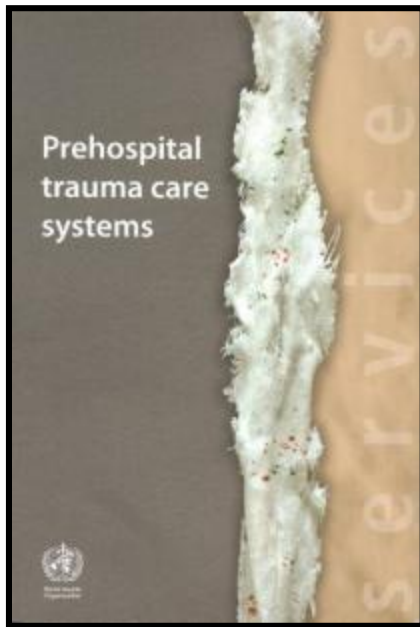
Table 1.1 The Essential Surgery Package: Procedures and Platforms^{a,b} (continued)

Type of procedure	Platform for delivery of procedure ^c		
	Community facility and primary health center	First-level hospital	Second- and third-level hospitals
Injury ^a	7. Resuscitation with basic life support measures	17. Resuscitation with advanced life support measures, including surgical airway	
	8. Suturing laceration	18. Tube thoracostomy (chest drain)	
	9. Management of non-displaced fractures	19. Trauma laparotomy ^d	
		20. Fracture reduction	
		21. Irrigation and debridement of open fractures	
		22. Placement of external fixator; use of traction	
		23. Escharotomy/fasciotomy (cutting of constricting tissue to relieve pressure from swelling)	
		24. Trauma-related amputations	
		25. Skin grafting	
		26. Burr hole	

Figure 1.2 Cost-Effectiveness of Surgical Interventions

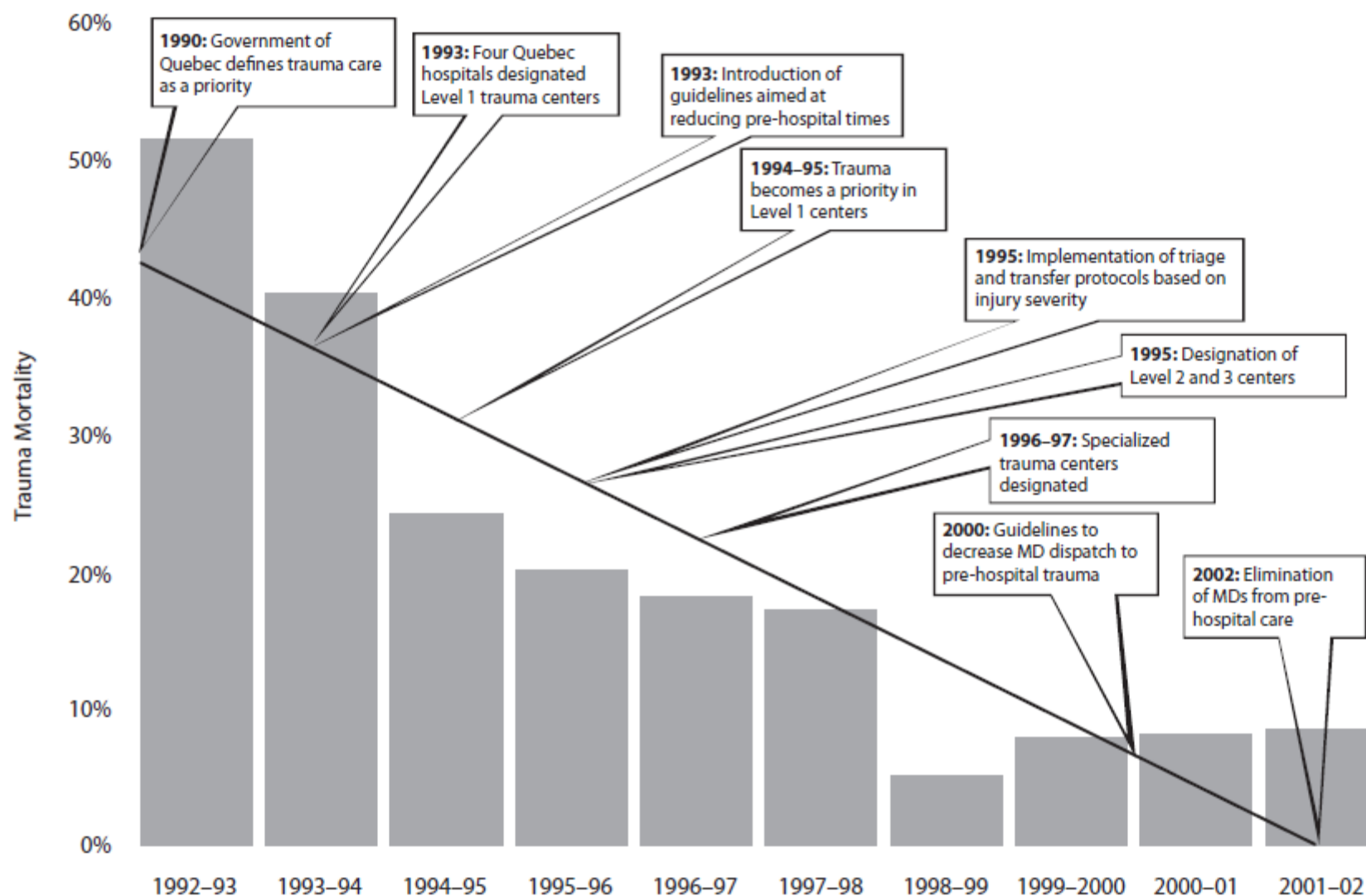


WHO efforts to promote better organized trauma systems globally



DCP3 UHC Essential package for trauma care based on existing WHO
Guidelines for Essential Trauma Care

Figure 1 **Mortality among severely injured patients (by year) in Quebec**



Inclusion criteria specified death as a result of injury or an Injury Severity Score (ISS) exceeding 12, a Prehospital Index exceeding 3, two or more injuries with an Abbreviated Injury Scale score of 3 or higher, or a hospital stay exceeding 3 days. Note: small year-to-year fluctuations in percentage mortality are expected. The overall trend, however, is steadily downward. MDs = doctors.

Conclusions

- Trauma care part of broader emergency care:
 - Dr. Reynolds to address.
- Essential packages in UHC.
 - How to promote in policy?
 - For discussion.

THANK YOU

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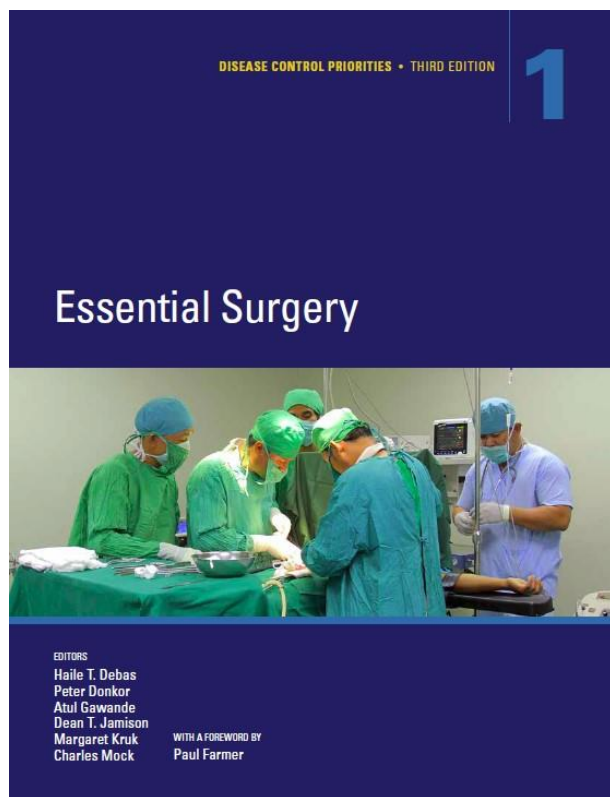


economic evaluation for health

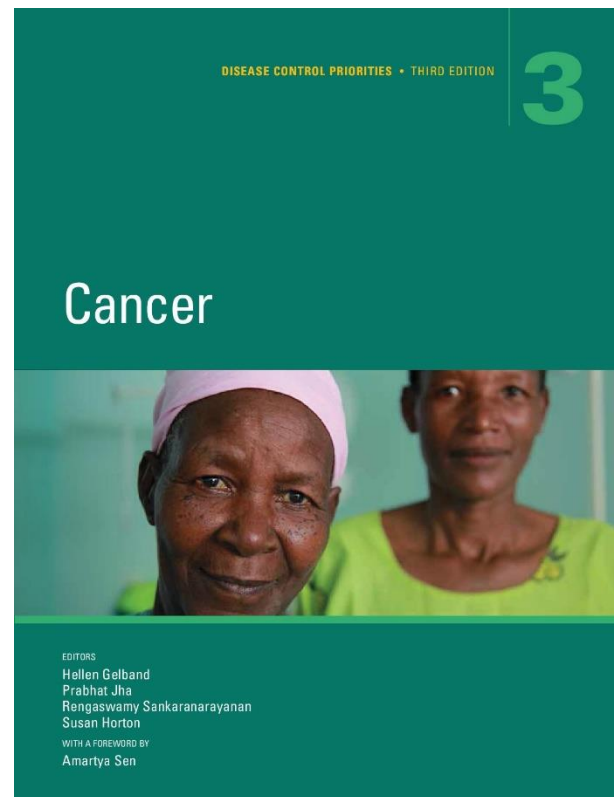


economic evaluation for health

Surgery and Cancer: Published

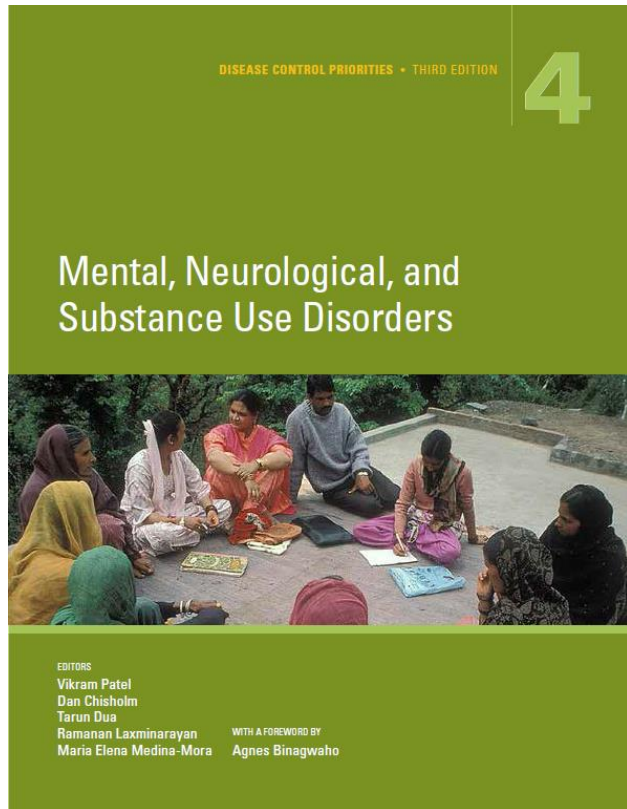


Published in March 2015

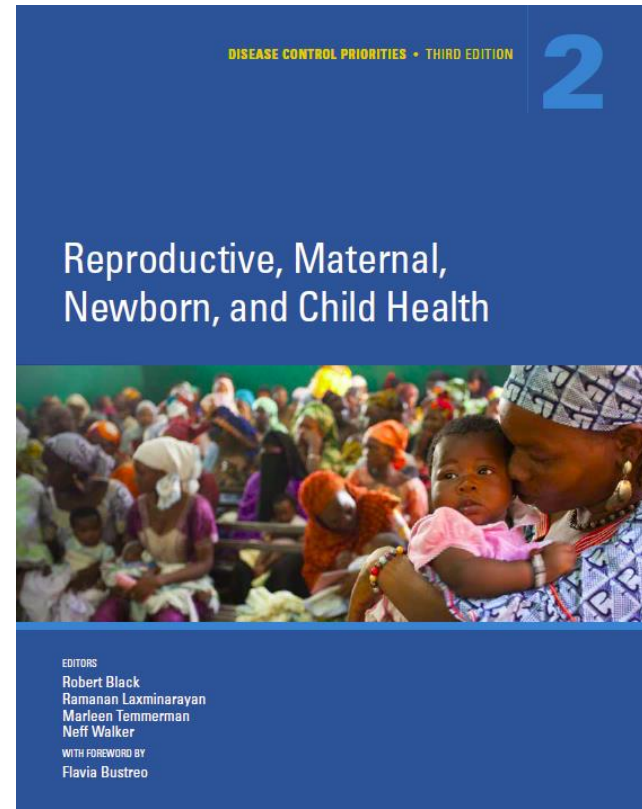


Published in November 2015

RMNCH & Mental Health: In Final Production



Expected late February



Expected Mid-March

Lancet publication: Chapter 1's

Essential surgery: key messages from *Disease Control Priorities*, 3rd edition

Charles N. Mock, Peter Donkor, Atul Gawande, Dean T. Jamison

The World Bank will publish the nine volumes: *Essential Surgery*—identifies 44 surgical procedures that are cost effective, and are feasible to implement. The findings. First, provision of essential surgical procedures can avertable deaths in low-income and middle-income countries. 44 essential procedures, making investment in access to surgery, such as task sharing, have been investments in building surgical and anaesthesia services. 28 procedures provided at first-level hospital

Addressing the burden of mental, neurological, and substance use disorders: key messages from *Disease Control Priorities*, 3rd edition

Vikram Patel*, Dan Chisholm*, Rachana Ramanan Laxminarayan, Carol Levin, G. Graham Thornicroft, Harvey Whitford,

The burden of mental, neurological, and substance use disorders now accounts for one in every 10 substantial excess mortality associated with on affected persons, their caregivers

February, 2015

October, 2015

Costs, affordability, and feasibility of an essential package of cancer control interventions in low-income and middle-income countries: key messages from *Disease Control Priorities*, 3rd edition

Hellen Gelband, Rengaswamy Sankaranarayanan, Cindy L. Gauvreau, Susan Horton, Benjamin O. Anderson, Freddie Bray, James Cleary, Anna J. Dare, Lynette Denry, Mary K. Gospodarowicz, Sumit Gupta, Scott C. Howard, David A. Jaffray, Felicia Knauth, Carol Levin, Linda Rabeneck, Preetha Rajaraman, Terrence Sullivan, Edward L. Trimble, Prabhat Jha, for the Disease Control Priorities-3 Cancer Author Group*

Investments in cancer control—prevention, detection, diagnosis, surgery, other treatment, and palliative care—are increasingly needed in low-income and particularly in middle-income countries, where most of the world's cancer deaths

Published Online
November 11, 2015
<http://dx.doi.org/10.1016/>

November, 2015

Launches



Cancer: AORTIC, Marrakech , Nov, 2015



Surgery: CUGH, Boston, March, 2015

Two way street with policy makers:

Shaping key messages

Looking for windows to advance policy.

Mental Health: June 16, 2015; London

CVD: Nov 14, 2015; Geneva

Road Safety: Feb 22, 2016; UAE

Ch Ad Dev: April 19, UAE

Table 14.1 Summary of Cost and Effectiveness of Interventions
U.S. dollars

	Intervention		
	Trained lay first responders and paramedic responders	Staffed community ambulance, urban	Staffed community ambulance, rural
Cost per 1 million population	62,923	1,272,705	3,827,376
Cost per death averted per 1 million population	170	1,818	5,468
Cost per life year gained per 1 million population	7	94	284