Role of primary care in the COVID-19 response

Interim guidance 26 March 2020



1. Introduction

1.1 Background

Primary health 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: differentiating patients with respiratory symptoms from those with COVID-19, making an early diagnosis, helping vulnerable people cope with their anxiety about the virus, and reducing the demand for hospital services (1,2).

This document provides interim guidance on:

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

Most people with COVID-19 develop mild or uncomplicated illness that can be managed at the primary care level. As the number of COVID-19 cases increases, the demand for primary care services will escalate. Health ministries will need to take appropriate action to support management of COVID-19 cases at the primary care level, identify strategies to increase surge capacity, manage and maintain stocks of personal protective equipment (PPE) and other essential medicines and supplies, and ensure timely adaptation to address the needs of vulnerable groups. In addition, essential health services will need to be maintained to reduce preventable deaths. The World Health Organization (WHO) has issued a wide range of technical guidance on the COVID-19 response (*3*), covering case investigation, case management, infection prevention and control, national laboratories, early investigation protocols, and risk communication and community engagement. Many of these documents already include important guidance on primary care approaches.

1.2 Target audience

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

2. Actions in primary care

The main principles of primary care in the COVID-19 response are: (1) identify and manage potential cases as soon as possible; (2) avert the risk of transmission of infection to contacts and health-care workers; (3) maintain delivery of essential health services; (4) enhance existing surveillance such as for influenza-like illness (ILI) and severe acute respiratory infection (SARI); and (5) strengthen risk communication and community engagement.

2.1 Actions prior to receiving possible COVID-19 cases

Health facilities must have standard operating procedures that include measures for assessing and isolating individuals, practising infection prevention and control, 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.

2.1.1 Infrastructure

- 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.
- Set up adequate signage and information notices at all entrances and exits of the health facility to stream patients with suggestive symptoms to the isolation room and away from regular clinical areas.
- Ensure the isolation room has a dedicated waiting area. Provisions for isolation should be maintained in this waiting area, and patients must not be grouped together. They may be grouped with family members or household contacts. Local plans for the facility developed in line with guidance from national/local health authorities should be available for care of children and vulnerable groups. The waiting area should be disinfected to the same standard as the dedicated isolation room. Supplies such as alcohol-based hand rub, soap at sinks and closed waste containers, as applicable, should be made available in the waiting area.
- In coordination with the local authorities, identify additional sites (e.g. convalescent homes, hotels, schools, community centres, gymnasiums) for conversion to patient care units.

2.1.2 Health-care workers

- Allocate an adequate number of health workers to attend to patients with suspected or confirmed COVID-19 while maintaining essential services. All health workers must be trained in recognizing the symptoms of COVID-19, including procedures to quickly triage and separate ill patients.
- Instruct health workers to strictly follow standard precautions such hand hygiene, cough etiquette and PPE use.
- Designate health workers who are trained in collecting nasopharyngeal and throat swabs, where applicable.
- Ensure appropriately trained health workers are available throughout opening hours of the health facility to provide decontamination services.

2.1.3 Medicines and supplies

 Develop priority resource lists (or adapt from existing lists) to avoid stock-outs. This list must include an adequate supply of PPE such as gloves, gowns, medical masks and eye protection (e.g. goggles).

2.1.4 Risk communication and community engagement (4,5)

- Promote two-way dialogue with communities to understand risk perceptions, behaviours and existing barriers, specific needs, and knowledge gaps.
- Encourage communities to adopt nonpharmaceutical interventions such as physical distancing.

2.2 Actions during initial clinical assessment of possible cases

These actions are guided by the categories in the algorithm for COVID-19 case referral and triage for resource-limited settings during community transmission (Fig. 1) (6).

2.2.1 Identification and triage of suspected COVID-19 cases

• Triage all people with suspected COVID-19 who have severe acute respiratory infection, and start emergency treatment based on disease severity (7). A pulse oximeter is an easy-to-use and reliable device for screening hypoxia and can be especially useful in resource-limited settings. Refer to the global surveillance for human infection with COVID-19 for case definitions (8).

2.2.2 Isolation of cases

- Segregate patients with respiratory symptoms from others, for example having a separate entrance and waiting area as well as dedicated staff for respiratory patients. All patients with suspected COVID-19 should be assessed in a dedicated isolation room of the health facility. Standard precautions should always be applied in all areas of the health facility (Table 1).
- In situations where 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).

Fig. 1 Algorithm for COVID-19 patient triage and referral^a for resource-limited settings during community transmission



Notes:

- a. The referral and triage pathways are intended to be adapted to the local context and to comply with local ethical guidelines.
- b. Taking into account judgement of clinicians and local capacity, for example if patient requires higher level of care than can be provided at facility.
- c. If not previously tested or if prior test was negative but COVID-19 is clinically suspected.

Sources:

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Table 1. Assessment of suspected COVID-19 cases

Identify & triage	Isolate	Assess	Advise
 Does patient report any of the following symptoms? Fever Cough (new onset or exacerbation of chronic cough) If yes, give patient and accompanying person(s) a mask to wear and ask them to perform hand hygiene. Use a pulse oximeter, if available, to screen patient for hypoxia. 	Place patient and accompanying person(s) in a separate room or area with at least 1 metre separation. Implement contact and droplet precautions. Put on PPE such as gowns, gloves, eye protection (e.g. face shield or goggles) and medical masks. Perform hand hygiene before, during and after case assessment.	Assess clinical signs and symptoms and exposure risk (history, vitals, respiratory exam). Arrange diagnostic sampling for patients meeting COVID-19 case definitions.	If hospital care is required, use the established referral protocol. 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. Notify the local health authority conducting ILI/SARI surveillance. Clean and disinfect surfaces that patient and accompanying person(s) touched.

Source: Adapted from COVID-19 Patient ID and Assessment for Primary Care with MD/NP, BC Centre for Disease Control/Ministry of Health(15).

2.2.3 Assessment of suspected COVID-19 cases

- Manage as outpatients 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 (7). This decision requires careful clinical judgement and should be informed by an assessment of the safety of patients' home environment (7). Establish a communication link with health-care workers for the duration of the outpatient care, until patients' symptoms have completely resolved.
- If patients' residential settings are unsuitable for providing care (e.g. hand hygiene, respiratory hygiene, environmental cleaning, limitations on 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.

- 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 selfisolation and return to the health facility if any of their symptoms worsen.
- 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. Organize testing through the designated hospitals/referral laboratories. For details, refer to WHO technical guidance for laboratory testing (9).
- 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 prevention of needle-stick or sharps injury, safe waste management, and cleaning and disinfection of equipment and the environment.

2.3 Actions post clinical assessment of suspected cases

2.3.1 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 transportation of cases (10).

2.3.2 Environmental cleaning

 Once patients with suspected COVID-19 have left the premises, do not use the room where they were assessed until it is adequately disinfected. The door to the room should remain shut until it has been cleaned with detergent and disinfectant. Once this process has been completed, the room can be put back into use immediately. For details, refer to WHO guidance on infection prevention and control at the health facility level (11).

2.3.3 Follow-up of contacts (12)

 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. Prepare a list of individuals who may have had potential exposure. No action is required until the patient's infection is confirmed. For a definition of contacts, refer to WHO technical guidance on home care for patients presenting with mild symptoms and management of their contacts (7).

2.3.4 Notification

• Notify the local health department through the established communication channel of suspected COVID-19 cases.

2.4 Actions to maintain delivery of essential health services at the primary care level

In the early stages of an outbreak, primary care facilities may have the capacity to deliver essential services, in addition to managing COVID-19 cases. However, as the caseload increases, health facilities will need to shift their strategies to optimize the use of limited resources. Service prioritization can release capacity to ensure continuity of core services while maintaining an effective COVID-19 response.

2.4.1 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 (13, 14). 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 the scope of prioritized services and adjust based on the capacity at the primary care level.
- Where a decision has been taken to defer services, clearly communicate the decision to the public to avoid distrust and discontent.

2.4.2 Provision of essential health services

- Ensure dedicated health-care workers are available for the delivery of essential health services. All health workers should use standard precautions for all patient care.
- Identify key medical and non-medical supplies needed for the delivery of the essential health services. Their use should be regularly monitored and replenished to avoid stock-outs.

3.1 Other considerations

3.1.1 Establishment of alternate first contact strategy

 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.

3.1.2 Home visits and community follow-up

• Appoint purposefully trained community health workers and/or volunteers to conduct home visits, support contact tracing and provide front-line advice to the public.

3.1.3 Use of eHealth

 Use eHealth (e.g. mHealth, telemedicine, electronic medical records, digital health) in primary care settings to provide information, triage and assess patients, and monitor COVID-19 cases in self-isolation. Using such technologies helps minimize contact between health-care workers and patients with respiratory symptoms, free up health workers' time and lighten their workload, and reduce the need for hospital admissions.

4. Guidance development

4.1 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).

4.2 Guidance development methods

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

4.3 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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