

National Surgical, Obstetric and Anaesthesia Planning (NSOAP) Discussion Framework

INFRASTRUCTURE

Number and Distribution of Surgical Facilities

I. Background

1. What are the different levels of health facilities that exist in the country?
 - a. How many facilities are there of each level in the country?
2. Which of the facilities should be capable of providing the Bellwether procedures (C-section, laparotomy, and treatment of open fracture)?
 - a. What is the geographic distribution of Bellwether-capable facilities?
 - i. Is this distribution deliberate, and if so how?
 - b. What percent of population do you estimate can reach a Bellwether-capable facility within 2 hours?
3. Is the current number and distribution of facilities adequate?

II. Challenges & Proposed Solutions

4. What are the major barriers to developing new facilities?
5. What are previous and current initiatives to improve distribution and number of facilities?

III. Targets

6. In 5 years, what changes need to be made in regards to the number and distribution of surgical facilities?

IV. Monitoring and Evaluation

7. Key Metrics
 - a. How can 2-hour access to Bellwether procedures be measured accurately?
 - b. What is the frequency that access to Bellwether procedures should be measured?
8. Which body of government or organization will lead this initiative and monitor progress?

Infrastructure of Surgical Facilities

I. Background

9. What classifies as an operating theatre?
10. What are the minimum infrastructure standards that define a surgical facility?
 - a. ORs, anaesthesia capabilities, sterilization, biomedical equipment etc.
11. Electricity
 - a. How is electricity provided for each level of facility?
 - i. How often are district hospitals relying on generators?
 - b. How often is electricity a barrier to performing surgery at the district hospital?
 - c. What is the current reporting system to report issues with electricity?
 - d. What is the process of maintenance?
12. Clean Water
 - a. How is water provided to hospitals?
 - b. How often is lack of access to running water a barrier to performing surgery at the district hospital?
13. Oxygen

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- a. How is oxygen distributed nationwide?
 - b. What is the process of procurement and distribution?
 - i. How does the availability of oxygen plants affect patient care?
 - c. What is the process of maintenance?
14. Sterilization equipment
- a. What are current provisions?
 - b. What is the process of maintenance?
15. Internet
- a. How many health facilities have access to internet?
 - b. How important do you think it is to have internet connectivity at hospitals? At which level is it necessary?
 - c. How can this be achieved?

II. Challenges & Proposed Solutions

16. What are the major challenges faced in achieving minimum infrastructure standards in order to provide the Bellwether procedures?
- a. What steps can be taken to address these challenges?
 - b. What approaches have been successful for related challenges in the past?
17. What are previous and current initiatives to improve quality of surgical facilities?

III. Targets

18. In 5 years, what facilities need to be improved to meet these minimum standards?

IV. Monitoring and Evaluation

19. Key Metrics
- a. What metrics are currently being collected in regards to infrastructure of surgical facilities?
 - b. What metrics should be collected?
 - c. How often should these facilities be re-evaluated?
20. Which body of government, organization or task force will lead an initiative to monitor infrastructure standards of surgical facilities?

Supply Chain

I. Background

21. What are the minimum equipment that are needed in a surgical facility?
- a. What is the process of procurement and distribution?
 - b. Who is responsible for assessing the need for these equipment?
 - i. What training do these responsible individuals receive?
 - c. How is the supply chain financed?
22. What is the process for maintenance of equipment?
- a. Who is responsible for maintaining these equipment?
 - i. What training do these responsible individuals receive?
 - b. How do current services coordinate and contract with sellers and manufacturers to ensure functioning equipment?
 - c. How can repair services be improved?
23. What are the minimum materials that are needed in a surgical facility?
- a. What is the process of procurement and distribution?
 - b. Who is responsible for assessing the need for these equipment?
 - i. What training do these responsible individuals receive?

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- c. How is the supply chain financed?
- 24. What role do the private suppliers play in the supply chain?
 - a. How can this role be better leveraged?
- 25. Is there a high volume of donated equipment?
 - a. Is there a nationally coordinated donation strategy?
 - b. What are the challenges and benefits?
 - c. How can it be optimized?
- 26. What are the

II. Challenges & Proposed Solutions

- 27. What are the biggest challenges for having adequate equipment in the hospitals?
 - a. What steps can be taken to address these challenges?
 - b. What are previous and current initiatives to improve the supply chain for the country?
- 28. Are there frequent stock-outs of equipment, and if so, which ones?
 - a. Is access to these materials adequate, and if not, what are the biggest challenges?
 - b. What steps can be taken to address these challenges?
- 29. What are previous and current initiatives to improve the supply chain for the country?

III. Targets

- 30. In 5 years, what improvements in the supply chain need to be made in order to ensure surgical capabilities at surgical facilities?

IV. Monitoring and Evaluation

- 31. Key Metrics
 - a. What metrics should be in place to ensure adequate supply at all hospitals?
 - b. How often should these be collected?
- 32. Which body of government or organization will lead an initiative to monitor / improve the supply chain?

Diagnostic and Ancillary Services

I. Background

- 33. Pharmacy
 - a. What medications are required to perform safe surgery?
 - b. Are these items on all the necessary essential supply lists?
 - c. What is the current supply chain of medications?
 - i. Are drugs required for surgery included within essential drug lists?
Are they included as tracer drugs for monitoring?
 - d. How are medications financed?
- 34. Radiology
 - a. What is the current state of imaging services offered at the different levels of surgical facilities?
 - b. What imaging is required to perform surgery?
- 35. Laboratory
 - a. What are the core requirements of a laboratory service to support surgical, anaesthesia and obstetric care at each level?

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- b. What is the process of procurement and distribution of equipment and reagents?
 - c. What measures exist for standardization?
 - d. What is the process of maintenance?
36. Pathology
- a. What is the current state of pathology services nationwide?
 - b. What is the referral system?
37. National Blood Bank
- a. What is your system for blood donation?
 - b. What is the annual unit volume of blood donation nationally?
 - c. How is blood banking distributed nationwide?
 - d. Do all first-level hospitals have access to a safe, affordable blood and blood components supply?
 - i. Which do and which do not?
 - ii. What factors determine this?
 - e. What are the key policies regarding provision of safe blood?

II. Challenges & Proposed Solutions

38. Medications - Are there frequent stock-outs of medications?
 - a. What can be done to improve stock-outs?
39. Radiology - What are the current barriers to increase access to imaging services?
 - a. What can be done to improve surgical imaging capabilities?
40. Laboratory - Is access to this equipment adequate, and if not, what are the biggest challenges?
 - a. What steps can be taken to address these challenges?
41. Pathology - Where are the major gaps in pathology capabilities?
 - a. What steps can be taken to address these challenges?
42. Blood access - What is the biggest barrier in blood availability?
 - a. What approaches do you think could improve service?
 - b. What are the priorities in improving access to blood?
43. What are previous and current initiatives in place to improve ancillary services (pharmacy, laboratory, diagnostic imaging, blood bank)?

III. Targets

44. In 5 years, what should be the standard for the different level hospitals in regards to ancillary services?

IV. Monitoring and Evaluation

45. Key Metrics
- a. What medication should be considered tracer drugs in a district hospital?
 - b. What key metrics should be in place to guarantee adequate supply for pharmacy, pathology, and diagnostic services?
 - c. What key metrics around blood utilization are currently being measured?
46. What organization or body of government will be monitoring these changes?

Summary

47. Of all the factors discussed, what are the most significant infrastructure barriers to performing surgery?
48. What are the top priorities in infrastructure that should be developed?

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SERVICE DELIVERY

Distribution of Services

I. Background

1. What are the different types of surgeries being performed at each level facility?
 - a. How many of the Bellwether procedures (C-section, laparotomy, repair of open fracture) are performed yearly at each facility?
2. What are the minimum surgical service that should be offered at each facility level?
 - a. Is there currently a basic surgical package of core procedures that each facility level is expected to perform?
 - b. If not, what should a basic surgical package contain?
 - i. What supplementary services should be included in this package?
3. What is the volume of surgeries being performed at each level of facility?
 - a. What factors influence this?
4. What different surgical specialty services are currently available at each level of facility?
 - a. Consider advanced orthopaedics, neurosurgery, advanced trauma care, intensive care, urology, paediatric surgery.
 - b. How is this allocation of services decided upon?

II. Challenges & Proposed Solutions

5. Geographically, where are the major gaps to general surgical services?
6. What are the major barriers to expanding surgical specialties?
7. What are the previous and current initiatives in place to expand surgical services?

III. Targets

8. In 5 years, what is the goal for upscaling surgical services?
9. What is the target surgical volume in 5 years? 10 years? (by region, hospital)

IV. Monitoring and Evaluation

10. Key Metrics
 - a. *Should procedures per population be a metric our country adopts? And If so, what is our ideal ratio? (Lancet Indicators recommend 5000 procedures/100,000 population)*
 - b. What metrics are currently being collected related to service delivery?
 - c. How can the number of Bellwether procedures be traced at a facility, regional, and national level?
11. What body of government, organization is responsible for monitoring and evaluation of these initiatives?

Quality and Safety of Services

I. Background

1. What standards currently exist to monitor quality of surgical services?
2. What structural standards are in place for facilities to provide quality surgical care?
 - a. Facility infrastructure (ORs, ventilators, etc)
 - b. Providers (qualifications of GPs, surgeons, specialists etc)
 - c. Ancillary services (pharmacy, lab, imaging)
3. Are there currently process measures for quality of care?

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- a. Preoperative, intraoperative, postoperative management
- b. Risk assessments, use of pulse oximetry, WHO checklist
- c. Appropriate use of antibiotics, line removals, urinary catheter removal, hand washing stations, sterilization etc.
4. What outcomes are being tracked to assess surgical quality?
 - a. Perioperative mortality?
 - b. Surgical site infections?
 - c. Re-admission rates?
 - d. Morbidity?
 - e. Length of stay?
5. Do standard operating protocol for surgical procedures exist?
 - a. Are they appropriate? Are they comprehensive?
 - b. Are they followed?
 - c. If a revision is required? Who should be responsible for drafting this?

II. Challenges & Proposed Solutions

7. What challenges to maintaining structural standards in a facility?

III. Targets

8. In 5 years, what are realistic changes that can be made to ensure in improvement quality of surgical care at all facilities?

IV. Monitoring and Evaluation

1. Key Metrics
 - a. What key metrics should be adopted to monitor quality of surgical care?
 - b. *Should we mandate perioperative mortality tracking?*
2. Who will monitor and track these changes?

Perioperative Services

I. Background

1. Preoperative Care
 - a. What is the chain of decision making and preoperative care needed to undergo a surgical procedure?
 - i. What level of training has the authority to decide a surgical procedure is needed?
 - ii. What existing constraints factor into this decision process?
 - b. What provisions are in place for patient informed consent?
 - c. Are there current standards in place in regards to preoperative assessment / work up prior to a patient undergoing surgery?
 - i. If not, what minimum standards need to be met? (assessment by anaesthesia, ASA class, comorbidities, risk assessment etc)
2. Intraoperative Care
 - a. What standards are currently in place in order to monitor quality of intraoperative care?
 - i. (consider anaesthesia monitoring, preoperative antibiotic usage, staffing of ORs, surgeon quality/decision making, use of WHO checklist)
3. Postoperative Care
 - a. What are the current practices for monitoring of a patient immediately

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- postoperative?
- b. Should standards be adopted to guarantee close monitoring for a certain time period?
- 4. Timing of Care
 - a. Is there variation in ability to deliver service at different times of day or times of week?
 - i. Are there contingencies (referral plans) for those time periods?
 - b. What is the wait time for elective procedures?
 - c. What are the greatest challenges leading to cancellation and/or delays of surgical procedures?
- 5. Advanced Care
 - a. What is the definition and availability of intensive care or advanced care units?
 - i. How are they geographically distributed?
 - ii. Where should they be located?
 - b. What are the minimum standards of an advanced care unit?
 - c. What referral system is currently in place for patients requiring critical care?
 - d. Which hospitals could scale up their current intensive care capacity?

II. Challenges & Proposed Solutions

- 1. What are the priority areas for solutions to improve access to:
 - a. Preoperative care
 - b. Intraoperative care
 - c. Postoperative care
 - d. Advanced care (eg training, equipment, infrastructure, management)
- 2. What are previous and current initiatives in place to improve peri-operative care?

III. Targets

- 1. In 5 years, what improvements need to be made in regards to perioperative care?

IV. Monitoring and Evaluation

- 1. Key Metrics
 - a. What are some key metrics for perioperative care?
- 2. Which governing body is over monitoring the improvement of perioperative services?

Referral System

I. Background

- 1. What is the process that a patient goes through in order to receive advanced surgical care? (What are the steps a patient will take to get from a district hospital to referral hospital?)
 - a. What are the current mechanisms for referral to higher levels of care?
 - b. Are there some national referral criteria (e.g. appropriateness of referral)?
 - i. Are these criteria logged? Assessed?
 - ii. Do any changes need to be made to this current referral process/system?
 - iii. What situations prevent the current referral guidelines/recommendations from being followed?
 - iv. Is there a feedback process for tertiary care facilities back to lower levels of care in regards to appropriateness of referral? Follow up of

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patient?

- c. What is the role of transfer logistics (e.g. ambulances)?
 - i. Is there a current system for patient transfer for the hospital?
 - ii. If so, who funds this transfer system?
 - iii. How many ambulances are there?
2. Is there a referral system in place for traditional healers/CHWs to refer to a surgical facility?
 - a. What is the linkage between these providers and the first-level hospitals?
 - b. Are there outreach efforts involving PHCs, traditional healers, community health workers? What can be done to enhance these efforts?

II. Challenges & Proposed Solutions

1. What changes need to be made in order to improve the referral system?
2. What are previous and current initiatives in place to improve the referral process?

III. Targets

1. In 5 years, what changes should be in place to improve patient referrals at the different level of hospitals?

IV. Monitoring and Evaluation

1. Key metrics
 - a. What metrics need to be in place in order to track improvement of the referral system?
2. Who should be responsible for monitoring and improving referral patterns?
 - a. Who should collect this information?
 - b. How should it be fed back?

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WORKFORCE

Distribution of Workforce

I. Background

1. Are the specific numbers of health professionals monitored?
 - a. Who monitors these numbers?
 - b. How often are these numbers updated?

2. Please state the specific number of practicing surgical providers in each category.

Specialty	Total number of practicing providers		# practicing in public institutions		# practicing in private institutions	
	Local	Visiting	Local	Visiting	Local	Visiting
Certified Surgeons (all specialties)						
General doctors providing surgery						
Non-physicians providing surgery						
General Surgery						
Urology						
Neurosurgery						
Orthopedics						
ENT						
Pediatrics						
Vascular						
Cardiac						
Thoracic						

3. Please state the specific number of practicing anaesthesia providers in each category.

Specialty	Total number of practicing providers		# practicing in public institutions		# practicing in private institutions	
	Local	Visiting	Local	Visiting	Local	Visiting
Certified Anesthetist provider						
General doctors providing anaesthesia						
Non-physicians providing anaesthesia						

4. Please state the specific number of practicing obstetric providers in each category.

Specialty	Total number of practicing providers		# practicing in public institutions		# practicing in private institutions	
	Local	Visiting	Local	Visiting	Local	Visiting
Certified OBGYNs						
General doctors providing C-sections						

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Non-physicians providing C-sections						
Number of midwives						

5. Please state the specific number of practicing allied health providers in each category.

Specialty	Total number of practising providers		# practising in public institutions		# practising in private institutions	
	Local	Visiting	Local	Visiting	Local	Visiting
Radiologist						
Pathologists						
Laboratory technicians						
Theatre managers						
Supply managers						
Biomedical technicians						

6. What requirements exist for licensing and credentialing for the listed health professionals?
- a. Who is responsible for this?
 - b. How often are these renewed?
 - c. Are there consequences for lack of renewal?
 - d. How are “visiting providers” monitored? (mission trips, short term providers from neighboring countries etc.)
 - i. What regulations are currently in place to ensure these visiting providers are qualified to provide care?
 - e. How can we measure improvement in licensing regulations?
7. How is the surgical workforce population distributed (rural vs. urban, public vs. private, military, NGO, faith-based, etc.)?
8. What major factors affect the distribution of providers (incentives, requirements, access, etc.)?
9. Describe the desired situation/minimum workforce required for each level facility, district, region.
- a. How does it compare to existing staffing guidelines?
10. What are the current practices and perspectives on task sharing and task shifting? (define the current situation)
- a. Who are middle level providers?
 - b. Are outcomes tracked? Are they tracked by provider type?
 - c. How can they best be utilized to increase providing care?

II. Challenges & Proposed Solutions

1. What are the major gaps in the surgical workforce?
2. What successful solutions for expanding workforce numbers do you know of? Why are they successful?
3. What are current and previous initiatives to improve number and distribution of surgical workforce?
4. What other solutions should be prioritized or scaled up to improve workforce?

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III. Targets

1. In 5 years, what changes can realistically be made to provider number and distribution?

IV. Monitoring and Evaluation

1. Key Metrics
 - a. *How many surgical, anaesthesia, obstetric providers should there be per 100,000? (Lancet indicators recommend 20/ 100,000)*
 - b. What other key metrics should be monitored to insure proper number and distribution of providers?
2. What organization and/or governing body will monitor this?

Education and Training

I. Background

1. Medical Education
 - a. How many medical schools are there?
 - i. Public
 - ii. Private
 - b. What is the number of students enrolled yearly? What number of students are graduated yearly?
 - i. If there is a significant difference in enrollment and graduating students, why is this?
 - ii. Is this number adequate?
2. Postgraduate Training
 - a. Describe the process for entering post-graduate residency training for surgical, anaesthesia, and obstetric providers.
 - b. Annually, how many choose to enter surgery, anaesthesia, or obstetric post-graduate residency positions?
 - c. How many of these residency positions exist nationally? Do these usually get filled?
 - i. How many of these are government sponsored?
 - ii. How many of these are privately or NGO sponsored?
 - iii. Do surgical, obstetric, or anaesthesia trainees have to leave the country for their training? If so, for how long, and to which countries?
 - d. Who determines the number, location, and requirements of these positions?
 - e. How are these training programs accredited and monitored?
 - f. Are any more training programs being developed currently?
 - g. What institutions are in place to monitor postgraduate training?
 - h. Please provide numbers for the following

Specialty	Training Schools	Training duration	Current number in training (per year)
Certified Surgeons (all specialties)			
General doctors providing surgery			
Non-physicians providing surgery			
General Surgery			

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Urology			
Neurosurgery			
Orthopedics			
ENT			
Pediatrics			
Vascular			
Cardiac			
Thoracic			
Certified Anesthetist provider			
General doctors providing anaesthesia			
Non-physicians providing anaesthesia			
Certified OBGYNs			
General doctors providing C-sections			
Non-physicians providing C-sections			
Midwives			
Radiologist			
Pathologists			
Laboratory technicians			
Theatre managers			
Supply managers			

II. Challenges & Proposed Solutions

1. What are the biggest challenges to recruiting surgical, anaesthesia, and obstetric providers?
2. What are current and previous initiatives to improve number of residency training programs and entering students into surgical fields?

III. Targets

1. In 5 years, what are the goals for number of providers entering each specialty?
 - a. How can we achieve this?

IV. Monitoring and Evaluation

1. Key Metrics
 - a. What are key metrics to monitoring education and training of providers?
2. Who will be overseeing the above initiative?

Physician Positions

I. Background

1. How many general trainees seek out surgical, anaesthetic and obstetric positions each year?
2. How many surgical, anaesthetic and obstetric positions are there each year?
 - a. Do they usually get filled?

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- b. Who determines the number, location, and requirements of these positions? Describe the process of this determination.
 - c. How are these training positions created and funded? How are they matched to the job market?
 3. Employment of trained workforce
 - a. What percentage of each of the cadres of the surgical workforce is employed by the public vs. private vs. faith-based sectors?
 - b. How many trained surgical, obstetric, and anaesthesia providers are unemployed?
 - c. What is the desired situation?
 - d. How do we improve this situation?
 - i. How do we advocate for increased posts for graduating specialists?
 3. What is the current level of salaries for different cadres?
 - a. Are surgical providers from all cadres currently satisfied with their salaries?
 - b. How does this affect workforce
 - c. What is the desired salary for each cadre?
 4. Are there incentive programs to keep people in rural areas?
 - a. Do they work? Are they cost effective?
 - b. How can they be improved?
 5. How is the inflow/outflow both internally and externally of trainees and professionals monitored and how significant is this problem?
 - a. What fields are most affected and what other options do these individuals pursue?
 - b. What factors affect this decision? (Disaster relief, wars, educational, personal, and financial opportunities, remuneration)
 6. Do public, private, NGO, Faith-based, military, etc. institutions face the same situation?
 7. What efforts have been made to decrease the outflow and increase the inflow?
 - a. What has succeeded and what has failed?
 8. Retention
 - a. Where are professionals that leave the surgical workforce going (out of country, non-clinical/administrative roles, retirement)
 - b. What is the best way to track attrition and retiree information?
 - c. How can this be improved?
 - i. What is currently being done to increase and improve the surgical workforce?

II. Challenges & Proposed Solutions

9. What are previous and current initiatives to increase or improve allocation of provider positions?
10. What are previous and current initiatives to incentivize improved distribution of providers?

V. Targets

1. In 5 years, what changes should be in place to improve physician positions?

VI. Monitoring and Evaluation

1. Who will monitor these changes and improvements?

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Continuing Medical Education

I. Background

2. Is there currently a system or standard in place for physician continuing medical education? (If so, describe)
3. What should be the minimum requirements for continued medical education for providers?
 - a. Who will enforce these regulations?
 - i. Employers? Surgical/ Anaesthesia Societies? Licensing Committee?
4. Should different level of facilities have different requirements for offering continued medical education?
 - a. Who will fund this?
5. What successful solutions do you know of for upskilling current providers?
 - a. Why are they successful? What outcome measures are collected?
6. Are there previous or current initiatives in place to improve/monitor continued medical education?
7. What is the current role of supervision?
 - a. What supportive programs exist? What could be improved/developed?

II. Key Metrics

8. What is the key metric for continued medical education?

III. Targets

9. In 5 years, what is the goal for continued medical education for providers and at the facility level?

IV. Monitoring and Evaluation

10. Who will be monitor and evaluate this initiative?

Healthcare Management

I. Background

1. Are there formally trained, professional healthcare managers in the system (or is leadership defaulted to clinical leadership)?
 - a. What is their job description?
 - b. What facilities should be mandated to have a healthcare manager?
2. Who should be responsible for theatre management? Preoperative, postoperative care unit management?
3. Who should be responsible for supplies ordering of surgical equipment?
 - a. What training is required?

II. Challenges & Proposed Solutions

4. What are previous and current initiatives to improve healthcare management?

III. Targets

5. In 5 years, what are the goals for healthcare management?

IV. Monitoring and Evaluation

1. Key Metrics
 - a. How can we monitor the progress of healthcare management?
2. Who will monitor these initiatives?

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FINANCE

National and Hospital Budgets for Surgery

I. Background

1. What is the budget for healthcare in the country?
 - a. Describe the process of how this is determined and what body of governance, organizations are involved.
 - b. What are the major data points used to make these decisions?
 - c. What is the frequency that these decisions are being made?
2. What proportion of healthcare financing is public, private, out of pocket and / or donations?
 - a. Describe any oversight or monitoring that exists for these sources of financing.
3. Is part of the national budget directed specifically for surgical, obstetric and anaesthesia care?
 - a. What percent of the national budget (or amount) is currently spent on surgical, obstetric and anaesthesia care?
 - b. What proportion of surgical, anaesthesia and obstetric financing is public, private, out of pocket and donations?
4. Are surgery, anaesthesia and obstetrics funding priorities for the Ministry of Health at present?
 - a. If not, what would be key in advocating for increased prioritization within the Ministry of Health?
5. What priority is health to the Ministry of Finance?
 - a. How does the Ministry of Health work with the Ministry of Finance?
 - b. What would be key in advocating for increased funding for surgery from the Ministry of Finance?
6. How are priorities set by local government and facilities?
 - a. What would be the key to advocating to increased budgeting on surgical, anaesthesia and obstetric care with local government and facilities?
7. What are key or possible areas of external funding?
 - a. What would be the important for advocating for external funding?
8. What role should the private sector play in funding surgical, anaesthesia, and obstetric care?
9. Describe the process by which funds are allocated from national levels to regional, local, and facility levels
 - a. Who are the key decision makers (key players, institutions) that decide these allocations?
 - b. What are the major data points used to make these decisions?
 - c. What is the frequency that these decisions are being made?
10. Are budget/resources allocated by district or province based on surgical need/output?
11. Are hospitals allowed to determine/request their budget for surgical care?
 - a. Are hospitals allowed to determine their own spending on surgical care?
 - b. If not, would this be beneficial? How could we start doing this?
12. What ways can we adjust allocation for unanticipated need?
 - a. Describe any mechanisms for accountability of these budgets.

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II. Challenges & Proposed Solutions

1. What are the major issues which prevent patients from receiving financial risk protection?
2. What needs to be done in order for surgery, obstetrics, and anaesthesia to be included within the basic health package for a country / universal health coverage?
3. What are current or previous initiatives to increase the national budget for surgical services?

III. Targets

1. In 5 years, what changes to the healthcare budget should be achieved to improve surgical care delivery?
2. In 5 years, what changes need to be made at the hospital level, to ensure appropriate funding to ensure adequate surgical care delivery?

IV. Monitoring and Evaluation

1. Key metrics
 - a. What are key metrics to monitor funding for surgical care?
2. What governing bodies are in place to monitor changes to budget allocation

Patient Cost of Surgical Care

I. Background

1. How is the cost for services currently determined?
2. How are services covered in general, i.e. does an insurance system exist?
 - a. Please describe in detail the different levels of insurance
 - i. What types of surgical care are covered under each insurance scheme?
 - ii. What types of surgical care is not covered under the national health insurance scheme?
 - b. How many people are insured under each health insurance scheme?
 - c. How are patients determined to be in a certain scheme?
 - i. If a patient's income changes how difficult is it to change their plan?
 - ii. Are any groups/procedures excluded from user fees?
 - iii. What safety nets are in place for patients to decrease the financial burden?
 - a. Describe any social work services that exist to help at risk and impoverished patients access health care?
3. Describe any direct costs incurred by surgical patients using healthcare services with regards to:
 - a. Outpatient care
 - b. Initial assessment
 - c. Hospital Admission
 - d. In-hospital stay (including food, clothing, etc.)
 - e. Procedures (emergent, urgent, elective)
 - f. Pharmaceuticals
 - g. Consumables (including gloves, gauze, etc)
4. Describe any indirect costs incurred by surgical patients using healthcare services with regards to:
 - a. Transportation to the hospital
 - b. Accommodation

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- c. Lost wages
5. What are the consequences of these costs? Delayed care? Not presenting at all?
 - a. How do these costs differ for Emergency surgery, bellwether procedures, elective surgery?
6. What is the countries stance on universal health coverage?

II. Challenges & Proposed Solutions

1. What are the current gaps in surgical coverage?
 - a. What populations are at greatest risk of impoverishing and catastrophic expenditure?
2. What previous or current initiatives are in place to improve coverage for surgical services?
3. What solutions are required to increase insurance coverage for surgical care?
 - a. What solutions are required to decrease cost of surgical care for those at highest risk of impoverishment from medical costs?

III. Targets

1. In 5 years, what change to coverage of surgical services should be made?

IV. Monitoring and Evaluation

1. Key Metrics
 - a. How can we accurately determine the cost of surgical care for patients?
 - b. *What metrics need to be collected in order to ensure our patients are protected from impoverishing and catastrophic expenditure?*
2. Who will monitor these changes?

National Surgical, Obstetric and Anaesthesia Planning (NSOAP) Discussion Framework

INFORMATION MANAGEMENT

Health System Indicators and Data Collection

I. Background

1. Describe the process by which health system related data is collected and reported from the facility to the national level.
 - a. What mechanisms exist for utilizing this information to improve facility and broader systemic performance? Is data reported back to facilities regularly?
 - b. Who is responsible for this data collection?
 - c. How often is data collected and reported?
 - d. How broadly is data collected (all facilities, sampled, etc.)?
2. What methods of data collection/registries exist?
 - a. Data collectors, analysts/ statisticians
 - b. What platform is used for data/indicator collection (tablet, computer)?
 - c. Disease/condition specific registries?
3. What barriers exist to facility-level data collection and reporting?
4. How can we collect the Lancet Commission on Global Surgery recommended minimum surgical dataset? (do any databases/registries already have these answers?)
 - a. 2-hour access to surgery
 - b. Specialist surgical workforce density
 - c. Surgical volume
 - d. Perioperative mortality rate
 - e. Protection against catastrophic expenditure
 - f. Protection against impoverishing expenditure
5. Which of these indicators can we add to current data collection systems?
6. What reporting avenues are currently in place? (Conferences, Health Reports, etc)
7. What additional information will be important and useful to measure to monitor the progress of this National, Surgical, Obstetric and Anaesthesia Plan?
8. Electronic Medical Records
 - a. What is currently being used? (electronic, paper, etc)
 - i. Is the system unified across public/private? How widely utilized are current data collection systems?
 - b. What information are they collecting/measuring?
 - c. What is the current plan for upscaling of electronic medical records?
 - d. What plans exist to create a unique patient identifier across hospitals?
 - e. How could this system be best expanded and utilized to improve communication amongst providers, facilities?
 - f. Is there a single Medical classification system?

II. Challenges & Proposed Solutions

1. What previous or current initiatives are in place to improve information management?

III. Targets

1. In 5 years, what changes in data collection, reporting, or indicators should be made?

IV. Monitoring and Evaluation

1. Who will monitor and lead this initiative?

National Surgical, Obstetric and Anaesthesia Planning (NSOAP) Discussion Framework

Research, Outcomes Monitoring, and Quality Improvement Initiatives

I. Background

1. Research
 - a. What type of surgical and anaesthesia research is currently ongoing?
 - i. Types and focus of research (project generation and direction)?
 - ii. What nationwide or systems research is currently being coordinated?
 - iii. What should we be adding to the research docket?
 - iv. In what sector is research most lacking?
 - b. What institutions are in place that focus on surgical research?
 - c. Where does research training exist?
 - i. Where is research a priority? (medical schools, tertiary care hospitals, NGOs, private sector etc.)
 - ii. How can we improve this?
2. Outcomes Monitoring
 - a. What outcomes are routinely monitored?
 - i. Is the peri-operative mortality rate tracked at individual facilities?
System level?
 - ii. What are other measures that warrant national monitoring?
 - a. Re-admission rates, length of stay, complications, SSI, etc.
3. Quality Improvement Initiatives
 - a. What measures of quality improvement currently exist? (i.e. WHO surgical checklist, patient risk calculators, fire safety, etc)
 - b. What administrative and financial support is needed to initiate/ continue quality improvement initiatives?
 - c. Is telemedicine being used as a source for quality improvement?
 - i. For education? Referrals? Direct patient care? Multi-institutional communication?
 - ii. Is this worth investing in?

II. Challenges

1. What are the current gaps/hurdles to increasing research capabilities?
 - a. What steps should be taken to foster research related to surgery, anaesthesia and obstetrics?

III. Targets

1. *In 5 years, should we aim to have all facilities report peri-operative mortality rate?*

IV. Monitoring and Evaluation

1. Key Metrics
 - a. What are some key metrics to showcase improvement in information management?
2. Who will track improvement of information management initiative?

National Surgical, Obstetric and Anaesthesia Planning (NSOAP) Discussion Framework

LEADERSHIP AND GOVERNANCE

Leadership

I. Current Structure

1. What governmental and non-governmental institutions are stakeholders in healthcare?
 - a. Are there any other Ministries or institutions that share governance with the MoH?
2. What is the operational structure and hierarchy of the Ministry of Health?
 - a. Please describe how directorates in the MoH coordinate with other Ministries and list these parallel Ministries/directorates
 - b. How about specifically for surgery, anaesthesia, and obstetrics?
 1. Describe any oversight they have over non-governmental institutions
 - c. What role do they play in operations, policy/regulation, and budgeting for:
 1. Infrastructure/supply chains
 2. Workforce/training/education
 3. Service delivery
 4. Information management
 5. Financing
3. Describe who is responsible for and how policies, regulations, and budgets are enforced for surgery, anaesthesia and obstetrics.
4. Describe any professional societies and organizations that exist to support surgery, anaesthesia, obstetrics, and allied health fields.
 - a. What role/voice do they have in decision making for their respective members?

II. Governance over the National Surgical Plan

1. Who will lead the initiative for implementation of the plan? MOH? Private Organization?
 - a. Should a task force be created to oversee the execution of the plan?
 - b. Should an Implementation coordinator be hired?
 - c. What will be the reporting system for the different categories of the plan?
2. How will the plan be prioritized? What governing institutions will decide which initiatives take precedent?

Implementation and Coordination

I. Considerations

1. How will the plan be disseminated to all healthcare facilities, providers, training centres, etc?
2. How can coordination amongst clinicians, ministries, donors, private sector, NGOs, be improved?
 - i. Who should coordinate these activities?
 - ii. Who are/will be the current NGOs involved in this process?
 1. Who should NGOs involved in the surgical space report to?
 2. What information should NGOs provide prior to starting implementation in the surgical space in relation to the NSOAP?

National Surgical, Obstetric and Anaesthesia Planning (NSOAP) Discussion Framework

Monitoring and Evaluation

I. Considerations

1. What are the current mechanisms on the ground that can be combined with the M&E process?
2. What is the interval of reporting for the M&E process?
3. How will the results of M&E be disseminated?
4. How will on the ground clinicians continue to feedback about their experience of the plan?
5. Who should be responsible for monitoring and evaluation of the plan?
6. Who will collect, compile and analyse the data
7. What is the role of each stakeholder in monitoring and evaluation?
 - i. MOH, surgical societies, academic partners, NGO, industry partners

Coordination of Care among Private and Public Sectors

I. Background

1. How is care provision currently divided between the public sector, private, for-profit sector, Faith-based/NGO/charitable sector, military?
2. What is the role of the private and faith based sector in the care delivery system?
 - i. (Innovation, service delivery, complex care, critical care, employment opportunities etc)
 - ii. How is care integrated?
 - iii. How are referrals made?
3. How is patient care information shared amongst the different sectors?
4. What systems are currently in place to guarantee communication between these different sectors?
5. What are the differences in care provision between the sectors?
6. What factors affect whether patients seek care in these systems?
7. What ideas and solutions can be learnt and transferred across sectors?
8. What standards are currently in place for non-public organizations to provide care?

II. Challenges & Proposed Solutions

1. What are previous and current initiatives to improve coordination of care amongst different sectors?

III. Targets

1. In 5 years, what is the goal for coordination of care?

IV. Monitoring and Evaluation

1. Who should all sectors report to in regards to service delivery and quality of care?
2. What body of government or organization is in charge of assessing different sectors for quality of care and appropriateness of care?
3. How often should organizations/facilities report the defined key metrics above to a governing body?