COVID-19: Post-Discharge Care

A Rapid Guidance Summary from the Penn Medicine Center for Evidence-based Practice

Last updated March 26, 2020 6:00 pm All links rechecked March 26 unless otherwise noted.

Key questions answered in this summary

- How should COVID-19 patients be cared for after hospital discharge?

Criteria for discontinuing isolation precautions and COVID-19 related care are outside the scope of this report.

Summary of major recommendations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rating</th>
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</thead>
<tbody>
<tr>
<td>Guidelines for patients with mild disease who do not need to be hospitalized also apply to discharged patients.</td>
<td>A</td>
</tr>
<tr>
<td>Patients should remain in isolation at home until free of disease.</td>
<td>A</td>
</tr>
<tr>
<td>Provide patients with symptomatic treatment. Guidelines do not call for definitive treatment, and protocols from other hospitals call for symptomatic treatment only.</td>
<td>B</td>
</tr>
<tr>
<td>Patients should immediately contact the hospital if they develop symptoms of complicated disease</td>
<td>A</td>
</tr>
</tbody>
</table>

Key: A—consistently recommended in multiple guidelines, B—recommended in a single guideline, recommended only in hospital policy documents, or recommended weakly, C—guidelines or recommendations lacking or inconsistent.

Definition of terms

Guideline: Guidance developed by a professional society or government agency, intended for use at multiple hospitals.
Policy: Guidance developed at a hospital for use at that hospital. It may be based on guidelines or on expert opinion.

Guidelines for discharge to home care

<table>
<thead>
<tr>
<th>Source</th>
<th>Recommendations</th>
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</thead>
<tbody>
<tr>
<td>WHO</td>
<td>Provide patient with mild COVID-19 with symptomatic treatment such as antipyretics for fever. Counsel patients with mild COVID-19 about signs and symptoms of complicated disease. If they develop any of these symptoms, they should seek urgent care through national referral systems. Instruct family members and caregivers on personal hygiene measures and infection control. If all mild cases cannot be isolated in health facilities, then those with mild illness and no risk factors may need to be isolated in non-traditional facilities, such as repurposed hotels, stadiums or gymnasiums where they can remain until their symptoms resolve and laboratory tests for COVID-19 virus are negative. Alternatively, patients with mild disease and no risk factors can be managed at home.</td>
</tr>
<tr>
<td>ECDC</td>
<td>No relevant guidance.</td>
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Patients can be discharged from the healthcare facility whenever clinically indicated. If discharged to home, isolation should be maintained if the patient returns home before discontinuation of Transmission-Based Precautions. The decision to send the patient home should be made in consultation with the patient's clinical care team and local or state public health departments. It should include considerations of the home's suitability for and patient's ability to adhere to home isolation recommendations. CDC guidance for home care applies to patients who have been discharged from the hospital (see below).

If discharged to a long-term care or assisted living facility, and transmission-based precautions are still required, patients should go to a facility with adequate personal protective equipment supplies and an ability to adhere to infection prevention and control recommendations for the care of COVID-19 patients. Preferably, the patient would be placed at a facility that has already cared for COVID-19 cases, in a specific unit designated to care for COVID-19 residents.

Acute and community hospitals must discharge all patients as soon as they are clinically safe to do so. 50% of discharged patients are expected to be cared for at home without support from a health or social care provider; 45% are expected to need health or social care support. 4% will need to be discharged to a rehabilitative care setting. 1% have had a life-changing event. NHS guidance for isolation of patients and family members applies. No guidance for symptomatic or definitive treatment is given.

### Details of isolation guidelines

<table>
<thead>
<tr>
<th>Source</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHO</td>
<td>Place the patient in a well-ventilated single room (i.e. with open windows and an open door). Limit the movement of the patient in the house and minimize shared space. Ensure that shared spaces (e.g. kitchen, bathroom) are well ventilated (keep windows open). Limit the number of caregivers. Ideally, assign one person who is in good health and has no underlying chronic or immunocompromising conditions. Caregivers should wear a medical mask that covers their mouth and nose when in the same room as the patient.</td>
</tr>
</tbody>
</table>
| CDC    | Considerations for care at home include:  
• The patient is stable enough to receive care at home.  
• Appropriate caregivers are available at home.  
• There is a separate bedroom where the patient can recover without sharing immediate space with others.  
• Resources for access to food and other necessities are available.  
• The patient and other household members have access to appropriate, recommended personal protective equipment (at a minimum, gloves and facemask) and are capable of adhering to precautions recommended as part of home care or isolation (e.g., respiratory hygiene and cough etiquette, hand hygiene).  
• There are household members who may be at increased risk of complications from COVID-19 infection (e.g., people >65 years old, young children, pregnant women, people who are immunocompromised or who have chronic heart, lung, or kidney conditions). |
| NHS (UK) | NHS guidance for isolation of patients and family members applies. Use of facemasks is not recommended. Please see linked document for details. |

### Hospital policies on discharge of patients to home

<table>
<thead>
<tr>
<th>Source</th>
<th>Policy</th>
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<tbody>
<tr>
<td>Washington</td>
<td>Please see Appendix A for detailed instructions.</td>
</tr>
<tr>
<td>March 15</td>
<td></td>
</tr>
<tr>
<td>Zhejiang University(China)</td>
<td>Please see Appendix B for detailed instructions</td>
</tr>
<tr>
<td>March 24</td>
<td></td>
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</tbody>
</table>
Hospital policies on management of discharged patients

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Hospitals</th>
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</thead>
<tbody>
<tr>
<td>No specific guidance for hospital patients discharged to home. We assume that outpatient treatment protocols apply.</td>
<td>Agree: Cleveland, Mt. Sinai</td>
</tr>
<tr>
<td>Provide supportive care rather than definitive treatment to patients not requiring hospital care.</td>
<td>Agree: Cleveland, Mt. Sinai</td>
</tr>
</tbody>
</table>

About this report

A Rapid Guidance Summary is a focused synopsis of recommendations from selected guideline issuers and health care systems, intended to provide guidance to Penn Medicine providers and administrators during times when latest guidance is urgently needed. It is not based on a complete systematic review of the evidence. Please see the CEP web site for further details on the methods for developing these reports.

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Appendix A. Washington discharge checklist
Checklist for Patients with Confirmed COVID-19 Infection Discharging Home

Discharge location:
- Verify private residence
- Verify and document contact number for patient, as well as name and contact number for primary community support person
- Verify adequate support and resources at home (depending on patient's baseline level of function and functional status at discharge)

ADL/IADL considerations:
- Confirm with medical provider and bedside RN that patient is able to manage ADL/IADLS independently or with degree of available support at home
  - If unable to manage ADL/IADLS, consider ongoing hospitalization
- Confirm patient has the resources/social support to receive 1-2 weeks of food and other necessary supplies while undergoing quarantine
  - If support unavailable, explore grocery delivery or Meals on Wheels
- Perform DME needs assessment and consider sponsorship of DME from hospital if items unable to be delivered to home or obtained by social support person

Discharge medications:
- Provide at least a 14 day supply of medications to cover duration of home isolation or confirm 14 day supply at home

Discharge supplies:
- Provide 10 surgical masks (yellow) to infected patients who are discharging home (Instructions for mask use is in Washington State DOH Instructions that will be printed for patient, see below)

Transportation:
- Verify patient has a ride by private vehicle [infected person should wear a mask in the car]
- If no private vehicle ride is available, set up AMR/Trimed transport

Discharge instructions:
- Provide patient and household members with home isolation instructions
  - Print the most up-to-date Washington State Department of Health instructions for patient returning home with confirmed COVID-19 and add hard copy to patient’s discharge paperwork (click Ctrl and press hyperlink below to obtain PDF):
  - Include the website below in discharge instructions on discharge readiness form for more detailed home precaution instructions to household members of confirmed COVID-19 patients. Consider printing a hard copy if household members do not have access to the internet.
- Add the following statements to the follow-up section for the discharge paperwork:
  - Because you have a confirmed (or suspected) case of COVID-19, you should remain under home isolation precautions for 7 days OR until fever is gone and symptoms (cough, shortness of breath, muscle aches, sore throat) get better, whichever is longer (per Washington State Department of
Body temperature remains normal for at least 3 days (ear temperature is lower than 37.5 °C); respiratory symptoms are significantly improved; the nucleic acid is tested negative for respiratory tract pathogen twice consecutively (sampling interval more than 24 hours); the nucleic acid test of stool samples can be performed at the same time if possible; lung imaging shows obvious improvement in lesions; there is no comorbidities or complications which require hospitalization; SpO2 > 93% without assisted oxygen inhalation; discharge approved by multi-disciplinary medical team.

Medication after discharge
Generally, antiviral drugs are not necessary after discharge. Treatments for symptoms can be applied if patients have mild cough, poor appetite, thick tongue coating, etc. Antiviral drugs can be used after discharge for patients with multiple lung lesions in the first 3 days after their nucleic acid are tested negative.

Home isolation
Patients must continue two weeks of isolation after discharge. Recommended home isolation conditions are:
1. Independent living area with frequent ventilation and disinfection;
2. Avoid contacting with infants, the elderly and people with weak immune functions at home;
3. Patients and their family members must wear masks and wash hands frequently;
4. Body temperature are taken twice a day (in the morning and evening) and pay close attention to any changes in the patient's condition.

Follow-up
A specialized doctor should be arranged for each discharged patient's follow-ups. The first follow-up call should be made within 48 hours after discharge. The outpatient follow-up will be carried out 1 week, 2 weeks, and 1 month after discharge. Examinations include liver and kidney functions, blood test, nucleic acid test of sputum and stool samples, and pulmonary function test or lung CT scan should be reviewed according to the patient's condition. Follow-up phone calls should be made 3 and 6 months after discharge.

Management of patients tested positive again after discharge
Strict discharge standards have been implemented in our hospital. There is no discharged case in our hospital whose sputum and stool samples are tested positive again in our follow-ups. However, there are some reported cases that patients are tested positive again, after being discharged based on the standards of national guidelines (negative results from at least 2 consecutive throat swabs collected at an interval of 24 hours; body temperature remaining normal for 3 days, symptoms significantly improved; obvious absorption of inflammation on lung images). It is mainly due to sample collection errors and false negative testing results. For these patients, the following strategies are recommended:
1. Isolation according to the standards for COVID-19 patients.
2. Continuing to provide antiviral treatment which has been proved to be effective during prior hospitalization.
3. Discharge only when improvement is observed on lung imaging and the sputum and stool are tested negative for 3 consecutive times (with an interval of 24 hours).
4. Home isolation and follow-up visits after discharge in accordance with the requirements mentioned above.