

# Supplemental Material

## Appendix

## APPENDIX 1

### **Anaesthesia setup and training of anaesthesiologists in the Sindh province of Pakistan**

In Pakistan health care supported by the government is stratified at three levels. The primary health care comprises of basic health care units (BHU) and rural health care centres (RHC). (Role of RHC) Secondary care is delivered at tehsil headquarter hospitals (THQ) (called Taluka hospitals in Sindh province) and District headquarter hospitals. These hospitals provide both acute ambulatory and inpatient services. The third tier are the tertiary care hospitals which are located in major cities. The government hospitals are supported by a private health care system. Due to the gaps in provision of health care services a large segment of the population relies on private medical facilities which range from clinics and small hospitals to teaching institutions.

The bodies responsible for post graduate training are the College of Physicians and Surgeons of Pakistan with various faculties. They award two types of diplomas in anaesthesiology, the fellowship FCPS which requires 4 years of structured training and MCPS that needs 2 years of training. In addition, some universities also award a diploma in Anaesthesiology after a two-year training program (DA). More recently some institutions have started offering a five-year Master of Science (MS) in anaesthesia. Government hospitals offer 2 type of staff positions, the academic posts and the non-academic posts with service commitment. Registration authority is PMC.

The following type of anaesthesia positions exist in Sindh.

- Specialist anaesthesiologist someone who possesses either MCPS/Diploma in anaesthesia and a 3 years' work experience (includes residency)
- Non-specialist Grade: These include both medical officers appointed in anaesthesia departments as well as Assistant anaesthesiologists

## APPENDIX 2: SURVEY TOOL

### ANAESTHESIA WORFORCE AT DISTRICT LEVEL IN SINDH PROVINCE OF PAKISTAN

Date of data collection (dd/mm/yy): \_\_\_\_\_

Healthcare facility name: \_\_\_\_\_

Healthcare facility region/district: \_\_\_\_\_

#### DEFINITIONS:

**Physician (specialist) anaesthesiologist:** A graduate of medical school who has completed a nationally recognized specialist anaesthesia training program/residency. (FCPS,MCPS,DA,Others)

**Non-specialist physician anaesthetist:** A graduate of medical school who has not completed a specialist training program/residency in anaesthesia but has undergone some formal anaesthesia training.

**Anaesthesia Technician:** An anesthetic technician is an allied healthcare worker who performs a patient care role predominantly assisting with the administration and monitoring of anaesthesia and has an extensive knowledge of anesthesia techniques, instruments, supplies and technology.

#### Operating Rooms (OR)

How many operating theatres/rooms does this health facility have?

(This includes operating theatres in the main operating theatre complex as well as remote theatres like obstetrics/gyn, accident & emergency, orthopaedics,)

**Total number of ORs:** \_\_\_\_\_

Anaesthesia services no	Full Time no	Part time
_____	_____	_____

- Physician (specialist) anaesthesiologists

- Non-specialist physician anaesthetists
- Other anaesthesia providers
- Anaesthesia Technicians

Do physician anaesthesiologist **trainees** work at this facility as part of their training?

If yes how many, provide numbers: \_\_\_\_\_

<b>Surgical services</b>	<b>Full Time no</b>	<b>Part time no</b>
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- Physician surgeons
- General (non-specialist)  
physicians who provide surgery

<b>Obstetrics/gynaecology services</b>	<b>Full Time no</b>	<b>Part time no</b>
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Obstetrician/gynaecologists (physicians)

General doctors who perform C-sections

#### **COMMENTS**

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