

SEMI-STRUCTURED INTERVIEW TOOL: HOSPITAL CEO

GENERAL QUESTIONS	
	Name of Hospital
	Address of Hospital
	Hospital CEO Name and Credentials
	Contact Information
	Name and professional title of staff completing this assessment

INFRASTRUCTURE	
Facility Readiness	
	What level facility is being evaluated? What type of hospital is being evaluated? How many functional advanced care/Intensive Care Unit beds are there? How do you define advanced care/Intensive Care Unit beds?
Access	
	What is the estimated population of the catchment area of this hospital? How do the majority of your patients travel to the hospital (e.g. walk, bus, train, etc.)? How far in distance (km) and in time (minutes) on average do patients travel to get to the hospital? What percentage of your patients can reach the hospital within 2 hours of travel? Describe the first response available to patients having medical emergencies in your catchment area, and how they are brought to the hospital. Do you have a reliable ambulance service available for patients? What is the hospital intake process (e.g. emergency department, outpatient clinic, transfers, etc.)? What percentage of your incoming patients are referrals?
Referral Systems	
	Is there a formalized process for transferring patients from lower-level care to higher-level care facilities? What is your process for transferring patients to a higher-level facility? Which hospitals refer to you? Are all of these lower-level facilities? Which hospitals do you refer to? Are all of these higher-level facilities?
Equipment and Supplies	
	What is the mechanism for equipment maintenance in the hospital? What is the process for procuring supplies (e.g. sutures, bandages, etc.)? What resources are available for pathology or radiology (e.g. laboratory, ultrasounds, etc.)?
	Does the hospital use telemedicine? If so, how?
	What are the key challenges your facility faces in terms of infrastructure?

WORKFORCE	
Healthcare staff	
	How many surgeons, obstetricians, and anesthesiologists/anesthetists are employed by the hospital? How many of these physicians work full time? What types of physicians are available on-call? What is the role of physician and non-physician task sharers within your facility*?
Ancillary Staff	
	What types of administrative staff does the hospital employ? What types of training exist for these positions? Do you have biomedical technicians? What kind of training program exists for these technicians?
Educational opportunities	
	What educational opportunities are available for the staff? How are these supported by the hospital?
	What issues does your facility have with recruiting or retaining workforce?
	What are the key challenges your facility faces in terms of workforce?

## SERVICE DELIVERY

Over the past 6 months, what was the average number of operations performed per month?

### Quality Measures

What are the processes for reviewing or improving quality of care?  
Do you review in-hospital deaths or complications on a regular basis? How is this reported?  
Do you measure peri-operative mortality rate? If yes, what is it?

### Safety Assurance

What processes are in place to ensure safe patient discharge?  
How do patients follow-up for care after discharge?  
What supportive services, such as social work or home care, are in place for patients?  
Does the hospital coordinate care with private, NGO, or other facilities?

What are the key challenges your facility faces in terms of service delivery?

## FINANCING

### Health financing and accounting

How do patients pay for services?  
What percentage of your patients have Free Care and what does it cover?  
What alternatives exist if a patient does not have Free Care but becomes unable to pay for their care?  
What is the range of cost for surgical and obstetric procedures at your hospital?  
What is the range of cost for a laparotomy, C-section, and an open fracture reduction at your facility?  
Are patients charged for itemized perioperative care (cost of goods and services is listed vs a total cost)?  
What percentage of these charges, on average, do patients pay out-of-pocket?  
Do patients incur costs not reflected in their hospital bills?

### Budget Allocation

What is your total annual hospital budget?  
How is your annual budget determined?  
What percentage of your annual hospital budget is allotted to surgery?  
How is the surgical budget determined?  
Is there a system for regularly re-evaluating the budget?  
Do you have a budget for unexpected supplies and what are you able to purchase with it?

What are the key challenges your facility faces in terms of financing?

## INFORMATION MANAGEMENT

### Information Systems

Does your hospital keep patient charts?  
Are charts accessible across multiple visits for the same patient?  
Following discharge, is the patient responsible for their own medical record or is it kept by the hospital?  
Do you use an EMR? If yes, what system and how did you determine which system to use?  
What type of administrative data is collected by the hospital? Specifically, are the following information collected: Operative logs, Mortality, Morbidity, Length of Stay, Diagnosis, Patient financial data  
What surgical data are you required to report to the Ministry of Health on a regular basis?  
Does the hospital employ someone in charge of data collection and management?  
What is your process for reporting and processing the deceased to determine the cause of death?

### Research Agenda

How does the hospital coordinate or perform research?  
What are the research expectations for the faculty?  
For those interested in research, do they have access to research support such as a biostatistician, an epidemiologist, or an academic institution?  
How is the research in the hospital funded?  
Do you regularly collaborate with international partners for research?

What are key challenges your facility faces in terms of research and information systems?

## ADDITIONAL QUESTIONS

What are the key overall hospital needs?  
What are key hospital needs to improve the surgical system?

SEMI-STRUCTURED INTERVIEW TOOL: SURGEON

GENERAL QUESTIONS	
	Name of Hospital
	Address of Hospital
	Name of Surgeon
	Contact Information
	Name and professional title of staff completing this assessment

INFRASTRUCTURE	
Facility Readiness	
	<p>How many functional operating rooms are available for surgical procedures?            What factors, if anything, prevents you from making a diagnosis?            What factors, if anything, prevents you from performing a surgery?            1. Lack of materials or equipment (e.g. sutures, gloves, etc.)?            2. Lack of operating space?            3. Lack of medical utilities (e.g. oxygen, electricity, etc.)?            4. Inadequate perioperative services?            On average when you experience delays in care, how long are these delays?            What systems exist at your facility to ensure availability of advanced or critical care?</p>
Access and Referral Systems	
	<p>What percentage of your patients can reach the hospital within 2 hours of travel?            Describe the first response available to patients having medical emergencies in your catchment area, and how they are brought to the hospital.            What is your process for transferring patients to higher-level facilities?</p>
	What are the key challenges your facility faces in terms of surgical infrastructure?

WORKFORCE	
Healthcare staff	
	<p>How many surgeons work at this facility? How many of these surgeons work full-time?            How do surgeons at your facility divide their time and responsibility between out-patient, in-patient, elective, and emergency care?            What is the on-call schedule and responsibility of the surgical staff?            What types of surgical staff (e.g. residents, mid-level surgical providers, etc.) are available on-call?            Who typically provides the initial surgical assessment and care to the patients?            What is the role of physician and non-physician task-sharers within the surgical department?            Can you describe what the typical training level for the task-sharers in your department is?            How many additional surgeons would your department need in order to provide optimal care?</p>
Educational opportunities	
	<p>Do you have surgical residents rotating through your department?            If yes, describe the training residents get at your program. What types of career paths do your residents follow post-training?            What are the strengths and weaknesses of the residency training in your department?            If not, what barriers exist to training residents at your facility?            What educational opportunities are available for the surgical staff (surgeons, surgical residents, etc.)?            How are these supported by the hospital?            What type of access do you have to advanced training?</p>
	What are the key challenges your facility faces in terms of surgical workforce?

SERVICE DELIVERY	
Surgical Volume	
	<p>What is the total number of operations performed in this facility per week? Specifically, in your department?            Does the hospital routinely perform laparotomies, Caesarean Sections, and open fracture reductions?            What are the 5 most common surgical diagnoses at your facility? Specifically, in your department?            What are the 5 most common surgical procedures performed at your facility? Specifically, in your department?</p>

	Describe your capacity to perform elective surgeries.
<b>Quality Measures</b>	
	<p>How is information transferred during provider transitions?</p> <p>What are the processes for reviewing or improving quality of care?</p> <p>Do you review in-hospital deaths or complications on a regular basis? How is this reported?</p> <p>Do you have a system in place for recording and assessing peri-operative mortality and morbidity? If yes, what is your peri-operative mortality rate?</p> <p>What are the greatest needs to improve the surgical system?</p>
<b>Safety Assurance</b>	
	<p>What forms of discharge planning are undertaken to ensure safe discharge?</p> <p>How do patients follow-up for care after discharge?</p> <p>How do patients follow-up for care after discharge?</p> <p>What supportive services, such as social work, home care, are in place for patients?</p>
	What are the key challenges your facility faces in terms of delivering surgical care?

<b>FINANCING</b>	
<b>Health financing and accounting</b>	
	<p>How do patients pay for surgical services?</p> <p>What percentage of your patients have Free Care and what does it cover?</p> <p>What alternatives exist if a patient does not have Free Care but becomes unable to pay for their care?</p> <p>What is the range of cost for surgical procedures at your hospital?</p> <p>What is the range of cost for a laparotomy, C-section, and an open fracture repair at your facility?</p> <p>Are patients charged for itemized perioperative care(cost of goods and services is listed vs a total cost)?</p> <p>What percentage of these charges, on average, do patients pay out-of-pocket?</p> <ol style="list-style-type: none"> <li>Surgical procedure cost</li> <li>Cost of an inpatient admission</li> <li>Cost of diagnostic services</li> <li>Cost of medications and materials</li> <li>Informal payments</li> <li>Cost of transportation</li> </ol> <p>What percentage of your patients have health insurance and what does it cover?</p>
<b>Budget Allocation</b>	
	Is there a budget for unexpected supplies and what are you able to purchase with it?
	What are the key challenges your facility faces in terms of financing surgical care?

<b>INFORMATION MANAGEMENT</b>	
<b>Information Systems</b>	
	<p>Does your hospital keep patient charts?</p> <p>Are charts accessible across multiple visits for the same patient?</p> <p>Following discharge is the patient responsible for their own medical record or is it kept by the hospital?</p> <p>Do you use a EMR?</p> <p>Do you record and report operative volume?</p>
<b>Research Agenda</b>	
	<p>How does the hospital coordinate or perform research?</p> <p>What are the research expectations for the faculty?</p> <p>For those interested in research, do they have access to research support such as a biostatistician, an epidemiologist, or an academic institution?</p> <p>How is the research in the hospital funded?</p> <p>Do you consistently collaborate with international partners for research?</p>
	What are the key challenges your department faces in terms of research and information systems?

**SEMI-STRUCTURED INTERVIEW TOOL: OBSTETRICIAN AND GYNECOLOGISTS (OBGYN)**

<b>GENERAL QUESTIONS</b>	
	Name of Hospital
	Address of Hospital
	Name of MD
	Contact Information
	Name and professional title of staff completing this assessment

<b>INFRASTRUCTURE</b>	
<b>Facility Readiness</b>	
	<p>How many functional operating rooms are available for obstetrical procedures?            What factors, if anything, prevents you from making a diagnosis?            What factors, if anything, prevents you from performing a surgery?</p> <ol style="list-style-type: none"> <li>1. Lack of materials or equipment (e.g. sutures, gloves, etc.)?</li> <li>2. Lack of operating space?</li> <li>3. Lack of medical utilities (e.g. oxygen, electricity, etc.)?</li> <li>4. Inadequate perioperative services?</li> </ol> <p>On an average when you experience delays in care, how long are these delays?            What systems exist at your facility to ensure availability of advanced or critical care?</p>
<b>Access and Referral Systems</b>	
	<p>What percentage of your patients can reach the hospital within 2 hours of travel?            Describe the first response available to patients having medical emergencies in your catchment area, and how they are brought to the hospital.            What is your process for transferring patients to higher-level facilities?</p>
What are the key challenges your facility faces in terms of obstetrical and gynecological infrastructure?	

<b>WORKFORCE</b>	
<b>Healthcare staff</b>	
	<p>How many OBGyns work at this facility? How many of these OBGyns work full-time?            How do OBGyns at your facility divide their time and responsibility between out-patient, in-patient, elective and emergency care?            What is the on-call schedule and responsibility of the OBGyn staff?            What types of OBGyn staff (e.g. residents, mid-level surgical providers, etc.) are available on-call?            Who typically provides the initial OBGyn assessment and care to the patients?            What is the role of physician and non-physician task-sharers within the obstetric and gynecology department?            Can you describe what the typical training level for the task-sharers in your department is?            How many additional OBGyns would your department need in order to provide optimal care?</p>
<b>Educational opportunities</b>	
	<p>Do you have OBGyn residents rotating through your department?            If yes, describe the training residents get at your program. What types of career paths do your residents follow post-training?            What are the strengths and weaknesses of the residency training in your department?            If not, what barriers exist to training residents at your facility?            What educational opportunities are available for the OBGyn staff (OBGyn, OBGyn Residents, etc.)?            How are these supported by the hospital?            What type of access do you have to advanced training?</p>
What are the key challenges your facility faces in terms of obstetric and gynecology workforce?	

<b>SERVICE DELIVERY</b>	
<b>Surgical Volume</b>	
	<p>What is the total number of operations performed in this facility per week? Specifically, in your department?            Does the hospital routinely perform laparotomies, Caesarean Sections, and open fracture reductions?            What are the 5 most common surgical diagnoses at your facility? Specifically, in your department?</p>

	What are the 5 most common surgical procedures performed at your facility? Specifically, in your department? Describe your capacity to perform elective surgeries.
<b>Quality Measures</b>	
	How is information transferred during provider transitions? What are the processes for reviewing or improving quality of care? Do you review in-hospital deaths or complications on a regular basis? How is this reported? Do you have a system in place for recording and assessing peri-operative mortality and morbidity? If yes, what is your peri-operative mortality rate? What are the greatest needs to improve the surgical system?
<b>Safety Assurance</b>	
	What forms of discharge planning are undertaken to ensure safe discharge? How do patients follow-up for care after discharge? What supportive services, such as social work or home care, are in place for patients?
What are the key challenges your facility faces in terms of delivering obstetric and gynecology care?	

<b>FINANCING</b>	
<b>Health financing and accounting</b>	
	How do patients pay for services? What percentage of your patients have Free Care and what does it cover? What alternatives exist if a patient does not have Free Care but becomes unable to pay for their care? What is the range of cost for obstetric and gynecology surgical procedures at your hospital? What is the range of cost for a laparotomy, C-section, and an open fracture repair at your facility? Are patients charged for itemized perioperative care(cost of goods and services is listed vs a total cost)? What percentage of these charges, on average, do patients pay out-of-pocket? <ul style="list-style-type: none"> <li>a) OBGyn procedure cost</li> <li>b) Cost of an inpatient admission</li> <li>c) Cost of diagnostic services</li> <li>d) Cost of medications and materials</li> <li>e) Informal payments</li> <li>f) Cost of transportation</li> </ul> What percentage of your patients have health insurance and what does it cover?
<b>Budget Allocation</b>	
	Is there a budget for unexpected supplies and what are you able to purchase with it?
What are the key challenges your facility faces in terms of financing obstetric and gynecology care?	

<b>INFORMATION MANAGEMENT</b>	
<b>Information Systems</b>	
	Does your hospital keep patient charts? Are charts accessible across multiple visits for the same patient? Following discharge is the patient responsible for their own medical record or is it kept by the hospital? Do you use a EMR? Do you record and report operative volume?
<b>Research Agenda</b>	
	How does the hospital coordinate or perform research? What are the research expectations for the faculty? For those interested in research, do they have access to research support such as a biostatistician, an epidemiologist, or an academic institution? How is the research in the hospital funded? Do you consistently collaborate with international partners for research?
What are the key challenges your department faces in terms of research and information systems?	

**SEMI-STRUCTURED INTERVIEW TOOL: ANESTHESIOLOGIST/ANESTHETIST**

<b>GENERAL QUESTIONS</b>	
	Name of Hospital
	Address of Hospital
	Name of Anesthesiologist
	Contact Information
	Name and professional title of staff completing this assessment

<b>INFRASTRUCTURE</b>	
Facility Readiness	
	What, if anything, prevents you from providing safe anesthesia consistently? What standardized procedures for pre-operative care exist? What standardized system for post-operative care exists? Where do you get the majority of your oxygen supply from?
	What are the key challenges your facility faces in terms of anesthesia infrastructure?

<b>WORKFORCE</b>	
Healthcare staff	
	How many anesthesiologists work at this facility? How many of these anesthesiologists work full-time? How many anesthetist work at this facility? How many of these anesthetist work full-time? What is the call schedule and responsibility of the anesthesia staff on-call? What types of anesthesia staff (e.g. anesthesia residents, mid-level anesthesia providers, etc.) are available on-call? What is the role of physician and non-physician task-sharers within the anesthesiology department? Can you describe what the typical training level for the anesthetists in your department is? How many additional anesthesiologists/anesthetist does your department need in order to provide optimal care? How many operating rooms do you cover at once?
Educational opportunities	
	Do you have anesthesiology residents rotating through your department? If yes, describe the training residents get at your program. What types of career paths do your residents follow post-training? What are the strengths and weaknesses of the residency training in your department? If not, what barriers exist to training residents at your facility? What educational opportunities are available for the anesthesiology/anesthetist staff? How are these supported by the hospital? What type of access do you have to advanced training?
	What are the key challenges your facility faces in terms of anesthesia workforce?

<b>SERVICE DELIVERY</b>	
Surgical Volume	
	How capable is the facility at providing: <ol style="list-style-type: none"> <li>General anesthesia</li> <li>Local/regional anesthesia</li> <li>Sedation for procedures</li> </ol> What is the total number of operations performed in this facility per week?
Quality Measures	
	What are the processes for reviewing or improving quality of care? Do you review intraoperative deaths or anesthesia complications on a regular basis? How is this reported? Do anesthesiology/anesthetist utilize the WHO checklist?
	What are the key challenges your facility faces in terms of delivering anesthesia care?

**FINANCING**

Health financing and accounting

- How do patients pay for services?
- What percentage of your patients have Free Care and what does it cover?
- What alternatives exist if a patient does not have Free Care but becomes unable to pay for their care?
- How are the patients billed for anesthesia services and supplies?
- Are patients charged for itemized perioperative care(cost of goods and services is listed vs a total cost)?
- What out-of-pocket costs do patients incur for anesthesia care?

Budget Allocation

- Is there a budget for unexpected supplies and what are you able to purchase with it?

What are the key challenges you face in terms of financing anesthesia care?

**INFORMATION MANAGEMENT**

Information Systems

- What form of recording system is in place for pre-, intra- and post-operative care and events?

Research Agenda

- How does the hospital coordinate or perform research?
- What are the research expectations for the faculty?
- For those interested in research, do they have access to research support such as a biostatistician, an epidemiologist, or an academic institution?
- How is the research in the hospital funded?
- Do you consistently collaborate with international partners for research?

What are the key challenges you face in terms of research and information systems?

SEMI-STRUCTURED INTERVIEW TOOL: NURSE

GENERAL QUESTIONS	
	Name of Hospital
	Address of Hospital
	Name of Nurse
	Contact Information
	Name and professional title of staff completing this assessment

INFRASTRUCTURE	
Facility Readiness	
	In urgent settings, how do nurses communicate with the physician teams (e.g. pagers, phone call, direct contact, etc.)? Do you have a centralized nurses' station from where you monitor your patients? How do patients alert nurses to their needs?
Access and Referral Systems	
	What percentage of your patients can reach the hospital within 2 hours of travel?
Equipment and Supplies	
	On the ward, how readily do you have access to basic protective equipment and supplies such as face masks, gloves etc.? On the ward, how readily do you have access to emergency equipment and supplies such as pain medicine, bag mask valves, etc.? How readily accessible are patient-care supplies (e.g. sutures, bandages, etc.)? What is the process for procuring supplies when there is a shortage?
What are the key challenges your facility faces in terms of nursing infrastructure?	

WORKFORCE	
Healthcare staff	
	What is your average nurse to patient ratio on the wards, Intensive Care Unit, Emergency Department, and Post Anesthesia Care Unit? Is a nurse available for 24 hours daily in all wards for all departments?
Educational opportunities	
	What educational opportunities are available for the nursing staff? How are these supported by the hospital? What type of access do you have to advanced training?
What are the key challenges your facility faces in terms of nursing workforce?	

SERVICE DELIVERY	
	How is patient-care divided between nursing staff on the wards? Do you have protocols or policies that govern high-risk procedures such as IV medication administration, blood transfusion, and codes? What is a nurse's involvement in post-operative care (e.g. suture removal, wound dressing, etc.)? What is the mechanism of feedback between doctors and nurses? How is information transferred during nursing shift changes? What forms of discharge planning are undertaken to ensure safe discharge? How do nurses participate ? What supportive services, such as social work or home care, are in place for patients?
What are the key challenges you face in terms of nursing service delivery in this hospital?	

**FINANCING**

Health financing and accounting

How do patients pay for services?

What alternatives exist if patients are unable to pay for their care?

What percentage of these charges, on average, do patients pay out-of-pocket?

- a) Cost of an inpatient admission
- b) Cost of diagnostic services
- c) Cost of medications and materials
- d) Informal payments
- e) Cost of transportation

How are hospital services paid for (e.g. food, linen, etc.)? Are patients directly billed for these?

What percentage of your patients have health insurance and what does it cover?

What are the key challenges your facility faces in terms of financing nursing care?

**INFORMATION MANAGEMENT**

Information Systems

What information do you enter into the patient's record? How is it recorded?

What information do nurses systematically monitor and document on a patient (e.g. vital signs, fluid balance, medication administration, etc.)?

What are the key challenges you face in terms of information management in this hospital?