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Program in Global Surgery and Social Change
WORLD FEDERATION OF NEUROSURGICAL SOCIETIES

- 1955
- 130 NEUROSURGICAL SOCIETIES
- 49,000 NEUROSURGEONS
- NYON, SWITZERLAND
- OFFICIAL RELATIONS WITH THE WHO
“We call on the neurosurgeons as well as their professional societies of the world and related stakeholders to take urgent coordinated action to lead and address the unmet global neurosurgical need.” Bogota, Colombia, December, 2016
RESEARCH

• 5 million Neurosurgical Case Deficit
• 20,000 additional Neurosurgeons Needed
• Head Injury 50%
Global Neurosurgical Workforce and Capacity Mapping Project
## Comprehensive Policy Recommendations for Head and Spine Injury Care in LMICs

### Vision
No person experiences undue disability or death due to head and spine injury regardless of where they live.

### Infra-structure
- Integration through agile platforms
- Leverage international partnerships for surveillance

### Workforce
- Fit for purpose workforce for data collection, analysis, and interpretation
- Align international collaborations to support local workforce capacity
- Flexible and strategic use of task-shifting and task-shifting to optimize human resources

### Service delivery
- Minimum data to include demographics, diagnosis, mechanism, severity, and outcome measures
- Use existing trauma registry
- Use WHO Trauma System Maturity Index to monitor progress

### Financing
- Maximize external funding to build internal capacity
- Use open-source platforms

### Information management
- Utilize WHO International Registry for Trauma and Emergency Care (IRTEC)
- Tracking of safety law compliance

### Governance
- Empower ministry of health leadership
- Utilize reporting requirements to improve accountability and compliance

### Surveillance
- Safe roads

### Prevention
- Contextualized pre-hospital system
- 80% of population within 4-hours of neurotrauma care center
- Strengthen pre-existing trauma infrastructure for neurotrauma

### Pre-hospital care
- Neurotrauma care training of emergency medical personnel
- 1 neurosurgeon per 200,000 people at minimum
- Task-sharing of surgical workforce is preferred over task-shifting
- Dramatically increase neurosurgical training capacity

### Surgical system
- Standardization of essential neurotrauma equipment
- CT scanner in all neurotrauma facilities
- Critical care unit in all neurotrauma facilities
- Leverage telemedicine as a tool for increasing coverage

### Rehabilitation
- Embed neurorehabilitation within universal health coverage package
- International partnerships for neurotrauma capacity building
- Collection of neurorehabilitation outcome data
- Rehabilitation is indispensable to a quality health system
Surveillance

Prevention

Pre-Hospital Care

Surgical System

Rehabilitation

Surveillance innovation is a priority for countries lacking computerized health systems.

Enforcement existing regulations and laws is essential to the prevention of neurotrauma and spine worldwide.

Development Contextual pre-hospital care is a priority.

The number of neurotrauma should be placed than 4% of the population.

Provision of neuro-rehabilitation includes physical space, facilities, and durable medical equipment.

Promote active involvement from the family and community, including Community-Based Rehabilitation Services.

Research agendas and outcome assessment frameworks must consider neurorehabilitation as part of an integrated national agenda.