Operational Considerations for Infection Prevention and Control in Outpatient Facilities: non-U.S. Healthcare Settings

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The Centers for Disease Control and Prevention (CDC) is working closely with international partners to respond to the coronavirus disease-2019 (COVID-19) pandemic. CDC provides technical assistance to help other countries increase their ability to prevent, detect, and respond to health threats, including COVID-19.

This document is provided by CDC and is intended for use in non-U.S. healthcare settings.

1. Background

This document outlines strategies for implementation of infection prevention and control (IPC) guidance for non-U.S. outpatient care settings in response to community spread of coronavirus disease-2019 (COVID-19). Clinics and facilities that provide outpatient services play an important role in a healthcare system's response to COVID-19 and are critical to provide continued essential health services. This information complements available IPC guidance for COVID-19.

2. Target Audience

These operational considerations are intended to be used by healthcare facilities and public health authorities in non-U.S. healthcare settings. Outpatient facilities can include community health centers, hospital-based outpatient clinics, non-hospital-based clinics, physician offices, alternate care sites, and others.

3. Objectives

The purpose of IPC in outpatient settings during the COVID-19 pandemic is to: 1) minimize disease transmission to patients and health workers (HWs), 2) identify persons with signs and symptoms of suspected COVID-19 for rapid isolation and triage, and 3) maintain essential health services.

4. Responsible Personnel to Implement IPC in Outpatient Settings

IPC activities in outpatient settings should be planned, implemented, and overseen by designated staff with experience in IPC. In many settings, these dedicated staff may consult other stakeholders such as facility leadership, occupational health, nursing, environmental services, engineering, or other relevant staff in the form of an IPC committee.

Designated IPC staff (or an IPC focal point) at facilities should also consult and coordinate activities with local and national IPC public health authorities based in the Ministry of Health or other relevant institution. In many settings, these district or national-level IPC focal points can help to provide supportive supervision of ongoing activities to assist facility staff in effective implementation.

5. Key Considerations for Outpatient Facilities

There are four operational steps to consider when planning outpatient service continuation in the context of COVID-19:

A. Modify service delivery through IPC administrative and engineering controls to maximize patient and HW safety
B. Prepare staff and facilities to receive patients with suspected or confirmed COVID-19
C. Implement controls to rapidly identify and isolate patients with suspected COVID-19
D. Implement IPC for alternate care sites and non-facility-based care

A. Modify service delivery through IPC administrative and engineering controls to maximize patient and HW safety

Modifications to outpatient operations (e.g., IPC administrative controls) and modifications to the physical layout of a facility (e.g., IPC engineering controls) are important ways to reduce crowding and mixing of potentially infectious and non-infectious patients at facilities, preventing transmission of SARS-CoV-2 in the process. Coordination with local public health authorities is helpful to expand strategies available to an individual facility (e.g., identifying alternate care sites for essential health services). Additionally, in communities with widespread community transmission of COVID-19, implementing source control of all patients, visitors, and HWs at clinics through wearing of non-medical masks can also reduce transmission of SARS-CoV-2. While non-medical masks are recommended for the general population, medical masks should be prioritized for HWs or vulnerable populations, including persons aged ≥60 years or persons with underlying co-morbidities, such as cardiovascular disease, diabetes, chronic lung disease, cancer, cerebrovascular disease, or persons with immunosuppression.

Strategies to reduce risk of SARS-CoV-2 transmission in outpatient facilities for essential and non-essential health services and for modifications for patients who are acutely ill or have respiratory symptoms are described below:

Modifications to outpatient operations for essential health services to reduce risk of SARS-CoV-2 transmission

- Detailed considerations for modifying service delivery of essential health services, including disease-specific considerations, can be found here. Minimum IPC requirements to maintain essential health services have also been described. Examples of such strategies include:
  - Consider dedicating certain days/times for services (e.g., vaccinations on Mondays, obstetric patients on Thursdays, etc.).
  - Dispense additional doses of medications for patients with stable, chronic disease to reduce number of times a patient needs to visit the pharmacy.
  - Identify separate locations (e.g., schools, churches, etc.) for holding well visits for children.
  - Consider non-facility-based settings (e.g., outreach or mobile services) for delivery of services based on the local context and ability to ensure IPC practices and safety of HWs and the community.

Modifications to outpatient operations for non-essential health services during COVID-19

- Identify non-essential health services that can be delayed or canceled in accordance with any local or national guidance. Postponing non-essential health services allows HWs to be available to provide COVID-19 care and reduces crowding in waiting rooms.
    - Examples of such services include routine vision or dental check-ups and annual physical exams.
- Explore alternatives to in-person encounters (see section below).

Modifications to outpatient operations for patients who are acutely ill or have symptoms consistent with COVID-19

- Outpatient facilities, in conjunction with national authorities, could consider alternatives to in-person triage as well as visits using telemedicine (e.g., telephone consultations or cell phone videoconference) to provide clinical support without direct contact with the patient.
    - Establish a hotline that:
        - Patients can call or text notifying the facility that they are seeking care due to respiratory symptoms or other acute illnesses.
        - Can be used as telephone consultation for patients to determine if they need to visit a healthcare facility.
        - Can inform patients of preventive measures to take as they come to the facility (e.g., wearing mask or having tissues to cover coughs or sneezes).
    - Provide information to the general public through local mass media such as radio, television, newspapers, and social media platforms about availability of a hotline, signs and symptoms of COVID-19, and when to seek care.
- If a patient with symptoms consistent with COVID-19 can be managed by telephone and advised to stay home:
    - Assess the patient's ability to engage in home monitoring, their ability to safely isolate at home, and the risk of them transmitting the virus to others in their home environment.
    - Provide clear instructions to caregivers and sick persons regarding home care (WHO home care guidance) and when and how to access the healthcare system for face-to-face care or urgent/emergent conditions.
    - If possible, identify HWs who can monitor those patients at home with daily "check-ins" using telephone calls, text, or other means.

B. Prepare staff and facilities to receive patients with suspected COVID-19

Despite modifications to outpatient operations to reduce the risk of SARS-CoV-2 transmission at facilities, patients with possible COVID-19 will still be seen. Optimizing preparedness of facilities to receive patients with symptoms consistent with COVID-19 can help limit the risk of COVID-19 exposure to patients and staff. Facility leadership and the IPC focal point should review WHO IPC guidance during health care when COVID-19 is suspected and follow national IPC guidance to begin preparing facilities to safely triage and manage patients with respiratory illness, including COVID-19. Consider the following measures:

Infection control infrastructure and healthcare workforce

- Consistent with WHO guidelines on infection prevention and control programs , national IPC programs should coordinate and facilitate implementation of IPC activities, including COVID-19 prevention activities, across all vertical programs within the Ministry of Health and through multimodal strategies at the sub-national level. Such strategies include ensuring availability of appropriate infrastructure and supplies to support good IPC practices, supporting education and training of the healthcare workforce, and providing data feedback on outcomes. This role for the national IPC program remains especially relevant during the COVID-19 response.
- Designate a staff member (IPC focal point) to be responsible for implementation of COVID-19 prevention measures at the facility. The IPC focal point, in collaboration with other relevant persons, should coordinate and implement

various activities in the facility:

- Facilitate implementation of engineering controls or structural changes to the facility that reduce transmission of SARS-CoV-2 (e.g., designating a separate waiting area for patients with symptoms consistent with COVID-19 or installing physical barriers like glass or plastic screens at screening and triage stations).
- Coordinate and communicate with local public health authorities to understand protocols for reporting suspected or confirmed COVID-19 patients and mechanisms to request additional supplies or other support.
- Review sick leave policies for HWs and ensure that they are not punishing but are flexible and consistent with public health guidance to allow ill HWs to stay home.
- Develop a system to screen HWs for symptoms of COVID-19 prior to building entry, which may include self-reporting of symptoms (e.g., cough, sore throat, shortness of breath, myalgias, fatigue, diarrhea), objective checks for fever (temperature >38°C) or a combination of both.
  - For example, employees could be advised to report to their supervisor (or send a text message to their supervisor) before beginning their workday to confirm they have no symptoms that are consistent with COVID-19 (using a standard list of possible symptoms).
  - In collaboration with local public health authorities, a standard text message could also be sent to employees each morning to ask if they have any symptoms consistent with COVID-19.
- Assess supplies for hand hygiene, PPE, and cleaning and disinfection
  - Assess availability and accessibility of supplies needed to perform frequent hand hygiene using either an alcohol-based hand rub or soap and water.
  - Assess supplies of PPE needed for HWs to implement contact and droplet precautions for all patients with suspected or confirmed COVID-19. These supplies include medical masks,[1] eye protection (face shields or goggles), gloves, and gowns.
    1. Monitor the use of these supplies, which can be inserted into a PPE burn rate calculator to estimate projected need for PPE.
    2. Even if PPE shortages do not currently exist at the facility, given disruptions in the global supply chain for PPE, plan to optimize your facility's supply of PPE . Consider implementing strategies for rational use of PPE and extended use or reuse of PPE following appropriate decontamination/sterilization procedures.
  - Assess supplies needed to clean and disinfect medical equipment (e.g., stethoscopes) and frequently touched surfaces (e.g., chairs and door handles) and to perform terminal cleaning at the facility at least once a day.
- Coordinate and ensure training for relevant staff on the following:
  - Standard and transmission-based precautions
  - Appropriate use of PPE , including:
    1. when to use PPE
    2. what PPE is necessary
    3. how to properly put on (don), use, and take off (doff) PPE in a manner to prevent self-contamination
    4. how to properly dispose of or disinfect and maintain PPE
  - Cleaning and disinfection practices, including:
    1. what PPE to wear while performing such cleaning
    2. how to appropriately put on (don), use, and take off (doff) all recommended PPE to prevent self-contamination
    3. Type of disinfectant and contact time
  - Given the urgency for training and the need for widespread dissemination of recommended PPE, cleaning and disinfection practices, remote training options could be considered, including use of online courses

that have already been developed or establishing routine conference calls to provide basic instructions and answer questions directly from facility IPC focal persons.

- Assist with employee health policies including policies and procedures for HWs who develop any symptoms or signs consistent with COVID-19:
  - Develop procedures for managing ill HWs. For example:
    1. If a HW becomes symptomatic while at work, he/she should be instructed to notify the supervisor and go home.
    2. The focal IPC point at the facility or supervisor should facilitate obtaining a COVID-19 test for the HW, because a positive test can guide how long the HW will need to be excluded from work in accordance with national or sub-national guidelines. In settings with limited testing availability, HWs suspected of having COVID-19 who are not tested should also be excluded from work for a period determined by national or sub-national guidelines.
  - Prepare for HW shortages caused by employee illness or illness in employees' family members that would require them to stay home.
    1. Planning for increased absenteeism could include extending hours, cross-training current employees, and hiring temporary employees.
    2. Develop a roster of people who can surge in for all categories of staff.

C. Rapidly identify and separate patients with suspected COVID-19

As recommended by WHO, all patients arriving at outpatient facilities require screening to rapidly identify and separate patients with suspected COVID-19. The IPC focal point at the facility, under authority from facility leadership, should oversee implementation of screening to prevent spread of SARS-CoV-2 at these facilities. Screening and triage can be operationalized in the following ways:

- Place visual alerts such as signs and posters at entrances and in strategic places providing instruction (in local languages) on hand hygiene, respiratory hygiene, cough etiquette, and maintaining physical distance of at least 1 meter from other patients and staff.
- Establish a separate registration desk for patients coming in with symptoms consistent with COVID-19, and place signs at the entrance directing patients to the designated registration desk.
  - Consider installing physical barriers (e.g., glass or plastic screens) for registration desk/reception area to limit direct contact between registration desk personnel and potentially infectious patients.
- At registration, every patient should be asked if they have a standard set of symptoms consistent with COVID-19 based on local or national guidance. Patients with any one of these symptoms meet criteria for suspected COVID-19 and should be:
  - Given a medical mask (or at least paper tissues to cover their nose and mouth when in the presence of others, if masks are unavailable) for source control;
  - Separated from patients without any of these symptoms in a different waiting area, ideally outdoors, if weather permits; and
  - Fast-tracked for clinical assessment.
- Registration/triage desks should be stocked with supplies of medical masks and paper tissues, and access to nearby hand hygiene stations (soap and water or alcohol-based hand rub) should be made available.
  - If screening personnel are unable to maintain physical distance of ≥1 meter from patients, they should wear a medical mask and eye protection (e.g., goggles or face shield) and have easy access hand hygiene stations.

After screening, patients with suspected COVID-19 should be fast-tracked for clinical assessment, which would ideally occur in a single-person room. During clinical assessment, ensure that windows, if present in the room, are opened as fully as possible to optimize ventilation and close doors that lead to hallways. Prior to entering the room, perform hand

hygiene (using a station that should be located near the outside of the room) and wear all recommended PPE.

D . Implement IPC for alternate care sites and non-facility-based care

To minimize the risk of SARS-CoV-2 transmission, the use of alternate care sites or non-facility-based models of healthcare delivery may be considered to separate healthy patients in need of essential health services from patients seeking care for acute illness. Alternate care sites include community-based locations, such as schools or churches, that might be temporarily out-of-use due to local mitigation measures. Such sites offer the benefit of space to allow appropriate physical distancing of staff and patients. However, since these sites are not primarily intended for the delivery of healthcare, their structure might not be suitable for outpatient services that require physical exams and are best used to deliver single-purpose care, e.g., drug pick-ups, immunizations, or well-child visits. Similarly, non-facility-based care, which includes outreach services to people's homes or mobile services, help minimize crowding at healthcare facilities while maintaining essential health services.

IPC is always needed wherever healthcare is delivered, including in alternate care sites and non-facility-based care. At a minimum, HWs delivering care in these settings require education and training in good IPC practices, including standard and transmission-based precautions. Patients and staff should maintain physical separation of at least 1 meter from others at all times. Additional IPC considerations for specific situations are below:

- Alternate care sites
  - Establish a system of screening and triage for patients arriving at alternate care sites as described in section C
- Outreach to patients' homes
  - Practice frequent hand hygiene before and after each patient encounter using portable alcohol-based hand rub.
  - Given that HWs might encounter persons or families with respiratory symptoms, consider extended use of medical masks and eye protection (e.g., face shields or goggles) for each shift.
  - For healthcare services that require gloves or gowns, special considerations are needed for appropriate donning, doffing, and disposal of this PPE due to variable availability of space to don/doff PPE and limited access to waste receptacles for disposal of PPE.
- Mobile medical units
  - Ensure that the vehicle is well-ventilated by opening all windows.
  - Stock vehicle with adequate supplies of alcohol-based hand rub for frequent hand hygiene and all recommended PPE.
  - Bring visual alerts or signs to encourage patients to take appropriate IPC precautions while waiting in queues, including maintaining physical distance of at least 1 meter from others and practicing hand hygiene, respiratory hygiene, and cough etiquette.

Footnote

[1] If they are not near aerosol-generating procedures, WHO recommends that health workers providing direct care to COVID-19 patients should wear a medical mask (in addition to other PPE that are part of droplet and contact precautions).

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