

# A Model for Sustainable Anesthesia Care in a Scarce Resource A Model for Sustainable Anesthesia Care in a Scarce Resource Setting: Angkor Hospital for Children in Siem Reap Cambodia

AUTHORS: Peng An Im<sup>1</sup> Suzanne Brown<sup>2</sup>, Sarah Zangle<sup>3,</sup> April Pinner<sup>4,</sup> Richard Henker<sup>5</sup>

1. Angkor Hospital for Children, Siem Reap, Cambodia. 2. Portland Oregon, 3. West Penn Hospital, Pittsburgh Pennsylvania, 4. Health Volunteers Overseas, Washington DC, 5. University of Pittsburgh, Pittsburgh Pennsylvania.

# **Anesthesia Workforce in** the USA and Cambodia a **Comparison**



**POPULATION** 1.69

Physicians giving anesthesia per 100,000 people

**15.88** 

0

Anesthesiologists per 100,000 people

**ANESTHESIOLOGISTS** 

16.76

**Nurse Anesthetists** 

per 100,000 people



2.10

**Nurse Anesthetists** per 100,000 people

**NURSE ANESTHETISTS** 

12,087



419 Surgeries per 100,000 people

# Surgeries per 100,000 people

# References

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## **Literature Review**

#### **ACCESS TO SURGICAL CARE IN LMICS**

- · Five billion do not have access to surgical care in low and middle income countries. (Meara & Greenberg,
- · Only 6% of all surgical procedures occur in LMICs. (Meara et al., 2015)
- · 81 million face catastrophic expenditures to access or pay for access to surgery. (Meara et al., 2015)

#### RECENT HISTORY OF CAMBODIA

- Two million victims of the civil war from 1975 to 1979
- · Decreased health care work force due to civil war
- · Educated people in Cambodia, including health care providers, targeted by Khmer Rouge
- · Less than 50 physicians remaining after the Khmer Rouge lost power. (McGrew, 1990)

# **Methods**

#### **OBJECTIVE**

- Provide high-quality, cost-efficient anesthetics in a scarce resource setting, i.e., regional anesthesia
- · Increase quantity of nurse anesthetists to improve access to
- · Develop the didactic and clinical instruction skills of nurse anesthetists
- Provide a sustainable system to increase quality and access to anesthesia care in the region

#### PROGRAM COMPONENTS

- · Since 2004, Over 100 HVO volunteers have provided professional development of AHC nurse anesthetists
- · Workshops, i.e., clinical instruction, didactic teaching, and simulation education
- · Anesthetist curriculum developed for nurses and physicians at AHC
- · Clinical sites at National Pediatric Hospital in Phnom Penh. Sirirai Hospital in Bangkok, and AHC
- QI and IRB approval were not required for this program evaluation

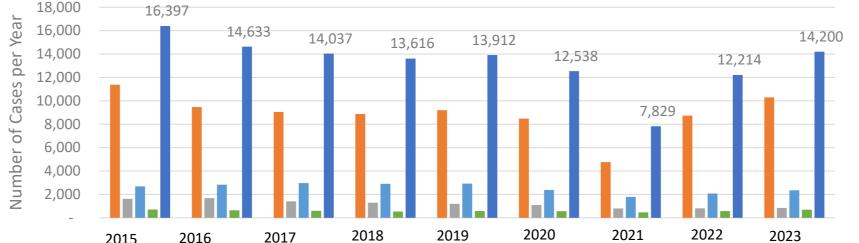
### Results

#### SURGICAL CASES AT AHC

Some of the cases performed in the operating theatres at AHC include:

- · Cardiac
- · Ligation patent ductus arteriosus
- · Thoracotomy
- · Exploratory laparotomy
- Urology
- Orthopedics
- · Ophthalmology
- · Retinoblastoma
- · Eve trauma
- · Cataract

BELOW: Angkor Hospital for Children anesthesia team receives the Health Volunteers Overseas Golden Apple Award in 2020 for their teaching of the nurse anesthetists from Lao Friends Hospital for Children.



Surgical Procedure Category by Year

Surgical Procedures at Angkor Hospital for Children by Year

■ Minor Surgical Procedures ■ Minor Ophthamology Procedures ■ Major Surgical Procedures

■ Major Ophthamology Procedures

