

Rapid Hospital Readiness Facility Assessment Checklist for COVID-19

Adopted from: WHO Rapid hospital readiness checklist for COVID-19



**World Health
Organization**
Nepal



Government of Nepal
Ministry of Health and Population

Introduction

Hospitals play a critical role within the health system in providing essential medical care to the community, particularly in a crisis. Prolonged and combined outbreaks like COVID-19 can lead to rapidly increasing service demands that can potentially overwhelm the capacity of hospitals and the health system at large.

Hospitals are complex and vulnerable institutions, dependent on crucial external support and supply lines. Under normal working conditions, many hospitals frequently operate at near-surge capacity. Consequently, even a modest rise in admission volume can overwhelm a hospital beyond its functional reserve.

Health facility readiness is very important especially during pandemic. A shortage of critical equipment and supplies could limit access to needed care and have a direct impact on healthcare delivery. Panic could potentially jeopardize established working routines. Even for a well-prepared hospital, coping with the health consequences of a COVID-19 outbreak would be a complex challenge. Lack of preparedness can lead to interruption of the critical support services and supplies which would potentially disrupt the provision of acute health care by health-care facility. In addition, a high rate of staff absenteeism can be expected.

Along with logistics and human resources, focus should be done on various aspects like leadership, proper communication, information management, etc. The questionnaire is structured on **fifteen key components**; under each component, there is a list of questions regarding the status of implementation of the recommended action specific to that component. Hospitals at risk of increased health service demand should be prepared to initiate the implementation of each action promptly.

This assessment will be carried out by UNIFIED COVID-19 Hospital with technical support from WHO-Nepal.



Figure 1. Rapid Hospital Assessment components

General Facility Information	
Date of Assessment: __/__/__ (Day/Month/Year)	
Name of the facility/Hospital:	
Established date:	Approved number of beds:
Facility address (Province/district/palika/ward):	
Administrative status (circle one): Government Private Teaching Other	
Director/ MeSu's Name:	
Contact no:	Email Id:
Total Number of Buildings:	Total Floors:
Total no. of General beds in the facility: _____ Total no. of inpatient beds (excluding delivery beds) _____ # Adult ICU Beds: _____ #Adult HDU Beds: _____ #Functional Ventilators: _____ #Emergency Department Beds: _____	Total allocated paediatric beds: _____ #NICU Beds: _____ #Paediatric ICU Beds: _____ #Functional Ventilators: _____
Total no. of all beds allocated for COVID-19: _____ #General Beds Adult Beds: _____ Paediatric Beds: _____ #HDU Beds Adult Beds: _____ Paediatric Beds: _____ #ICU Beds Adult Beds: _____ Paediatric Beds: _____ #Emergency Ward Beds: _____ #Holding Area Beds: _____	No. of ambulances according to category: क वर्ग ख वर्ग ग वर्ग #Mortuary Van: _____ Access to road facility: _____

Description of the facility																																					
Which of the following department/wards are present in the facility? (Tick all those available)	Which of the ancillary services are present in the facility? (Tick all those available)																																				
<table border="0"> <thead> <tr> <th>Dept./Wards</th> <th>No. of beds</th> </tr> </thead> <tbody> <tr><td>• Internal Medicine</td><td></td></tr> <tr><td>• Surgery</td><td></td></tr> <tr><td>• ENT</td><td></td></tr> <tr><td>• Pediatric</td><td></td></tr> <tr><td>• Obstetrics and gynecology</td><td></td></tr> <tr><td>• Infectious disease</td><td></td></tr> <tr><td>• Isolation</td><td></td></tr> <tr><td>• Cardiology</td><td></td></tr> <tr><td>• Critical Care Unit (ICU/CCU/SICU/MICU/PICU/NICU)</td><td></td></tr> <tr><td>• High Dependency Unit</td><td></td></tr> <tr><td>• Operating room (Table)</td><td></td></tr> <tr><td>• Neurology</td><td></td></tr> <tr><td>• Oncology</td><td></td></tr> <tr><td>• Long term care and rehabilitation _____</td><td></td></tr> <tr><td>• Palliative care</td><td></td></tr> <tr><td>• Dedicated 24-hr staffed Emergency room</td><td></td></tr> <tr><td>• Other (specify) _____</td><td></td></tr> </tbody> </table>	Dept./Wards	No. of beds	• Internal Medicine		• Surgery		• ENT		• Pediatric		• Obstetrics and gynecology		• Infectious disease		• Isolation		• Cardiology		• Critical Care Unit (ICU/CCU/SICU/MICU/PICU/NICU)		• High Dependency Unit		• Operating room (Table)		• Neurology		• Oncology		• Long term care and rehabilitation _____		• Palliative care		• Dedicated 24-hr staffed Emergency room		• Other (specify) _____		<ul style="list-style-type: none"> • Radiology ❖ Xray ❖ CT scan ❖ MRI • Laboratory • Pharmacy • Physiotherapy • Others (specify) _____ • Mortuary facility: _____ Capacity: _____ • Central sterile services department
Dept./Wards	No. of beds																																				
• Internal Medicine																																					
• Surgery																																					
• ENT																																					
• Pediatric																																					
• Obstetrics and gynecology																																					
• Infectious disease																																					
• Isolation																																					
• Cardiology																																					
• Critical Care Unit (ICU/CCU/SICU/MICU/PICU/NICU)																																					
• High Dependency Unit																																					
• Operating room (Table)																																					
• Neurology																																					
• Oncology																																					
• Long term care and rehabilitation _____																																					
• Palliative care																																					
• Dedicated 24-hr staffed Emergency room																																					
• Other (specify) _____																																					

Other Activities/Services

Telemedicine

- Does the hospital provide Telemedicine services to other hospitals in other provinces?

Which hospitals seek telemedicine service from the hospital? List them.

1.
2.
3.
4.

- Does the hospital provide Telemedicine services to general public?
- If Yes, which dept./specialists are involved in providing the services?
- If Yes, which is the top 5 common problems the telemedicine department deals with?
- What is the mode of delivery of telemedicine service? Telephone/video/Social medias

CME

- Does the hospital conduct regular CME or CME like activities to increase the knowledge of healthcare workers?
- Have any CME been conducted recently (within 1 month) regarding management of COVID-19 cases? If Yes, please mention the topic.
- Who are involved in the CME activities? Doctors only/ Doctors and Nurses both/ All healthcare workers depending on the topic?

IMU

- Does the hospital regularly update the cases of COVID-19 in IMU app?
- If not regularly, how often are the cases updated?
- Who is responsible for updating the cases?

Human Resources	
<p><u>Human Resources available in the Hospital</u></p> <p>Total # Administrative staff: _____</p> <p>Total # Doctors: _____ Specialists: _____</p> <p>Medical Officers: _____ Residents: _____</p> <p>Anesthetists: _____ Physicians: _____</p> <p>MDGPs: _____ Pediatricians: _____</p> <p>Surgeons: _____ OB-GYNs: _____</p> <p>Total # Nursing staffs: _____</p> <p>Total # Nurses working in Critical Care (ICU) _____</p> <p>HDU _____ PICU _____ NICU _____</p> <p>Total # paramedics/Allied HCW: _____</p> <p>Total # Cleaning/Support staff: _____</p> <p>Total # maintenance staff: _____</p> <p>Total # Biomedical engineer: _____</p>	<p><u>Human Resources designated for COVID-19</u></p> <p>Total # Administrative staff: _____</p> <p>Total # Doctors: _____ Specialists: _____</p> <p>Medical Officers: _____ Residents: _____</p> <p>Anesthetists: _____ Physicians: _____</p> <p>MDGPs: _____ Pediatricians: _____</p> <p>Surgeons: _____ OB-GYNs: _____</p> <p>Total # Nursing staffs: _____</p> <p>Total # Nurses working in Critical Care (ICU) _____</p> <p>HDU _____ PICU _____ NICU _____</p> <p>Total # paramedics/Allied HCW: _____</p> <p>Total # Cleaning/Support staff: _____</p> <p>Total # maintenance staff: _____</p> <p>Total # Biomedical engineer: _____</p>

Vaccination status of HR:					
Category	Total no.	1 Dose Vaccinated		2 Dose Vaccinated	
		No.	%	No.	%
Doctors					
Nurses					
Paramedics					
Cleaning/ support staff					
Maintenance staff					
Administrative staff					

Number of trained EMDT present in the facility along with their designation:

Hospital Readiness					
A. LEADERSHIP AND INCIDENT MANAGEMENT SYSTEM					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	Does the hospital/facility have a well-established emergency response plan for Disaster?				
2	Is the incident management system activated? If Yes, list the members of the team along with their department and designation. (Please attach the list in separate Page)				
3	Does the hospital have a designated incident manager for COVID-19 risk management?				
4	Does the hospital have a business continuity plan (plan for continuation of essential health services) tested through a simulation exercise for the COVID-19 pandemic? When was it last done?				
5	Does the hospital have mechanisms to coordinate with national and local authorities and the community for actions related to COVID-19 prevention, preparedness, readiness, response and recovery?				
6	Are all the guidance and documents related to COVID-19 risk management available for use by hospital staff?				

B. COORDINATION AND COMMUNICATION					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	<p>Has the COVID-19 internal communications plan and standard operating procedures for hospital staff, patients and visitors been developed?</p> <ul style="list-style-type: none"> • If developed, has it been activated? • Does it include updates to roles and responsibilities for staff and their contact details? 				
2	<p>Are the hospital communications equipment and systems for addressing the COVID-19 pandemic available and have they been tested and determined to be optimally functional; for example, landlines, mobile phones, radio equipment and mechanisms for ensuring access to the internet?</p>				
3	<p>Are all hospital staff (medical and non-medical) briefed and trained on COVID-19 emergency policies and procedures complying with 2-way communications with hospital management, staff and visitors?</p>				
4	<p>Has the hospital and the COVID-19 incident management system team activated mechanisms for coordination and communication with, for e.g., the Ministry of Health, DHO, Unified COVID-19 hospital and P/HEOC to ensure that a consistent approach is taken to COVID-19 management?</p>				
5	<p>Is an official hospital spokesperson for COVID-19 information and an alternate designated and are well trained? Is there a sign language interpreter during broadcast?</p>				
6	<p>Is the list of all stakeholders involved in COVID-19 management, including media partners, available for timely communication?</p>				

C. SURVEILLANCE AND INFORMATION MANAGEMENT					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	Has the hospital staff been informed about and trained in COVID-19 case definitions, the definition of close contacts and the quarantine system?				
2	Are standardized forms/IMU available to report COVID-19 case information to a centralized health information system within 24 hours of case identification?				
3	Have the standard operating procedures/guidelines addressing the collection, confirmation and validation of COVID-19 data been developed and are available to designated staff?				
4	Has the hospital designated staff to collect, analyze and disseminate data related to COVID-19 and information on cases and services being offered by the hospital?				
5	Does the hospital have a system in place for to ensure proper documentation and secure storage of hospital information about COVID-19, with a back-up system, for present and future use?				
6	Is there a mechanism for collecting feedback from patients and visitors about COVID-19 management available and operational?				

D. RISK COMMUNICATION AND COMMUNITY ENGAGEMENT					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	Is COVID-19 risk communication protocols about infection prevention and control, including standard operating procedures, available for use by all staff, patients and visitors?				
2	Are the key messages for use in COVID-19 risk communication developed and regularly updated based on the evolving situation & evidence-based technical guidance?				
3	Has the hospital designated staff to regularly update risk communication materials and procedures in order to manage hospital-based rumors and keep everyone well informed about the COVID-19 pandemic?				
4	Are the hospital staff briefed regularly about COVID-19 risk communication messages and community engagement actions that have been conducted?				

E. ADMINISTRATION, FINANCE AND BUSINESS CONTINUITY					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	Are all legal procedures for administration and financial mechanisms in place for COVID-19 management, including procedures for procuring necessary supplies and services?				
2	Are the administrative policies and guidance available to alert hospital staff about and enable them to cope with the COVID-19 pandemic?				
3	Has the liability and insurance coverage and procedures for COVID-19 management been reviewed, including reviewing human resources recruitment procedures?				
4	Is there a system in place to waive user fees for health care for COVID-19 cases (i.e., testing and case management)?				
5	Has the staff turnover and absenteeism been incorporated into the hospital's corporate strategy to avoid staff fatigue due to the COVID-19 workload and to ensure continuity of services?				
6	Does the hospital's incident management system team have ways and means for assessing and identifying the expansion of hospital inpatient, outpatient and intensive care unit capacity (including physical space, staff, supplies and processes) in case of an increasing COVID-19 caseload?				
7	Is there a COVID-19 plan available to potentially refer or outsource care of non-critical patients to appropriate alternative health facilities (e.g., home care for patients with mild illness who may require only telemedicine)?				
8	Have the hospital business continuity plan (continuation of essential health services) been developed and tested to address the COVID-19 pandemic?				

F. HUMAN RESOURCES					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	The staff directory has been updated for COVID-19 patient management.				
2	Staff have been briefed, trained and take part in exercises relevant to their COVID-19 areas of work, including infection prevention and control and clinical management, thus, ensuring staff competency and safety.				
3	The hospital's/facility's administration has estimated the current human resources capacity to prepare for and respond to the potential COVID-19 caseload (Surge Staff).				
4	The hospital/facility has identified the optimum number of staff (medical and non-medical) needed to ensure the business continuity of essential services during the COVID- 19 pandemic.				
5	Systematic procedures are in place to support the repurposing and reassignment of hospital staff (with medical conditions who are at high risk for complications).				
6	Optimum procedures are in place to monitor occupational health hazards and ensure the safety of staff to mitigate COVID-19 risks.				

G. SURGE CAPACITY					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	The hospital/facility has a surge plan and a replenishment plan that address issues including staffing, supplies, equipment and logistics; expertise for critical areas of care				
2	There is a plan for progressive scale-up of all key activities (Bed number, Oxygen Storage and supply, staffing, supplies, equipment and logistics), to manage the increased caseload on basis of real time calculations.				
3	Is there dedicated budget allocated for surge capacitance (staffing, supplies, equipment and logistics)				
4	The hospital/facility is part of the central surge mechanism or system.				
5	Procedures are in place to ensure management of the COVID-19 surge supply chain for essential medicines, diagnostics (including laboratory reagents, personal protective equipment and test kits) and supplies for clinical care, therapeutic interventions and clinical management.				
6	The hospital/facility has an agreed, documented arrangement with the Ministry of Health or its equivalent to procure equipment necessary for the surge (e.g., mechanical ventilators, oxygen tanks/Plants).				
7	A surge roster of qualified human resources is available and has been updated and includes the names and contact details of volunteers (e.g., retired medical staff, senior medical and nursing students, community volunteers), with a back-up database of staff.				

H. CONTINUITY OF ESSENTIAL SUPPORT SERVICES					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	The hospital/facility has identified and prioritized essential support services that should always be available and under all circumstances, with adequate and backup resources for maintenance of these services.				
2	The hospital/facility has identified the backup resources necessary to optimally maintain essential support services, including human; financial; logistics; supplies; beds, including in the intensive care unit; additional hospital space; a morgue facility; body bags; power; communications; water; and laundry service.				
3	Hospital/facility inventory, stockpile and maintenance systems are in place for food, oxygen, cleaning materials and disinfectants.				
4	The hospital/facility security system has identified potential safety and security challenges, including maintaining secure access to the facility, physical distance of at least 1 m, rational use of masks if someone has symptoms of COVID-19, patient flow, traffic, parking and access for visitors, and stocks of essential pharmaceuticals. The hospital also has a mitigation plan for security risks.				
5	The hospital/facility information management system is available to allow monitoring of utilization of routine essential health and care services not related to COVID-19 through a set of defined indicators.				

I. PATIENT MANAGEMENT					
S.N.	Questions	Yes	No	Means of Verification	Remarks
1	The hospital has an updated protocol for providing essential health care services to patients with COVID-19 that is based on WHO guidance/National/Local guidelines and is available to all health care providers and is functional.				
2	Procedures and provisions are available and functional for receiving patients and transferring them within the hospital to authorized isolation areas or rooms; other diagnostic and therapeutic support services are also available and functional.				
3	Hospital staff are implementing IPC protocols and safe hospital network and transportation services for pre- and post-hospital referral, including transferring patients from home care.				

J. OCCUPATIONAL HEALTH, MENTAL HEALTH AND PSYCHOSOCIAL SUPPORT					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	Staff are protected, well trained and equipped to provide initial medical care to people with suspected, probable or confirmed COVID-19.				
2	The hospital has policies about and capacities to manage occupational safety and health in conjunction with infection prevention and control measures.				
3	The hospital has policies about and capacities to manage occupational safety and health in conjunction with Zero tolerance for Workplace Violence.				
4	The hospital has policies about and capacities to manage occupational safety and health in conjunction with medical surveillance of hospital staff.				
5	The hospital has policies about and capacities to manage occupational safety and health in conjunction with Suspected cases of COVID-19 among hospital staff, their families and their contacts.				
6	Appropriate mental health and psychosocial support services (Based on cultural background) and feedback are available for staff, caregivers, their families.				
7	Post COVID services are available for staff, caregivers and their families.				
8	Standard operating procedures for mental health screening amongst COVID-19 infected staffs.				
9	All staff have been trained in basic occupational safety and health measures and psychological first aid and are aware of when to seek support services.				
10	Sufficient number of safety equipment, e.g., availability of Personal protective equipment based on risk for HCWs, Waste handlers, cleaning staffs, laundry staffs, laboratory staffs etc.				
11.	Is there availability of TLD batch (dosimeter) to radiology staffs? If yes, how many TLD available.....				
12	Is there availability of lead apron? If yes, how many Lead apron available.....				

K. RAPID IDENTIFICATION AND DIAGNOSIS					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	Staff have been trained in accurate, rapid identification and timely screening of suspected COVID-19 cases, with timely reporting to the designated authority.				
2	Communication and monitoring system are in place that allows for timely alerts and reporting of suspected COVID-19 cases in any area of the hospital, including the facility's points of entry and patient arrival and reception areas.				
3	A triage procedure is in place in the emergency department, focusing on rapid identification, isolation and testing of patients with signs and symptoms of acute respiratory infection.				
4	Staff are trained in standardized procedures for collecting samples and transferring them to the laboratory, according to current recommendations.				
5	If an on-site testing laboratory is available, the hospital has adopted standardized systems for COVID-19 testing, supported by assured access to reagents and test kits.				
6	Signages/posters and information about personal protective equipment and biosafety measures are posted strategically in the laboratory and reception areas to aid in the safe handling of samples, including their disposal.				

L. LABORATORY					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	The hospital/facility has continuous availability of basic laboratory testing (e.g., complete blood count, biochemistry profile, electrolytes, blood gas analysis, blood culture, and sputum examination).				
2	The hospital/facility has identified the essential laboratory supplies and their continuous availability is ensured.				
3	Hospital/facility has back up laboratory personnel and/or alternative laboratory services				
4	The hospital/facility has mechanism for prompt provision of laboratory data (reporting) to the physicians and health authorities responsible for clinical management and surveillance. (If yes, please specify). (Should specifically ask whether the laboratory is entering data into IMU).				
5	The hospital/facility has facilities (for COVID19 diagnostic testing? - If yes, please specify (real time RT-PCR, Antigen RDT or both) of testing COVID-19 viruses.				
6	The hospital has established and trained staff on packaging and transportation procedures for specimen referrals in accordance with national and international transport regulation and requirements. What is the provision of discarding samples that came to hospital for SARS-CoV-2 PCR?				
7	To maintain the quality control, is hospital following quality control measures as per NPHL and what is their recent status on it? (Like monthly certification status they got from NPHL)				

M. INFECTION PREVENTION AND CONTROL					
S.N.	Questions	Yes	No	Means of verification	Remarks
1	Is there IPC focal person to support IPC activities in the facility?				
2	Have COVID focused IPC activities received additional budget or support from the Government/other stakeholders?				
3	Has the hospital itself separated budget for IPC activities?				
4	Infection prevention and control protocols with standardized procedures for managing COVID-19 are available and functional, and all hospital staffs have been trained in the protocols, which should include a mechanism for periodic monitoring.				
5	Has the administrative and managerial staff received general training regarding IPC and HCWM in your facility?				
6	Is there specific orientation plan for patients or family members to minimize the potential spread of COVID- 19 virus?				
7	Staff are trained to recognize and screen all suspected COVID-19 cases at their point of contact with the hospital, and this screening includes all patients, visitors and hospital staff.				
8	WHOs 5 Moments for Hand Hygiene is always implemented and adhered to (before touching a patient, before any clean or aseptic procedure, after exposure to bodily fluids, after touching a patient, after touching a patient's surroundings).				
9	Water supply is adequately available for all uses (all health care activities, use for patients, visitors, staffs), with storage enough for at least 2 days when there is no supply.				
10	All toilets/bathroom in the hospital are functional with regular supply of water and soap.				
11	Grey water or water from: washing PPE, laboratory, surfaces and floors is disposed of safely in either septic tank or in a fenced soak-away pit.				
12	Adequate personal protective equipment (i.e., medical and surgical masks, N95 or FFP2 respirators, gloves, gowns and eye protection) is available and easily accessible to all hospital staff designated to interact with COVID-19 cases.				

13	Designated isolation areas are available for providing medical care to people with suspected, probable or confirmed COVID-19, with appropriate signage and equipment, and adequate ventilation.				
14	Airborne isolation room is available with 6 air changes/hour for a mechanically ventilated room or 160 L/s/patient for a naturally ventilated room. Airflow from clean-to-less clean zones is ensured whenever aerosol-generating procedures are performed. Where a mechanical ventilation system is available, negative pressure is created and maintained to control the direction of airflow from clean-to-less clean zones.				
15	Standard and transmission-based precautions are applied for case management and for receiving and transferring people with suspected, probable or confirmed COVID-19.				
16	Staff are using airborne precautions during aerosol- generating procedures for COVID-19, such as tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, bronchoscopy and sputum induction by using nebulized hypertonic saline.				
17	Appropriate measures are in place at points of entry and are routinely available in all areas of the hospital (e.g. hand hygiene stations available for use before hospital entry and throughout the hospital should be stocked with water, soap, paper towels or an alcohol- based hand rub; waste bins with lids are placed at strategic locations in the hospital).				
18	Signages or Posters of good hygiene practices are available in relevant languages and with illustrations within the hospital and in strategic locations around the hospital/facility; they should include information about hand hygiene, respiratory etiquette and social distancing.				
19	A protocol is available about how to avoid transporting COVID-19 patients out of their rooms and for exceptional reasons if this cannot be avoided, a protocol for transporting COVID-19 patients safely out of their rooms is available.				

20	Staff have been trained, whether in person or online, about infection prevention and control technical guidance from WHO, especially frequent hand hygiene, respiratory hygiene, cough etiquette, social distancing (maintaining distance of at least 1 m) and the use of personal protective equipment.				
21	A policy is available and has been implemented that ensures all hospital/facility beds are placed at least 1 m apart, regardless of COVID-19 suspicion.				
22	All surfaces in the hospital and in ambulances are routinely cleaned and disinfected, according to infection prevention and control and environmental cleaning and disinfection guidelines.				
23	Are all reusable medical devices and other material cleaned and disinfected as per environmental cleaning and disinfection guidelines.				
24	During cleaning and disinfection activities, do the designated workers use appropriate PPE?				
25	Does the hospital have infrastructure and a protocol (national/international/organizational), including COVID 19 in place for waste management, including the management of biological and clinical waste.				
26	Does the hospital have a designated and well managed donning and doffing areas with hand hygiene stations?				
27	Does the hospital have designated and well managed waste segregation areas with bin with lid?				
28	Does the hospital have designated trolley for waste collection and transportation?				
29	Does the hospital have secured waste treatment site/area? Do they dispose waste after decontamination or treatment?				
30	Do the waste handlers use appropriate PPE during collection, transportation, treatment of waste?				
31	Is a printed/electronic/register record of all essential people entering a COVID-19 patient's/resident's room is available and maintained?				
32	Physical space and guidelines are available for managing the bodies of those who die of COVID-19, including guidelines for providing a safe and dignified funeral.				

33	Does this hospital have well managed laundry service (collection, cleaning, disinfection and washing facilities)?				
----	---	--	--	--	--

Critical Care Inventory Assessment

SECTION 1: FACILITY READINESS CHARACTERISTICS FOR OXYGEN SUPPLY SYSTEMS				
QUESTION	RESPONSE CODE			
Does the facility have a wall pipe network of medical gases?	<input type="checkbox"/> Yes, Oxygen, Air and Vacuum <input type="checkbox"/> Yes, Oxygen and Air <input type="checkbox"/> Yes, Oxygen <input type="checkbox"/> No			
What is the source of electricity for this facility?	<input type="checkbox"/> Central electricity grid <input type="checkbox"/> Power generator <input type="checkbox"/> Both <input type="checkbox"/> Other (specify):			
If 'Power generator' or 'Both' selected above: how many generators are available at the facility?				
If electrical generator(s) at the facility, please complete the following details for those functional	Generator Capacity (Kva)	Stabilizer (Y/N)	UPS (Indicate Capacity)	Inverter (Y/N)
Please list all wards that have dependable voltage stabilization; double conversion uninterruptible power supply	<input type="checkbox"/> Emergency room <input type="checkbox"/> Intensive care <input type="checkbox"/> Surgery <input type="checkbox"/> Hospitalization <input type="checkbox"/> Laboratory <input type="checkbox"/> Imaging <input type="checkbox"/> Other (specify):			
Does Facility have any emergency transport vehicles or ambulances?	<input type="checkbox"/> Yes, with oxygen If yes, how many?____ <input type="checkbox"/> Yes, but without oxygen If yes, how many?____ <input type="checkbox"/> No			
Is there a staff at your facility dedicated to the management, installation, and maintenance of medical equipment?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, what is their job title: Title: _____ Number: _____		
Is there a clinical staff at your facility that has experience in invasive mechanical ventilation / intubation	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, what is their job title: Title: _____ Number: _____		

SECTION 2: PULSE OXIMETERS		
Instructions: Count the number of pulse oximeters at the facility by functionality and type.		
TYPE	Number Functional	Number Non-functional
Table-top pulse oximeter		
Portable handheld pulse oximeter		
Self-contained fingertip pulse oximeter		
If non-functional for any type is >0, please indicate the reason(s) the devices are non-functional.	<input type="checkbox"/> No spare parts <input type="checkbox"/> No funds for maintenance <input type="checkbox"/> No training to use or to repair <input type="checkbox"/> No consumables (cables, sensors) <input type="checkbox"/> Not installed <input type="checkbox"/> No distributor in country <input type="checkbox"/> Other (specify):	

SECTION 3: OXYGEN CONCENTRATORS		
Instructions: For each concentrator maximum capacity, count the number of functioning and non-functioning concentrators at the facility.		
Maximum flow rate capacity	Number Functional	Number Non-functional
Up to 3L/min		
Up to 5L/min		
Up to 8L/min		
Up to 10L/min		
Greater than 10L/min		
If non-functional for any type is >0, please indicate the reason(s) the devices are non-functional. <ul style="list-style-type: none"> <input type="checkbox"/> No spare parts <input type="checkbox"/> No funds for maintenance <input type="checkbox"/> No training to use or to repair <input type="checkbox"/> No consumables (cables, sensors) <input type="checkbox"/> Not installed <input type="checkbox"/> No distributor in country Other (specify) 		

SECTION 4: OXYGEN CYLINDERS

Instructions:

For each cylinder size and connection type, count the number of cylinders available at the facility.

Cylinder size	Pin-index	Bullnose
"D" (340L)		
"E" (680L)		
"F" (1360L)		
"G" (3400L)		
"J" (6800L)		
What is the average number of J sized oxygen cylinders consumed per day? (routine)		Total: _____
What is the average number O sized oxygen cylinders consumed per day? (peak of COVID)		Total: _____
What is the cost of refilling single cylinder?		

SECTION 5: BiPAP & CPAP MACHINES

Instructions:

Count the number of BiPAP machines at the facility by size and functionality.

Size	Number Functional	Number Non-functional
Adult		
Paediatric		
Neonatal		

SECTION 6: HIGH-FLOW NASAL CANNULA (HFNC)

Instructions:

Count the number of types of high-flow nasal cannula (HFNC) oxygen delivery device, by age category, available at the facility.

Size	Total number at facility
Adult	
Paediatric	

SECTION 7: SUCTION DEVICES

Instructions:

Count the number of complete suction devices at the facility by type.

Size	Number Functional	Number Non-functional
Manual		
Electric		
Central vacuum		
If non-functional for any type is >0, please indicate the reason(s) the devices are non-functional.	<input type="checkbox"/> No spare parts <input type="checkbox"/> No funds for maintenance <input type="checkbox"/> No training to use or to repair <input type="checkbox"/> No consumables (cables, sensors) <input type="checkbox"/> Not installed <input type="checkbox"/> No distributor in country <input type="checkbox"/> Other (specify)-----	

SECTION 8: LARYNGOSCOPE

Instructions: Count the number of laryngoscopes at the facility (regardless of type).

Type	Total number at facility
Macintosh (Curved blade)	
Miller (Straight blade)	

SECTION 9: INTUBATION SETS

Instructions:

Count the number of components of intubation sets at the facility by type.

Component	Adult	Paediatric
Endotracheal tube set: Tube Guide ("Stylet" or "Bougie")		
Laryngeal mask		
Colorimetric end tidal CO2 detector		

SECTION 10: AIRWAYS

Component	Single use	Reusable
Oropharyngeal (Guedel) airway		
Nasopharyngeal airway		

SECTION 11: PATIENT VENTILATOR

Instructions:

Count the number of functional patient ventilators at the facility by type.

Type	Number Functional	Number Non-functional
Transport, portable		
Intensive care – Adult		
Intensive care – Paediatric		
Intensive care – Neonate		
If non-functional for any type is >0, please indicate the reason(s) the devices are non-functional.	<input type="checkbox"/> No spare parts <input type="checkbox"/> No funds for maintenance <input type="checkbox"/> No training to use or to repair <input type="checkbox"/> No consumables (cables, sensors) <input type="checkbox"/> Not installed <input type="checkbox"/> No distributor in country <input type="checkbox"/> Other (specify)-----	

SECTION 12: AUTOCLAVE / STERILIZER

Instructions:

Count the number of autoclave and sterilizer equipment at the facility.

Capacity	Number functional	Number non-functional
40-60 L		
> 90 L		
Other (specify capacity and type if needed (e.g., Ethylene Oxide):		

SECTION 13: OXYGEN TERMINAL BEDSIDE WALL UNITS

Instructions:

Count the number of oxygen terminal bedside wall units at the facility in all wards/departments whose pressure is between 345 – 425 kPa (50-60 psi).

Ward/Department	Total number in the ward/department	Number per bed	Fitted with a valve and a pressure and flow regulator
Emergency Room		<input type="checkbox"/> 1 per bed <input type="checkbox"/> 2 per bed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Intensive Care Unit (ICU)		<input type="checkbox"/> 1 per bed <input type="checkbox"/> 2 per bed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Inpatient Department		<input type="checkbox"/> 1 per bed <input type="checkbox"/> 2 per bed	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is there any other units with oxygen wall outlets? (<i>Do not count</i> terminal units in operating theatres (OT) or X-ray/imaging)		<input type="checkbox"/> Yes, Specify name of other unit: _____ <input type="checkbox"/> No	
Other unit	<input type="checkbox"/> 1 per bed <input type="checkbox"/> 2 per bed	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Are there bedside oxygen wall units with other pressures other than 345-425 kPa	<input type="checkbox"/> Yes <input type="checkbox"/> No	<u>Pressure</u> _____ kPa or psi (circle one)	<u>Total number</u> _____ <input type="checkbox"/> 1 per bed <input type="checkbox"/> 2 per bed

SECTION 14: OXYGEN CYLINDER MANIFOLD

Instructions:
 Count the number of oxygen cylinder manifolds at the facility by size (e.g., number of cylinders that it can fit) and switching mechanism (e.g., manual or automatic).

Number of cylinders that can fit in the manifold	Manual switch	Automatic switch

Section 15: Bulk Liquid Oxygen Tank

QUESTION	RESPONSE
Does the facility have a bulk liquid oxygen tank?	<input type="checkbox"/> Yes <input type="checkbox"/> No
What is the tank capacity in M ³ . If other unit, please indicate.	
What is the refill frequency	<input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Other (Specify: _____)
How much, price per m ³ ?	

SECTION 16: ON-SITE OXYGEN PLANT (PSA)

QUESTION	RESPONSE CODE
Does this facility have a pressure swing absorption (PSA) oxygen plant?	<input type="checkbox"/> Yes <input type="checkbox"/> No
What is the manufacturer and model of the plant?	
What is the maximum production capacity of this plant? Change units if not familiar	<input type="checkbox"/> _____ m ³ /hr

What is the average oxygen consumption per month? Change units if not familiarm3 /month Other (specify):		
Is the oxygen plant functional and operational?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Is the oxygen plant operating for 24 hours a day?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
What is the percent concentration of oxygen being produced by the plant?	Percent concentration%		
Is the oxygen plant connected to a back-up source of electricity, such as a fuel generator?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Is the back-up source of electricity dedicated to the oxygen plant?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Is there a surge suppressor for the oxygen plant?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Is there a booster compressor? If yes, specify capacity.	<input type="checkbox"/> Yes <input type="checkbox"/> No		
What is the backup oxygen source? What is the type of the plant? (singlex, duplex or multiplex)	<input type="checkbox"/>		
Mention the power rating (KVA).	<input type="checkbox"/>		
Is there a voltage stabilizer for the oxygen plant?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Does the oxygen plant have a filling ramp or manifold for filling cylinders?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
How many cylinder connections of the following type are on the ramp/manifold?		Quantity	
	<input type="checkbox"/> Bullnose		
	<input type="checkbox"/> Pin-index		
To what pressure do you fill the cylinders? (Bar or kPA or psi)			
Approximately, how many cylinders did the oxygen plant fill in the last month?	Type	Nominal Content/O2	Number
	D	340	
	E	680	
	F	1360	
	G	3400	
	H	6800	
Other	Specify:		
Is there direct piping from the oxygen plant to other wards/departments within this facility?			

ABG						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

BiPAP Machine						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

CPAP Machine						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

Defibrillator						
S.N.	Manufacturer (M or B)	Model	Qty	Installation	Department	Status

ECG						
S.N.	Manufacturer (Channel)	Model	Qty	Installation	Department	Status

HFNC Device						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

Infusion Pump						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

Patient Monitor (7 parameter)						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

Patient Monitor (5 parameter)						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

PCR Machine						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

Syringe Pump						
S.N.	Manufacturer	Model	Qty	Installation	Department	Status

Ventilator						
S.N.	Manufacturer (A/P/N)	Model	Qty	Installation	Department	Status

Ventilator (Transport)						
S.N.	Manufacturer (A/P/N)	Model	Qty	Installation	Department	Status

Disability Inclusions

DISABILITY INCLUSION, REHABILITATION & POST COVID-19

Parameters	SCORE			Observations (Evaluators' Comments)
	Low	Average	High	
<p>1. <u>Transportation during an emergency:</u></p> <p>Scoring: Low = Ambulances and other vehicles and modes of transportation are not available; Average = Some vehicles are available, but not in sufficient numbers and not accessible for persons with disabilities for a major emergency or disaster; High = Appropriate vehicles in sufficient numbers are available and accessible for persons with disabilities during emergencies/disasters.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>2. <u>Capacity of Health Care Staff:</u></p> <p>Low = less than 25% of the staff have undergone trainings in disability inclusion, rehabilitation and post covid 19</p> <p>Average = 25 to 50% of health care staff – Doctors, PT, Nurses, Paramedical, ambulance drivers etc. have undergone trainings on disability inclusion, rehabilitation and post covid 19.</p> <p>High = More than 50% of health care staff – Doctors, PT, Nurses, Paramedical, ambulance drivers - have undergone trainings on disability inclusion, rehabilitation and post covid 19. In addition, the staff are aware of disability issues</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<p>Evaluators should verify what proportion of the staff has received hands-on trainings on disability inclusion, rehabilitation and post covid 19, Community Emergency Medical Technician (CEMT) for ambulance drivers etc. or any refresher trainings</p> <p>In addition, the evaluators should verify whether the staff have got basic knowledge, skills and attitude towards persons with disabilities. This will help the staff to understand the needs of persons with disabilities, how to communicate and provide appropriate care according to the disabilities.</p>				

<p>3. <u>ACCESS</u>: Reach, Enter, Circulate/internal Movement within the hospital & key service areas and basic amenities:</p> <p>Low = Reach, Enter, Circulate/Internal movement within the hospital, key service areas and basic amenities are less than 25% accessible to wheelchair users and persons with visual impairments/disabilities</p> <p>Average = Reach, Enter, Circulate/Internal movement within the hospital, key service areas and basic amenities are 25-50% accessible to wheelchair users and persons with visual impairments/disabilities</p> <p>High= Reach, Enter, Circulate/Internal movement within the hospital, key service areas and basic amenities are more than 50% accessible to wheelchair users and persons with visual impairment/disabilities</p>	□	□	□	
<p>This assessment should be carried out by a team of persons with disabilities (wheel chair user, blind person, deaf person and low vision) and the physiotherapist/rehab professional. <u>In the pandemic context, a brief telephonic call to the superintendent, one of the rehab staff, nurse, paramedic, health aid can be done to rapidly assess the capacity and resources in Covid facilities.</u></p> <p>Evaluators should verify whether persons with disabilities / rehabilitation needs can reach, enter, and move inside/around the key services areas and basic amenities.</p> <p>Key services include social security unit, emergency, OPD, X-ray, laboratory pharmacy, wards, and physiotherapy.</p> <p>Basic amenities include disabled-friendly toilet, drinking water etc.</p> <p>A checklist for access audit and mapping of hospital and service areas are found in guidance document/annex. This will enable us to identify barriers and suggest recommendations.</p>				
<p>4. <u>Disability inclusion, rehabilitation and post covid-19 services</u>:</p> <p>Low = very limited or no inclusion and no post covid 19 rehabilitation services available</p> <p>Average = some services are disability-inclusive and post covid 19 rehabilitation services</p> <p>High = All hospital services are disability-inclusive and post covid 19 rehabilitation services are available</p>	□	□	□	

This question should be evaluated by a team of persons with disabilities (wheel chair user, visual impairment/blind, hearing impairment/deaf and low vision) and the physio/rehab professional.

Evaluators should verify if persons with disabilities can access the health services they need. For example, rehabilitation services during hospital/ICU, including step-down care facility. In addition, availability of post covid 19 services including rehabilitation services in terms of staffing - at least one PT/rehab staff, basic equipments and supplies should be assessed.

<p>5. <u>Information & communication:</u></p> <p>Low = No accessible information available</p> <p>Average = Some information is accessible</p> <p>High = All information is given in accessible format (or) vulnerable focal point/sign language interpreter is available</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
---	--------------------------	--------------------------	--------------------------	--

Evaluators should verify if there is a communication plan and procedures for persons with disabilities as part of hospital disaster preparedness plan, and check if the hospital has information board, signages, patient education sheets, Information, Education and Communication/IEC materials that are accessible to persons with disabilities/rehabilitation needs. Accessible information means, for hearing impairment/deaf – sign language interpreter; visual impairment/blind – Braille format; low vision – bold letters).

<p>6. <u>Assistive devices* for emergency rehabilitation:</u></p> <p>Low = No assistive devices are planned, procured and stockpiled for emergency</p> <p>Average = some assistive devices are planned and procured for emergency</p> <p>High = Assistive devices are planned, procured and stockpiled.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
---	--------------------------	--------------------------	--------------------------	--

*Any device designed, made or adapted to help a person perform a particular task, such as wheelchairs, prostheses, mobility aides, hearing aids or visual aids. Products may be specially produced or generally available for persons with disabilities (WHO, 2016). Evaluators should verify if the hospital disaster preparedness plan includes assistive devices for managing emergencies as per the checklist of priority assistive devices to be stockpiled found in guidance document/annex. The evaluator should give a high score if all 8 assistive devices and the recommended quantity are available and stockpiled as approved in the 'Priority Assistive Products list of Nepal'.

OVERALL COMMENTS:

Assistive Products in Covid 19 Facilities
(Derived from Priority Assistive Products List of Nepal, 2018)

I. Hospitals/health facility with 20 beds plus outpatients

S.N.	Name of Product	Required (no.)	Available (no.)	Functional (no.)
1.	Patient transfer boards for chair to bed and bed/trolley to bed	1		
2.	Portable commodes (chairs for shower/toilet)	1		
3.	Wheelchairs	4		
4.	Pressure-relieving cushions for wheelchairs	Align quantity with number of wheelchairs		
5.	Slide sheets (To remain in the hospital)	10		
6.	Pairs of crutches	- 20 adult - 10 pediatric		
7.	Walking frames	4		
8.	Pressure relieving mattresses (To remain in the hospital)	4		

II. Hospitals/health facilities with 40 beds plus outpatients (Type 3)

S.N.	Name of Product	Required (no.)	Available (no.)	Functional (no.)
1.	Patient transfer boards for chair to bed and bed/trolley to bed	2		
2.	Portable commodes (Chairs for shower/toilet)	2		
3.	Wheelchairs	8		
4.	Pressure-relieving cushions for wheelchairs	Align quantity with number of wheelchairs		
5.	Slide sheets (To remain in the hospital)	20		
6.	Pairs of crutches	- 60 adult - 30 pediatric		
7.	Walking frames	8		
8.	Pressure relieving mattresses (To remain in the hospital)	8		

Information Collected By (Assessment Team)			
Name	Designation	Signature	Remarks

Information Given By (Hospital Authority)			
Name	Designation	Signature	Remarks

Information Verified By (Assessment Team)			
Name	Designation	Signature	Remarks

Name of Hospital Director/Me'su

Signature

Stamp



**World Health
Organization**

Nepal



**Government of Nepal
Ministry of Health and Population**