Supplemental Text A: Discharge Instructions

Beth Israel Deaconess Medical Center

COVID-19 Outpatient Pulse Oximetry Protocol Discharge Instructions

COVID-19 Outpatient Pulse Oximetry Protocol

Your provider today was concerned that you may have the COVID-19 virus. After a thorough evaluation, you were found to be safe for discharge home.

Even though you are currently safe to go home, some people with this disease can get worse over the next few days. For this reason we have created this follow-up program. Participation is completely voluntary. If at any time you feel you need medical attention, you are always welcome to return to the emergency department.

As part of this protocol we are lending you a small device called a "pulse-oximeter" which will measure the heart rate and oxygen levels in the body. Additionally we may call you on your provided cell phone number to check on how you are doing.

What is a pulse-oximeter?

A pulse-oximeter is a small device that measures the oxygen level in your body. This is called "oxygen saturation". It also measures how fast your heart is beating. This is called "heart rate".

What do I do?

>> Check your heart rate and oxygen saturation three times a day and record it in your log >> Come to the emergency department if your oxygen saturation is less than 92% or your heart rate is more than 120.

>> Call your primary doctor if your heart rate is between 110 and 119 or if you are feeling worse. If you are having difficulty reaching your primary care office, or do not have a primary care doctor, you may also use the BIDMC OnDemand Telehealth service at www.bidmc.org/ondemand.

How do I do this? Easy as 1-2-3!

1) Rest comfortably seated with your hand on a table.

2) Put the pulse oximeter all the way on to your finger tip (no nail polish!) and press the power button.3) Wait 30 seconds and then record the two large numbers: oxygen saturation (labeled SPO2 %) and heart rate (labeled bpm) in your attached log.

MOST IMPORTANT PART:

If your oxygen saturation is ever less than 92% or heart rate greater than 120, you should go to the emergency department. If your heart rate is between 110 and 119 you should call your primary care doctor.

If you are having difficulty reaching your primary care office, or do not have a primary care doctor, you may also use the BIDMC OnDemand Telehealth service at www.bidmc.org/ondemand.

Pulse-oximeter Tips

Stay as still as possible while using the device. Make sure that your finger is covering the red light inside the device. Do not use the device on a finger with nail polish. If it is difficult to read the display, try pressing the power button again to cycle through additional displays of the same information. The pulse oximeter will turn off by itself.

Returning the pulse-oximeter

Gootenberg DB, et al. BMJ Health Care Inform 2021; 28:e100330. doi: 10.1136/bmjhci-2021-100330

The pulse oximeter you are borrowing is property of Beth Israel Lahey Health. To make sure we can continue to offer this service it is important that you return it after 7 days. You will be mailed a pre-paid return kit which will have further instructions on how to return this device.

Reasons to return to the Emergency Department:

- >> Worsening difficulty breathing or ability to catch breath
- >> Chest pain
- >> Pulse-oximeter reading (SpO2) < 92%
- >> Heart rate > 120
- >> Confusion
- >> Persistent vomiting
- >> Any concerns about your health or desire for medical evaluation

Log Sheet

Day 1 Morning Afternoon Evening/Night	%SPO2	HR
Day 2 Morning Afternoon Evening/Night	%SPO2	HR
Day 3 Morning Afternoon Evening/Night	%SPO2	HR
Day 4 Morning Afternoon Evening/Night	%SPO2	HR
Day 5 Morning Afternoon Evening/Night	%SPO2	HR
Day 6 Morning Afternoon Evening/Night	%SPO2	HR
Day 7 Morning Afternoon Evening/Night	%SPO2	HR

IMPORTANT: If your oxygen saturation is ever less than 92% or heart rate greater than 120, you should go to the emergency department. If your heart rate is between 110 and 119, call your doctor.

Supplemental Text B: Medical Student Script Beth Israel Deaconess Medical Center

COVID-19 Outpatient Pulse Oximetry Protocol Follow-up Script

VM SCRIPT: "Hello, this is *Insert name here*. I'm a medical student calling you in regards to your recent health care visit. I'll try to call you again later to ask you some questions about how you've been doing."

Introduction:

Hello, may I speak to XX? I am a Harvard Medical School medical student working at Beth Israel Lahey Health calling to follow up on your recent emergency department visit, is now an okay time to speak?

If yes:

I would first like to inform you that I am not a doctor, and if you feel you need immediate medical attention you should seek medical care.

- 1. Do you have your pulse oximeter available to take a vital sign reading?
 - 1. *If no:* I apologize, this screening service relies on the use of the provided pulse oximeter device. If you have any concerns regarding your health you should call your primary care doctor or seek emergency care.
 - 2. If yes: Please go get your log book and pulse oximeter now
- 2. What is the number on the label of your pulse oximeter device? [FIRST CALL ONLY]
- 3. Can you confirm your home address? [FIRST CALL ONLY]
- 4. Do you feel generally better, worse, or the same since your last visit (or since my last phone call)
- 5. Please place your pulse oximeter on your finger and wait 30 seconds.
- 6. What is your oxygen saturation reading on the pulse oximeter right now?
- 7. What is your heart rate reading on the pulse oximeter right now?
- 8. Do you feel safe standing and walking around your room (at least 10 steps)?
 - 1. Yes
 - Please walk around your room. When you return, sit down and after 30 seconds, report to me your oxygen saturation. (Heart rate is not important).
 - 2. No
 - 1. Thank you, please remain seated
- 9. Please provide me with all of the new vital sign information in your log book since my last call.
- 10. Have you seen a healthcare provider since your ED visit (or since my last phone call) either in person or via tele-health?
 - 1. If yes:
 - 1. Was it an in-person visit (if "no", "was it via tele-health?")
 - 2. Did you speak to the provider about the pulse oximeter we provided you?

RESPONSES:

If heart rate >120, resting SPO2 < 92% or ambulatory SPO2 <90% [Ambulatory heart rate >120 is okay]: I am very concerned regarding your abnormal vital signs. Let's make sure this is an accurate recording.

Do you have any nail polish on your fingernail?

If yes: In order to get an accurate reading you will need to remove the nail polish *If no continue below:*

Please turn the device on by pushing the power button.

Now I want you to look inside the device. Do you see the red light? I want you to place your finger directly on the red light so that it is shining on the pad of your fingertip. (If not sure what "pad of fingertip" means you can describe "Where your fingerprint is").

Now let the device close on your finger.

If the device has turned off, press the power button again.

Rest your hand on a firm surface for 30 seconds and do not move.

Now let's read the vital signs again.

If persistently <92% or >120:

It seems that your vital signs continue to be concerning and I think it is very important that you go directly to the emergency department for immediate evaluation.

If vital signs now better. The previous abnormal vital signs may have been due to a technical issue. I want you to be sure to follow these same steps every time you check your vital signs. [*Follow appropriate prompts below*]

If SPO2 >=92%, but HR is 110-119:

I am glad your oxygenation is reassuring, but am concerned your heart rate is somewhat elevated. Call your primary care doctor now for further evaluation. If you are having difficulty reaching your primary care office, you may also use the BIDMC OnDemand Telehealth service at www.bidmc.org/ondemand. You should recheck your vital signs in 1-2 hours. If they are not improving go to the emergency department for further evaluation.

If vital signs reassuring but patient feeling worse:

I am sorry to hear that you are feeling worse, but am reassured that your vital signs and oxygen level are currently stable. Please call your primary care doctor to let them know about your worsening symptoms. Given your reassuring oxygen level and heart rate, they may ask you to stay home, come to their office, or present to the emergency department for further evaluation.

If for some reason you are unable to get an evaluation by your primary care team, you may schedule a telehealth visit with BIDMC OnDemand Virtual Urgent care at www.bidmc.org/ondemand.

I will plan to check in on you again in XX days. But please note, if for whatever reason you feel like you need an emergent medical evaluation, you are always welcome to come to the emergency department at any time, day or night.

If vital signs reassuring and patient feeling better or the same:

I am happy to hear you are not feeling any worse. Please continue to monitor your symptoms as directed. Be sure to call your doctor or seek emergency care if you have abnormal vital signs or any concerns. I will plan on calling back again in XX days to check in with you. (Or if last visit, see below)

If patient asks for any medical advice

I apologize but I am not a doctor and cannot provide any medical advice. Please call your primary care doctor for any medical questions. You may also schedule a telehealth visit with BIDMC OnDemand Virtual Urgent care at www.bidmc.org/ondemand.

LAST CALL

Thank you for participating in this protocol. I am glad that your vital signs today continue to be reassuring. In order to continue to provide this service it is critical that the pulse oximeter you have been using is returned to BIDMC so that it can be cleaned and reused for other patients in a similar situation. You have been mailed a prepaid return envelope to send the device back to BIDMC. Please follow instructions to safely clean and return your device.