Suite of health service capacity assessments in the context of the COVID-19 pandemic

Interim guidance
2 November 2020

Introduction

Countries face a multitude of questions and decisions that must be addressed to prepare for and respond directly to the COVID-19 pandemic while simultaneously maintaining the delivery of other health services. Key decisions and actions to mitigate the risk of potential health system collapse must be informed by accurate and timely data collected through ongoing monitoring of health service delivery and utilization throughout all phases of the COVID-19 pandemic. Rapid and accurate assessments of health service capacities – including management structures and processes, health worker capacity and protection, resources, supply-chain management, and community needs – are essential for planning high-quality service delivery and the related redistribution of resources.

This suite of modules is designed to meet country needs throughout the different phases of COVID-19 preparedness, response and recovery, and is aligned and consistent with all published WHO guidance on COVID-19. Its primary aim is to support rapid and accurate assessments of the current, surge and future capacities of health facilities, so that they are prepared for and responsive to COVID-19 while maintaining the delivery of essential health services throughout all phases of the pandemic.

Scope

The suite consists of two sets of modules that can be used to inform the prioritization of actions and decision-making at health facility, subnational and national levels.

1. **Hospital readiness and case management capacity for COVID-19**
    This set of modules can be used to assess hospital preparedness and response planning and case management capacities for COVID-19.

2. **Continuity of essential health services in the context of the COVID-19 pandemic**
    This set of modules assesses health facility capacities to maintain delivery of essential health services. It can also be used to assess community needs and access to services during the COVID-19 outbreak.

The modules are listed in Table 1 and described in further detail in the following sections. Countries may select different combinations of modules according to context and the need for one-time or recurrent use throughout the pandemic.

The modules have been developed to support WHO guidance on COVID-19 preparedness and response, facility readiness for COVID-19 case management, and the continuity of essential health services during the COVID-19 outbreak, including *Maintaining essential health services: operational guidance for the COVID-19 context (1)*.

Each module will become available online through a free downloadable IT application as well as via downloadable files (*2*). WHO will release modules as they are finalized.

Table 1. Suite of health service capacity assessment modules

No.	Module	Purpose	Status
Hospital readiness and case management capacity for COVID-19		
1	Rapid hospital readiness checklist	To assess the overall readiness of hospitals and to identify a set of priority actions to prepare for, be ready for and respond to COVID-19	Published *(3)*
2	Diagnostics, therapeutics, vaccine readiness, and other health products for COVID-19	To assess present and surge capacities for the treatment of COVID-19 in health facilities with a focus on availability of diagnostics, therapeutics and other health products as well as vaccine readiness, availability of beds and space capacities	Published *(4)*
3	Biomedical equipment for COVID-19 case management – inventory tool	To conduct a facility inventory of biomedical equipment re-allocation, procurement and planning measures for COVID-19 case management	Published *(5)*
4	Ensuring a safe environment for patients and staff in COVID-19 health-care facilities	To assess the structural capacities of health facilities to allow safe COVID-19 case management, maintain the delivery of essential services and enable surge capacity planning	Published *(6)*
5	Infection prevention and control health care facility response for COVID-19	To assess infection prevention and control capacities to respond to COVID-19 in health facilities	Published *(7)*
#	Module	**Continuity of essential health services in the context of the COVID-19 pandemic**	
#	Module	Purpose	
1	Continuity of essential health services: Facility assessment tool	– To assess the capacity of health facilities to maintain the provision of essential health services during the COVID-19 outbreak – To assess workforce capacity during the outbreak, availability, absences, COVID-19 infections, support and training	Published *(8)*
2	Continuity of essential health services: Community demand side tool	To conduct a rapid pulse survey on community needs and perceptions around access to essential health services and community resilience during the COVID-19 outbreak	In preparation

Hospital readiness and case management capacity for COVID-19 modules

1. Rapid hospital readiness checklist

Use

Countries can use this checklist to assess hospital governance, structures, plans and protocols to rapidly determine the current capacities of hospitals to respond to the COVID-19 pandemic and to identify gaps and major areas that require investment and action and to develop hospital readiness improvement plans. The tool can be used periodically to monitor hospital emergency operational readiness capacity development.

Content areas
- Leadership and Incident Management System
- Coordination and communication
- Surveillance and information management
- Risk communication and community engagement
- Administration, finance and business continuity
- Human resources
- Surge capacity
- Continuity of essential support services
- Patient management
- Occupational health, mental health and psychosocial support for health workers
- Rapid identification and diagnosis
- Infection prevention and control

Target audience
Primary: Hospital managers
Others:
- National and subnational health authorities
- National and subnational COVID-19 incident management teams
- Facility managers

Key questions that this tool can help to answer
- Do facilities have the necessary day-to-day and backup arrangements in place and functioning to respond to COVID-19 (including safe and high-quality care of COVID-19 and non-COVID-19 patients, and the continued provision of safe and essential public health functions)?
- Which recommended actions need to be prioritized and invested in to make the facility fully functional?
- What are the "to do" priority actions in case of surge?

When to use this module

Pre-outbreak/epidemic or early stages of the outbreak/epidemic, during the epidemic/pandemic

Mode of data collection

Paper-based and electronic

Module status

Published *(3)*

2. Diagnostics, therapeutics, vaccine readiness, and other health products for COVID-19

Use

Countries can use this tool to assess present and surge capacities for the case management of COVID-19 in health facilities, with a focus on availability of diagnostics, therapeutics and other health products as well as vaccine readiness, availability of beds and space capacities. It can help inform decisions relating to procurement, supply-chain management, and beds and space capacity.

Content areas

- Medicines for management of COVID-19 (including the Solidarity clinical trial *(9)*)
- Personal protective equipment
- Infection prevention and control supplies
- Diagnostic testing, imaging and patient monitoring devices and supplies
- Medical equipment for management of COVID-19
- COVID-19 vaccine readiness
- Beds and space capacity

Target audience

- Incident management and emergency operation officers
- Facility managers
- Pharmacists
- Biomedical engineers
- Infection prevention and control officers
- Planning officers
- Procurement officers
- Laboratory staff

Key questions that this tool can help to answer

- Do facilities have the necessary diagnostic equipment and supplies for COVID-19 testing?
- Do facilities have the necessary medicines and medical supplies for the management of COVID-19 patients?
- Do facilities have the necessary personal protective equipment for health-care workers?
- Do facilities have the necessary infection, prevention and control supplies?
- Do facilities have a functioning cold chain ready to support potential COVID-19 vaccination?
- What is the bed and space capacity of health facilities to manage patients affected by COVID-19?

When to use this module

From the early stages of an emergency to recovery

Mode of data collection

Paper-based and electronic

Module status

Published *(4)*

3. Biomedical equipment for COVID-19 case management – inventory tool

Use

Countries can use this tool to collect in-depth facility inventories of biomedical equipment re-allocation, procurement and planning measures for COVID-19 case management. The tool helps to assess the quantified availability and the causes for non-functioning of different sources of oxygen delivery and supply systems to the patient in order to determine priorities and re-allocation requirements in accordance with needs.

Content areas

- Oxygen supplies and equipment
- Respiratory instruments and equipment
- Suction devices
- Ventilators
- Autoclaves/sterilizers

Target audience

- Facility managers
- Clinical decision-makers
- Procurement officers
- Planning officers
- Biomedical engineers
- Infrastructure engineers

Key questions that this tool can help to answer

- Do facilities have adequate supplies to administer oxygen and ventilation to severe and critical COVID-19 patients?
- What is the current capacity for production of biomedical equipment (if available in the country)?
- What are the causes of equipment malfunctioning?
- What resources need to be procured, reassigned or redistributed?

When to use

From early stages of emergency to early recovery

Mode of data collection

Paper-based and electronic

Module status

Published *(5)*

4. Ensuring a safe environment for patients and staff in COVID-19 health-care facilities

Use

Countries can use this tool to assess and monitor the structural capacities of facilities to allow safe COVID-19 case management, maintain the delivery of essential services and enable surge capacity planning. Collecting this information provides guidance for immediate action and resolution of identified gaps. It is relevant for preparedness and readiness, as well as for evaluations during the response, and in particular, at any time the epidemiological situation requires further modifications/repurposing on the health-care facility structure and flows.

Content areas

- Area distribution
- Surface availability versus foreseen occupancy rate
- Patient and staff flows
- Ventilation requirement per specific areas
- Visitors' area and visitor flow
- Surge capacity

Target audience

- Facility managers
- Technical officers
- Logisticians
- Water, sanitation and hygiene (WASH) specialists
- Health-care facility engineers and architects

Key question that this tool can help to answer

Does the facility provide a safe environment with adequate engineering and administrative controls to promote safe patient care for COVID-19 and protect the health and well-being of the staff?

When to use this module

From early stages of emergency to early recovery and every time the epidemiological situation requires structural or flow changes

Mode of data collection

Paper-based and electronic

Module status

Published (*6*)

5. Infection prevention and control health-care facility response for COVID-19

Use

Countries can use this self-assessment tool to help identify, prioritize and address the gaps in infection prevention and control (IPC) capacity of health-care facilities in managing their response to COVID-19. The tool should be used by IPC professionals and/or those responsible for disaster planning or outbreak management in the facility (such as the response to the COVID-19 outbreak) at the start of the improvement process. A sample workplan template is provided to address gaps identified and record required actions.

Content areas

- IPC programme
- IPC guidelines and standard operating procedures
- IPC training and monitoring
- Screening, triage, early recognition and testing of COVID-19
- Built environment, infrastructure and supplies
- Visitors
- Maintaining IPC measures

Target audience

- IPC professionals
- Facility managers

Key questions that this tool can help to answer

- Do facilities have a minimum IPC programme or focal point assisting in their COVID-19 response?
- Are facilities adequately equipped with critical IPC supplies and infrastructure to support a robust COVID-19 response or resurgence?
- Are facilities providing baseline IPC training in standard precautions and COVID-19-related guidelines and protocols as per international guidance?
- Are facilities performing IPC monitoring of COVID-19 infections in patients/residents and staff?
- Do facilities have appropriate flow and visitor restrictions in place?

When to use this module

As part of preparedness and/or response

Mode of data collection

Paper-based and electronic

Module status

Published (*7*)

Continuity of essential health services in the context of the COVID-19 pandemic

1. Continuity of essential health services: Facility assessment tool

Use

Countries can use this tool to rapidly assess the capacity of health facilities to maintain the provision of essential health services during the COVID-19 outbreak. It can help to alert the authorities and other stakeholders about where service delivery and utilization may require modification and/or investment. The tool collects information on health workforce capacities, financial management of the facility, changes in health service delivery and utilization, infection prevention and control (IPC) capacities and COVID-19 primary care services. It also includes optional sections on therapeutics, diagnostics, and vaccine readiness and infrastructure. The assessment can be used once to provide a rapid snapshot of current service capacity, or on a regular basis for tracking and monitoring the continuity of essential health services during the different phases of the pandemic.

Content areas

- Health workforce (numbers, absences, COVID-19 infections, health workforce management, training and support)
- Financial management and barriers
- Service delivery and utilization (facility closures, changes in service delivery, community communication campaigns, changes in service utilization and catch-up strategies)
- IPC capacities (protocols, safety measures, guidelines and the availability of personal protective equipment (PPE) for staff)
- Availability of therapeutics, diagnostics and supplies, and vaccine readiness
- Provision of COVID-19 primary care services

Target audience

- National and subnational health authorities
- National and subnational COVID-19 incident management teams
- Facility managers
- WHO and other partners

Key questions that this tool can help to answer

- How many staff are available in each facility? How many staff have been diagnosed with COVID-19? What adjustments to health workforce management have been made? Is additional training and support being provided to health-care workers?
- Is the facility charging user fees during the COVID-19 outbreak?
- Are staff salaries being paid on time? Are staff receiving overtime pay?
- How has delivery of services unrelated to COVID-19 changed (for example, have there been facility closures or service delivery modifications)?
- How has service utilization increased or decreased and what are the main reasons for those changes?
- Has the facility implemented any community communication campaigns?
- Has the facility made catch-up plans for missed routine appoints?
- Are safety processes and protocols in place to ensure the safe delivery of health services?
- Do health workers have sufficient PPE to deliver essential services safely?
- Do facilities have therapeutics, diagnostic tests and supplies available for the delivery of essential health services?
- Do facilities have functioning cold chain capacity?
- Does the facility provide "COVID-19 primary care services" (detection, diagnosis, treatment, referral, rehabilitation, contact tracing, etc.)? What changes and support did this involve?

When to use this module

From the early stages of an emergency to recovery and continuity after recovery

Mode of data collection

Paper-based and electronic

Module status

Published (*8*)

Continuity of essential health services: Community demand side tool

Use

Countries can use this tool to conduct a rapid pulse survey on community health needs and perceptions around access to essential health services and community resilience during the COVID-19 outbreak. The assessment helps to inform decision-making and investments to meet community needs, and to ensure the continuity of high-quality health services throughout the course of the pandemic.

Content areas

- Community perceptions around access to essential health services during the COVID-19 outbreak
- Barriers to care
- Unmet needs and reasons (considering supply- and demand-related factors)
- Health service use and experience during the COVID-19 outbreak
- Changes in care-seeking behaviours
- Community resilience

Target audience

- National and subnational health authorities
- National and subnational COVID-19 incident management teams
- Facility managers
- Communities

Key questions that this tool can help to answer

- What are community perceptions around care-seeking and access to care during the COVID-19 outbreak?
- What are the greatest barriers to accessing care (government protocols, changes in health-seeking behaviour, information and communications to communities, etc.)?
- What changes have occurred in care-seeking behaviours?
- If services are accessed, what is the experience of care like during the COVID-19 outbreak?
- What are the main vulnerabilities affecting communities?

When to use this module

From the early stages of an emergency to recovery and continuity after recovery

Mode of data collection

Paper-based and electronic

Module status

In preparation

Other modules

Further modules based on identified country needs and gaps may be added to this suite as they are developed.

References

1. Maintaining essential health services: operational guidance for the COVID-19 context. Geneva: World Health Organization; 2020 (WHO/2019-nCoV/essential health_services/2020.2; https://apps.who.int/iris/handle/10665/332240, accessed 15 October 2020).

2. Monitoring health services [website]. Geneva: World Health Organization; 2020. (https://www.who.int/teams/integrated-health-services/monitoring-health-services, accessed 15 October 2020).

3. Rapid hospital readiness checklist: interim guidance. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/332779, accessed 15 October 2020).

4. Diagnostics, therapeutics, vaccine readiness, and other health products for COVID-19. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336256, accessed 20 October 2020)

5. Biomedical equipment for COVID-19 case management – inventory tool: interim guidance. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/332777, accessed 15 October 2020).

6. Ensuring a safe environment for patients and staff in COVID-19 health-care facilities. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336257, accessed 20 October 2020)

7. Infection prevention and control health care facility response for COVID-19. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336255, accessed 20 October 2020)

8. Continuity of essential health services: Facility assessment tool. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336254, accessed 20 October 2020)

9. "Solidarity" clinical trial for COVID-19 treatments. Geneva: World Health Organization; 2020 (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov/solidarity-clinical-trial-for-covid-19-treatments, accessed 15 October 2020).

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WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.