

Role of primary care in the COVID-19 response

Interim guidance

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1. Introduction

1.1 Background

Primary care is an essential foundation for the global response to coronavirus disease 2019 (COVID-19). Primary care plays a significant role in gatekeeping and clinical responses: identifying and triaging possible COVID-19 cases, making an early diagnosis, helping vulnerable people cope with their anxiety about the virus, and reducing the demand for hospital services (1–3). The role of primary care has been increasingly important as cities imposed strict control measures including non-pharmaceutical interventions and as larger hospitals closed their outpatient departments during periods of increased transmission. There also is an increasing role of home care for COVID-19 cases within communities supported by a strong primary care system, which strengthens the trust between health-care workers and communities. A response built around primary care has also been a more cost-effective measure.

Most people with COVID-19 develop mild or uncomplicated illness that can be managed at the primary care level, and the demand for primary care services will escalate during periods of increased transmission. Health policy-makers at the national and subnational level will need to take appropriate action to support the role of primary care in the response, such as managing mild COVID-19 cases or recovery of hospitalized cases, identifying strategies to increase surge capacity, managing and maintaining stocks of personal protective equipment (PPE) and other essential supplies, and maintaining of essential services, while ensuring timely adaptation to address the needs of vulnerable groups.

This document provides updated interim guidance on:

- timely, effective and safe supportive management of patients with suspected and confirmed COVID-19 at the primary care level;
- delivery of essential health services at the primary care level during the COVID-19 outbreak.; and
- the role of primary care facilities in COVID-19 vaccination.

While this document covers actions relevant to the broader primary care approach including community health care, as appropriate, it does not address community engagement comprehensively, as other guidance documents focus on this in greater detail.

The World Health Organization (WHO) has issued a wide range of technical guidance on the COVID-19 response (4), covering case investigation, case management, infection prevention and control (IPC), national laboratories, early investigation protocols, risk communication and community engagement, and essential health services. This guidance adapts these for the primary care context, while including specific content on considerations for policy-makers, and the role of primary care in COVID-19 vaccination.

1.2 Target audience

National and subnational health managers, as well as staff at primary care facilities.

4. Actions at the primary care level

Evidence since the start of the pandemic has shown that the role of primary care during a public health emergency leans primarily to maintaining essential health services and secondly to responding to the outbreak. The main principles of primary care in the COVID-19 response are:

- maintain delivery of essential health services;
- identify and manage potential cases as soon as possible;
- avert the risk of transmission of infection to contacts and health-care workers;
- enhance existing surveillance such as for influenza-like illness (ILI) and severe acute respiratory infection (SARI);
- strengthen risk communication and community engagement; and
- support provision of vaccination services against SARS-CoV-2, the virus that causes COVID-19.

2.1 Policy actions

Optimizing the role of primary health care in the COVID-19 response as well as maintaining essential health services requires several policy considerations from the outset.

2.1.1 Planning

- Outline an effective communication and coordination mechanism between centralized health policy-makers and mid-level and facility health managers working in primary care to ensure overall preparedness for care and vaccination.
- Plan for alternative approaches to delivery of primary care services and invest accordingly, including in digital health approaches and home-based/community care models.
- Conduct and update mapping of primary care facilities, including the public and private (for-profit and non-profit) sector, to ensure adequate capacity for service provision and vaccination depending on national roll-out plans.

- Identify key metrics to monitor primary care capacity and responsiveness as part of overall health system capacity monitoring.

2.1.2 Resources

- Ensure that resource allocation for the COVID-19 response takes account of actors at the primary care level. The roll-out of COVID-19 vaccination will require increased resources as primary care providers will carry the greatest burden of delivery.
- Sustain allocations to frontline workers as providers of first resort for essential health services, including funding adjustments to account for increased expenditure for maintaining IPC.
- Consider incentives for primary care workers in hard-to-serve areas and communities.

2.1.3 Regulation

- Review the legal and regulatory frameworks to ensure an appropriate environment for required service delivery changes, such as using telemedicine and developing, standardizing and updating clinical and non-clinical protocols, as well as for the administration of new COVID-19 vaccines.

2.2 Actions to maintain delivery of essential health services (5)

In the acute stage of the COVID-19 pandemic, with increasing pressure on health systems, there was a need for countries to carry out service prioritization to free up capacity to respond. However, with the prolonged nature of the pandemic and increasing amount of mortality from non-COVID-19 causes, it is important for countries to plan how to deliver an increasing scope of essential services in the midst of response efforts while minimizing risk of infection transmission.

In this regard, countries can explore service optimization with primary care facilities handling an increasing proportion of essential care to free up hospital and acute care beds.

2.2.1 Identification of context-specific essential health services

- Ensure service prioritization is guided by health system context and local disease burden. Ideally, prioritize services that increase the likelihood of survival or reduce the loss of function and are less resource-intensive (6,7). High priority may be given to:
 - preventive services such as vaccination;
 - reproductive services such as maternal and newborn care;
 - services for vulnerable groups, such as infants, older adults and individuals with underlying chronic conditions; and
 - referral services for patients with emergency conditions.
- Regularly review and update the scope of prioritized services and adjust based on risk assessment tailored to the local context, including the capacity at the primary care level.
- Identify triggers or thresholds for re-expansion or reallocation of services as the pandemic evolves and pressure on the health-care system ebbs and flows.

2.2.2 Provision of essential health services

- Ensure that there are health-care workers available for the delivery of essential services, maintaining a balance between allocation for routine health services and pandemic response. Regularly review health workforce distribution and reassign or implement task sharing as needed.
- Ensure all health workers use standard IPC precautions for all patient care. Refer to WHO's [guidance](#) and [training course](#) on IPC.
- Identify medicines, vaccines and other key medical and non-medical supplies needed for the delivery of the essential health services. Regularly monitor and replenish their use to avoid stock-outs.
- Where appropriate, explore the use of appointment systems to reduce overcrowding at health facilities.
- Adapt outreach delivery of services such as those for immunization, where feasible, to minimize risk of infection transmission.

2.2.3 Innovations in service delivery

- Explore and deploy digital health platforms such as mHealth, telemedicine and electronic medical records in primary care settings to provide essential health services and information and to conduct remote monitoring or self-monitoring of patients. For further information and guidance on using telemedicine and support systems, refer to WHO guidance on telemedicine (8).
- Consider home delivery of drugs for people with chronic conditions, as well as extended prescription duration of medicines to patients.
- Redesign traditional service delivery methods, such as extended facility opening times and redistribution of the workforce and services, to minimize crowding and risk of infection. Tailor this reorganization to the local risk assessment, inclusive of the prevailing context and stage of the pandemic in the area.
- Consider inter-district/provincial movement of workers and resources to manage surges and maintain essential services in hard-hit areas.

2.2.4 Communication with the community

- Clearly communicate decisions about service deferrals, alternatives and availability to the public to avoid distrust and discontent.
- Keep the population informed about changes in service delivery platforms as well as changes in protocols for in-person visits to health facilities to facilitate compliance.

2.3 Actions to ensure resources for managing suspected or confirmed COVID-19 cases

Health facilities must have standard operating procedures that include measures for assessing and isolating individuals, practising IPC, protecting health-care workers and initiating notification systems. In addition, a nationally available triage and testing protocol must be available to guide and initiate the most appropriate care pathway.

2.3.1 Infrastructure

- Map and update existing health facilities in the vicinity and establish a coordination mechanism among facility and district health managers in case support is needed when cases surge.

- In coordination with the local authorities, identify additional sites (e.g., convalescent homes, hotels, schools, community centres, gymnasiums) to convert into patient care units.
- Set up a dedicated space for screening/triage for all visitors and patients in all health facilities, and ensure this screening/triage room has a dedicated waiting area. Enforce the following measures in the waiting area: hand hygiene, physical distancing, mask wearing and visible signage/instructions for patient flow.
- Identify a dedicated isolation room that must be available during the opening hours of the health facility. It can be either an area of the existing infrastructure or a temporary structure allocated for this purpose and must be located away from waiting areas and other consultation rooms. Where possible, this room should have separate toilet and handwashing facilities that can be appropriately decontaminated after use, as well as appropriate natural ventilation. Also, ensure other IPC measures are in place such as mask wearing, physical distancing and availability of hand hygiene options.
- Put up adequate signage and information notices at all entrances and exits of the health facility to stream patients with suggestive symptoms to the screening/triage room away from regular clinical areas and to direct suspected cases to the isolation room.

2.3.2 Health-care workers

- Allocate specific health workers to screen/triage patients and attend to those with suspected or confirmed COVID-19. All health workers must be trained in recognizing the symptoms of COVID-19, including procedures to quickly triage and separate ill patients.
- Train all health workers on IPC standards and additional transmission-based precautions for COVID-19 such as hand hygiene, cough etiquette, PPE use, frequent cleaning and disinfecting of surfaces, health-care waste management and safe disposal of infectious waste.
- Ensure health workers trained to provide decontamination services are available throughout opening hours of the health facility.
- Set up services to provide mental and psychosocial support for health workers. Establish mechanisms to monitor health workers for signs of infection and ensure rotation systems are in place to avoid burnout. For further information, refer to WHO guidance on preventing and managing health worker infection (9).
- Prepare backup plans for surge capacity, including considerations for inter-district/provincial movement of workers, resources and patients, as needed.

2.3.3 Medicines and supplies

- Develop priority resource lists (or adapt from existing lists) to avoid stock-outs. These lists must include an adequate supply of PPE such as gloves, gowns, medical masks, eye protection (e.g. goggles), items to perform handwashing such as alcohol-based hand rub, and equipment and solutions (detergent and disinfectant) for cleaning and disinfecting. The amount to keep in stock will depend on in-country supply availability and prevailing national supply management protocols.
- Ensure availability of pulse oximeters for screening and severity monitoring, operationalizing a patient's referral to a higher-level facility when needed.

2.3.4 Risk communication and community engagement (10,11)

- Promote two-way dialogue with communities to understand risk perceptions, behaviours and existing barriers, specific needs, and knowledge gaps.
- Tailor risk communication to catchment populations based on the local context.
- Work with community stakeholders to promote and encourage community compliance with the prevailing public health measures put in place by the authorities.

2.4 Actions to manage suspected or confirmed COVID-19 cases

These actions are guided by existing guidance on COVID-19 case triage and referral during community transmission.

2.4.1 Identification, triage and isolation of suspected COVID-19 cases (Table 1)

- Screen all patients and visitors at the entrance to the health facility. Segregate patients with suspected COVID-19 from others, in a separate isolation room (see section 2.3.1), for further assessment. Within the isolation area, apply standard and additional transmission-based precautions, especially when attending to patients.
- Triage all people with symptoms suggestive of COVID-19, and start emergency treatment based on disease severity (12). Make available pulse oximeters, which are easy to use and reliable for screening hypoxia, especially in resource-limited settings. These must be disinfected between patients. Refer to the global surveillance for human infection with COVID-19 for case definitions (13).

Ensure appropriate protective items are worn by client-facing health workers while in the health facility, and ensure clients comply with hand hygiene and other appropriate public health measures, based on prevailing national regulations and local transmission stage. Refer to WHO guidance on [use of PPE, IPC](#) and [masks](#).

- Always apply standard precautions in all areas of the health facility

In situations where temporary isolation of all cases in a health facility is not possible, prioritize patients with the highest probability of poor outcomes: those with severe and critical illness and those with mild disease and risk factors for poor outcomes (age over 60 years and/or with underlying co-morbidities such as chronic cardiovascular disease, chronic respiratory disease, diabetes and cancer)

Table 1. Assessment of suspected COVID-19 cases

Identify & triage	Isolate	Assess	Advise
<p>Does patient report any of the following symptoms?</p> <ul style="list-style-type: none"> - Fever - Cough (new onset or exacerbation of chronic cough) <p>If yes, give patient and accompanying person(s) a mask to wear and ask them to perform hand hygiene.</p> <p>Use a pulse oximeter, if available, to screen patient for hypoxia.</p>	<p>Place patient and accompanying person(s) in a separate room or area with at least 1 metre separation.</p> <p>Implement contact and droplet precautions.</p> <p>Put on PPE such as gowns, gloves, eye protection (e.g. face shield or goggles) and medical masks.</p> <p>Perform hand hygiene before, during and after case assessment.</p>	<p>Assess clinical signs and symptoms and exposure risk (history, vitals, respiratory exam).</p> <p>Arrange diagnostic sampling for patients meeting COVID-19 case definitions.</p>	<p>If hospital care is required, use the established referral protocol.</p> <p>If hospital care is not required, advise patient to limit contact with others and to get in touch with the health facility if symptoms worsen.</p> <p>Notify the local health authority conducting ILI/SARI surveillance.</p> <p>Clean and disinfect surfaces that patient and accompanying person(s) touched.</p>

Source: Adapted from COVID-19 Patient ID and Assessment for Primary Care with MD/NP, BC Centre for Disease Control, Ministry of Health.

- During clinical assessment, apply droplet and contact precautions, in addition to adhering to standard precautions such as hand hygiene and the use of PPE when in direct and indirect contact with patients' blood, body fluids, secretions (including respiratory secretions) and non-intact skin. Standard precautions also include respiratory hygiene, prevention of needle-stick or sharps injury, safe waste management, and cleaning and disinfection of equipment, linen and the environment.
- Where possible, arrange diagnostic sampling for patients meeting COVID-19 case definitions or refer cases to designated sample collection centres in accordance with national guidance. Ensure sample collection is done safely with appropriate use of PPE, hand hygiene and other IPC precautions. For details, refer to WHO technical guidance for laboratory testing (14).

2.4.2 Management of suspected or confirmed COVID-19 cases

- Depending on local capacity, consider managing as outpatients with home isolation those with mild symptoms and without underlying chronic conditions, such as lung or heart disease, renal failure or immunocompromising conditions that place the patient at increased risk of developing complications (12). This decision requires careful clinical judgement and should be informed by an assessment of the safety of a patient's home environment. Initiate early monitoring of oxygenation status by using a pulse oximeter to screen and measure severity. Provide patients with IPC guidance for home care including how to do laundry, how to clean and disinfect the environment, etc.
- Establish a communication link between the patient and health-care workers for the duration of the outpatient care, until the patient's symptoms have completely resolved.
- If the patient's residential settings are unsuitable for providing care (e.g. limitations on hand hygiene, respiratory hygiene, environmental cleaning, and movement around or from the house), isolate them in non-traditional facilities, such as repurposed hotels, stadiums or gymnasiums, until their symptoms resolve and laboratory tests for COVID-19 are negative.
- Where patients are placed in quarantine or isolation at home or in non-traditional health-care settings, comply with the minimum requirements to be able to provide safe care to the patient. Refer to WHO guidance on quarantine of contacts.
- Where feasible, appoint community health workers and/or volunteers to conduct home visits and provide frontline advice to the public. Ensure they are purposefully trained in IPC measures (hand hygiene, physical distancing, mask wearing etc.).
- Instruct all patients cared for outside hospitals (i.e. at home or in non-traditional settings) to manage themselves appropriately per local/regional public health protocols for self-isolation and return to the health facility if any of their symptoms worsen.
- Consider using primary care centres as "step-down" facilities for patients who are not critical or are recovering, and for managing surge capacity and preventing mortality in tertiary or specialized care facilities. Ensure follow-up and provide ongoing care to patients with persistent symptoms of COVID-19 ("long COVID") through established service delivery channels. Support navigation through relevant referral pathways (15).

2.4.3. Transport to hospital

- Set up plans for the safe and contained transportation of cases referred to hospitals or other locations. Any case deemed suitable for COVID-19 testing should not travel to or from receiving units on public transport (including private or shared taxis). For details, refer to WHO guidance on rational use of PPE in different settings (16).

2.4.4 Environmental cleaning

- Once patients with suspected COVID-19 have left the premises, ensure the room in which they were assessed is thoroughly cleaned and disinfected before using with other patients. Cleaning staff should wear appropriate PPE when cleaning and disinfecting the room. Once this process has been completed, the room can be put back into use.

- Establish protocols for regular cleaning and disinfection of screening/triage areas, as well as frequently touched items and surfaces. For more details, refer to WHO guidance on IPC at the health facility level (17).

2.4.5. Follow-up of contacts and notification

- Advise individuals (including caregivers and health-care workers) who have been exposed to patients with suspected COVID-19 and are thus considered close contacts to monitor their health for 14 days from the last day of possible contact. Refer them to the local health department for appropriate monitoring and follow-up. For a definition of contacts, refer to WHO technical guidance on home care for patients presenting with mild symptoms and management of their contacts (12).
- Ensure all suspected COVID-19 cases are notified to the local health department through existing infectious disease surveillance channels.

2.4.6 Other considerations

- Consider developing an alternate first contact strategy to manage increased demand for services. Options could include a centralized hotline, online platforms and physical locations in specially established temporary centres or fever clinics. Each contact point must have clear algorithms and visual aids to triage calls and indicate pathways, which should be based on a single nationally available triage protocol for responding to COVID-19. Such contact points must be managed by trained health-care workers and/or volunteers. Clearly communicate the adopted approach to the public.
- Consider the use of digital health approaches (e.g. mHealth, telemedicine, electronic medical records, hotlines, social media) to provide information, triage and assess patients, monitor COVID-19 cases in self-isolation, and make appointments for vaccination, depending on the context. This helps minimize contact between health-care workers and patients and reduces the risk of transmission.

2.5 Actions to prepare and roll out COVID-19 vaccination

As countries in the Western Pacific Region and around the world begin to roll out vaccines against SARS-CoV-2, primary care providers will play a central role. The following actions are recommended to prepare for and deploy COVID-19 vaccines through primary care (18,19).

2.5.1 Facility and infrastructure

- Identify which primary care facilities will be part of the network of vaccination sites, both in the public and private sector. Apply the procedures for managing patient flow to minimize interaction outlined above for COVID-19 case management and maintaining essential services also in the provision of vaccination services.

2.5.2 Health workforce

- Facilitate the vaccination of all frontline health workers, including at the primary care level, based on current recommendations for priority populations (20).
- Ensure frontline health workers receive the appropriate vaccine-specific and non-vaccine specific refresher training to manage the vaccination drive. This must cover vaccine management, vaccine safety and safety surveillance relevant to their level of implementation. Also, provide additional training on any new or updated digital tools for immunization monitoring developed for the roll-out.
- Plan allocation of health workers as well as surge capacity for the vaccination roll-out considering the different types of sites, fixed health facilities, fixed temporary sites or mobile/outreach. In planning for surge capacity, consider maintaining other services while rolling out COVID-19 vaccination, as needed.

2.5.3 Service delivery adaptation

- Plan for changes in service delivery to account for onsite and offsite vaccination sessions, while minimizing the negative impact on other routine health services, as outlined in section 2.2.

2.5.4 Vaccines and commodities supply and storage

- Provide appropriate IPC supplies along with refresher orientation or training for health workers, especially those not routinely involved in the care of COVID-19 patients.
- Review and assess cold storage requirements at various levels to ensure they are adequate for the planned vaccine doses within a given period.

2.5.5 Communication and community engagement (21)

- Work with primary care providers who play an important role in communication and community engagement for demand generation relating to COVID-19 vaccination, like the rest of the pandemic response measures. Make available context-appropriate information and materials to primary care providers to facilitate this engagement with the communities in their catchment area.

3. Guidance development

3.1 Acknowledgements

This document was developed by a guideline development group composed of staff from the WHO Regional Office for the Western Pacific (Division of Health Systems and Services and WHO Health Emergencies Programme).

3.2 Guidance development methods

This document was developed based on a review of relevant literature as well as guideline development group discussion and consensus.

3.3 Declaration of interests

Interests have been declared in line with WHO policy, and no conflicts of interest were identified from any of the contributors.

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