

REPUBLIC OF RWANDA



MINISTRY OF HEALTH

P. O. Box 84 Kigali  
[www.moh.gov.rw](http://www.moh.gov.rw)

# Private Health Facilities in Rwanda Health Service Packages

January 2017



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# **Private Health Facilities in Rwanda**

## **Health Service Packages**

**January 2017**



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# Abbreviations

<b>ACLS</b>	: Advanced Cardiac Life Support
<b>AN</b>	: Antenatal
<b>ARV</b>	: Antiretrovial
<b>ASA</b>	: Acetylsalicylic Acid (aspirin)
<b>BCC</b>	: Behavior Change Communication
<b>BLS</b>	: Basic Life Support
<b>CPAP</b>	: Continuous Positive Airway Pressure
<b>D</b>	: Dispensary
<b>ENT</b>	: Ear, Nose and Throat
<b>FP</b>	: Family Practice
<b>GA</b>	: General Anesthesia
<b>GP</b>	: General Practitioner
<b>H</b>	: Hospital
<b>HIV</b>	: Human Immunodeficiency Virus
<b>IMCI</b>	: Integrated Management of Childhood Illnesses
<b>IUD</b>	: Intrauterine Device
<b>LA</b>	: Local Anesthesia
<b>LRA</b>	: Locoregional Anesthesia
<b>M</b>	: Maternity Home
<b>MO</b>	: Medical Officer
<b>MP</b>	: Medical Practice
<b>MC</b>	: Medical Clinic
<b>NH</b>	: Nursing Home
<b>NICU</b>	: Neonatal Intensive Care Unit
<b>P</b>	: Polyclinic
<b>PALS</b>	: Pediatric Advanced Life Support
<b>PIT</b>	: Provider-Initiated Testing
<b>PMTCT</b>	: Prevention of Mother-to-Child Transmission
<b>RDS</b>	: Respiratory Distress Syndrome
<b>RHSSA</b>	: Rwanda Health Systems Strengthening Activity
<b>SC</b>	: Specialty Clinic
<b>SH</b>	: Specialty Hospital
<b>TB</b>	: Tuberculosis

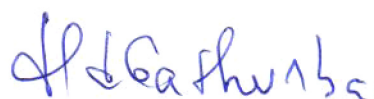
## Foreword

The Ministry of Health (MoH) of Rwanda is pleased to introduce the first set of **Rwandan Private Healthcare Service Packages**. This is the first description of health care service packages for the private sector in Rwanda. It demonstrates an effort to facilitate partnerships between public and private health care providers to strengthen the healthcare structure and services provided. This document describes each level of the private healthcare system in Rwanda in terms of the principal types of services offered, the description and qualifications of staff required to provide the services and the basic equipment needed to carry out the services. The health service packages support the clinical and managerial standards by which the healthcare facilities operate. The goal of this document is to provide guidance in the organization of private healthcare service facilities to work hand in hand with the Ministry of Health to improve the quality of health care and services provided to the population of Rwanda.

The design of this document also illuminates the importance of effective referral processes, linking each level of health care services to provide a seamless transition for the patients to navigate. Rwanda is building a health system based on basic health services that address our major health problems. This edition provides a description of services offered at each level by identifying key interventions that are provided within each service area. This level of detail assists in clarifying which services are available at various facilities within the health care system.

The Ministry of Health shares the vision of providing high quality, safe care for all Rwandans – with the further aspiration of broadening the availability of these services to individuals within the region. This document will provide an introductory resource to clarify the structure of the private healthcare system in Rwanda and guide private practitioners in setting up their practice.

We believe that the private healthcare services will complement the activities of the public sector and look forward to working together to improve the availability and quality of healthcare.



**Dr. Diane GASHUMBA**  
Minister of Health



# Acknowledgements

The production of the Rwandan Private Health Services Packages was completed through a series of workshops and stakeholder feedback activities. The MoH would like to thank all the participants for their contribution to this effort (Annex). The MoH was supported in this process by the Rwandan Health Systems Strengthening Activity (RHSSA), a USAID-funded project managed by Management Sciences for Health.



## Background

The Ministry of Health (MoH) is strengthening its relationship with the private sector. This collaboration is based on 1) greater participation of the private sector in the provision of healthcare services, 2) improved access to care using services offered by the private sector and 3) strengthening the capacity of a unit within the MoH that oversees the private health sector. Private healthcare facilities are owned and operated by physicians, nurses, and other allied healthcare providers. Some of these facilities provide hospitalization and some provide a variety of specialty services such as obstetrics and gynecology, pediatrics, ophthalmology, dental, physiotherapy, mental health and laboratory investigations. Most of these services currently reside in Kigali.

The MoH has identified healthcare accreditation as a means of institutionalizing quality and safety of care; at the same time, the private sector working with the Rwanda Development Board (RDB) has also identified the need to pursue accreditation. In part, the motivation is driven by a desire to be recognized for quality and safety, with the anticipated outcome of increased utilization of services by Rwandans and a desire to attract medical tourism. These health service packages are one step in the process of defining and standardizing care available.

## Purpose

The health services packages have three purposes: 1) to identify standard packages of services at each level of the healthcare system, 2) to provide a guide for the MoH, private sector and non-governmental organizations (NGOs) and donors on how the health care facilities should be staffed and equipped and 3) to promote a health referral system that integrates all levels of services. This document includes the description and qualifications of staff required but does not include the numbers of staff needed for each service, as the quantity of staff will vary based on types of services, workload indicator for staffing needs a human resource planning tool. This document identifies, with tables, the following elements for each level of facility so that the resources needed at each level may be compared:

- 1) Services available at each type of private healthcare facility
- 2) Types and qualifications of human resources required for each service
- 3) Basic equipment needed for each type of service
- 4) Laboratory test packages and required basic equipment

**Table 1: Definitions of Types of Facilities**

Type of Facility	Description	Service Parameters
<b>Dispensary</b>	First level curative, preventive and laboratory activities, which is staffed by an A1 nurse. Deliveries are not performed in dispensaries.	Not to exceed 12 hours
<b>Medical Practice</b>	Consultation, diagnostics, prescriptions of treatment and emergency laboratory tests are carried out, run by medical doctors.	Not to exceed 4 hours; transfer if necessary
<b>Medical Clinic</b>	Diagnosis and/or curative consultation, preventive care and hospitalization is carried out, which is operated by a general practitioner or a specialist in the field.	Maximum 7 hospital beds; night duty mandatory
<b>Specialized Clinic</b>	Diagnosis and specialized consultative care is provided and is operated by a specialist in the field. Hospitalization is permitted. Examples of specialized clinics include ophthalmology, pediatrics, gynecology, ENT, stomatology/dental surgery, dermatology, psychiatry, neuropsychiatry, geriatrics, cardiology, endocrinology, urology and medical imaging.	Hospital beds; night duty mandatory (optional beds and night duties)
<b>Polyclinic</b>	Diagnosis, consultation, curative and preventive care as well as hospitalization in different specialized domains are available. The clinic may be operated by a general practitioner or a specialist in the field.	May have 10-50 beds; night duty is mandatory and services must be available 24/7.
<b>Hospital</b>	A hospital has a clear clinical governance structure and provides the following services but not limited to: general medicine, surgery, gynecology-obstetrics, pediatrics, stomatology, ophthalmology, physiotherapy, dermatology, medical imaging, laboratory, a stock of health products and a dispensing room. A hospital has different departments operated by permanent qualified health professionals. An intensive care unit is mandatory.	Minimum of number beds 50
<b>Specialized Hospital</b>	Diagnosis, consultation, specialized treatment and/or specialized care is provided according to the specialization. Outpatient, inpatient, and investigation services as well as an intensive care unit are mandatory or clear written agreement with a hospital which has intensive care unit. The subspecialty services are operated by specialized professionals. Some health products and a dispensing facility are available; the list of health products is established by the Minister of Health.	Minimum of number of beds 20
<b>Paramedical Facilities</b>		
<b>Biomedical</b>	Analysis of biological samples from the human body is exclusively carried out without	

<b>Laboratory</b>	Providing consultations, health care or distributing health products. The lab is managed by a biomedical laboratory scientist with a Bachelor's degree.
<b>Antenatal Clinic</b>	Consultations, antenatal and postnatal care are carried out. The clinic is operated by at least a midwife with advanced diploma.
<b>Nursing Home</b>	A nursing home is a place for people who do not need to be in a hospital but cannot be cared for at home. Most nursing homes have nursing aides and skilled nurses on hand 24 hours/day. Some nursing homes are set up like a hospital. The staff provides nursing care, as well as physical, speech and occupational therapy.
<b>Physiotherapy</b>	Diagnosis and/or consultation treatment and physical exercises are carried out in the areas of narco-therapy, thermotherapy, cryotherapy, pulley therapy, physical re-education and/or physiotherapy. The clinic is managed by a holder of at least a Bachelor's degree in physiotherapy.
<b>Dental</b>	Diagnosis and/or consultation and care in the domain of the odontology is provided. The clinic is managed by a person with at least a Bachelor's degree in dental therapy.
<b>Ophthalmic Technician</b>	Consultation and treatment in the areas of ophthalmology is provided and is managed by at least an ophthalmic technician with a Bachelor's degree.
<b>Optometry</b>	Only a clinical optometrist having academic qualification of at least A0 level is permitted to prescribe and sell medical eyeglasses or contact lenses; they examine, prescribe and dispense.
<b>Ophthalmologist</b>	An ophthalmologist possesses all the equipment necessary to prescribe medical eyeglasses and treat all eye related diseases but does not sell eyeglasses.
<b>Imaging Center</b>	Medical imaging techniques are carried out by a medical imaging officer with at least a Bachelor's degree.

## Table 2: Levels of Health Care Workers

Table 2 describes the qualifications required in Rwanda for each level of health care worker.

Type of Health Care Worker	Qualifications
<b>Sub-specialists:</b> Cardiologist, pulmonologist, anesthesiologist, ophthalmologist, radiologist, oncologist, pediatrician, psychiatrist, obstetrician, ENT, maxilla- facial surgeon, nephrologist, gastroenterologists, pathologist	Specialty certification (greater than A0) Master in Pediatrics/Pediatrician and Internal Medicine and Sub specialization Cardiology, Master in Anesthesiology, Master in Ophthalmology (Specialization in Ophthalmology), Master in Radiology (Specialization in Radiology), Master in Oncology, Master in Psychiatry(Specialization in Psychiatry), Gynecology & Obstetrician/Master in Gynecology & Obstetrician, Master in Ear, Nose and Throat Surgeon/ Ear, Nose and Throat Surgeon, Master in Maxilla-facial surgery, Master in Nephrology, Master in Gastroenterology, Master in Pathology.
<b>Specialists:</b> Internal medicine, surgeon, dentist, podiatrist, emergency medicine	Master Degree/Specialization in Internal Medicine, General Surgery, Orthopedic, Neurosurgery, Emergency Medicine, Dentist
<b>Physicians:</b> General and family practitioners	A0
<b>Psychologists</b>	Bachelor's degree
<b>Nurses/Midwives</b>	A0 level: Bachelor's degree
	A1 level: advanced certificate following 3 years of school
<b>Nurse Anesthetist</b>	A1/A0
<b>Mental Health Nurse</b>	A1/A0
<b>Allied Health Professionals</b>	A1/A0
<ul style="list-style-type: none"> <li>• <b>Dental</b></li> </ul>	Dental Assistant (DA) – 1 year training
	Dental Therapist (BDT) – 3 years' training
	Bachelor of Dental Surgery (BDS) – 5 years' training
<ul style="list-style-type: none"> <li>• <b>Dietician/Nutritionist</b></li> </ul>	A0/Master's degree
<ul style="list-style-type: none"> <li>• <b>Physiotherapist</b></li> </ul>	A1/A0
<ul style="list-style-type: none"> <li>• <b>Occupational Therapist</b></li> </ul>	A0
<ul style="list-style-type: none"> <li>• <b>Optometrist</b></li> </ul>	A0
<ul style="list-style-type: none"> <li>• <b>Optician</b></li> </ul>	Diploma
<ul style="list-style-type: none"> <li>• <b>Ophthalmic Technician</b></li> </ul>	A1 special course; certifications
<ul style="list-style-type: none"> <li>• <b>Lab Scientist</b></li> </ul>	A0
<ul style="list-style-type: none"> <li>• <b>Lab Technician</b></li> </ul>	A1

**Table 3: Health Service Packages for Private Healthcare Facilities**

CLINICAL SERVICES														
Service	Interventions	Level of Service										Level of Healthcare Worker		
		D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications		
<b>Health Promotion</b>														
	Behavior change communication (BCC); health education for patients and families	X	X	X	X	X	X	X	X	X	X	X	Nurse/ Midwife	A1/A0
	Community health mobilization/sensitization								X				Nurse	A1/A0
	School health				X			X	X				Psychologist/Mental health Nurse/ Pediatricians/ Psychiatrist	A1/A0/ Specialist
	Fight against stigma of patients with chronic diseases, e.g. chronic diseases, mental health, HIV, epilepsy.	X	X	X	X	X	X	X	X	X	X	X	All healthcare workers	A0, Specialists, A1/A0
	Home visits	X	X	X	X	X	X	X	X	X	X	X	Nurse	A1/A0
	Eye and oral health promotion	X	X	X	X	X	X	X	X	X	X	X	Nurse	A1/A0
	Organization of Mutuelle Health Insurance								X				Nurse	A1/A0
	Epidemiological surveillance of diseases	X	X	X	X	X	X	X	X	X	X	X	Nurse	A1/A0
	Nutrition promotion	X	X	X	X	X	X	X	X	X	X	X	Dietician/Nurse	A1/A0
	Hygiene, sanitation and environmental health	X	X	X	X	X	X	X	X	X	X	X	Nurse	A1/A0
	Education on non-communicable diseases	X	X	X	X	X	X	X	X	X	X	X	Nurse	A1/A0

Outpatient Services		D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
General Medical Consultation	General Practice		X	X	X	X	X	X			Physician	Degree in Medicine
	Dental	X	X	X	X	X	X	X			Dentist	A0
Specialist	Ophthalmology			X	X	X	X	X			Ophthalmologist	Specialist/Master in degree
	Anesthesia			X	X	X	X	X			Anesthesiologist	Specialist/Master in degree
	Family Medicine		X	X	X	X	X	X			Family Practitioner	Degree in Medicine or Specialist in Family Medicine
	Psychiatry			X	X	X	X	X			Psychiatrist	Specialist
	Emergency Medicine	X	X	X	X	X	X	X			Physician or Specialist in Emergency Medicine	Physician or Specialist in Emergency Medicine
	Radiology			X	X	X	X	X			Radiologist	Specialist in Radiology
	Internal Medicine		X	X	X	X	X	X			Internist	General Medicine or Internist
	Obstetrics & Gynecology			X	X	X	X	X			Obstetrician	Gynecology & Obstetrician Specialist/Master in Gynecology & Obstetrician
	Pediatrics			X	X	X	X	X			Pediatrician	Specialist/Master in Pediatrics
	Medical Oncology			X	X	X	X	X			Oncologist	Master in Oncologist/Specialist in Oncology
Stomatology			X	X	X	X	X			Stomatology/Maxillofacial Surgeon	Specialist in Stomatology/Maxillofacial Surgery/Master in Maxillofacial Surgery	
Ear, Nose, and Throat (ENT)			X	X	X	X	X			ENT specialist	Master in ENT surgery/Specialization in ENT Surgery	
Renal Dialysis				X	X	X	X			Nephrologist	Sub Specialist in Nephrology with Masters in Medicine or Pediatrics	

		D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
<b>Nurse/Midwives and Allied Health Clinics</b>	Endoscopy				X	X	X	X			Gastroenterologist	Sub Specialist in Gastroenterology with Masters in Medicine or Pediatrics
	Clinical Psychology		X	X	X	X	X	X			Clinical Psychologist	A1/A0
	Family Planning	X	X	X	X	X	X	X	X		Nurse/ Midwife	A1/A0
	General Counseling	X	X	X	X	X	X	X	X	X	Nurse	A1/A0
	Midwife Episode								X		Midwife	A1/A0
	Nutrition/Dietetics	X	X	X	X	X	X	X	X	X	Nutritionist/ Dietitian	A1/A0
	Occupational Therapy		X	X	X	X	X	X			Occupational Therapist	A1/A0
	Optometry			X	X	X	X	X			Optometrist	A1/A0
	Physiotherapy		X	X	X	X	X	X			Physiotherapist	A1/A0
	Primary Health Care	X	X	X	X	X	X	X	X			Nurse
Wound Management	X	X	X	X	X	X	X	X			Nurse	A1/A0
<b>Maternal and Newborn Health</b>												
<b>General</b>	Consultation	X	X	X	X	X	X	X	X		General Practitioner (GP)/Medical Officer (MO), Gynecology & Obstetrician, FP, Nurse	A0, Specialist A1/A0
	Pre-marital consultation	X	X	X	X	X	X	X	X		GP/MO, Gynecology & Obstetrician, FP, Nurse	A0, Specialist A1/A0

	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
<b>Pregnancy Antenatal Care Childbirth</b>	X	X	X	X	X	X	X	X		GP/MO, Gynecology & Obstetrician, FP, Nurse / Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Gynecology & Obstetrician, FP, Nurse / Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Gynecology & Obstetrician, FP, Nurse / Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Gynecology & Obstetrician, FP, Nurse / Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Nurse / Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Nurse/ Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Nurse/ Midwife	A0, Specialist A1/A0 with HIV training
	X	X	X	X	X	X	X	X		GP/MO, Nurse/ Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Nurse/ Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Nurse / Midwife	A0, Specialist A1/A0
	X	X	X	X	X	X	X	X		GP/MO, Nurse / Midwife	A0, Specialist A1/A0



	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
Prevention of pre-eclampsia: • Calcium • Low dose ASA	X	X	X	X	X	X	X	X		GP/MO, Midwife	A0 A1
Treatment of eclampsia: magnesium sulfate			X	X	X	X	X			Gynecology & Obstetrician, Midwife	Specialist A1/A0
Induction of labor to manage pre-labor rupture of membranes at term			X	X	X	X	X			Gynecology & Obstetrician, Midwife	Specialist A1/A0
Prevention of respiratory distress syndrome (RDS) in preterm babies			X	X	X	X	X			Gynecology & Obstetrician	Specialist A1/A0
Monitoring labor			X	X	X	X	X			Gynecology & Obstetrician, Midwife	Specialist A1/A0
Induction of labor for prolonged pregnancy			X	X	X	X	X			Gynecology & Obstetrician, Midwife	Specialist A1/A0
Active management of 3 <sup>rd</sup> stage labor to prevent postpartum hemorrhage			X	X	X	X	X			Midwife	Specialist A1/A0
Controlled cord traction			X	X	X	X	X			Gynecology & Obstetrician, Midwife	Specialist A1/A0
Episiotomy			X	X	X	X	X	X		GP, Specialist, Midwife/Certified Nurse	Specialist A1 (EMONC)
Pudendal anesthesia			X	X	X	X	X			Anesthesiologist, Anesthetist under supervision of Anesthesiologist	Specialist A1/A0
Repair perineal tears (3rd & 4th degree managed by specialist)			X	X	X	X	X			Gynecology & Obstetrician, GP, Midwife	Specialist A1/A0
Amniocentesis			X	X	X	X	X			Gynecology & Obstetrician	Specialist with training

	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
	Screen & manage HIV (if not already tested)	X	X	X	X	X	X	X		GP, FP, Gynecology & Obstetrician, Midwife	A0, Specialist A1
	Management of malpresentation			X	X	X	X			Gynecology & Obstetrician, Midwife	Specialist
<b>Basic Emergency Obstetric Care</b>	Manual removal of placenta			X	X	X	X			Gynecology & Obstetrician, Midwife	Specialist A1/A0
	Assisted vaginal delivery			X	X	X	X	X		Gynecology & Obstetrician, Midwife	Specialist A1/A0
	Removal of retained products			X	X	X	X			Gynecology & Obstetrician, Midwife	Specialist A1/A0
	C-section: Prophylactic antibiotics			X	X	X	X			Gynecology & Obstetrician /GP	Specialist
<b>Comprehensive Emergency Obstetric Care</b>	Management of post-partum hemorrhage: Prescription of Blood transfusion			X	X	X	X			Gynecology & Obstetrician or GP	Specialist
	Immediate thermal care	X	X	X	X	X	X	X		Gynecology & Obstetrician,	Specialist
<b>Postnatal care: newborn</b>	Breastfeeding within 1 <sup>st</sup> hour	X	X	X	X	X	X	X		Pediatrician, Gynecology & Obstetrician, Midwife	Specialist A1/A0
	Hygienic cord & skin care	X	X	X	X	X	X			Pediatrician, Gynecology & Obstetrician Midwife	Specialist A1/A0
	Hepatitis screening & immunization	X	X	X	X	X	X			All physicians	A0 and Specialist
	Neonatal resuscitation		X	X	X	X	X	X		Gynecology & Obstetrician, Pediatrician, Midwives	Specialist A0

	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
			X	X	X	X	X			Pediatrician, Midwife, Nurse	Specialist A1/A0
				X	X	X	X			Pediatrician	Specialist
					X	X	X			Pediatrician/ Anesthesiologist	Specialist
			X	X	X	X	X			Pediatrician	Specialist
				X	X	X	X			Pediatrician	Specialist
				X	X	X	X			All Physicians, Midwife	Specialist/ A0/ A1
			X	X	X	X	X			Pediatrician, Trained GP	Specialist
		X	X	X	X	X	X			All Physicians, Midwife/Nurse	A0, Specialist A1
		X	X	X	X	X	X			All Physicians, Midwife/Nurse	A0, Specialist A1
				X	X	X	X			Gynecology & Obstetrician	Specialist
<b>Family Planning</b>	X	X	X	X	X	X	X	X		All Physicians, Nurse/ Midwife	A1/A0
	X	X	X	X	X	X	X	X		All Physicians, Nurse/ Midwife	A1/A0
<b>Child Health</b>											
<b>Newborns</b>		X	X	X	X	X	X	X		All Physicians	A0, Specialist
			X	X	X	X	X	X		Pediatrician and GP under supervision of Pediatrician.	A0, Specialist
			X	X	X	X	X	X		Pediatrician and GP under supervision of Pediatrician	A0, Specialist

	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
	Evaluation & management of uncomplicated premature infant		X	X	X	X	X			Pediatrician	Specialist
				X	X	X	X			Pediatrician	Specialist
	Supra-public bladder tap		X	X	X	X	X			All Physicians	A0, Specialist
						X	X			Pediatrician/ Neonatologist	Specialist
<b>Diarrhea Pneumonia Malaria Measles Malnutrition HIV Meningitis</b>	Integrated management of childhood illnesses (IMCI)	X	X	X	X	X	X	X		All Physicians, Nurse	A0, Specialist A1/A0
	Meningitis to be managed in hospitals and specialty hospitals exclusively										
	Growth monitoring	X	X	X	X	X	X	X		All Physicians, /Nurses	A0, Specialist A1/A0
	Routine immunizations	X	X	X	X	X	X	X		All Physicians, Nurses	A0, Specialist A1/A0
<b>Expanded Program on Immunizations (EPI)</b>											
<b>Child-friendly services<sup>1</sup></b>	Fundamental and child rights	X	X	X	X	X	X	X		All Physicians, Nurses	A0, Specialist A1/A0
	Dignity Participation Equitable access to quality care Best interests of the child										
<b>Internal Medicine</b>											
<b>General</b>	Diagnosis & management of uncomplicated medical conditions									All Physicians	A0, Specialist
	Independent care of more complicated general medicine problems, which may be life-threatening									Internist	Specialist

<sup>1</sup> Council of Europe. Guidelines of the Committee of Ministers of the Council of Europe on child-friendly health care. 21 Sept 2011. Available at: [http://www.coe.int/t/dg3/health/Guidelines\\_on\\_child\\_friendly\\_health\\_care](http://www.coe.int/t/dg3/health/Guidelines_on_child_friendly_health_care_English_version_.pdf)

Communicable Diseases		D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
<b>General</b>	Consultation, regular checkup	X	X	X	X	X	X	X		X	All Physicians, Nurse	A0, Specialist A1/A0
	Post-exposure prophylaxis	X	X	X	X	X	X	X		X	All Physicians, Nurse	A0, Specialist A1/A0
<b>Note:</b> Medication for HIV, TB, Malaria not available to private HFs												
<b>Tuberculosis</b>	TB screening	X	X	X	X	X	X	X		X	All Physicians, Nurse	A0, Specialist A1/A0
	Preventive treatment		X	X	X	X	X	X			All Physicians	A0, Specialist
	TB treatment		X	X	X	X	X	X			All Physicians	
	Prevention	X	X	X	X	X	X	X		X	All Physicians, Nurse	A0, Specialist A1/A0
<b>Malaria</b>	Treatment	X	X	X	X	X	X	X		X	All Physicians, Nurse	A0, Specialist A1/A0
	HIV testing & counseling	X	X	X	X	X	X	X	X		All Physicians, Nurse	A0, Specialist A1/A0
<b>HIV/STIs</b>	HIV treatment		X	X	X	X	X	X	X		All Physicians	A0, Specialist
	Prevention of Mother-to-Child Transmission (PMTCT)		X	X	X	X	X	X	X		All Physicians	A0, Specialist
	Provider-initiated testing (PIT)		X	X	X	X	X	X	X		All Physicians	A0, Specialist
<b>Acute respiratory diseases</b>	Treatment of ARI	X	X	X	X	X	X	X			All Physicians, Nurse	A0, Specialist A1/A0
	Pneumonia	X	X	X	X	X	X	X			All hysicians, Nurse	A0, Specialist A1/A0
<b>Skin infections</b>	Diagnosis & management of general skin infections	X	X	X	X	X	X	X			All Physicians, Nurse	A0, Specialist A1/A0
	Parasitic deworming	X	X	X	X	X	X	X			All Physicians, Nurse	A0, Specialist A1/A0

Non-communicable Diseases		D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
<b>General</b>	General/initial consultation		X	X	X	X	X	X			All Physicians	A0, Specialist
<b>Oncology</b>	Oncology consultation			X	X	X	X	X			Oncology Specialist	Specialist
	Bone marrow aspiration			X	X	X	X	X			MO, Oncologist	Specialist
	Chemotherapy			X	X	X	X	X			Different trained specialist depending where diagnosed	Specialist
	PUVA photo-chemotherapy			X	X	X	X	X			Different trained specialist depending where diagnosed	Specialist
<b>Neurological conditions</b>												
	Neurological consultation		X	X	X	X	X	X			GP and Specialist	Specialist
	Lumbar puncture			X	X	X	X	X			GP and Specialist	Specialist
	Electroencephalogram (EEG)			X	X	X	X	X			Psychiatrist	Specialist
	Electromyography			X	X	X	X	X			Psychiatrist	Specialist
	Intrathecal administration of medications						X	X				Specialist
	Muscle biopsy				X	X	X	X				Specialist
	Myelography/arteriography			X	X	X	X	X			Radiologist	Specialist
	Transcutaneous angiography of the cerebral vessels				X	X	X	X			Radiologist	Specialist
<b>Respiratory conditions</b>												
	Asthma	X	X	X	X	X	X	X			All Physicians	A0, Specialist
	Chronic Obstructive Pulmonary Disease (COPD)	X	X	X	X	X	X	X			All Physicians	A0, Specialist
	Thoracentesis						X	X			Anesthesiologist	Specialist
	Chest tube placement						X	X			Anesthesiologist	Specialist

	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
Intubation						X	X			Anesthesiologist	Specialist ACLS trained
Ventilator management						X	X			Anesthesiologist	Specialist
Tracheotomy						X	X			Anesthesiologist	Specialist
Lung biopsy, mediastinum or pleural with percutaneous needle						X	X			Pulmonologist, Surgeon	Specialist
Bronchoscopy, removal of foreign object						X	X			ENT Surgeon Pulmonologist	Specialist
Bronchoscopy, with trans-bronchial biopsy						X	X			ENT Surgeon Pulmonologist	Specialist
Chemical pleurodesis						X	X			Pulmonologist	Specialist
Interpretation of pulmonary function studies						X	X			Pulmonologist	Specialist
Polysomnography						X	X			Pulmonologist	Specialist
Swan-Ganz catheter placement						X	X			Pulmonologist Cardiologist Anesthesiologist	Specialist
Trans-tracheal aspiration						X	X			Pulmonologist	Specialist
Tube thoracostomy placement						X	X			Pulmonologist	Specialist
Central IV-line placement						X	X			Pulmonologist Cardiologist Anesthesiologist	Specialist
<b>Cardiovascular conditions</b>											
Screening and follow up	X	X	X	X	X	X	X		X	Nurse	A1/A0
Electrocardiogram (ECG)		X	X	X	X	X	X			All Physicians	A0, Specialist
Hypertension	X	X	X	X	X	X	X		X	All Physicians, Nurse.	A0, Specialist A1/A0
Stroke				X		X	X			Cardiologist	Specialist
Myocardial infarction						X	X			Cardiologist	Specialist
Rheumatic heart disease						X	X			Cardiologist	Specialist

	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
Cardiovascular exercise study			X	X	X	X	X			GP and specialist	Specialist
Central IV-line placement					X	X	X			Pulmonologist, Cardiologist Anesthesiologist	Specialist
Swan-Ganz catheter placement					X	X	X			Pulmonologist Cardiologist, Anesthesiologist	Specialist
Defibrillation					X	X	X			Health workers trained in advanced life support	A0, Specialist
<b>Gynecological conditions</b>											
Gynecological conditions, including sexually transmitted diseases	X	X	X	X	X	X	X	X		All Physicians, Nurse.	A0, Specialist A1/A0
Pap smears & pelvic exams		X	X	X	X	X	X			All Physicians	A0, Specialist
Insert Intrauterine device (IUD)		X	X	X	X	X	X			All Physicians	A0, Specialist
Remove IUDs		X	X	X	X	X	X			All Physicians	A0, Specialist
Cervical biopsies & polypectomy				X	X	X	X			Gynecology & Obstetrician	Specialist
Endometrial biopsies			X	X	X	X	X			Gynecology & Obstetrician	Specialist
Culdocentesis				X	X	X	X			Gynecology & Obstetrician and GP	Specialist
Bartholin cyst drainage or marsupialization			X	X	X	X	X			Gynecology & Obstetrician	Specialist
Diagnostic and therapeutic dilation and curettage			X	X	X	X	X			Gynecology & Obstetrician	Specialist
Colposcopy			X	X	X	X	X			Gynecology & Obstetrician	Specialist
Hysteroscopy, diagnostic			X	X	X	X	X			Gynecology & Obstetrician	Specialist
Loop electrosurgical excision procedure (LEEP)			X	X	X	X	X			Gynecology & Obstetrician	Specialist
Gynecological cancer			X	X	X	X	X			Gynecology & Obstetrician	Specialist



	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualifications
		X	X	X	X	X	X			Gynecology & Obstetrician/Urologist	Specialist
		X	X	X	X	X	X			All Physicians	GP, Specialist
		X	X	X	X	X	X			Gynecology & Obstetrician	Specialist
		X	X	X	X	X	X			GP/ Gynecology & Obstetrician	GP, Specialist
				X	X	X	X			Gynecology & Obstetrician and Surgeon	Specialist
<b>Gastrointestinal (GI) conditions</b>											
		X	X	X	X	X	X		X	All Physicians, Nurse	AO, Specialist A1/A0
				X	X	X	X			Gastroenterologist	Specialist
				X	X	X	X			Gastroenterologist	Specialist
				X	X	X	X			Gastroenterologist	Specialist
				X	X	X	X			Gastroenterologist	Specialist
<b>Urology/ Nephrology</b>											
		X	X	X	X	X	X		X	All Physicians, Nurse	AO, Specialist A1/A0
						X	X			Nephrologist	Specialist
						X	X			Nephrologist	Specialist
						X	X			Nephrologist	Specialist
					X	X	X			Nephrologist	Specialist

		Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification	
<b>ENT SURGERY</b>														
<b>Ear</b>		Ear washout	x	X	X	X	X	X	X		X	Physician, Nurse	Specialist, A0 A1	
		Catheterization			X	X	X	X	X			ENT Surgeon	Specialist	
		Keloid excision			X	X	X	X	X			ENT Surgeon, GP	Specialist, GP	
		Pre-auricular sinus excision			X	X	X	X	X			ENT Surgeon	Specialist	
		Excision				X	X	X	X			ENT Surgeon	Specialist	
		Myringotomy +/- Ventilation tube insertion				X	X	X	X			ENT Surgeon	Specialist	
		Mastoidectomy				X	X	X	X			ENT Surgeon	Specialist	
		Tympanoplasty				X	X	X	X			ENT Surgeon	Specialist	
		Stapedectomy						X	X			ENT Surgeon	Specialist	
		Facial nerve decompression							X			ENT Surgeon	Specialist	
		Endolymphatic sac decompression							X			ENT Surgeon	Specialist	
		Acoustic neuroma excision							X			ENT Surgeon	Specialist	
		Glomus tumor excision							X			ENT Surgeon	Specialist	
		Implantable hearing devices							X			ENT Surgeon	Specialist	
		Hearing aid fitting				X	X	X	X	X		X	Audiologist, Audiometrist	A0
		Audiometry- diagnostic				X	X	X	X	X			Audiologist, Audiometrist	A0
		Electronystagmography/ vestibulometry				X	X	X	X	X			Audiologist	A0
	Tympanometry + Stapedial Reflexes				X	X	X	X	X			ENT Surgeon, Audiologist	Specialist, A0	
	Brainstem-evoked Response Audiometry				X	X	X	X	X			Audiologist	A0	

Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
OAEs - diagnostic			X	X	X	X	X			Audiologist	A0
	X	X	X	X	X	X	X			Audiologist, Audiometrist, Registered nurse	A0, A1
Foreign body extraction	X	X	X	X	X	X	X			Physician, Nurses, ENT Surgeon	Specialist, A0, A1
Ear repair	X	X	X	X	X	X	X			Physician, Nurses, ENT Surgeon	Specialist, A0, A1
Incision & drainage	X	X	X	X	X	X	X			Physician, Nurses, ENT Surgeon	Specialist, A0, A1
Incision & Drainage			X	X	X	X	X			ENT Surgeon	Specialist
Excision				X	X	X	X			ENT Surgeon	Specialist
Nasal endoscopy & biopsy				X	X	X	X			ENT Surgeon	Specialist
				X	X	X	X			ENT Surgeon	Specialist
Parotidectomy				X	X	X	X			ENT Surgeon	Specialist
Tracheostomy				X	X	X	X			ENT Surgeon	Specialist
Sublingual gland excision				X	X	X	X			ENT Surgeon	Specialist
Dilatation Wharton's/ Stensen's duct				X	X	X	X			ENT Surgeon	Specialist
Submandibular Gland Excision				X	X	X	X			ENT Surgeon	Specialist
Endo-buccal extraction of salivary calculus				X	X	X	X			ENT Surgeon	Specialist
Laryngectomy						X	X			ENT Surgeon, Speech Therapist	Specialist
Pharyngectomy						X	X			ENT Surgeon, Speech Therapist	Specialist
Lymph node biopsy				X	X	X	X			ENT Surgeon	Specialist
Excision				X	X	X	X			ENT Surgeon	Specialist
Excision ranula				X	X	X	X			ENT Surgeon	Specialist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
	Glossectomy						X	X			ENT Surgeon, Maxillo-facial Surgeon, Speech Therapist	Specialist
	Neck dissection				X	X	X	X			ENT Surgeon	Specialist
	Parathyroid surgery				X	X	X	X			ENT Surgeon	Specialist
	Thyroidectomy				X	X	X	X			ENT Surgeon	Specialist
Laryngo- Broncho-esophageal	Esophagoscopy + extraction/removal				X	X	X	X			ENT Surgeon	Specialist
	Bronchoscopy + extraction/removal						X	X			ENT Surgeon	Specialist
	Direct laryngoscopy				X	X	X	X			ENT Surgeon	Specialist
Larynx	Flexible nasopharyngolaryngoscopy			X	X	X	X	X			ENT Surgeon	Specialist
	Phonemicsurgery				X	X	X	X			ENT Surgeon, Speech Therapist	Specialist
	Medialization/laryngoplasty/Lateralization				X	X	X	X			ENT Surgeon	Specialist
	Excision Laryngocele				X	X	X	X			ENT Surgeon	Specialist
Maxillo-Facial	Laryngotracheal reconstruction						X	X			ENT Surgeon	Specialist
	Facial bone fractures - reduction				X	X	X	X			ENT Surgeon, Maxillo-facial	Specialist
Nose	Nasal Repair cuts	X	X	X	X	X	X	X			ENT Surgeon	Specialist
	Synechia release				X	X	X	X			ENT Surgeon	Specialist
	Tumor Biopsy				X	X	X	X			ENT Surgeon	Specialist
	Diathermo-coagulation (SMD)				X	X	X	X			ENT Surgeon	Specialist
	Functional endoscopic sinus surgery				X	X	X	X			ENT Surgeon	Specialist
	Turbinectomy				X	X	X	X			ENT Surgeon	Specialist
	Posterior nasal packing			X	X	X	X	X			ENT Surgeon	Specialist
						X	X	X				ENT Surgeon

Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
Septoplasty				X	X	X	X			ENT Surgeon	Specialist
Choanoplasty				X	X	X	X			ENT Surgeon	Specialist
Anterior nasal packing	X	X	X	X	X	X	X			Physicians, Nurses, ENT Surgeon	Specialist, A0, A1
Reduction nasal bone fracture				X	X	X	X			ENT Surgeon	Specialist
Foreign body extraction	X	X	X	X	X	X	X			Physician, Nurses, ENT Surgeon	Specialist, A0, A1
Antral washout				X	X	X	X			ENT Surgeon	Specialist
Frontal Sinus Trephination				X	X	X	X			ENT Surgeon	Specialist
Caldwell –Luc				X	X	X	X			ENT Surgeon	Specialist
Antrostomy				X	X	X	X			ENT Surgeon	Specialist
Incision & drainage			X	X	X	X	X			ENT Surgeon	Specialist
Release	X	X	X	X	X	X	X			Physician, Nurses, ENT Surgeon	Specialist, A0, A1
Adenoidectomy				X	X	X	X			ENT Surgeon	Specialist
Tonsillectomy				X	X	X	X			ENT Surgeon	Specialist
Uvulopalatopharyngoplasty				X	X	X	X			ENT Surgeon	Specialist
<b>Ophthalmology</b>											
General	X	X	X	X	X	X	X		X	All Physicians, Nurse	A0, Specialist A1/A0
Anterior segment (allergy, conjunctivitis, Chalazion)				X	X	X	X			Ophthalmologist, Nurse	Specialist A1/A0
Posterior segment				X	X	X	X			Ophthalmologist	Specialist
Pediatric				X	X	X	X			Ophthalmologist	Specialist
Oculo-plastic				X	X	X	X			Ophthalmologist	Specialist
Neuro-ophthalmology				X	X	X	X			Ophthalmologist	Specialist

Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
<b>Rheumatology</b>											
Arthritis and gout		X	X	X	X	X	X			All Physicians	A0, Specialist
Connective tissues diseases, e.g. systemic lupus erythematosus & scleroderma			X	X	X	X	X			Rheumatologist Rheumatologist	Specialist
Regional pain syndromes, e.g. tendonitis, bursitis, disc disease		X	X	X	X	X	X			Rheumatologist	A0, Specialist
Systemic vasculitis				X	X	X	X			All Physicians	A0, Specialist
Raynaud's syndrome		X	X	X	X	X	X			All Physicians	A0, Specialist
Osteoporosis		X	X	X	X	X	X			All Physicians	A0, Specialist
Bone density measurement				X	X	X	X			All Physicians	A0, Specialist
Intra-articular injections		X	X	X	X	X	X			Orthopedic Surgeon	Specialist
<b>Geriatrics</b>											
Assessment of physical and mental capabilities Exercise programs Social assessment Environmental safety devices & education	X	X	X	X	X	X	X		X	All Physicians, Nurses	Specialist A1/A0
<b>Dermatology</b>											
Uncomplicated basal & squamous cell carcinomas				X	X	X	X			Dermatologist, General Surgeon or area Specialist	Specialist
Routine biopsy of dermatological problem, skin cancer, melanoma				X	X	X	X			Dermatologist	Specialist
Routine excision & drainage of cysts,		X	X	X	X	X	X			All Practitioners	A0, A1, Specialists
X-ray therapy for dermatology				X	X	X	X			Dermatologist, Radiation Oncologist	Specialist
MOH's micrographic surgery				X	X	X	X			Dermatologist and Plastic Surgeon and Certified General Surgeon	Specialist

Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
CO2 laser				X	X	X	X			Dermatologist and Plastic Surgeon and Certified General Surgeon	Specialist
Liposuction				X	X	X	X			Dermatologist and Plastic Surgeon and Certified General Surgeon	Specialist
Hair transplantation				X	X	X	X			Certified Technician and Dermatologist, Surgeon	Specialist
Microliipo injection				X	X	X	X			Dermatologist, Surgeon	Specialist
Injections for treating scars				X	X	X	X			Dermatologist, Surgeon	Specialist
Dermabrasion & face peels				X	X	X	X			Dermatologist, Surgeon	Specialist
Dermato surgery				X	X	X	X			Dermatologist	Specialist
Curettage (seborrheic keratosis)				X	X	X	X			Dermatologist	Specialist
Cautery				X	X	X	X			Dermatologist	Specialist
Cryosurgery (warts and other skin lesions)				X	X	X	X			Dermatologist	Specialist
Dermato allergology				X	X	X	X			Dermatologist	Specialist
Phototherapy				X	X	X	X			Dermatologist	Specialist
Dermatologic pathology				X	X	X	X			Dermatologist	Specialist
<b>Mental Health</b>											
Mental health disorders	Assessment, including post traumatic distress syndrome	X	X	X	X	X	X	X		All Physicians, Clinical Psychologist, Nurse	A0, A1, Specialists A1/A0
	Clinical psychology and counselling	X	X	X	X	X	X	X		All Physicians, Clinical Psychologist, Nurse	A0, A1, Specialists A1/A0
	Mental health and psychosocial support	X	X	X	X	X	X	X		All Physicians, Clinical Psychologist, Nurse	A0, A1, Specialists A1/A0

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
<b>Psychiatric illness</b>	Adult psychiatry				X	X	X	X			Psychiatrist	Specialist
	Child and adolescent psychiatry				X	X	X	X			Psychiatrist	Specialist
	Liaison psychiatry				X	X	X	X			Psychiatrist	Specialist
<b>Dental</b>												
	General		X	X	X	X	X	X			All Physicians	A0/Specialist
	Prosthetics and orthodontics				X	X	X	X			Dental Surgeon	Specialist
	Dental imaging				X	X	X	X			Dental Surgeon	Specialist
	Restorative dentistry				X	X	X	X			Dental Surgeon	Specialist
	Pediatric dentistry				X	X	X	X			Dental Surgeon	Specialist
	Oral surgery				X	X	X	X			Dental Surgeon	Specialist
	Periodontology				X	X	X	X			Dental Surgeon	Specialist
<b>Accident and Injury</b>												
<b>Physical Trauma and Fractures</b>	Reception and triage	X	X	X	X	X	X	X	X		All Physicians, Nurses.	A0/Specialist, A1/A0
	Screening for abuse	X	X	X	X	X	X	X	X		All Physicians, Nurses	A0/Specialist, A1/A0
	Care of sprains, strains and contusions	X	X	X	X	X	X	X		X	All Physicians, Nurses	A0/Specialist, A1/A0
	Simple closed fractures & dislocations				X	X	X	X			Surgeons and GPs where possible	Specialist
	Massive trauma management						X	X			All GPs and Surgeons	A0, Specialist
	Chest tube insertion					X	X	X			Surgeons	Specialist
<b>Small Lacerations</b>	Suturing	X	X	X	X	X	X	X	X	X	All Physicians Nurses / Midwife	A0/Specialist A1/A0
<b>Medical Emergencies</b>												
<b>Convulsions</b>	Administration of anticonvulsants	X	X	X	X	X	X	X	X	X	All Physicians Nurses/ Midwife	A0/Specialist A1/A0
<b>Drug overdose</b>	Treatment of drug overdose						X	X			Emergency Physician	Specialist
<b>Diabetic ketoacidosis</b>	Management of diabetic ketoacidosis				X	X	X	X			Internist	Specialist



	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
<b>Pulmonary embolism</b>	Management of massive pulmonary embolism						X	X			Internist/ Pulmonologist	Specialist
<b>Cardiac Emergencies</b>	Myocardial infarction, congestive heart failure or stroke				X	X	X	X			Cardiologist	Specialist
<b>Resuscitation</b>	Basic life support (BLS)	X	X	X	X	X	X	X	X	X	All Health Care Professionals	Trained in BLS
	Pediatric advanced life support (PALS)						X	X			Pediatrician/Nurses	Specialist A1 trained in PALS
<b>Ambulance</b>	Advanced cardiac life support (ACLS)						X	X			Cardiologist, Anesthesiologist, Critical Care Specialists, Critical Care Nurses	Specialist, trained in ACLS
	Advanced trauma life support						X	X			Surgeons (certified)	Specialist
	Transfer patients to other facilities	X	X	X	X	X	X	X		X	Nurses	A1/A0
	Transport critically ill patients	X	X	X	X	X	X	X		X	Nurses.	A1/A0
<b>Surgical Procedures</b>												
<b>Minor Surgery</b>	Simple abscess incision and drainage	X	X	X	X	X	X	X		X	All Physicians, Registered Nurse	A0, Specialist
	Male circumcision, adult	X	X	X	X	X	X	X		X	All Physicians, Registered Nurse	A0, Specialist
<b>Burns</b>	First degree	X	X	X	X	X	X	X		X	All Physicians, Nurse	A0, Specialist A1/A0
	Second degree			X	X	X	X	X			All Physicians	A0, Specialist
	Third degree, skin grafts				X	X	X	X			General Surgeon	Specialist
	Burn unit						X	X			General Surgeon	Specialist
<b>Anesthesia</b>												
	Pre-anesthetic care				X	X	X	X			Anesthesiologist/Nurse Anesthetist	Specialist
	Intra-operative care				X	X	X	X			Anesthesiologist/Nurse Anesthetist	Specialist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
	Post-operative care (recovery)				X	X	X	X			Anesthesiologist/Nurse Anesthetist	Specialist
	Pain management		X	X	X	X	X	X			All health care providers	A0, Specialist, A1, A0
<b>Palliative care</b>		X	X	X	X	X	X	X		X	All health care providers	Trained in palliative care
<b>Medical Imaging</b>												
	General radiography (chest, abdomen, skeleton)				X	X	X	X			Radiographer Technician	A0, Specialist, A1,
	Fluoroscopy				X	X	X	X			Radiologist, Radiographer	A0, Specialist,
	Ultrasonography			X	X	X	X	X			All Physicians	Radiology technicianA1, A0 Specialist, Medical Officer
	Mammography				X	X	X	X			Radiologist, Radiographer	Specialist in Radiology
	Computed tomography (CT) scan				X	X	X	X			Radiologist, Radiographer	Specialist in Radiology
	Magnetic resonance imaging (MRI) scan				X	X	X	X			Radiologist, Radiographer	Specialist in Radiology
	Angiography				X	X	X	X			Radiologist, Radiographer	Specialist in Radiology
<b>Medical Physics</b>	Nuclear medicine				X	X	X	X			Radiologist, Radiographer	Nuclear medicine physician
<b>Pathology/Laboratory</b>												
<b>Phlebotomy</b>	Phlebotomy		X	X	X	X	X	X	X	X	Nurse/ Lab Technician	A1/A0

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
<b>Hematology</b>	Hemoglobin	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	Hematocrit	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	Complete blood count	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	Blood typing	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	Bleeding and clotting times	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	Erythrocyte sedimentation rate (ESR)	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	Proteinuria and Glucosuria	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	RDT for malaria	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	Drug monitoring assays				X			X		X	Lab Technician	A1/A0
	Rapid pregnancy test	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
<b>Biochemistry</b>	Serum bilirubin			X	X	X	X	X			Lab Technician	A1/A0
	Blood glucose	X	X	X	X	X	X	X			Lab Technician	A1/A0
	Rapid plasma reagin (RPR) for test for syphilis	X	X	X	X	X	X	X		X	Lab Technician	A1/A0
	Rapid HIV test	X	X	X	X	X	X	X		X	Lab Technician	A1/A2
	Rapid hepatitis B&C tests	X	X	X	X	X	X	X		X	Lab Technician	A1/A2
	Liver function tests		X	X	X	X	X	X		X	Lab Technician	A1/A2
	Renal function tests		X	X	X	X	X	X			Lab Technician	A1/A2
	Allergology				X	X	X	X				Specialist
	Parasitology	X	X	X	X	X	X	X		X	Lab Technician	A1/A2
	Mycology				X	X	X	X			Lab Technician	A1/A2
<b>Microbiology</b>	Bacteriology	X			X	X	X	X		X	Lab Technician	A1/A2
	Mycobacteriology	X			X	X	X	X		X	Lab Technician	A1/A2
	Cytology and histopathology				X		X	X			Pathologist	
	Molecular biology and genetics				X		X	X			Pathologist	

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description	Qualification
<b>Pharmacy*</b>	Dispensing pharmacy	X				X	X	X		X	Pharmacist, Nurse/ Medical Assistant	A1/A2
	Clinical pharmacy						X	X			Clinical Pharmacist	A0
	Drug poison information services						X	X			Toxicologist	A0
	ARV distribution		X	X	X	X	X	X			Nurse	A1/A0
	Oncology reconstitutions						X	X			Oncologist	Master in Oncology
<b>Physiotherapy</b>												
	Exercise (strength & balance)				X	X	X	X			Physiotherapist	A1/A0
	Hydrotherapy				X	X	X	X			Physiotherapist	A1/A0
	Infrared massage				X	X	X	X			Physiotherapist	A1/A0
	Ultraviolet				X	X	X	X			Physiotherapist	A1/A0
	Cerebral palsy				X	X	X	X			Physiotherapist	A1/A0
	Nutritional counselling		X	X	X	X	X	X			Nutritionist/Dietitian	A1/A0
	Therapeutic nutrition rehabilitation				X		X	X			Nutritionist/Dietitian	A1/A0

\* The Ministerial Orders indicate that dispensaries, medical practice, medical, dental and antenatal care clinics keep emergency medications but otherwise do provide pharmacological services; lists to be approved by the Ministry of Health

**Table 4: Surgery**

Interventions		D	MP	MC	SC	P	H	SH	AN	NH	Anesthesia Description	Qualification
<b>Neurosurgery</b>												
<b>Head</b>												
Debridement, suturing (Clean the wound to remove all foreign bodies and close the wound)			X		X	X	X	X			GA, LRA, sedation, analgesics	Nurse, GP, any Surgeon
Hemostasis						X	X	X			Analgesics or sedation, GA.	Definitive management to be done by a Neurosurgeon.
Elevation, debridement						X	X	X			GA	Neurosurgeon
Elevation						X	X	X			GA	Neurosurgeon
Craniectomy, craniotomy and craniostomy						X	X	X			GA	Neurosurgeon
Craniectomy						X	X	X			GA	Neurosurgeon
Aneurysm clipping						X	X	X			GA	Neurosurgeon
Arteriovenous malformation excision						X	X	X			GA	Neurosurgeon
Base of skull brain tumor excision						X	X	X			GA	Neurosurgeon
Bilateral chronic subdural hematoma evacuation (burr holes)						X	X	X			GA	Neurosurgeon
Brain tumor biopsy						X	X	X			GA	Neurosurgeon
Burr holes for drainage of brain abscess						X	X	X			GA	Neurosurgeon
Burr hole and ventriculostomy						X	X	X			GA	Neurosurgeon
Chronic subdural hematoma evacuation (burr holes)						X	X	X			GA	Neurosurgeon
Chronic subdural hematoma craniotomy						X	X	X			GA	Neurosurgeon
Cranioplasty						X	X	X			GA	Neurosurgeon
Craniotomy and base of the skull drilling						X	X	X			GA	Neurosurgeon

Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Anesthesia Description	Qualification
Craniotomy for brain tumor (convexity tumor)						X	X			GA	Neurosurgeon
Craniotomy for drainage of brain abscess						X	X			GA	Neurosurgeon
Craniotomy for drainage of epidural empyema						X	X			GA	Neurosurgeon
Craniotomy for drainage of subdural empyema						X	X			GA	Neurosurgeon
Depressed skull fracture debridement (trauma)						X	X			GA	Neurosurgeon
Encephaloceles repair						X	X			GA	Neurosurgeon
Endoscopic approach						X				GA	Neurosurgeon
Epidural hematoma evacuation craniotomy (trauma)						X	X			GA	Neurosurgeon
Excision intracerebral tumor						X	X			GA	Neurosurgeon
Excision of post fossa tumor						X	X			GA	Neurosurgeon
Excision of skull tumor						X	X			GA	Neurosurgeon
Fascia harvesting and duraplasty						X	X			GA	Neurosurgeon
Glomus jugulare tumor excision						X	X			GA	Neurosurgeon
Mini-laparotomy + tunneling catheter Neurosurgeon						X	X			GA	Neurosurgeon
Pineal region tumor excision						X	X			GA	Neurosurgeon
Strip craniectomies						X	X			GA	Neurosurgeon
Ventriculo-peritoneal shunt revision						X	X			GA	Neurosurgeon
Ventriculo-peritoneal shunt						X	X			GA	Neurosurgeon
Ventricular tap						X	X			NA	Neurosurgeon
Shunt reservoir tap						X	X			GA	Neurosurgeon
External ventricular drainage						X	X			GA, LRA	Neurosurgeon
Ommaya reservoir insertion						X	X				Neurosurgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Anesthesia Description	Qualification
Spine	Anterior cervical decompression						X	X			GA	Neurosurgeon
	Anterior thoracic decompression						X	X			GA	Neurosurgeon
	Anterior thoraco-lumbar decompression						X	X			GA	Neurosurgeon
	Bone harvesting and grafting						X	X			GA	Neurosurgeon
	Closed reduction (trauma - cervical)						X	X			GA	Neurosurgeon
	Anterior cervical fixation and fusion						X	X			GA	Neurosurgeon
	Posterior cervical fixation and fusion						X	X			GA	Neurosurgeon
	Lumbar -sacral fixation and fusion						X	X			GA	Neurosurgeon
	Thoracic fixation and fusion						X	X			GA	Neurosurgeon
	Thoraco-lumbar fixation and fusion						X	X			GA	Neurosurgeon
	Halo's reduction						X	X			GA	Neurosurgeon
	Halo's traction (trauma - cervical)						X	X			GA	Neurosurgeon
	Kyphoplasty						X	X			GA	Neurosurgeon
	Laminectomy for drainage of spinal epidural abscess						X	X			GA	Neurosurgeon
	Laminectomy for drainage of spinal subdural abscess						X	X			GA	Neurosurgeon
	Lateral mass screws insertion and fusion						X	X			GA	Neurosurgeon
	Lumbar CSF manometry						X	X			GA	Neurosurgeon
	Lumbar discectomy						X	X			GA	Neurosurgeon
	Lumbar discectomy: multiple level						X	X			GA	Neurosurgeon
	Lumbar drain insertion						X	X			GA	Neurosurgeon
Lumbar posterior decompression						X	X			GA	Neurosurgeon	
Lumbar posterior fusion						X	X			GA	Neurosurgeon	
Lumbo peritoneal shunt insertion						X	X			GA	Neurosurgeon	
Manipulation of spine under c-arm						X	X			GA	Neurosurgeon	
Meningocele repair						X	X			GA	Neurosurgeon	
Myelo-meningocele repair						X	X			GA	Neurosurgeon	
Lipo-meningocele repair						X	X			GA	Neurosurgeon	

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
	Pilonidal sinus excision						X	X			GA	Neurosurgeon
	Occipital cervical decompression						X	X			GA	Neurosurgeon
	Odontoid screw insertion						X	X			GA	Neurosurgeon
	Posterior cervical decompression						X	X			GA	Neurosurgeon
	Posterior lumbar sacral decompression						X	X			GA	Neurosurgeon
	Posterior thoracic decompression						X	X			GA	Neurosurgeon
	Posterior thoraco-lumbar decompression						X	X			GA	Neurosurgeon
	Skull traction						X	X			GA	Neurosurgeon
	Spine fusion one level						X	X			GA	Neurosurgeon
	Spine tumor excision						X	X			GA	Neurosurgeon
	Spine: removal disc plus spinal fusion one level						X	X			GA	Neurosurgeon
	Transforaminal lumbar interbody fusion (t-lif)						X	X			GA	Neurosurgeon
	Transforaminal nerve infiltration						X	X			GA	Neurosurgeon
	Facet infiltration						X	X			GA	Neurosurgeon
<b>Plastic Surgery and Organ</b>												
<b>Face</b>	Abbé type flap						X	X			GA or LA	Plastic Surgeon
<b>Skin</b>	Acellular dermal allograft						X	X			GA	Plastic Surgeon
<b>Leg</b>	Achilles tendon repair						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Face</b>	Alveolar periosteal or other flaps for arch closure						X	X			GA	Plastic Surgeon/ Orthodontist, Maxillo-Facial Surgeon



	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Hand</b>	Bennett fracture-dislocation reduction under GA and fixation						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic
<b>Face</b>	Blepharoplasty: upper lid for improvement in function (unilateral)						X	X			GA or LA	Plastic Surgeon
<b>Neck</b>	Brachial plexus exploration and repair						X	X			GA	Plastic Surgeon
<b>Arms</b>	Brachioplasty						X	X			GA	Plastic Surgeon
<b>Breast</b>	Breast augmentation						X	X			GA	Plastic Surgeon
	Breast augmentation with fat transfer						X	X			GA	Plastic Surgeon
	Breast reconstruction: latissimus dorsi flap, without prosthetic implant						X	X			GA	Plastic Surgeon
	Breast reconstruction: touch-ups						X	X			GA or LA	Plastic Surgeon
	Breast reconstruction: transverse rectus abdominis myocutaneous flap (tram), single pedicle (suture of donor site included)						X	X			GA	Plastic Surgeon
<b>Buttocks</b>	Breast reduction						X	X			GA	Plastic Surgeon
	Buttock augmentation						X	X			GA	Plastic Surgeon
	Buttock lift						X	X			GA	Plastic Surgeon
<b>Eyelid</b>	Canthoplasty						X	X			GA or LA	Plastic Surgeon/ Ophthalmologist
<b>Fingers</b>	Capsulectomy digital joint						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon5t
<b>Wrist</b>	Carpal tunnel syndrome release						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Any</b>	Change of dressing under anesthesia, any type						X	X			GA	Plastic Surgeon/ Any Surgeon
	Examination under anesthesia						X	X			GA	Plastic Surgeon/ Any Surgeon
<b>Face</b>	Cleft lip repair: unilateral						X	X			GA	Plastic Surgeon
	Cleft lip repair: bilateral						X	X			GA	Plastic Surgeon
	Cleft palate repair						X	X			GA	Plastic Surgeon
	Cleft lip subsequent touch-ups						X	X			GA or LA	Plastic Surgeon
	Cleft rhinoplasty						X	X			GA	Plastic Surgeon
	Closure of anterior nasal floor						X	X			GA	Plastic Surgeon/ Maxillo- Facial Surgeon
<b>Any</b>	Columella reconstruction or lengthening						X	X			GA or LA	Plastic Surgeon
	Complex debridement						X	X			GA or Regional block	Plastic Surgeon
	Complex pedicled or perforator flaps						X	X			GA	Plastic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
Skin	Composite graft						X	X			GA or LA	Plastic Surgeon
Face	Cross facial nerve graft						X	X			GA	Plastic Surgeon
Fingers	Cross finger flap						X	X			GA or Regional block	Plastic Surgeon
Any	Simple debridement						X	X			GA or Regional block	Plastic Surgeon/ Any Surgeon
Skin	Split thickness skin graft						X	X			GA or Regional block	Plastic Surgeon
	Full thickness skin graft						X	X			GA or Regional block	Plastic Surgeon
Face	Dermabrasion						X	X			GA	Plastic Surgeon
Face or hands	Dermal fillers						X	X			LA	Plastic Surgeon
Any	Distant flap, like groin flap						X	X			GA or Regional block	Plastic Surgeon
Face	Drainage of intra-oral abscess						X	X			GA	Plastic Surgeon/ Maxillo-Facial, ENT Surgeon
Hand	Dupuytren's contracture: fasciectomy						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
	Dupuytren's contracture: fasciotomy						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Face</b>	Entropion or ectropion repair by free skin, mucosal grafting or flap						X	X			GA or LA	Plastic Surgeon
	Epicanthal folds correction						X	X			GA or LA	Plastic Surgeon
<b>Skin</b>	Epidermoid cyst excision						X	X			LA	Plastic Surgeon/ Any Surgeon
<b>Face</b>	Estlander type flap						X	X			GA or LA	Plastic Surgeon
<b>Skin</b>	Excision biopsy of skin tumors						X	X			GA or LA	Plastic Surgeon/ Any Surgeon
	Incision biopsy of skin tumors						X	X			LA	Plastic Surgeon/ Any Surgeon
<b>Hand</b>	Excision of a simple polydactyly						X	X			GA or LA	Plastic Surgeon/ Surgeon/ Orthopedic Surgeon
	Excision of a complex polydactyly						X	X			GA or LA	Plastic Surgeon
<b>Skin</b>	Excision of keloid with primary closure						X	X			LA	Plastic Surgeon/ Any Surgeon
	Excision of keloid with skin graft						X	X			GA or LA	Plastic Surgeon/ Any Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Any</b>	Excision of peripheral neuroma						X	X			GA or Regional block	Plastic Surgeon
	Exploration and excision of a fistula above deep fascia						X	X			GA or Regional block	Plastic Surgeon/ Any Surgeon
	Exploration and excision of a fistula deep to deep fascia						X	X			GA or LA	Plastic Surgeon/ Any Surgeon
<b>Face</b>	Exploration of facial nerve: extra temporal exploration and repair of the facial nerve without nerve graft						X	X			GA	Plastic Surgeon
	Extensive debridement (complex involving more than one limb)						X	X			GA	Plastic Surgeon/ Any Surgeon
<b>Face</b>	Eyelid laceration repair						X	X			GA or LA	Plastic Surgeon/ ophthalmologist
	Face lift						X	X			GA	Plastic Surgeon
<b>Face</b>	Facial botulinum toxin						X	X			LA	Plastic Surgeon
	Facial fat grafting						X	X			GA or Regional block	Plastic Surgeon
	Facial implants for cosmetic purpose						X	X			GA	Plastic Surgeon
	Facial laceration exploration and closure						X	X			GA or LA	Plastic Surgeon/ Any Surgeon
<b>Any</b>	Facial nerve palsy correction with local regional muscle flap						X	X			GA	Plastic Surgeon
	Facial tissue defect reconstruction						X	X			GA	Plastic Surgeon
	Fat grafting						X	X			GA or Regional block	Plastic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Hand</b>	Fingertip cover with a homodigital neurovascular island flap						X	X			GA or Regional bloc	Plastic Surgeon
	Flexor tendon graft using silastic rod						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Any</b>	Flap division and inset or any subsequent stage in flap reconstruction						X	X			GA or Regional block	Plastic Surgeon
<b>Hand</b>	Flexor tendon freeing operation following free tendon graft or suture						X	X			GA or Regional block	Plastic Surgeon
<b>Face</b>	Floor of the mouth reconstruction with distant pedicled flap							X	X		GA	Plastic Surgeon
	Forehead lift							X	X		GA or Regional block	Plastic Surgeon
<b>Any</b>	Fracture: nose and septum, open reduction							X	X		GA	Plastic Surgeon
	Free flap harvesting							X	X		GA	Plastic Surgeon
<b>Abdomen</b>	Free flap inset and microvascular anastomosis							X	X		GA	Plastic Surgeon
	Full abdominoplasty							X	X		GA	Plastic Surgeon
<b>Face</b>	Full thickness lip laceration debridement and closure							X	X		LA	Plastic Surgeon/ Plastic Surgeon
	Nose reconstruction first stage							X	X		GA	Plastic Surgeon
	Nose reconstruction subsequent stage							X	X		GA or LA	Plastic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Hand</b>	Ganglion excision							X	X		GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Breast</b>	Gynecomastia correction bilateral							X	X		GA	Plastic Surgeon
<b>Hand</b>	Hand tendons: opponens tendon transfer							X	X		GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Any</b>	Harvesting of cartilage graft							X	X		GA	Plastic Surgeon
	Harvesting of non-vascularized bone graft							X	X		GA	Plastic Surgeon/ Orthopedic Surgeon
<b>Face</b>	Harvesting of fascia lata graft						X	X			GA or LA	WHO?
<b>Hand</b>	Haversting of tendon graft						X	X			GA	Plastic Surgeon/ Orthopedic Surgeon
<b>Breast</b>	Immediate breast reconstruction with breast implant, bilateral						X	X			GA	Plastic Surgeon
	Immediate breast reconstruction with breast implant, unilateral						X	X			GA	Plastic Surgeon
<b>Lower limb</b>	Infrapatellar or quadriceps tendon repair						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Hand</b>	Intrinsic tendon release						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
	Joint ligament reconstruction or suture: digital joint ligament						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Face</b>	Lacrimal duct repair						X	X			GA or LA	Plastic Surgeon/ Ophthalmologist
<b>Any</b>	Large nerve repair with nerve graft						X	X			GA	Plastic Surgeon
	Large nerve repair without graft						X	X			GA	Plastic Surgeon
<b>Face</b>	Lid operation for facial nerve paralysis including tarsorrhaphy						X	X			GA or LA	Plastic Surgeon
	Lip contracture release and cover						X	X			GA	Plastic Surgeon
<b>Any</b>	Liposuction						X	X			GA	Plastic Surgeon
<b>Face</b>	Blepharoplasty						X	X			GA or LA	Plastic Surgeon
<b>Any</b>	Major compartmental decompression						X	X			GA	Plastic Surgeon
<b>Breast</b>	Mastopexy							X	X		GA	Plastic Surgeon
	Mastotomy with exploration, drainage of abscess or removal of mammary implant							X	X		GA	Plastic Surgeon
<b>Any</b>	Microvascular anastomosis, any							X	X		GA	Plastic Surgeon
<b>Abdomen</b>	Mini abdominoplasty							X	X		GA	Plastic Surgeon
<b>Hand</b>	Tendon transfers							X	X		GA or Regional block	Plastic Surgeon/ Orthopedic Surgeons
<b>Face</b>	Neck lift							X	X		GA	Plastic Surgeon
<b>Breast</b>	Nipple and areola reconstruction							X	X		GA	Plastic Surgeon
<b>Face</b>	Obliteration of frontal sinus with pericranial flap						X	X			GA	Plastic Surgeon
<b>Leg</b>	Open elongation Achilles tendon						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon



	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Hand</b>	Open reduction of a dislocation (hand)						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Torso</b>	Open sternum reconstruction						X	X			GA	Plastic Surgeon
<b>Hand</b>	Orif hand bones						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Hand</b>	Osteotomy: metacarpal and phalanx: corrective for malunion or rotation						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Ears</b>	Otoplasty						X	X			GA or LA	Plastic Surgeon
	Partial ear reconstruction						X	X			GA	Plastic Surgeon
<b>Upper limb</b>	Pectoralis major or latissimus dorsi transfer to biceps tendon						X	X			GA	Plastic Surgeon
<b>Penis</b>	Penis reconstruction						X	X			GA	Plastic Surgeon
<b>Hand</b>	Pollicization of the finger						X	X			GA or Regional block	Plastic Surgeon
	Extensor tendon repair						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
	Flexor tendon repair						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Eyelid</b>	Ptosis correction						X	X			GA or LA	Plastic Surgeon/ Ophthalmologist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Hand</b>	Radical excision of nailbed						X	X			Regional block	Plastic Surgeon/ Orthopedic Surgeon
	Reconstruction of pulley for flexor tendon						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
	Reduction carpal bone fracture under general anesthetic						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Any</b>	Removal of deep foreign body using c-arm						X	X			GA or Regional block	Plastic Surgeon
	Removal of foreign body superficial to deep fascia in hands, feet or face						X	X			GA or Regional block	Plastic Surgeon/ Any Surgeon
<b>Hand</b>	Repair of boutonnière deformity or mallet finger with graft						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
	Repair of nail bed						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Face</b>	Repair of oronasal fistula including redo of cleft lip						X	X			GA	Plastic Surgeon
	Rhinoplasty						X	X			GA or LA	Plastic Surgeon
<b>Skin</b>	Scar revision						X	X			GA or LA	Plastic Surgeon
<b>Hand</b>	Skin contracture releases of fingers						X	X			GA	Plastic Surgeon
<b>Any</b>	Skin contracture release of a big joint with z-plasty and skin graft						X	X			GA	Plastic Surgeon
<b>Face</b>	Skin resurfacing						X	X			GA	Plastic Surgeon
<b>Any</b>	Sloughectomy						X	X			GA	Plastic Surgeon/ Any Surgeon
<b>Hand</b>	Syndactyly release						X	X			GA or Regional block	Plastic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Lower limb</b>	Thigh lift						X	X			GA	Plastic Surgeon
<b>Hand</b>	Thumb or great toe duplication correction						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>Skin</b>	Tissue expander insertion						X	X			GA	Plastic Surgeon
	Tissue expander removal, excision of lesion and inset						X	X			GA	Plastic Surgeon
<b>Ears</b>	Total ear reconstruction						X	X			GA	Plastic Surgeon
<b>Upper limb</b>	Transposition of ulnar nerve						X	X			GA or LA	Plastic Surgeon/ Orthopedic Surgeon
<b>Hand</b>	Trigger finger release						X	X			GA or Regional block	Plastic Surgeon/ Orthopedic Surgeon
<b>General Surgery and Organ</b>												
<b>Airway</b>	Tracheostomy						X	X			LA, GA	Any Surgeon
	Crico-thyroidotomy						X	X			LA, GA	Any Surgeon
<b>Effusion</b>	Thoracic drainage/Chest tube insertion						X	X			LA, GA	Any Surgeon
<b>Trauma</b>	Conservative management of rib fracture						X				Analgesics. GA, LRA	Any surgeon
	Flail chest management						X				GA, LRA	Thoracic Surgeon/ General Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Breast</b>	Incision of a breast abscess			X			X				GA	General Surgeon
	Lumpectomy of breast tumor (benign), biopsy			X			X				GA, LRA	General Surgeon
	Mastectomy (malignant tumor), biopsy			X		X	X				GA, LRA	General Surgeon
<b>Thyroid and Neck Masses and Soft Tissues Injuries</b>	Thyroid lobectomy			X		X	X				GA, LRA	General Surgeon /ENT Surgeon
	Total thyroidectomy					X	X				GA	General Surgeon /ENT Surgeon
<b>Thorax</b>	Lung decortication Eloesser flap			X		X	X				GA	Thoracic Surgeon (Need for ICU)
	Pneumectomy lobectomy, wedge lung resection, masses resection					X	X				GA	Thoracic Surgeon (Need for ICU)
	Esophageal replacement, segmental resection and anastomosis,					X	X				GA	Thoracic Surgeon (Need for ICU)
	Stenting or dilation			X		X	X				GA/LRA	Thoracic Surgeon
	Pericardial decortication					X	X				GA	Thoracic Surgeon
	Fistula ligation, esophagostomy					X	X				GA	Thoracic Surgeon
	Pericardial window					X	X				GA	Thoracic Surgeon/ General Surgeon
Emergency thoracotomy					X	X				GA	Thoracic Surgeon	

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Abdomen</b>	Laparotomy			X		X	X				GA	General Surgeon
	Abdominal hernia repair			X		X	X				GA	General Surgeon
	Diaphragmatic hernia repair					X	X				GA	General Surgeon/ Thoracic Surgeon (may need ICU)
	Inguinal hernia repair			X		X	X				GA, LRA	General Surgeon
	Strangulated hernia repair			X		X	X				GA,	General Surgeon
	Umbilical hernia repair			X		X	X				GA, LRA	General Surgeon
	Abdominal incisional hernia repair			X		X	X				GA, LRA	General Surgeon
	Repair of traumatized abdominal wall or organs.			X		X	X				GA,	General Surgeon
	Insertion of a supra-pubic catheter			X		X	X				GA, LRA	Any Surgeon
	Gastrostomy (open or endoscopic ally)			X		X	X				GA, LRA	General Surgeon
<b>Stomach &amp; duodenum</b>	Repair of a perforation of duodenal or gastric ulcer			X		X	X				GA	General Surgeon
	Repair of a gastric or duodenal bleeding ulcer					X	X				GA	General Surgeon
	Duodeno-duodenostomy for duodenal atresia					X	X				GA	General Surgeon
	Gastrectomy (subtotal or antrectomy)			X		X	X				GA	General Surgeon
	Vagotomy plus Pyloroplasty/gastroenterostomy			X		X	X				GA.	General Surgeon
	Gastroenterostomy			X		X	X					General Surgeon
	Total Gastrectomy					X	X				GA	General Surgeon
	Pyloromyotomy			X		X	X				GA, LRA	General Surgeon (requires Anesthesiologist)

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Gallbladder &amp; Biliary tract,</b>	Cholecystectomy, open/laparoscopic, stenting			X		X	X				GA	General Surgeon
	CBD exploration			X		X	X				GA	General Surgeon (Requires Image intensifier)
	Kasai procedure					X	X				GA	General Surgeon
<b>Pancreas</b>	Biliary by-pass surgery					X	X				GA	General Surgeon
	Whipple procedure			X		X	X				GA	General Surgeon
	Pancreatic pseudocyst drainage			X		X	X				GA	General Surgeon
<b>Small intestine</b>	Suture of an intestinal perforation			X		X	X				GA	General Surgeon
	Resection, stoma or anastomosis			X		X	X				GA	General Surgeon
	Peritonitis /Laparotomy			X		X	X				GA	General Surgeon
<b>Appendix</b>	Intestinal obstruction			X		X	X				GA	General Surgeon
	Appendectomy			X	X		X				GA, LRA	General Surgeon
	Appendicular abscess			X	X		X				GA	General Surgeon
<b>Colon</b>	Colostomy			X	X		X				GA	General Surgeon
	Segmentectomy			X	X		X				GA	General Surgeon
	Hemi-colectomy			X	X		X				GA	General Surgeon
	Sigmoidectomy.			X	X		X				GA	General Surgeon
	Sigmoid derotation			X	X		X				GA	General Surgeon
	Reconstruction of colon after Hartman's procedure			X	X		X				GA	General Surgeon
	Pull through				X		X				GA	General Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Rectum</b>	Recto sigmoidectomy			X		X	X				GA	General Surgeon
	Abdomino perineal Resection,					X	X				GA	General Surgeon
	Lower anterior resection,					X	X				GA	General Surgeon
	Rectal biopsy			X		X	X				GA	General Surgeon
<b>Anus</b>	Hemorrhoidectomy			X			X	X			GA, LRA	General Surgeon
	Anal fissure			X			X	X			GA, LRA	WHO?
	Anal fistula repair			X			X	X			GA, LRA	Urologist/ General Surgeon
<b>Anorectal malformation</b>	Incision of an ischio-rectal abscess						X	X			GA, LRA	General Surgeon
	PSARP, ASARP, anoplasty, Anal dilation, cloaca repair			X			X	X			GA, LRA	General Surgeon
<b>Limb</b>	Stripping, arterial venous fistula, vascular repair			X			X	X			GA & LRA	General Surgeon
	Lipomectomy, Cystectomy, Excision and Incision, Drainage, Debridement, Surgical & Suturing, Therapeutic circumcision, Skin graft, Nail extraction, Tendon repair, Fasciotomy			X			X	X			GA & LRA	General Surgeon
<b>Urology surgery/organ</b>												
<b>Adrenals</b>	Adrenalectomy						X	X			GA	Urologist
	Amputation of penis (partial)						X	X			GA or Spinal Anesthesia	Urologist
<b>Penis</b>	Amputation of penis (total)						X	X			GA or Spinal Anesthesia	Urologist
	Artificial urinary sphincter implant						X	X			GA or Spinal Anesthesia	Urologist
<b>Epididymis</b>	Biopsy of epididymis						X	X			Local Anesthesia or GA	Urologist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Bladder</b>	Bladder diverticulum resection						X	X			GA or Spinal Anesthesia	Urologist
	Bladder neck incision						X	X			GA or Spinal Anesthesia	Urologist
	Bladder neck reconstruction						X	X			GA or Spinal Anesthesia	Urologist
	Bladder exstrophy repair						X	X			GA	Urologist
	Bladder neck resection						X	X			GA or Spinal Anesthesia	Urologist
	Boari flap						X	X			GA or Spinal Anesthesia	Urologist
<b>Penis</b>	Burch colposuspension						X	X			GA or Spinal Anesthesia	Urologist
	Circumcision adult						X	X			LA	All Surgeons
<b>Vagina</b>	Condyloma excision/electrocoagulation						X	X			LA	General Surgeon Dermatologist Urologist
	Colovaginoplasty for vaginal reconstruction						X	X			GA or Spinal Anesthesia	Obstetric Gynecologist Urologist
<b>Bladder</b>	Cystectomy partial						X	X			GA or Spinal Anesthesia	Urologist
	Cystectomy radical						X	X			GA	Urologist
	Cystocele repair						X	X			GA or Spinal Anesthesia	Urologist Obstetric Gynecologist
	Cystolitholapaxy (transurethral)						X	X			GA or Spinal Anesthesia	Urologist
	Cystolitholapaxy percutaneous suprapubic						X	X			GA or Spinal Anesthesia	Urologist
	Cystolithotomy						X	X			GA or Spinal Anesthesia	Urologist
	Cystoplasty augmentation						X	X			GA	Urologist
	Cystoplasty ileo/coloplasty						X	X			GA	Urologist
	Cystoscopy for clots removal						X	X			GA	Urologist
	Cystoscopy under GA						X	X			Ga	Urologist
<b>Bladder</b>	Cystoscopy under la						X	X			GA or Spinal Anesthesia	Urologist
	Cystostomy (open)						X	X			GA or Spinal Anesthesia	Urologist
	Cystostomy (puncture)						X	X			LA	Urologist



	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Scrotum</b>	Debridement for fourniers gangrene						X	X			GA	Urologist
<b>Spermatid cord</b>	Detorsion for torsion of the testis + contralateral testis fixation						X	X			GA or Spinal Anesthesia	Urologist
<b>Prostate</b>	Drainage of prostatic abscess (perineal)						X	X			GA or Spinal Anesthesia	Urologist
<b>Renal pelvis</b>	Endopyelotomy						X	X			GA	Urologist
<b>Epididymis</b>	Epididymal cyst excision (bilateral)						X	X			GA	Urologist
	Epididymal cyst excision (unilateral)						X	X			GA	Urologist
	Epididymal fna						X	X			LA	Urologist
	Epididymal sperm retrieval						X	X			GA	Urologist
	Epididymectomy (bilateral)						X	X			GA or Spinal Anesthesia	Urologist
	Epididymectomy (unilateral)						X	X			GA or Spinal Anesthesia	Urologist
<b>Urethra</b>	Epispadias repair						X	X			GA or Spinal Anesthesia	Urologist
	Epispadias repair (complex)						X	X			GA or Spinal Anesthesia	Urologist
<b>Kidney</b>	Excision of renal cyst						X	X			GA	Urologist
<b>Bladder</b>	Excision of urachus and repair of bladder						X	X			GA	Urologist
<b>Inguinal canal</b>	Herniotomy						X	X			GA or Spinal Anesthesia	Urologist/General Surgeon
<b>Scrotum</b>	Hydrocelectomy (bilateral)						X	X			GA or Spinal Anesthesia	Urologist
	Hydrocelectomy (unilateral)						X	X			GA or Spinal Anesthesia	Urologist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Urethra</b>	Hypospadias repair						X	X			GA or Spinal Anesthesia	Urologist/
	Hypospadias repair complex						X	X			GA	Urologist
<b>Urinary diversion</b>	Ileal conduit						X	X			GA	Urologist
	Ileoureteral substitution						X	X			GA	Urologist
<b>Penis</b>	Implantation of penile prosthesis for treatment of impotence						X	X			GA or Spinal Anesthesia	Urologist
<b>Scrotum</b>	Incision and drainage of scrotum abscess under GA						X	X			GA	Urologist
<b>Urethra</b>	Internal urethrotomy						X	X			GA or Spinal Anesthesia	Urologist
<b>Bladder</b>	Intravesical injection (Botox, silicon, etc.)						X	X			GA or Spinal Anesthesia	Urologist
<b>Kidney</b>	Kidney cyst resection						X	X			GA	Urologist
<b>Penis</b>	Lapeyronie disease repair						X	X			GA or Spinal Anesthesia	Urologist
<b>Bladder</b>	Laser treatment of bladder cancer						X	X			GA or Spinal Anesthesia	Urologist
<b>Lymph nodes</b>	Lymphadenectomy (bilateral inguinal)						X	X			GA	Urologist
	Lymphadenectomy (bilateral pelvic)						X	X			GA	Urologist
	Lymphadenectomy (retroperitoneal)						X	X			GA	Urologist
	Lymphadenectomy (unilateral inguinal)						X	X			GA	Urologist
	Lymphadenectomy (unilateral pelvic)						X	X			GA	Urologist
<b>Urinary diversion</b>	Mainz pouch ii					X	X			GA	Urologist	

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Urethra</b>	Meatotomy						X	X			GA or Spinal Anesthesia	Urologist
	Meatoplasty						X	X			GA or Spinal Anesthesia	Urologist
<b>Ureter</b>	Megaureter repair						X	X			GA	Urologist
<b>Kidney</b>	Nephrectomy laparoscopic						X	X			GA	Urologist
	Nephrectomy partial (open, laparoscopic, trans peritoneal or retroperitoneal)						X	X			GA	Urologist
	Nephrectomy radical						X	X			GA	Urologist
<b>Ureter</b>	Nephroureterectomy (open or laparoscopic)						X	X			GA	Urologist
<b>Kidney</b>	Nephrectomy (donor)						X	X			GA	Urologist
<b>Inferior vena cava</b>	Cava thrombectomy						X	X			GA	Urologist
<b>Kidney</b>	Nephrectomy (simple)						X	X			GA	Urologist
	Nephrolithotomy (open)						X	X			GA	Urologist
	Nephrostomy (bilateral percutaneous)						X	X			GA	Urologist
	Nephrostomy (open)						X	X			GA	Urologist
	Nephrostomy (unilateral percutaneous)						X	X			GA	Urologist
	Nephroscopy						X	X			GA	Urologist
<b>Testis</b>	Orchidectomy (bilateral)						X	X			GA or Spinal Anesthesia	Urologist
	Orchidectomy (unilateral radical inguinal)						X	X			GA or Spinal Anesthesia	Urologist
	Orchidectomy (unilateral)						X	X			GA or Spinal Anesthesia	Urologist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
	Orchidopexy for undescended testis (bilateral)						X	X			GA	Urologist
	Orchidopexy for undescended testis (unilateral)						X	X			GA	Urologist
<b>Penis</b>	Penile fracture repair						X	X			GA or Spinal Anesthesia	Urologist
	Penile prosthesis						X	X			GA or Spinal Anesthesia	Urologist
	Paraphimosis reduction						X	X			GA	Urologist/ General Surgeon
<b>Ureter</b>	Percutaneous antegrade stent replacement						X	X			GA	Urologist
<b>Kidney</b>	Percutaneous nephrolithotripsy (pcnl)						X	X			GA	Urologist
<b>Urethra</b>	Perineostomy						X	X			GA or Spinal Anesthesia	Urologist
	Peri-urethral collagen injection for incontinence						X	X			GA or Spinal Anesthesia	Urologist
<b>Prostate</b>	Plasma vaporization of the prostate						X	X			GA or Spinal Anesthesia	Urologist
<b>Urethra</b>	Posterior urethral valves fulguration						X	X			GA or Spinal Anesthesia	Urologist
	Priapism management (aspiration, injection of the corpus cavernosum)						X	X			GA or Spinal Anesthesia	Urologist
	Priapism operation (winter shunt)						X	X			GA or Spinal Anesthesia	Urologist
	Priapism operation (el ghorab)						X	X			GA or Spinal Anesthesia	Urologist
	Priapism operation (grayhack)						X	X			GA or Spinal Anesthesia	Urologist
	Priapism operation (selective embolization, or ligation)						X	X			GA or Spinal Anesthesia	Urologist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Prostate</b>	Prostate biopsy (any approach)						X	X			GA or Spinal Anesthesia	Urologist
	Prostatectomy (radical)						X	X			GA or Spinal Anesthesia	Urologist
	Prostatectomy for benign prostate hypertrophy						X	X			GA or Spinal Anesthesia	Urologist
<b>Renal pelvis</b>	Prostatic stenting						X	X			GA or Spinal Anesthesia	Urologist
	Pyelolithotomy						X	X			GA	Urologist
<b>Kidney</b>	Pyelonephrolithotripsy						X	X			GA	Urologist
	Pyelonephrolithotomy						X	X			GA	Urologist
<b>Renal pelvis</b>	Pyelolithotripsy						X	X			GA	Urologist
	Pyeloplasty						X	X			GA	Urologist
	Pyelostomy						X	X			GA	Urologist
	Pyelo ureteroplasty						X	X			GA	Urologist
<b>Kidney</b>	Renal transplant						X	X			GA	Urologist
	Renal arterial graft						X	X			GA	Urologist
	Repair of lacerated kidney						X	X			GA	Urologist
	Repair of ureteral injuries/transections						X	X			GA	Urologist
<b>Ureter</b>	Repair of ureteral					X	X			GA	Urologist	
<b>Bladder</b>	Repair of ruptured bladder						X	X			GA	Urologist
	Retrograde pyelography						X	X			GA	Urologist
<b>Bladder</b>	Sacral nerve stimulation						X	X			GA	Urologist
<b>Vas deferens</b>	Seminal vasectomy (bilateral)						X	X			GA	Urologist/ Urologist
<b>Bladder</b>	Psoas hitch						X	X			GA or Spinal Anesthesia	Urologist
	Pubovaginal sling						X	X			GA or Spinal Anesthesia	Urologist/ obstetric gynecologist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Kidney</b>	Surgery for renal abscesses						X	X			GA	Urologist
<b>Penis</b>	Surgery for pyerionie disease						X	X			GA or Spinal Anesthesia	Urologist
	Surgery for congenital urethral duplication						X	X			GA or Spinal Anesthesia	Urologist
<b>Urethra</b>	Surgery for ambiguous genitalia						X	X			GA	Urologist
<b>Penis</b>	Surgery for ureterocele (transurethral unroofing)						X	X			GA	Urologist
	Surgery for duplicate system (endoscopic decompression)						X	X			GA	Urologist
<b>Ureter</b>	Surgery for duplicate system (open reconstruction at the bladder level)						X	X			GA	Urologist
	Surgery for duplicate system (open reconstruction at the renal level)						X	X			GA	Urologist
<b>Kidney</b>	Surgery for duplicate system (combine approach)						X	X			GA	Urologist
	Symphiotomy of horseshoe kidney						X	X			GA	Urologist
<b>Vas deferens</b>	Seminal vasectomy (unilateral)						X	X			GA or Spinal Anesthesia	Urologist
<b>Testis</b>	Testis biopsy: inguinal						X	X			GA or Spinal Anesthesia	Urologist
	Testis biopsy: scrotal						X	X			GA or Spinal Anesthesia	Urologist
<b>Ureter</b>	Transureteroureterostomy						X	X			GA or Spinal Anesthesia	Urologist
<b>Bladder</b>	Trans-urethral resection of bladder tumor (one)						X	X			GA or Spinal Anesthesia	Urologist
	Trans-urethral resection of large bladder tumor						X	X			GA or Spinal Anesthesia	Urologist
<b>Prostate</b>	Trans-urethral resection of the prostate						X	X			GA or Spinal Anesthesia	Urologist
							X	X			GA or Spinal Anesthesia	Urologist

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Kidney</b>	Ureterocolicostomy						X	X			GA or Spinal Anesthesia	Urologist
	Ureteric stent (bilateral)						X	X			GA or Spinal Anesthesia	Urologist
	Ureteric stent (unilateral)						X	X			GA or Spinal Anesthesia	Urologist
	Ureteric stent removal						X	X			GA or Spinal Anesthesia	Urologist
	Ureterolithotomy						X	X			GA or Spinal Anesthesia	Urologist
<b>Ureter</b>	Ureterolithotripsy laser						X	X			GA or Spinal Anesthesia	Urologist
	Ureterolithotripsy electrohydraulic						X	X			GA or Spinal Anesthesia	Urologist
	Ureteral dilatation						X	X			GA or Spinal Anesthesia	Urologist
	Ureterolysis						X	X			GA or Spinal Anesthesia	Urologist
	Ureteroneocystostomy (bilateral)						X	X			GA or Spinal Anesthesia	Urologist
	Ureteroneocystostomy (unilateral)						X	X			GA or Spinal Anesthesia	Urologist
	Ureteroplasty						X	X			GA or Spinal Anesthesia	Urologist
	Uretero-pyelolithotomy						X	X			GA or Spinal Anesthesia	Urologist
	Ureteropyelolithotripsy						X	X			GA or Spinal Anesthesia	Urologist
	Ureterorrhaphy						X	X			GA or Spinal Anesthesia	Urologist
	Ureteroscopic laser lithotripsy						X	X			GA or Spinal Anesthesia	Urologist
	Ureteroscopy						X	X			GA or Spinal Anesthesia	Urologist
	Ureterolysis for retroperitoneal fibrosis						X	X			GA or Spinal Anesthesia	Urologist
	Ureteroscopy and basket extraction of stone						X	X			GA or Spinal Anesthesia	Urologist
	Uretero-sigmoidostomy						X	X			GA or Spinal Anesthesia	Urologist
Ureterovesical anastomosis, reimplantation						X	X			GA or Spinal Anesthesia	Urologist	
Ureterocolic anastomosis						X	X			GA or Spinal Anesthesia	Urologist	

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
	Ureteroileal conduit						X	X			GA or Spinal Anesthesia	Urologist
	Ureteroureterostomy						X	X			GA or Spinal Anesthesia	Urologist
	Ureterectomy						X	X			GA or Spinal Anesthesia	Urologist
	Ureterostomy						X	X			GA or Spinal Anesthesia	Urologist
<b>Urethra</b>	Urethral diverticulectomy						X	X			GA or Spinal Anesthesia	Urologist
	Urethral meatotomy						X	X			GA or Spinal Anesthesia	Urologist
	Urethrectomy						X	X			GA or Spinal Anesthesia	Urologist
	Urethrocutaneous fistula repair						X	X			GA or Spinal Anesthesia	Urologist
	Urethroplasty first stage						X	X			GA or Spinal Anesthesia	Urologist
	Urethroplasty with substitution tissue						X	X			GA or Spinal Anesthesia	Urologist
	Urethrorraphy: anterior						X	X			GA or Spinal Anesthesia	Urologist
	Urethrorraphy: posterior						X	X			GA or Spinal Anesthesia	Urologist
	Urethroscopy						X	X			GA or Spinal Anesthesia	Urologist
	Urinary diversion (Indiana pouch)						X	X			GA or Spinal Anesthesia	Urologist
<b>Spermatid cord</b>	Varicocelectomy						X	X			GA or Spinal Anesthesia	Urologist
	Vascular surgery for treatment of impotence						X	X			GA or Spinal Anesthesia	Urologist
<b>Penis</b>	Vaso-vasostomy: bilateral						X	X			GA or Spinal Anesthesia	Urologist
	Vaso-vasostomy: unilateral						X	X			GA or Spinal Anesthesia	Urologist
<b>Vas deferens</b>	Vaso epididymostomy						X	X			GA or Spinal Anesthesia	Urologist
<b>Bladder</b>	Vesico-urethropexy with rectus sling						X	X			GA or Spinal Anesthesia	Urologist/ Obstetric Gynecologist
	Vesico-vaginal fistula (complicated)						X	X			GA or Spinal Anesthesia	Urologist/ Obstetric Gynecologist



	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
	Vesico-vaginal fistula (complex)						X	X			GA or Spinal Anesthesia	Urologist/ Obstetric Gynecologist
	Vesicostomy						X	X			GA or Spinal Anesthesia	Urologist
<b>Urinary diversion</b>	Orthotopic continent diversion						X	X			GA or Spinal Anesthesia	Urologist
<b>Urethra</b>	Urethral dilatation						X	X			GA or Spinal Anesthesia	Urologist
<b>Ureter</b>	Ureterocele incision						X	X			GA or Spinal Anesthesia	Urologist
	Ureteric reimplantation						X	X			GA or Spinal Anesthesia	Urologist
<b>Bladder</b>	Urodynamic study						X	X			LA	Urologist
	Qmax						X	X			LA	Urologist
<b>Urinary diversion</b>	Continent pouches						X	X			GA	Urologist
<b>Orthopedic Surgery/ Organ</b>												
	Above elbow amputation				X	X	X	X			GA or LRA	Orthopedic surgeon/ general surgeon
<b>Upper limb</b>	Above elbow amputation stump refashioning				X	X	X	X			GA or LRA	Orthopedic surgeon/ general surgeon
<b>Pelvis</b>	Acetabulum fracture reconstruction						X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Lower limb</b>	Amputation above knee (without tumor)				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Foot</b>	Amputation chopart				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
	Amputation foot: one ray				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
	Amputation Lisfranc				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
	Amputation of multiple fingers (transmetacarpal)				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
<b>Hand</b>	Amputation part of or whole of finger				X		X	X			GA or LRA	Orthopedic Surgeon/ General Surgeon
<b>Foot</b>	Amputation syme/pirogoff/chopart				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
<b>Upper limb</b>	Amputation through shoulder				X		X	X			GA or LRA	Orthopedic Surgeon/ General Surgeon
<b>Foot</b>	Amputation toe				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
	Amputation trans metatarsal				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
<b>Knee joint</b>	Anterior cruciate ligament (acl) reconstruction				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Ankle joint</b>	Arthrodesis ankle				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Hand/foot</b>	Arthrodesis digital joint				X		X	X			GA OR LRA	Orthopedic Surgeon
	Arthrodesis hip						X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Hip joint</b>	Excision arthroplasty						X	X				Orthopedic Surgeon
<b>Knee joint</b>	Arthrodesis knee				X	X	X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Foot</b>	Arthrodesis stabilization of foot arthrodesis				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Shoulder</b>	Arthroplasty of acromioclavicular joint				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Foot</b>	Triple arthrodesis				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Hip/knee/shoulder/ankle/elbow</b>	Debridement large joints				X		X	X			GA or LRA	Orthopedic Surgeon
	Arthroscopy knee (diagnostic)				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Knee joint</b>	Arthroscopy knee + acl/pcl repair				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Arthroscopy knee + meniscectomy or repair				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
Upper limb/lower limb	Arthroscopy of elbow, wrist and ankle + any repair/surgery				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Hip joint	Arthroscopy of the hip/labral repair				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Shoulder/elbow/wrist/ ankle	Arthroscopy shoulder, elbow, wrist, ankle (diagnostic)				X		X	X			GA, LRA or SPINAL Anesthesia	Orthopedic Surgeon
Shoulder joint	Arthroscopy shoulder+any repair				X		X	X			GA or LRA	Orthopedic Surgeon
All joints	Aspiration of joint				X	X	X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
All bones	Bone biopsy less readily accessible				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
	Bone biopsy open readily accessible				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
Lower limb	Bone grafting/internal fixation of tibia				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Bone grafting/internal fixation: femur				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Upper/ lower limb	Bone grafting/internal fixation: other bones				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Lower limb	Capsulectomy ankle				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Upper limb	Capsulectomy elbow				X		X	X			GA or LRA	Orthopedic Surgeon
Hip joint	Capsulectomy hip				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Knee joint</b>	Capsulectomy knee				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Shoulder joint</b>	Capsulectomy shoulder				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Wrist joint</b>	Carpal bone replacement				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Hand</b>	Carpal-metacarpal disarticulation of multiple fingers				X		X	X			GA or LRA	Orthopedic Surgeon/ General Surgeon
<b>Hand</b>	Carpal-metacarpal disarticulation of one finger				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Hip joint</b>	Congenital dislocation of hip: open reduction				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Congenital dislocation of hip: subsequent plaster				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Congenital dislocation of hips: close reduction				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Hand</b>	Curettage of a metacarpal bone				X		X	X			GA or LRA	Orthopedic Surgeon/ General Surgeon
<b>Upper joint</b>	Curettage of one bone of the forearm				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Hand</b>	Curettage of the carpal bone under ga				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Upper/ lower limb</b>	Decompression operation: fasciotomy only				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
	Drainage reaming and irrigation (lautenbach procedure)				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Elbow joint</b>	Elbow arthrodesis				X		X	X			GA or LRA	Orthopedic Surgeon
	Elbow arthrolysis				X		X	X			GA or LRA	Orthopedic Surgeon
	Elbow arthroplasty				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Knee joint</b>	Elsiem trirant procedure				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Elbow joint</b>	Elbow disarticulation				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Upper /lower limb</b>	Epiphysiodesis at one level				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
	Exostosis: excision: readily accessible sites				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Hand</b>	Finger amputation at any level				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Upper/lower limb</b>	Fixation post osteotomy (long bones)				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
	Fractures: closed reduction with general anesthesia + pop				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
<b>Foot</b>	Hallux valgus repair				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Cervical spine</b>	Halo-splint and pop jacket inc				X		X	X			LA (for pins)	Orthopedic Surgeon
<b>Pelvis/lower limb</b>	Harvesting bone graft (iliac crest/ fibula)				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Hip joint</b>	Hip total replacement				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper limb</b>	Humeral curettage under general anesthesia				X		X	X			GA or LRA	Orthopedic Surgeon
<b>All joints</b>	Intra articular injection				X	X	X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon
	Intra-articular injection in theatre				X	X	X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Knee/shoulder joint</b>	Joint ligament reconstruction				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Knee joint</b>	Knee: quadricepsplasty				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Knee joint</b>	Knee: total replacement				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Knee joint</b>	Ligament augmentation procedure				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper limb</b>	Manipulation under GA + k wires distal radius				X		X	X			GA, LRA	Orthopedic Surgeon/ General Surgeon
<b>Upper/lower limb</b>	Manipulation: large joint under c-arm				X	X	X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
	Material removal: screws				X	X	X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Knee</b>	Medial parapatellar ligaments reconstruction				X		X	X			GA OR SPINAL Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
Upper limb	Metaphyseal osteotomy of radius				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
Foot	Multiple metatarsal osteotomies				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Elbow joint	Muscle, tendons, and fascia tendon transfer at elbow				X		X	X			GA, LRA	Orthopedic Surgeon
Lower limb	Nail removal femur				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Upper limb	Nail removal humerus				X		X	X			GA, LRA	Orthopedic Surgeon
Lower limb	Nail removal tibia				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Shoulder joint	Open reduction and fixation of sterno-clavicular dislocation				X		X	X			GA, LRA	Orthopedic Surgeon
Shoulder joint	Open reduction and fixation acromio-clavicular dislocation				X		X	X			GA, LRA	Orthopedic Surgeon
Elbow joint	Open reduction and fixation elbow dislocation				X		X	X			GA, LRA	Orthopedic Surgeon
Lower limb	Open reduction and fixation femur: neck or shaft				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Open reduction and fixation fracture femur: supra or intra condylar				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
Hand	Open reduction and fixation fracture of carpal bones				X		X	X			GA, LRA	Orthopedic Surgeon
Shoulder joint	Open reduction and fixation fracture of clavicular fracture				X		X	X			GA, LRA	Orthopedic Surgeon



	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Upper limb</b>	Open reduction and fixation fracture of humerus head				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation fracture of humerus shaft				X		X		X		GA, LRA	Orthopedic Surgeon
	Open reduction and fixation fracture of olecranon				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Hand</b>	Open reduction and fixation fracture of one metacarpal and phalanx bone				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Pelvis</b>	Open reduction and fixation fracture of pelvis						X	X			GA or Spinal	Orthopedic Surgeon
<b>Upper limb</b>	Open reduction and fixation fracture of radial shaft				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation fracture of radius and ulna shafts				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Hand</b>	Open reduction and fixation fracture of scaphoid				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Upper limb</b>	Open reduction and fixation fracture of scapho-lunate dislocation				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation fracture of the distal extremity of the radius				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Lower limb</b>	Open reduction and fixation fracture of ulna shaft				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation fracture tibial plateau				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Open reduction and fixation fractured patella				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Upper limb</b>	Open reduction and fixation of epicondyle or epitrochlea				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation of fracture-dislocation of radial head				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation of Monteggia fracture-dislocation				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Hand</b>	Open reduction and fixation of multiple metacarpal bones				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation of supracondylar fracture humerus				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Upper limb</b>	Open reduction and fixation of supra-condylar fracture of the humerus				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation of the radial head or radial neck				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction and fixation pubic diastasis				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Pelvis</b>	Open reduction and fixation tibial shaft				X		X				GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Lower limb</b>												
<b>Shoulder</b>	Open reduction and fixation (orf) shoulder dislocation				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction of a dislocated finger				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Hand</b>	Open reduction of a fracture of one finger				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction of a fracture-dislocation of the elbow				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Elbow joint</b>	Open reduction of a recent elbow dislocation				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction of an old elbow dislocation (more than three weeks)				X		X	X			GA, LRA	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Hand</b>	Open reduction of fracture of multiple fingers				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction of multiple fingers of one hand				X		X	X			GA, LRA	Orthopedic Surgeon
	Open reduction of multiple metacarpals and carpals dislocation				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Upper limb</b>	Open reduction and fixation of the humeral neck				X		X	X			GA, LRA	Orthopedic Surgeon
<b>Foot</b>	ORIF calcaneus fracture				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Ankle joint</b>	ORIF fracture-dislocation of ankle				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Foot</b>	ORIF Jones fracture				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	ORIF other tarsal bones				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	ORIF talar dome fracture				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	ORIF talar neck fracture				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	ORIF tarsometatarsal dislocation (lisfranc)				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Lower limb</b>	ORIF tibia with or without fibula				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Foot</b>	Osteotomy multiple metatarsals				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Hand</b>	Osteosynthesis of the carpal bone				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Lower limb</b>	Osteotomy femoral: proximal				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper limb</b>	Osteotomy humeral shaft				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Lower limb</b>	Osteotomy knee region: adults				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Osteotomy knee region: children				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Pelvis</b>	Osteotomy of pelvis				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper limb</b>	Plate removal distal radius				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Lower limb</b>	Plate removal femur				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper limb</b>	Plate removal humerus				X		X	X			GA or LRA	Orthopedic Surgeon
	Plate removal proximal radius				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Lower limb</b>	Plate removal tibia				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper limb</b>	Plate removal ulna and radius				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Knee joint</b>	Posterior cruciate ligament (pci) reconstruction				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Lower limb</b>	Reconstruction of femoral condyle				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Shoulder joint</b>	Reconstruction of recurrent shoulder dislocation				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Upper limb</b>	Reconstruction of the radial head				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Lower limb</b>	Reconstruction of tibial pilon				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Reconstruction of tibial plateau				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
	Reconstruction patella (comminuted)				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Hand</b>	Refashioning of a finger amputation				X		X	X			GA or LRA	Orthopedic Surgeon
	Refashioning of the transmetacarpal finger amputation				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Hip joint</b>	Relook debridement-hip joints				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>All joints</b>	Relook debridement-other joints				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Ankle joint</b>	Removal ankle metal work				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper/lower limb</b>	Removal external fixator				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Multiple organs</b>	Removal of foreign bodies requiring incision under general anesthesia				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon/ General Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Elbow joint</b>	Removal of intramuscular osteoma of the elbow				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Upper/ lower limb</b>	Removal of k-wire				X	X	X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper limb</b>	Removal of synostosis of the forearm				X		X	X			GA or LRA	Orthopedic Surgeon
	Resection of a bone of the forearm with use bone graft or prosthesis				X		X	X			GA or LRA	Orthopedic Surgeon
	Resection of distal extremity of ulna				X		X	X			GA or LRA	Orthopedic Surgeon
	Resection of radial styloid				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Shoulder joint</b>	Rotator cuff repair				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Knee joint</b>	Revision tkr: polyethylene liner only				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Spine/pelvis</b>	Sacro-iliac fusion				X		X	X			GA or Spinal	Orthopedic Surgeon
<b>Upper/lower limb</b>	Sequestrectomy long bones (femur, tibia, humerus)				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper limb</b>	Sequestrectomy short bones (radius, ulna, other short bones)				X		X	X			GA, LRA or SPINAL Anesthesia	Orthopedic Surgeon
	Shortening of both ulna and radius				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Shoulder joint</b>	Sternoclavicular arthrodesis				X		X	X			GA or LRA	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
Upper limb	Supracondylar humerus manipulation under GA + k wires				X	X	X	X			GA or LRA	Orthopedic Surgeon
	Surgery for humeral tumor with bone grafting				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of epicondylalgia				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of elbow chondromatosis				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of humeral malunion				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of humeral pseudoarthrosis				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of olecranon pseudoarthrosis of olecranon				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of a metacarpal pseudoarthrosis				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of one finger pseudoarthrosis				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of pseudoarthrosis of one bone of the fore-arm				X		X	X			GA or LRA	Orthopedic Surgeon
	Surgical treatment of the pseudoarthrosis of the carpal bone				X		X	X			GA or LRA	Orthopedic Surgeon
	Synovectomy elbow				X			X	X		GA or LRA	Orthopedic Surgeon

	Interventions	D	MP	MC	SC	P	H	SH	AN	NH	Description and Anesthesia	Qualification
<b>Wrist joint</b>	Synovectomy of the wrist				X		X	X			GA or LRA	Orthopedic Surgeon
<b>All joint</b>	Synovectomy: large joint				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>All joints</b>	Synovectomy: tendon				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Foot</b>	Talar dome open reduction fixation(orf)				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Foot</b>	Talar neck orf				X		X	X			GA or Spinal Anesthesia	Orthopedic Surgeon
<b>Elbow joint</b>	Tennis elbow				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Wrist joint</b>	Tenolysis carpal tunnel				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Hand</b>	Tenolysis flexor tendon freeing				X		X	X			GA or LRA	Orthopedic Surgeon
	Tenolysis intrinsic tendon release per finger				X		X	X			GA or LRA	Orthopedic Surgeon
<b>Hand and foot</b>	Tenolysis: open elongation tendon				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
	Titanium ender nails insertion				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>Upper/lower limb</b>	Titanium ender nails removal				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon
<b>All joints</b>	Tumors: nodular synovitis				X		X	X			GA, LRA or Spinal Anesthesia	Orthopedic Surgeon



**Table 5: Therapeutic and Diagnostic Imaging Services**

Service	Interventions	Service Level							Types of Staff				
		MP	MC	SC	P	H	SH	IC*	Radiologist	Imaging Specialist	Medical Imaging Officer	Rad. Technologist	
<b>GENERAL RADIOGRAPHY</b> (Plain radiographic procedures)	Musculoskeletal procedures		X	X	X	X	X	X	X	X	X	X	X
	Plain abdominal procedures		X	X	X	X	X	X	X	X	X	X	X
	Respiratory procedures		X	X	X	X	X	X	X	X	X	X	X
<b>ULTRASOUND</b> (Sonography)	Abdomino-pelvic sonography	X	X	X	X	X	X	X	X	X	X	X	X
	Obstetrics & gynecology sonography	X	X	X	X	X	X	X	X	X			
	Musculoskeletal sonography			X	X	X	X	X	X	X	X		
<b>FLUOROSCOPY</b>	Small parts sonography		X	X	X	X	X	X	X	X	X		X
	Vascular sonography			X	X	X	X	X	X	X	X		
	Cardiac sonography/ echocardiography			X	X	X	X	X	X	X	X		
	Hystero-			X	X	X	X	X	X	X	X		X

Service	Interventions	Service Level							Types of Staff					
		MP	MC	SC	P	H	SH	IC*	Radiologist	Imaging Specialist	Medical Imaging Officer	Rad. Technologist		
<b>(Special procedures)</b>	salpingography													
	Urinary tract procedures (IVU, UCG)			X	X	X	X	X	X	X	X			X
	Gastrointestinal tract studies			X	X	X	X	X	X	X	X			X
	Venography			X	X	X	X	X	X	X	X			X
<b>COMPUTED TOMOGRAPHY (CT Scanning)</b>	Sialography & fistulography			X	X	X	X	X	X	X	X			X
	Musculoskeletal CT			X	X	X	X	X	X	X	X			X
	Abdomino-pelvic CT			X	X	X	X	X	X	X	X			X
	Neuro-imaging			X	X	X	X	X	X	X	X			X
<b>MAGNETIC RESONANCE IMAGING (MRI)</b>	Cardio-respiratory CT			X	X	X	X	X	X	X	X			X
	CT angiography			X	X	X	X	X	X	X	X			X
	Musculoskeletal MRI			X	X	X	X	X	X	X	X			X
	Abdomino-pelvic MRI			X	X	X	X	X	X	X	X			X
<b>MAMMOGRAPHY</b>	Neuro imaging			X	X	X	X	X	X	X	X			X
	Cardiac MRI			X	X	X	X	X	X	X	X			X
	MR angiography			X	X	X	X	X	X	X	X			X
	Mammographic procedures			X	X	X	X	X	X	X			X	X

Service	Interventions	Service Level							Types of Staff			
		MP	MC	SC	P	H	SH	IC*	Radiologist	Imaging Specialist	Medical Imaging Officer	Rad. Technologist
<b>DENTAL RADIOGRAPHY</b>	Peri-apical x-ray			X	X	X	X	X		X	X	X
	Occlusal X-ray			X	X	X	X	X		X	X	X
	Cephalometric		X	X	X	X	X	X		X	X	X
	Bite wing x-ray		X	X	X	X	X	X		X	X	X
	Orthopantomogram (OPG)		X	X	X	X	X	X		X	X	X
<b>INTERVENTIONAL RADIOLOGY</b>	Interventional procedures			X				X		X		X
<b>NUCLEAR MEDICINE</b>	Diagnostic radionuclide procedures			X				X		X		X
<b>RADIOTHERAPY</b>	External beam therapy			X				X		X		X
	<u>Brachytherapy</u>			X				X		X		X
	Radionuclide therapy			X				X		X		X

\*Imaging Center

\*\* A dispensary can be allowed to offer general abdomono-pelvic, obstetrics & gynecology and small parts sonography provided the staff received a formal training and are licensed to do so.

**Table 6: Ophthalmic Services**

Service Category	Intervention	Level of Health Facility					Healthcare Staff		Comments
		Vision Center	Optometry Practice	Eye Clinic	Eye Unit	Eye Hospital	Description	Qualification	
<b>Refractive services</b>									
	Full refraction and prescription of glasses	X	X	X	X	X	COT, A0 O.T, A0 Optometrist, Ophthalmologist	Certified OT, A0 OT, BSc Optometry, Specialist	Certified ophthalmic technician is a special course for A1 OT.
	Prescription of contact lenses (soft and rigid)		X			X	Optometrist	A0, BSc Optom	
	Dispensing glasses	X	X			X	Optometrist	BSc Optom	
	Optical workshop		X			X	Qualified Optician	Diploma	
	Refractive surgery					X	Subspecialist Cornea and refractive surgery	Certified refractive Surgeon	
<b>Glaucoma Services</b>									
	Glaucoma screening (IOP)	X	X	X	X	X	O T, Optometrist, Specialist	A1/ A0/ Specialist	All levels of eye care should be able to take intraocular pressure
	Glaucoma Confirmation tests			X	X	X	Ophthalmologist	Specialist	
	Prescription for Glaucoma		X	X	X	X	Ophthalmologist	Specialist	
	Glaucoma Surgery				X	X	Ophthalmologist	Specialist	

Service Category	Intervention	Level of Health Facility					Healthcare Staff		Comments
		Vision Center	Optometry Practice	Eye Clinic	Eye Unit	Eye Hospital	Description	Qualification	
<b>Conjunctivitis</b>									
	Diagnosing Conjunctivitis	X		X	X	X	OT, Ophthalmologist	A1, A0, Specialist	
	Treatment of Conjunctivitis (all)	X		X	X	X	OT, Ophthalmologist	A1, A0, Specialist	
<b>General examination</b>									
	Slit lamp exam	X		X	X	X	OT, Ophthalmologist	A1, A0 Specialist	
	Anterior segment photos	X		X	X	X	OT, Optometrist, Ophthalmologist	A1, A0, Specialist	Vision Centers send photos for tele-consultation
	Fundoscopy			X	X	X	Ophthalmologist	Specialist	
	Fundus photos	X		X	X	X	OT, Optometrist, Ophthalmologist	A1, A0, Specialist	Photos are sent for tele-consultations
	<b>Special Investigations</b> (Including strabismus assessment)			X	X	X	Ophthalmologists	Specialists/subspecialists	OT, Optometrist can do the tests but the Specialist interprets
<b>Ophthalmic Surgery</b>									
	Abscess/Sty/Chalazion			X	X	X	OT, Ophthalmologist	A1, A0, Specialist	
	Laser treatment for retina			X	X	X	Ophthalmologists	Specialist	
	Intravitreal injections			X	X	X	Ophthalmologist	Specialist	

Service Category	Intervention	Level of Health Facility					Healthcare Staff		Comments
		Vision Center	Optometry Practice	Eye Clinic	Eye Unit	Eye Hospital	Description	Qualification	
	General Surgery Ophthalmology								
	(Cataract, Simple glaucoma, Trauma, simple lid)		X		X	X	Ophthalmologist	Specialist	
	Subspecialty Surgery (pediatric; cornea and anterior segment and refractive; orbit and oculoplastic; glaucoma; vitreo-retinal)				X	X	Ophthalmologist	Subspecialty trained	Skills training required, not academic

## Specific Definitions of types of eye centers

**Vision Center:** It is a primary eye care center linked to an eye hospital. Visual screening for refractive errors, glaucoma screening and imaging for diabetic retinopathy or other retinal disease is performed. Tele-consultations services are available through the main hospital. If it is run by an optometrist, it can also have optical services in the package but no optical workshop. It can also be run by an ophthalmic technician (OT A1 level, if it is part of a referral network and A0 if it is a stand-alone practice). The OT can treat conjunctivitis at this level.

**Optometry practice:** It is a center offering full range of optical services including testing for glasses and contact lenses, optical shop for dispensing glasses, workshop for cutting lenses and fitting of glasses. It is run by qualified optometrist (Bachelor's degree) with the assistance an optician for fitting the glasses.

**Eye Clinic:** A specialist clinic is run by an ophthalmologist who provides both diagnostic and therapeutic services of all eye diseases, and minor surgery. Eye clinics do not have optical shops or pharmacies.

**Eye Unit:** An eye unit is an eye clinic based in a general hospital that is managed by an ophthalmologist. All types of diagnostic and therapeutic services both medical and surgical are provided with no restrictions. The hospital can have optical services as well as pharmaceutical products.

**Eye Hospital:** An eye hospital is a specialized facility that provides high level eye care; for outpatients and inpatients along with an operating theater – it is a one-stop center for all ophthalmology services. For a center to qualify as an eye hospital, it needs to provide the main subspecialty services in ophthalmology: cornea and anterior segment; pediatric and strabismus; glaucoma; vitreo-retinal; oculoplastic and orbit as well general ophthalmology services. These services are provided by certified subspecialists.

**Minimum requirement:** 3 subspecialty services in addition to general ophthalmology running full time; their services may be offered on a part- time basis.

**Table 7: Ophthalmic Definitions**

Minor surgery	An operation on superficial structures of the body or a manipulative procedure or under normal circumstance does not <b>a major hazard or s that does involve serious risk.</b>
Ophthalmic Technician/ Ophthalmic Clinical Officer (OCO)	<p>An Ophthalmic Clinical Officer (OCO) is a professional health worker who has completed three years training in ophthalmology from an accredited institution and obtained an advanced diploma or its equivalent.</p> <p>An Ophthalmic Clinical Officer (OCO) should be able to provide appropriate preventive, curative and rehabilitative eye care services, and delivery to individuals and communities. An OCO can work in both public and private sector.</p>
Ophthalmologist	An ophthalmologist is a medical doctor who specializes in eye and vision care. An ophthalmologist is licensed to practice medicine and surgery. An ophthalmologist diagnoses and treats all eye diseases, performs eye surgery and prescribes and fits eyeglasses and contact lenses to correct vision problems.
Optician	Opticians are technicians trained to design, verify and fit eyeglass lenses and frames, contact lenses, and other devices to correct eyesight. They use prescriptions supplied by ophthalmologists, Ophthalmic Clinical Officer or optometrists, but do not test vision or write prescriptions for visual correction. Opticians are not permitted to diagnose or treat eye disease.
Optometric technicians	Optometric technicians work under the supervision of an optometrist or ophthalmologist. They perform a variety of duties including: patient pretesting such as visual acuity, color vision, depth perception, pupil reflexes, visual field testing, pressure inside the eye and blood pressure; frame and lens selection, eyeglass adjustment; and contact lens patient education.
Optometrist	Optometrists are healthcare professionals who provide primary vision care ranging from sight testing and correction to the diagnosis, treatment, and management of vision changes. An optometrist is not a medical doctor. They are licensed to practice optometry, which primarily involves performing eye exams and vision tests, prescribing and dispensing corrective lenses, detecting certain eye abnormalities, and prescribing medications for certain eye diseases.



**Table 8: Ophthalmic Services<sup>2</sup>**

Service	Interventions	Ophthalmic techs/ Cataract Surgeon	Optometrist	Ophthalmologist	MP	MC	SC	P	H	SP	Ophthalmic Technician Clinic
Eye Examinations	Routine eye exam: visual acuity, pupil assessment, color vision, tonometry, eye muscle movements	X	X	X		X	X	*	*	*	X
	Ophthalmoscopy (direct or indirect)	X	X	X		X	X	*	*	*	X
	Screening fundus photography	X	X	X		X	X	X	X	X	X
	Photographs (e.g. external ocular)	X	X	X		X	X	X	X	X	X
	Screening for defects in central or peripheral field of vision (arc perimeter, tangent screen or computerized auto field analyzer)	X	X	X		X	X	*	*	*	X

<sup>2</sup> Only a clinical optometrist having the academic qualification of at least A0 is allowed to prescribe and sell medical eyeglasses or contact lenses. An ophthalmologist's physician possessing all the equipment is allowed to prescribe medical eyeglasses and treat all eye related diseases but not to sell eyeglasses. (Ministerial Instructions Licensing Private Health Facilities in Rwanda).

Service	Interventions	Ophthalmic techs/ Cataract Surgeon	Optometrist	Ophthalmologist	MP	MC	SC	P	H	SP	Ophthalmic Technician Clinic
<b>Treatments</b>	Measurement of lateral or vertical imbalances & near focusing ability (phoropter, trial lens set, or phorometer)	X	X	X		X	X	*	*	*	X
	Ophthalmometry to measure corneal curvature & presences of scarring	X	X	X		X	X	*	*	*	X
	Corneal topography	X	X	X		X	X	*	*	*	X
	Contact lens exam	X	X	X		X	X	X	X	X	X
	Glaucoma screening	X	X	X		X	X	*	*	*	X
	Pachymetry	X	X	X		X	X	*	*	*	X
	Pediatric vision exams	X	X	X		X	X	*	*	*	X
	Prescribe and fit eye glasses	X	X	X		X	X	X	X	X	X
	Contact lens fitting		X	X		X	X	X	X	X	X
	Treatment of keratoconus		X	X		X	X	X	X	X	X
	Lacrimal duct implants			X			X	X	X	X	X
	Blepharoplasty or blepharoptosis			X		X	X	X	X	X	X
Laser surgery			X		X	X	X	*	*	X	

Service	Interventions	Ophthalmic techs/ Cataract Surgeon	Optometrist	Ophthalmologist	MP	MC	SC	P	H	SP	Ophthalmic Technician Clinic
	Treatment of glaucoma	X	X	X		X	X	X	X	X	X
	Treatment of retinal/uveitis diseases	X	X	X		X	X	X	X	X	X
	Pediatric eye care	X	X	X		X	X	X	X	X	X
	Strabismus surgery			X		X	X	X	X	X	X
	Cataract surgery*	X		X		X	X	*	*	*	X
	Postoperative cataract care	X	X	X	X	X	X	X	X	X	X
	Emergency treatment of eye injuries	X	X	X	X	X	X	X	X	X	

\*Under supervision of an ophthalmologist

**Table 9: Ophthalmic Equipment**

Equipment	Facility level					Comments
	Vision Center	Optometry Practice	Eye Clinic	Eye Unit	Eye Hospital	
Refraction kit	X	X	X	X	X	
Auto-refractometer	X	X	X	X	X	
Non-contact tonometer	X	X	X	X	X	Screening of glaucoma
Applanation tonometer			X	X	X	
Slit lamp	X		X	X	X	
Optical workshop equipment		X			X	Only facilities that can produce fitted glasses.
Direct ophthalmoscope	X		X	X	X	
Indirect ophthalmoscope			X	X	X	
Diagnostic lenses			X	X	X	
Color vision and stereopsis			X	X	X	
A Scan ultrasound				X	X	
B Scan ultrasound				X	X	
Visual field analyzer			X	X	X	
Optical Coherence Tomography (OCT)					X	Highly specialized investigations
Cornea Topography/Tomography					X	Highly specialized investigations

Equipment	Facility level					Comments
	Vision Center	Optometry Practice	Eye Clinic	Eye Unit	Eye Hospital	
Argon laser				X	X	
YAG laser				X	X	
Excimer laser					X	High tech surgery
Operating microscope				X	X	
Phaco machine				X	X	Advanced cataract surgery
Posterior vitrector				X	X	
Anterior vitrector				X	X	
Collagen cross-linking machine				X	X	New high tech cornea treatment
Different Instrument sets				X	X	
Autoclaves				X	X	
Ethylene oxide (EtO) sterilizer					X	Gas sterilizer: to handle with extreme care.
Laboratory equipment						
Hematology					X	
Biochemistry					X	
Microbiology					X	
Orthoptic equipment				X	X	Expert assessment of ocular movement disorders.

**Table 10: Dental Services**

Service	Interventions	Type of Health Worker				Level of Facility	Staff Description	Equipment
		Dental surgeon	Dentist	Orthodontics	Dental therapist			
Health Promotion	Behavior change communication (BCC); health education for patients and families	X	X	X	X	Polyclinic, Hospital, Dental clinic	Specialist, dental surgeon, dentist, dental therapy	Dental models, toothbrush, toothpaste
	Community health mobilization/sensitization	X	X		X	X	Specialist, dental surgeon, dentist, dental therapy	
General	School health	X	X		X	X	Specialist, dental surgeon, dentist, dental therapy	
	Consultation X-ray	X	X	X	X	X	Specialist, dental surgeon, dentist, dental therapy	<ul style="list-style-type: none"> <li>▪ Dental chair</li> <li>▪ Dental furniture</li> <li>▪ Light</li> <li>▪ Hand pieces</li> <li>▪ Tabletop autoclave</li> <li>▪ X-ray</li> <li>▪ Dental digital x-ray</li> <li>▪ X-ray film developer with darkroom</li> <li>▪ X-ray viewer</li> <li>▪ Digital camera</li> <li>▪ Lead apron</li> </ul>

Service	Interventions	Type of Health Worker				Level of Facility		Staff Description	Equipment
		Dental surgeon	Dentist	Orthodontics	Dental therapist	Polyclinic, Hospital, Dental clinic	Qualification		
<b>Prevention</b>	Cleaning; Patient education; Use of fluoride		X		X	X	Specialist, dental surgeon, dentist, dental therapy	Basic instruments Magnifier goggles	
<b>Restoration</b>	Fillings: Classes 1, 2, 3, 4, 5	X	X	X	X	X	Specialist, dental surgeon, dentist (Dental therapy A1 1&5 only)	Amalgamator machine Basic instrument sets	
	Bonding	X	X	X	X	X	Specialist, dental surgeon, dentist, dental therapy	Basic instrument sets, light cured	
<b>Surgical</b>	Oral & maxillofacial procedures; laser procedures; impacted wisdom teeth; complicated facial trauma, surgical of tumors	X				This can be done in specialist dental clinic & hospital only	Maxillofacial surgeon	Laser machine & other advanced instruments	
	Extractions	X	X	X	X	X	Specialist, dental surgeon, dentist, dental therapy	Impacted wisdom tooth extraction set Basic instrument	
	Periodontal treatment	X	X	X	X	X	Specialist, dental surgeon, dentist, dental therapy		
<b>Orthodontics</b>	Orthodontics			X		X	Orthodontics only	▪ Orthodontics instruments	
<b>Endodontics</b>	Root canals treatment	X	X			X	Dental surgeon, dentist,	▪ Root canal treatment set ▪ Apicectomy set ▪ Apex locator	
<b>Prosthodontics</b>	Dentures	X	X			X	Dental technologists	▪ Prosthodontics	
	Dental crowns	X	X			X		lab	
	Dental bridges	X	X			X			

**Table 11: Rehabilitation Services**

Service	Interventions	Type of Healthcare Worker	Level of Facility		Required Equipment
			Polyclinic/ Hospital	Private Clinic	
Physiotherapy	Functional assessment	X	X	X	
	Cryotherapy (cold therapy)		X	X	<ul style="list-style-type: none"> <li>• Cold baths, standard size</li> </ul>
	Heat therapy: <ul style="list-style-type: none"> <li>• Hot packs</li> </ul>		X	X (optional)	<ul style="list-style-type: none"> <li>• Hot baths, standard size</li> </ul>
	<ul style="list-style-type: none"> <li>• Paraffin wax baths</li> </ul>		X	X (optional)	<ul style="list-style-type: none"> <li>• Combination therapy unit</li> </ul>
	<ul style="list-style-type: none"> <li>• Paraffin wax baths</li> </ul>		X	X (optional)	<ul style="list-style-type: none"> <li>• Paraffin bath</li> </ul>
	<ul style="list-style-type: none"> <li>• Infrared heat</li> </ul>		X	X	<ul style="list-style-type: none"> <li>• Infrared lamp</li> </ul>
	<ul style="list-style-type: none"> <li>• Ultrasound</li> </ul>		X	X	<ul style="list-style-type: none"> <li>• Ultrasound machine</li> </ul>
	<ul style="list-style-type: none"> <li>• Diathermy</li> </ul>		X (optional)	X (optional)	<ul style="list-style-type: none"> <li>• Diathermy (shortwave) machine</li> </ul>
	Hydrotherapy		X (optional)	X (optional)	<ul style="list-style-type: none"> <li>• Hydrotherapy pool</li> </ul>
	Electrical stimulation		X	X (optional)	<ul style="list-style-type: none"> <li>• TENS unit</li> </ul>
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>• Multipurpose stimulator machine</li> </ul>
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>• Electromyography apparatus</li> </ul>



Service	Interventions	Type of Healthcare Worker	Level of Facility		Required Equipment			
			Polyclinic/ Hospital	Private Clinic				
Range of motion exercises		PT (from BSc PT and above (MSc, PhD))	X (optional)	X (optional)	<ul style="list-style-type: none"> <li>E-Z exercise board for fingers</li> </ul>			
			X	X	<ul style="list-style-type: none"> <li>Goniometer</li> </ul>			
			X	X	<ul style="list-style-type: none"> <li>Tape measure</li> </ul>			
			X	X	<ul style="list-style-type: none"> <li>Treatment couch</li> </ul>			
			X	X (optional)	<ul style="list-style-type: none"> <li>Vibromat machine</li> </ul>			
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Ultraviolet lamp with lenses</li> </ul>			
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Ultraviolet cabinet</li> </ul>			
			X	X	<ul style="list-style-type: none"> <li>Balls – different sizes</li> </ul>			
			X	X	<ul style="list-style-type: none"> <li>Wobble board</li> </ul>			
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Ankle Arc plus</li> </ul>			
Therapeutic massage (ultraviolet and infrared)			X	X	<ul style="list-style-type: none"> <li>Digital hand dynamometer</li> </ul>			
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Extension bars, wall bars</li> </ul>			
			X	X (optional)	<ul style="list-style-type: none"> <li>Inflatable air splint for limbs</li> </ul>			
			X	X (optional)	<ul style="list-style-type: none"> <li>Plaster spreader</li> </ul>			
			X	X (optional)	<ul style="list-style-type: none"> <li>Cast saw</li> </ul>			
			Joint mobilization			X	X	
						X	X	
						X (optional)	X (optional)	
						X	X	
						X (optional)	X (optional)	
Joint immobilization						X	X (optional)	
						X	X (optional)	
						X	X (optional)	
						X	X (optional)	
						X	X (optional)	

Service	Interventions	Type of Healthcare Worker	Level of Facility		Required Equipment	
			Polyclinic/ Hospital	Private Clinic		
		PT (from BSc PT and above (MSc, PhD))	X	X (optional)	<ul style="list-style-type: none"> <li>Cast bending forceps</li> </ul>	
			X	X (optional)	<ul style="list-style-type: none"> <li>Plaster knife cutter</li> </ul>	
			X	X (optional)	<ul style="list-style-type: none"> <li>X-ray viewer</li> </ul>	
			X	X	<ul style="list-style-type: none"> <li>Exercise room</li> </ul>	
			X	X	<ul style="list-style-type: none"> <li>Bars, vertical wooden, wall-mounted</li> </ul>	
			X	X	<ul style="list-style-type: none"> <li>Walking frame</li> </ul>	
	Gait training/assistive device training			X	X	<ul style="list-style-type: none"> <li>Crutches, aluminum</li> </ul>
				X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Mobile crawler (e.g. PRONE)</li> </ul>
				X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Pediatric stand positioner</li> </ul>
				X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Posterior Tyke roller</li> </ul>
				X		<ul style="list-style-type: none"> <li>Exercise mats</li> </ul>
				X	X	<ul style="list-style-type: none"> <li>Dumb bell set</li> </ul>
Muscle strengthening			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Exercise wheel, wooden, wall-mounted shoulder wheel</li> </ul>	

Service	Interventions	Type of Healthcare Worker	Level of Facility		Required Equipment
			Polyclinic/ Hospital	Private Clinic	
		PT (from BSc PT and above (MSc, PhD))	X	X	<ul style="list-style-type: none"> <li>Wrist roll</li> </ul>
			X	X	<ul style="list-style-type: none"> <li>Pulleys</li> </ul>
			X(optional)	X(optional)	<ul style="list-style-type: none"> <li>Quadriceps bench</li> </ul>
			X(optional)	X(optional)	<ul style="list-style-type: none"> <li>Pedal exerciser</li> </ul>
			X(optional)	X(optional)	<ul style="list-style-type: none"> <li>Continuous passive motion (CPM) for lower &amp; upper limbs</li> </ul>
			X	X	<ul style="list-style-type: none"> <li>Mechanical therapy with accessories</li> </ul>
			X	X	No equipment needed
Ergonomic training	Balance exercises		X	X	<ul style="list-style-type: none"> <li>Balance board, roller and cushion</li> </ul>
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Trampoline</li> </ul>
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Sit to stand exerciser</li> </ul>
Traction			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Traction table</li> </ul>
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>Cervical traction unit, door frame</li> </ul>
Taping			X	X	<ul style="list-style-type: none"> <li>Scissors, tapes</li> </ul>
Bandaging			X	X	<ul style="list-style-type: none"> <li>Bandages</li> </ul>
Fitting of orthotics			X	X	
Aerobic exercise			X	X	<ul style="list-style-type: none"> <li>Ergo-stationary bicycles</li> </ul>

Service	Interventions	Type of Healthcare Worker	Level of Facility		Required Equipment
			Polyclinic/ Hospital	Private Clinic	
		PT (from BSc PT and above (MSc, PhD)	X	X	<ul style="list-style-type: none"> <li>• Steppers</li> </ul>
			X	X (optional)	<ul style="list-style-type: none"> <li>• Treadmill</li> </ul>
			X	X	<ul style="list-style-type: none"> <li>• Spirometer</li> </ul>
	Patient and family education		X	X	
	Motor learning activities		X	X	Hand therapy, small items
	Activities of daily living		X	X (optional)	<ul style="list-style-type: none"> <li>• Stacking cones</li> </ul>
			X (optional)	X (optional)	<ul style="list-style-type: none"> <li>• Upper limb workstation</li> </ul>

**Table 12: Nutrition and Dietetic Services**

Service	Interventions	Service Level						Types of Staff			EQUIPMENT
		MP	MC	SC	P	H	SH	Nutritionist	Dietician	Nutritionist & Dietician	
<b>NUTRITION</b>	Nutritional assessment/screening (anthropometric measurements, interpretation of nutritional index, growth monitoring)	X	X	X	X	X	X	A0, Masters	A0, Masters	A0, Master	<ul style="list-style-type: none"> <li>Balance</li> <li>Yard stick</li> <li>Bioelectrical impedance analyzer</li> <li>Metabolic cart (indirect calorimetry to measure energy expenditure)</li> <li>Skin fold caliper</li> <li>Cooking demonstration equipment</li> <li>Refrigerator</li> <li>Ribbon diametric (forearm and upper arms)</li> <li>Reference tables (BMI: girl and boy)</li> <li>Food composition tables</li> </ul>
	Nutritional counseling,	X	X	X	X	X	X	A0, Masters	A0, Masters	A0, Master	
	<ul style="list-style-type: none"> <li>Nutritional, rehabilitation of Protein Energy Malnutrition</li> </ul>	X	X	X	X	X	X	A0, Masters	A0, Masters	A0, Master	
	<ul style="list-style-type: none"> <li>Diet recall (Anamnesis) and diet assessment:</li> <li>Diet therapy: diabetes, hypertension, Nephropathy, Protein Energy Malnutrition, Intensive Care Unit cases, before and after surgical intervention or other...</li> </ul>	X	X	X	X	X	X	A0, Masters	A0, Masters	A0, Master	

Service	Interventions	Service Level						Types of Staff			EQUIPMENT
		MP	MC	SC	P	H	SH	Nutritionist	Dietician	Nutritionist & Dietician	
<b>DIETETICS</b>	<ul style="list-style-type: none"> <li>Nutritional assessment/screening (anthropometric measurements, interpretation of nutritional index)</li> <li>Anamnesis and diet assessment:</li> <li>Diet counseling</li> <li>Diet therapy: diabetes, hypertension, Nephropathy, Protein Energy Malnutrition, Intensive Care Unit cases, before and after surgical intervention or other...</li> </ul>	X	X	X	X	X	X	A0, Masters	A0, Masters	A0, Masters	

## NUTRITION/ DIETETIC EQUIPMENT

- Balance
- Yard stick
- Bioelectrical impedance analyzer
- Metabolic cart (indirect calorimetry to measure energy expenditure)
- Skin fold caliper
- Cooking demonstration equipment
- Refrigerator
- Ribbon diametric (forearm and upper arms)
- Reference tables (BMI: girl and boy)
- Food composition tables

**Table 13: Laboratory Services**

Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
Medical Practice (MP)	HEMATOLOGY	Hemoglobin (Hb)			X
		Erythrocyte sedimentation rate (ESR)			X
	BIOCHEMISTRY	Urine chemistry using strips: <ul style="list-style-type: none"> <li>• Albumin</li> <li>• Glucose</li> </ul>			X
		Specimen collection, storage, and transport			X
	MICROBIOLOGY	Microscopic examination & identification of blood parasites			X
		Stool and urine examination for parasites: fresh and after staining with Lugol's iodine			X
	Wet preparation			X	
IMMUNOSEROLOGY	Rapid tests: <ul style="list-style-type: none"> <li>• HIV</li> <li>• Pregnancy test</li> </ul>			X	
	Manual and automated methods: <ul style="list-style-type: none"> <li>• Full Blood Count</li> <li>• Red blood cells (RBCs)</li> <li>• White blood cells (WBCs) &amp; differential counts</li> </ul>		X	X	
Medical Clinic (MC)	HEMATOLOGY				



Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
		<ul style="list-style-type: none"> <li>• Hematocrit</li> <li>• Hemoglobin</li> </ul>			
		Erythrocyte sedimentation rate (ESR)		X	X
	<b>CHEMISTRY</b>	Fully automated methodology with ISE module for electrolytes		X	X
	<b>BIOCHEMISTRY</b>	Urine chemistry using strips:		X	X
		<ul style="list-style-type: none"> <li>• Albumin</li> <li>• Glucose</li> </ul>			
	<b>MICROBIOLOGY</b>	Blood chemistry		X	X
		<ul style="list-style-type: none"> <li>• Kidney function tests</li> <li>• Liver function tests</li> <li>• Blood glucose</li> </ul>			
		Specimen collection, storage, and transport		X	X
		Macroscopic examination		X	X
		Microscopic examination & identification of blood, body fluid and sputum: staining (giemsa, gram, methylene blue, Ziehl-Neelson)		X	X
	Stool examination for parasites: fresh and after staining with Lugol's iodine (or Kato-Katz, formol-ether)		X	X	
	Wet preparation		X	X	
	Cytobacteriological exam of urine		X	X	
	Examination of vaginal swabs		X	X	

Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
	<b>IMMUNOSEROLOGY</b>	Rapid tests: <ul style="list-style-type: none"> <li>• HIV</li> <li>• Hepatitis B</li> <li>• Hepatitis C</li> <li>• CRP</li> <li>• ASLO</li> <li>• Rubella</li> <li>• Toxoplasmosis</li> <li>• TPHA</li> <li>• Pregnancy test</li> <li>• Rheumatoid factor</li> </ul>	X		X
Polyclinic (PC)	<b>HEMATOLOGY</b>	Manual and automated methods: <ul style="list-style-type: none"> <li>• Full Blood Count</li> <li>• Red blood cells (RBCs)</li> <li>• White blood cells (WBCs) &amp; differential counts</li> <li>• Hematocrit</li> <li>• Hemoglobin</li> </ul>	X		X
		Erythrocyte sedimentation rate (ESR)			X
		Blood group and rhesus			X
		Coagulation tests: <ul style="list-style-type: none"> <li>• Bleeding time (BT)</li> <li>• Partial thromboplastin time (PTT)</li> <li>• Activated PTT (APTT)</li> <li>• Prothrombin time (PT)</li> </ul>	X		X
	<b>CHEMISTRY</b>	Fully automated methodology with ISE module for electrolytes	X		X

Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
BIOCHEMISTRY	Urine chemistry using strips: <ul style="list-style-type: none"> <li>• Albumin</li> <li>• Glucose</li> </ul>			X	X
		Blood chemistry <ul style="list-style-type: none"> <li>• Kidney function tests</li> <li>• Liver function tests</li> <li>• Blood glucose</li> </ul>		X	X
		Specimen collection, storage, and transport		X	X
	MICROBIOLOGY	Macroscopic examination		X	X
		Microscopy		X	X
		Microscopic examination & identification of blood, body fluid and sputum: staining (giemsa, gram, methylene blue, Ziehl- Neelson, India ink/ Cryptococcus antigen test)		X	X
		Stool examination for parasites: fresh and after staining with Lugol's iodine (or Kato-Katz, formol ether)		X	X
		Wet preparation		X	X
		Cytobacteriological exam of urine		X	X
		Examination of vaginal swabs		X	X
MYCOBACTERIOLOGY	TB rapid test		X	X	
	GeneXpert		X	X	
	Fluorescent microscope		X	X	

Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
	<b>IMMUNOSEROLOGY</b>	Rapid tests: <ul style="list-style-type: none"> <li>• HIV</li> <li>• Hepatitis B</li> <li>• Hepatitis C</li> <li>• CRP</li> <li>• ASLO</li> <li>• Rubella</li> <li>• Toxoplasmosis</li> <li>• TPHA</li> <li>• Pregnancy test</li> <li>• Rheumatoid factor</li> </ul>		X	X
<b>Hospital (H)</b>	<b>HEMATOLOGY</b>	Manual and automated methods: <ul style="list-style-type: none"> <li>• Full Blood Count</li> <li>• Red blood cells (RBCs)</li> <li>• White blood cells (WBCs) &amp; differential counts</li> <li>• Hematocrit</li> <li>• Hemoglobin</li> </ul>	X	X	X
		Erythrocyte sedimentation rate (ESR)		X	X
		Blood group and rhesus		X	X
		CD4 count (percent and absolute value)		X	X
		Reticulocyte count		X	X
		Sickle cell test		X	X
		Coagulation tests: <ul style="list-style-type: none"> <li>• Bleeding time (BT)</li> <li>• Partial thromboplastin time (PTT)</li> <li>• Activated PTT (APTT)</li> <li>• Prothrombin time (PT)</li> </ul>		X	X
		Compatibility testing		X	X
		Coombs test		X	X

Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
	<b>CHEMISTRY</b>	Fully automated methodology with ISE module for electrolytes		X	X
		Polarography		X	X
		Blood gas analysis		X	X
	<b>BIOCHEMISTRY</b>	Urine chemistry using strips: <ul style="list-style-type: none"> <li>• Albumin</li> <li>• Glucose</li> </ul>		X	X
		Blood chemistry <ul style="list-style-type: none"> <li>• Kidney function tests</li> <li>• Liver function tests</li> <li>• Blood glucose</li> </ul>		X	X
		Specimen collection, storage, and transport	X	X	X
		Macroscopic examination		X	X
	<b>MICROBIOLOGY</b>	Microscopy		X	X
		Microscopic examination & identification of blood, body fluid and sputum: staining (giemsa, gram, methylene blue, Ziehl- Neelson, India ink/ Cryptococcus antigen test)		X	X
		Stool examination for parasites: fresh and after staining with Lugol's iodine (or Kato-Katz, formol ether)		X	X
		Wet preparation		X	X
		Culture and biochemical tests: Cytobacteriological exam of urine Examination of vaginal swabs		X	X

Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
	<b>MYCOBACTERIOLOGY</b>	Extra-pulmonary TB diagnosis		X	X
		TB rapid test		X	X
		GeneXpert		X	X
	<b>IMMUNOSEROLOGY</b>	Fluorescent microscope		X	X
		Immunoassay automated methodology: <ul style="list-style-type: none"> <li>• HIV</li> <li>• Hepatitis B &amp; C</li> </ul>		X	X
		Immunofluorescence techniques		X	X
<b>Ordinary Biomedical Laboratory (O-BML)</b>	<b>HEMATOLOGY</b>	Rapid tests: <ul style="list-style-type: none"> <li>• HIV</li> <li>• Hepatitis B</li> <li>• Hepatitis C</li> <li>• CRP</li> <li>• ASLO</li> <li>• Rubella</li> <li>• Toxoplasmosis</li> <li>• TPHA</li> <li>• Pregnancy test</li> <li>• Rheumatoid factor</li> </ul>		X	X
		Manual and automated methods: <ul style="list-style-type: none"> <li>• Full blood count</li> <li>• Red blood cells (RBCs)</li> <li>• White blood cells (WBCs) &amp; differential counts</li> <li>• Hematocrit</li> <li>• Hemoglobin</li> </ul>		X	X

Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
		Erythrocyte sedimentation rate (ESR)		X	X
		Blood group and rhesus		X	X
		Reticulocyte count		X	X
		Sickle cell test		X	X
		Coagulation tests: <ul style="list-style-type: none"> <li>Bleeding time (BT)</li> <li>Partial thromboplastin time (PTT)</li> <li>Activated PTT (APTT)</li> <li>Prothrombin time (PT)</li> </ul>		X	X
		Compatibility testing		X	X
		Coombs test		X	X
		Fully automated methodology with ISE module for electrolytes		X	X
		Urine chemistry using strips: <ul style="list-style-type: none"> <li>Albumin</li> <li>Glucose</li> </ul>		X	X
		Blood chemistry <ul style="list-style-type: none"> <li>Kidney function tests</li> <li>Liver function tests</li> <li>Blood glucose</li> </ul>		X	X
<b>MICROBIOLOGY</b>		Specimen collection, storage, and transport		X	X
		Macroscopic examination		X	X
		Microscopy		X	X

Service Level	Service	Laboratory Tests	Types of Staff		
			Pathologist/ Lab specialist (>A0)	Lab Scientist (A0)	Lab tech (A1/ A0)
		Microscopic examination & identification of blood, body fluid and sputum: staining (giemsa, gram, methylene blue, Ziehl-Neelson, India ink/ Cryptococcus antigen test)		X	X
		Stool examination for parasites: fresh and after staining with Lugol's iodine (or Kato- Katz, formol ether)		X	X
		Wet preparation		X	X
		Cytobacteriological exam of urine		X	X
		Examination of vaginal swabs		X	X
	<b>IMMUNOSEROLOGY</b>	Immunoassay automated methodology: <ul style="list-style-type: none"> <li>• HIV</li> <li>• Hepatitis B &amp; C</li> </ul>		X	X
		Rapid tests: <ul style="list-style-type: none"> <li>• HIV</li> <li>• Hepatitis B</li> <li>• Hepatitis C</li> <li>• CRP</li> <li>• ASLO</li> <li>• Rubella</li> <li>• Toxoplasmosis</li> <li>• TPHA</li> <li>• Pregnancy test</li> <li>• Rheumatoid factor</li> </ul>		X	X

**NOTE:**

The laboratory services in all Special Private Health establishment categories including **Special clinic (SC)**, **Special Hospital (SH)** and **Specialized Biomedical laboratories (S-BML)** have not been defined in the table above. It will only be possible if this special private health establishment has defined its scope of services that in turn will be used to determine the laboratory services and the type of staff needed as required for delivery of specialized health service package.



**Table 14: Laboratory Equipment**

Service	Method	Equipment Specification	Level of Facility					
			MP	MC	PC	H	O-BML	
			Quantity					
<b>HEMATOLOGY</b>	Manual and automated methods.	Binocular microscope		1	1	1	1	1
		Hemoglobin device	2	1	1	1	1	1
	Hematology analyzer or other instruments		1	1	1	1	1	
		UPS		1	1	1	1	1
<b>CHEMISTRY</b>	Fully automated methodology with ISE module for electrolytes, Polarography	Chemistry analyzer		1	1	1	1	1
		UPS		1	1	1	1	1
	Blood gas analyzer				1			
	Electrophoresis analyzer							
<b>MICROBIOLOGY</b>	Macroscopic examination	Electric binocular microscope using clear white light		1	1	1	1	1
		Fluorescence microscope				1		
	Microscopy	Electric centrifuge	1	1	1	1	1	
		Oven	1	1	1	1	1	
Staining	Jars (aerobic and anaerobic)				1			

Service	Method	Equipment Specification	Level of Facility					
			MP	MC	PC	H	O-BML	
			Quantity					
	Wet preparation	Water bath		1	1	1	1	1
		Electric or gas Bunsen burners				1		
	Culture and biochemical tests	Chemical hood				1		
		Precision balance				1		
		Incubator			1	1	1	1
		Autoclaves (1 for sterilization & 1 for decontamination)	1	1	1	2	1	1
		Safety cabinet Class II				1		
		Hot plate		1	1	1	1	1
		Refrigerator	1	1	1	2	1	1
		Freezer		1	1	1	1	1
Single channel micropipettes (2 each of 10-100ul, 20-200ul, 100-1000ul)		6	6	6	6	6		
<b>MYCOBACTERIOLOGY</b>	GeneXpert					1		
	Fluorescent microscope					1		
<b>IMMUNOSEROLOGY</b>	Immunoassay automated methodology,	Automated immunoassay analyzers				1	1	
	Immunofluorescence	Immunofluorescence microscope				1		

Service	Method	Equipment Specification	Level of Facility					
			MP	MC	PC	H	O-BML	
			Quantity					
	Techniques.	Bench top centrifuge		1	1	1	1	1
		Rotator/stirrer	1	1	1	1	1	1
		Kline agitator		1	1	1	1	1
		Refrigerator	1	1	1	1	1	1
		Freezer	1	1	1	1	1	1
		Single channel micropipettes (2 each of 10-100ul, 100-1000ul)				4		4
		Multichannel micropipettes (2 each of 20-200ul)				2		2
		Incubator					1	1
	HIV	CD4 machine					1	
		ELISA reader and washer					2	

**NOTE:**

The laboratory equipment in all Special Private Health establishment categories including Special Clinic (SC), Special Hospital (SH) and Specialized Biomedical Laboratories (S-BML) have not been defined in the table above. It will only be possible if this special private health establishment has defined its scope of services that in turn will be used to determine the laboratory equipment needed as required for delivery of specialized health service package.

**Table 15: Laboratory Small Equipment**

Item	Qualification	MP	MC	PC	H	O-BML
Gas cylinders or electric Bunsen burners			X	X	X	X
96 wells microplate with U-shaped bottom for TPHA			X	X	X	X
Sedimentation rate rack	20 plates each	X	X	X	X	X
Glass pipette (Westergren tubes for ESR)		X	X	X	X	X
Pipette bulb		X	X	X	X	X
Micropipette rack		X	X	X	X	X
Platinum wire loop			X	X	X	X
Microliter calibrated platinum wire loop for bacterial count in urine					X	
Wood clamps		X	X	X	X	X
Glass funnel	60 mm diameter		X	X	X	X
Plastic beaker	50, 100 and 250 ml		X	X	X	X
Borosilicate Erlenmeyer	Large neck of 250ml & 500 ml		X	X	X	X
Wash bottle	250 ml	X	X	X	X	X

Item	Qualification	MP	MC	PC	H	O-BML
Graduated plastic measuring cylinders	5 ,10,25 and 50 ml		X	X	X	X
Volumetric flasks	100 ml, 250 ml, 500ml and 1000 ml		X	X	X	X
Slide box	100 slides	X	X	X	X	X
Box to store slides	100 positions	X	X	X	X	X
Drop count vials	50 ml	X	X	X	X	X
Amber glass drop count vials	100 ml	X	X	X	X	X
Thermometers	20°C - 30°C	X	X	X	X	X
Spatula		X	X	X	X	X
Wooden tongs			X	X	X	X
Goblets		X	X	X	X	X
Pairs of scissors		X	X	X	X	X
Diamond pencil		X	X	X	X	X
Stands for tubes	2 for hemolysis tubes, 2 for test tubes, 2 for centrifuge tubes (round bottom), 2 for centrifuge tubes (conical bottom)	X	X	X	X	X
Hemocytometer	Modified Neubauer		X	X	X	X
Petri dishes	90x14 and 60x14 in glass and plastic				X	

Item	Qualification	MP	MC	PC	H	O-BML
Table trash bins for slides and needles		X	X	X	X	X
Drop count vials for paraffin oil			X	X	X	X
Aluminum foil		X	X	X	X	X
Sterile swabs		X	X	X	X	X
Stop watch	60 minutes	X	X	X	X	X
Slide box	100 positions	X	X	X	X	X
Dryer/strip	10 to 20 positions	X	X	X	X	X
Staining rack		X	X	X	X	X
Staining bac		X	X	X	X	X
Slide rack	10 to 20 positions	X	X	X	X	X
Trash bin		X	X	X	X	X
Tips (yellow, white and blue)		X	X	X	X	X
Manual counter	1 key	X	X	X	X	X
Counter for WBC			X	X	X	X
Vortex			X	X	X	X
Magnetic bars	Different sizes				X	X
Inverse mirror					X	X
Plastic weighing dish	Different sizes				X	X

Item	Qualification	MP	MC	PC	H	O-BML
Biodegradable trash bags (Autoclavable and non autoclavable)		X	X	X	X	X
Cool boxes	Various size	X	X	X	X	X
Cryotubes - 2 ml		X	X	X	X	X
Cryotubes racks		X	X	X	X	X
Spill kit	For each service	X	X	X	X	X
First aid kit	For each service	X	X	X	X	X
Eye wash kit	For each service	X	X	X	X	X
Microwave		X	X	X	X	X
Fire extinguisher	For each service	X	X	X	X	X
Fire blanket		X	X	X	X	X
Lab coat		X	X	X	X	X
Sprays and formaldehyde vaporizers					X	
Universal and special antidotes		X	X	X	X	X
Full face respirators				X	X	X
Gloves and head covering		X	X	X	X	X
Tools (hammers, axes, spanners, screwdrivers, ladders, ropes)		X	X	X	X	X

**Table 16: Media and Culture Preparation Equipment that are required in hospital facility laboratories.**

List	Specifications
Distiller	
Magnetic plate	
Electric mixer	
Hot plate	
Refrigerator	2 compartments without automatic defrost (2- 8°C and -20°C) 400L
Autoclave	200 L
Precision balance	100 grams
Roberval balance with mass kit	
pH meter	



## Recommendations from Team from Private Hospitals and Polyclinics

1. MoH needs to urgently approve and implement the suggested scope of work at different categories of health professionals to meet the international recognized standards
2. MoH needs to review the list of medications and equipment authorized in each category of private health facility with the support of professional societies. Emergency drugs and equipment need to be uniform at each category of health facility.
3. The coding list of medical procedures needs to comply with international recognized standards such as ICD-10 and be harmonized across all sectors public and private.
4. MoH needs to increase participation of the private facilities in decision making of policies, planning and implementation of health strategies.
5. The HMIS needs to be upgraded and include all specialties which are internationally recognized.
6. Some specialized procedures can be done by dental health practitioners that have been certified, e.g. a dentist should be allowed to extract impacted wisdom teeth if certified.(Needs to be reformulated instead include review the list).
7. The MoH should appoint physiotherapy practitioners according to the level and size of health facilities, respecting the international norms and standards of the World Confederation of Physical Therapy of which Rwanda is a member (e.g. a physiotherapy service at district hospital should be run by a BSc PT holders – A0 not A1; and the ratio of 1PT/ 10 patients should be respected).
8. There is need to have an anesthesiologist who is either part time or full time to support the major surgical interventions at private health facilities including Specialized Clinics, Hospitals and Specialized Hospitals. The facilities need to have well equipped recovery rooms for patients, especially children and elderly, who are likely to require an extended recovery period from sedation. There is need to have a clear written agreement with hospitals equipped ICU for transfer of patient.
9. Some specialized clinics that are willing to carry out major surgical procedures need to have more than one theatre room to avoid infection of patients. Furthermore, the equipment in these theatres should be periodically monitored for quality.

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Dr Musafiri Roger	Family Medecine	Kinihira Hospital
Dr Musiime Stephenson	Pediatrician	Rwanda Pediatric Association
Dr Mutangana Alexis	Anesthesiologist	Rwanda Society of Anesthesiology
Dr Mutangana Francis	Ophthalmologist	Rwanda Ophthalmology Society
Dr Muvunyi Zuberi	Director of Bushenge Hosp	Bushenge Hospital
Dr Muyombano Antoine	GP	Rwanda Private Healthcare Federation
Dr Muzungu Kumwami	Pediatrician	Rwanda Pediatric Association
Dr Namanya William	Director of Kibungo Hospital	Kibungo Hospital
Dr Ncogoza Isaie	ENT Surgeon	Rwanda Surgical Society
Dr Ndagijimana Sylvestre	Director of Kibirizi Hospital	Kibirizi Hospital
Dr Ndatinya Augustin	Pediatrician	Rwanda Pediatric Association
Dr Ndayisenga Albert	Surgeon	Rwanda Surgical Society
Dr Ndekezi Deogratias	Gynecologist and Obstetrician	Rwanda Society of Gynecology & Obstetrics
Dr Ndekezi Deogratias	Director of Ruhengeri Hospital	Ruhengeri Hospital
Dr Ndibanje Alain Jules	Surgeon	Rwanda Surgical Society
Dr Nduwimana JMV	GP	Rwanda Healthcare Federation

Names of participants	Position title	Institutions
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Dr Ngendahimana Gerald	GP	Rwanda Healthcare Federation
Dr Ngoga Eugene	Gynecologist & Obstetrician	Rwanda Society of Gynecology & Obstetrics
Dr Niyibizi Pretextate	Pediatrician	Rwanda Pediatric Association
Dr Nizeyimana Theoneste	GP	Nyagatare Hospital
Dr Nizeyimana Theophile	M.D/MPH	MOH
Dr Nkeramihigo Emmanuel	Internist	Rwanda Colleague of Physicians
Dr Nkuranga Jean Baptiste	Director of Rwamagana Hospital	Rwamagana Hospital
Dr Nkurikiye John	Ophthalmologist	Rwanda Ophthalmological Society
Dr Nkurikiye John	Ophthalmologist	Rwanda Ophthalmology Society
Dr Nkusi Agabe Emmy	Neuro surgeon	Rwanda Surgical Society
Dr Nshimyumuremyi Isaac	Anesthesiologist	Rwanda Anesthesiology Society
Dr Nshizirungu Placide	Director of Gihundwe Hospital	Gihundwe Hospital
Dr Ntaganda Evariste	GP/MPH	Rwanda Ophthalmology Society
Dr Nyemaji Alex	Ophthalmologist	Rwanda Ophthalmology Society
Dr Nzeyimana Isaie	Program Director	SIDHARTE
Dr Rugwizangoga Eugene	Surgeon	JHPIEGO
Dr Ruhamyia Nathan	Cardiologist	Rwanda Colleague of Physicians
Dr Ruhungande Landoward	General Surgeon	Ruhengeri Hospital
Dr Rurangwa Theogene	Gynecologist & Obstetrician	Rwanda Gynecology & Obstetrics Society
Dr Rwamasirabo Emile	Medical Director	Rwanda Surgical Society
Dr Rwirangira Theogene	Director of Kibuye Hospital	Kibuye Hospital
Dr Sebatunzi Osee	Director of Kibagabaga Hosp	Rwanda Colleague of Physicians
Dr Sindayigaya Alphonse	Physician	Kibungo Hospital
Dr Subira Manzi	Gynecologist & Obstetrician	Rwanda Gynecology & Obstetrics Society

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Dr Turate Innocent	Quality Improvement Specialist	MOH
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Dr Utumatwishima J. Nepo	Director of Kinyihira Hospital	Kinyihira Hospital
Dr Uwambazimana Jeanne d'Arc	Anesthesiologist	Rwanda Society of Anesthesiologist
Dr Uwineza Bonaventure	Anesthesiologist	Rwanda Society of Anesthesiologist
Dr Uyisabye Innocent	General Surgeon	Rwanda Surgical Society
Dr Uzabakiriho Raphael	GP	Gihundwe Hospital
Dushimimana Evodia	MCH Specialist	MOH
Gashayija Modeste	Quality Health Specialist	MOH
Mbonimpa Theodore	Dental Therapist	Rwanda Dental Association
Musabwasoni M. Grace Sandra	Midwife	Rwanda Nursing and Mid wife council
Dr Tuyisenge Lysine	Pediatrician	Rwanda Pediatric Association
Joy Atwine	Principal Technical Advisor QI	MSH
Joanne Ashton	Consultant	MSH
Dr Akishuri Dennis	Senior Technical Advisor QI	MSH
Laetitia Kakana	Technical Advisor QI	MSH
Dr Kalinda Viateur	Technical Advisor QI	MSH
Dr Ahabwe Moses	Senior Technical Advisor Leadership and Governance	MSH





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