

the Remedi Pulse

NAVIGATING
THE PANDEMIC:
The COVID
Compass



A CLINICAL AND REGULATORY UPDATE FROM REMEDI SENIORCARE

SPRING 2022

Erin M. Foti, PharmD, BCGP

The Road to Recovery

What is Long-Haul Syndrome?

Over the past two years of the COVID-19 pandemic, our primary focus as healthcare providers has been on the prevention of COVID-19, treatment of acute illness, infection control, and reduction of hospitalizations and death. In the shadows of the pandemic, a new syndrome has emerged for some post COVID-19 infection, referred to as “long COVID”, “long-haul COVID”, “post-acute COVID”, or “chronic COVID”. This condition presents with a range of new, returning, or ongoing symptoms that individuals can experience four or more weeks after first being diagnosed with COVID-19. Even originally asymptomatic individuals are reporting these types of symptoms days or weeks later. Recent studies have shown that up to 20-30% or more individuals with COVID-19 will continue to have health related issues once their body has cleared the virus. It is still not yet clear what causes

“long-haul syndrome” and why some people experience it, and some do not. It is currently clear that individuals with certain risk factors, including age, obesity, diabetes, high blood pressure, and smoking, are more likely to experience more serious COVID-19 disease. As we discover more about the ever-evolving virus, additional details will emerge on why this condition seems to linger. COVID-19 can wreak havoc on the body in numerous ways - damaging the lungs, heart, nervous system, kidneys, and liver. This is in addition to the mental health issues that have arisen during an ongoing pandemic- the grief, pain and fatigue, and post-traumatic stress disorder.

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FOR MORE INFORMATION
RemediRx.com

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“Recent studies have shown that up to 20-30% or more individuals with COVID-19 will continue to have health related issues...”

Difficulty breathing or shortness of breath	Cough	Heart palpitations	Diarrhea	Change in smell or taste	Dizziness
Fatigue	Chest or stomach pain	Joint or muscle pain	Sleep disturbances	Change in menstrual cycle	Rash
Difficulty thinking or concentrating	Headache	Neuropathy	Fever	Post-exertional malaise	Mood changes

Commonly Reported Symptoms of Long Haul Syndrome

continued from page 1

The Road to Recovery

What is Long-Haul Syndrome?

These long-term post-COVID symptoms can be addressed with medical and supportive care. Breathing exercises, physical therapy, and possible medications can improve symptoms, but most should be prepared for a gradual recovery. When deciding to seek treatment, new symptoms should not be ignored since the symptoms may be similar to signs of other diseases. If someone is known to be experiencing “long-haul syndrome”, the Centers for Disease Control (CDC) has many resources available from coping with stress and working with the individual to understand what they are going through and how he/she can be supported by others. The best prevention to avoid COVID-19 and its complications is to prevent initial infection in the first

place. Practicing standard COVID-19 precautions keeping up to date with COVID-19 vaccinations is the best defense one can have.

Selected References

<https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects/index.html>

<https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects/care-post-covid.html>

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/covid-long-haulers-long-term-effects-of-covid19>

<https://www.uhhospitals.org/Healthy-at-UH/articles/2021/11/recovery-from-covid-long-haul-syndrome-may-require-specialty-care>

Rebecca Ogden, RN, BSN, CRNI

COVID-19 Self-Care Strategies for Nurses

Nurses have been dealing with symptoms of stress, fatigue, and burnout even prior to the COVID-19 pandemic upending their lives. With the heavy demand placed on the nursing industry in the last two years and with being on the frontlines of the pandemic, nurses are experiencing a greater degree of burnout, feelings of conflict, guilt, and overwhelming stress and anxiety. Nurses already suffer from a higher suicide rate than the general population and they may not be processing their experiences during this crisis. Consequently, many nurses are finding it increasingly difficult to “survive” and may not have adequate coping mechanisms to deal with the prolonged stress and trauma due to the pandemic. Recent statistics reveal that since the pandemic began, 1 in 5 nurses have retired from active duty.

To help nurses manage their COVID-19 stress and overcome trauma, in 2020 the American Nurse Foundation partnered with four other leading nursing organizations to launch [The Well-Being Initiative](#). This program gives nurses access to digital mental health and wellness-related tools. Below are a couple examples of downloadable tools.

Let’s plan to stay strong and healthy and be nurses who don’t just survive, but overcome and thrive!

Selected References

COVID-19 stress strains nurses’ physical and emotional health
https://www.nurse.com/blog/2020/09/08/covid-19-stress-strains-nurses-physical-and-emotional-health/?utm_source=newsletter&utm_medium=email&utm_campaign=hc-weekly-newsletter&utm_content=091320

The Moral Injury of COVID: How Will Nurses Survive?
<https://www.medscape.com/viewarticle/968051>

The Well-Being Initiative website
<https://www.nursingworld.org/practice-policy/work-environment/health-safety/disaster-preparedness/coronavirus/what-you-need-to-know/the-well-being-initiative/>

After Work Checklist

At the end of your workday, take these steps to decompress.

For more well-being resources, visit: [NursingWorld.org/TheWellBeingInitiative](https://www.nursingworld.org/TheWellBeingInitiative)

- ✓ **Review**
Acknowledge a challenge you faced, take a deep breath, and let it go.
- ✓ **Reflect**
However small, consider and appreciate three positives in your day.
- ✓ **Regroup**
Offer support to your colleagues—and ask for help when you need it.
- ✓ **Reenergize**
Turn your attention to home. Focus on relaxing and resting.

Well-Being INITIATIVE

AMERICAN NURSE FOUNDATION ANA AMERICAN NURSE ASSOCIATION AORN EIA

PTSD: Common Symptoms & Prevention Strategies

Before the coronavirus pandemic, 15% of U.S. nurses in general units showed symptoms of PTSD.

Post-pandemic, experts expect those numbers to double—meaning 1 in 3 nurses could suffer from PTSD.

You are not alone. For self-care and stress management resources, visit the Well-Being Initiative at: [NursingWorld.org/TheWellBeingInitiative](https://www.nursingworld.org/TheWellBeingInitiative).

Symptoms of PTSD (persistent):

- Detachment
- Hypervigilance
- Re-experiencing/reliving events
- Negative thoughts

Strategies for lowering PTSD risk:

- Socializing
- Meditation
- Healthy lifestyle habits
- Writing
- Seeking help for feelings of distress

Well-Being INITIATIVE

AMERICAN NURSE FOUNDATION ANA AMERICAN NURSE ASSOCIATION AORN EIA

See page 8 for full-sized downloadable cards.

COVID-19 Therapeutics

While vaccines are the preferred primary prevention, therapeutics are available to Remedi SeniorCare Pharmacy pending individual state allocation. Antibody therapeutics are administered in a healthcare setting only.

SOTROVIMAB*

CLASS TYPE

Monoclonal antibody

MECHANISM OF ACTION

Passive immunity through man made antibodies

DOSING

One IV infusion after a positive viral test and within 10 days of symptom onset

DRUG INTERACTIONS

Interaction unlikely since not excreted by kidney or liver

ADVERSE EVENTS

Hypersensitivity and Anaphylaxis; fever, difficulty breathing, chills, fatigue, chest pain, nausea, headache, rash/itching, dizziness, diaphoresis, confusion, bronchospasm

MONITORING

During infusion and at least one hour post-infusion

COMMENTS

Should not be used in patients who are hospitalized, using oxygen therapy due to COVID-19, or requiring an increase in baseline oxygen flow rate due to COVID-19 or another underlying condition



BAMLANIVIMAB/ETESEVIMAB**

CLASS TYPE

Monoclonal antibody

MECHANISM OF ACTION

Passive immunity through man made antibodies

DOSING

Administered together as an IV infusion as soon as possible following a positive viral test or possible exposure and within 10 days of symptom onset

DRUG INTERACTIONS

Interaction unlikely since not excreted by kidney or liver

ADVERSE EVENTS

Hypersensitivity and Anaphylaxis; fever, difficulty breathing, chills, fatigue, chest pain, nausea, headache, rash/itching, dizziness, diaphoresis, confusion, bronchospasm

MONITORING

During infusion and at least one hour post-infusion

COMMENTS

Should not be used in patients who are hospitalized, using oxygen therapy due to COVID-19, or requiring an increase in baseline oxygen flow rate due to COVID-19 or another underlying condition



CASIRIVIMAB/IMDEVIMAB**

CLASS TYPE

Monoclonal antibody

MECHANISM OF ACTION

Passive immunity through man made antibodies

DOSING

Administered together as an IV infusion as soon as possible following a positive viral test or possible exposure and within 10 days of symptom onset

DRUG INTERACTIONS

Interaction unlikely since not excreted by kidney or liver

ADVERSE EVENTS

Hypersensitivity and Anaphylaxis; fever, difficulty breathing, chills, fatigue, chest pain, nausea, headache, rash/itching, dizziness, diaphoresis, confusion, bronchospasm

MONITORING

During infusion and at least one hour post-infusion

COMMENTS

Should not be used in patients who are hospitalized, using oxygen therapy due to COVID-19, or requiring an increase in baseline oxygen flow rate due to COVID-19 or another underlying condition



COVID-19 Therapeutics (continued)

Antibody therapeutics are administered in a healthcare setting only.

BEBTELOVIMAB



CLASS TYPE

Monoclonal antibody

MECHANISM OF ACTION

Passive immunity through man made antibodies

DOSING

One IV infusion after a positive viral test and within 7 days of symptom onset

DRUG INTERACTIONS

Interaction unlikely since not excreted by kidney or liver

ADVERSE EVENTS

Hypersensitivity and Anaphylaxis; monitor for fever, difficulty breathing, chills, fatigue, chest pain, nausea, headache, rash/itching, dizziness, diaphoresis, confusion, bronchospasm

MONITORING

During infusion and for at least one hour after injection is complete

COMMENTS

Should not be used in patients who are hospitalized, using oxygen therapy due to COVID-19, or requiring an increase in baseline oxygen flow rate due to COVID-19 due to another underlying condition

MOLNUPIRAVIR



CLASS TYPE

Antiviral

MECHANISM OF ACTION

Halt viral replication

DOSING

Four tablets twice daily following a positive viral test and within 5 days of symptom onset

DRUG INTERACTIONS

None yet identified

ADVERSE EVENTS

Diarrhea, nausea, dizziness

MONITORING

Monitor for any side effects

COMMENTS

- Film coated; do not crush, chew or break
- Not studied in children or pregnant or breastfeeding women must use reliable birth control during treatment and 4 days after last dose; men use contraception for at least 3 months

PAXLOVID



CLASS TYPE

Antiviral

MECHANISM OF ACTION

Halt viral replication

DOSING

Three Tablets twice daily for 5 days OR if eGFR > 30 and < 60 mL/min two tablets twice daily for 5 days following a positive viral test and within 5 days of symptom onset

DRUG INTERACTIONS

Interaction unlikely since not excreted by kidney or liver

ADVERSE EVENTS

Diarrhea, myalgia, dysgeusia, and hypertension

MONITORING

Monitor for any side effects

COMMENTS

- Film coated; do not crush, chew or break
- Not recommended for severe renal or hepatic insufficiency

COVID-19 Therapeutics (continued)

Antibody therapeutics are administered in a healthcare setting only.

REMEDSIVIR

CLASS TYPE

Antiviral

MECHANISM OF ACTION

Halt viral replication

DOSING

IV infusions for three days following positive viral test and within 7 days of symptom onset

DRUG INTERACTIONS

Drug interaction trials have not been conducted

ADVERSE EVENTS

Nausea and increases in ALT/AST

MONITORING

eGFR, hepatic labs, and prothrombin time done prior to and during therapy

COMMENTS

- Not recommended in individuals with eGFR < 30 ml/min
- Therapeutic is administered in a healthcare setting only



Legend

- PEP: Post-exposure prophylaxis
- IV: Intravenous
- SQ: Subcutaneous

COVID-19 therapeutics are ever-evolving; this information is current as of Feb. 2, 2022.

*As of February 23, 2022, FDA further limits the use of sotrovimab to exclude geographic regions where, based on information on variant susceptibility, that infection is likely due to a variant that is non-susceptible to sotrovimab.

**Bamlanivimab/Etesevimab and Casirivimab/Imdevimab as of January 24, 2022, the FDA has limited their use to only when the patient is likely to have contracted or exposed to a variant that is susceptible to these treatments. Data shows that these agents are not likely to be active against the omicron variant, which is circulating at a very high frequency in the U.S. at this time.

Special notation on Ivermectin and Hydroxychloroquine: these agents are not approved by the FDA and are not recommended by the NIH panel for the treatment of COVID-19. For a complete list of therapeutics please visit <https://www.covid19treatmentguidelines.nih.gov/therapies/>

Antibody therapeutics are administered in a healthcare setting only.

COVID-19 Vaccine Dosing & Interval Recommendations

Vaccine	Age of Recipient (years)	Dosage	Injection Volume	Number of doses in Primary Series and Interval between Doses	Additional Primary dose in Immunocompromised Individuals	Interval between Primary Series and Booster Dose
Pfizer-BioNTech	5-11	10 µg	0.2 mL	2 (21 days)	1 (≥28 days)	Booster not recommended
Pfizer-BioNTech	≥ 12	30 µg	0.3 mL	2 (21 days)	1 (≥ 28 days)	≥ 5 months*
Moderna	≥ 18	100 µg	0.5 mL	2 (28 days)	1 (≥ 28 days)	≥ 5 months
Janssen	≥ 18	5x10 ¹⁰ viral particles	0.5 mL	1 (N/A)	Not applicable	≥ 2 months

BOOSTER DOSE



- ***Only Pfizer can be used as a booster dose in those ages 12-17 years**
- **Pfizer:** 30 mcg (0.3mL)- same as the primary series and additional doses
- **Moderna:** 50 mcg (0.25mL)- this is half the amount used for the primary series and additional doses
- **Janssen:** 0.5mL- same as the primary series dose
- Use of an mRNA vaccine for a booster dose is preferred over the Janssen vaccine
- If heterologous vaccine products (mix or match) are used for booster dose; the interval should follow the interval recommended by the primary series

Vaccine recommendations are ever-evolving; this information is current as of January 6, 2022.

MyRemedi: Survey Check-Up Solutions

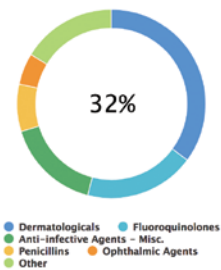
As we approach our second year with the pandemic, surveyors are returning to a more traditional focus on compliance. Infection control remains a key element of Remedi's commitment, not only to medication management safety with PAXIT, but also with our robust reporting tools in MyRemedi. When thinking of

high-risk, high-volume, problem prone areas, MyRemedi offers real-time dashboards focusing on unique pharmacy metrics for quality improvement. As shown below, our dashboards connect your current pharmacy data with their corresponding regulatory risk factors.

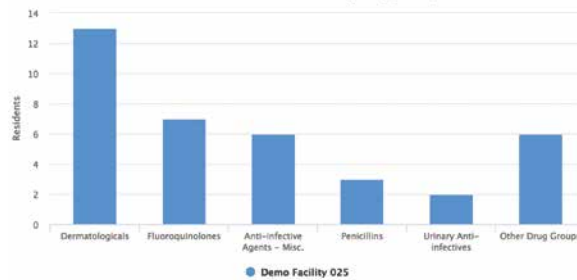
F881: ANTIBIOTIC STEWARDSHIP

(a system to monitor antibiotic use)

% of Residents on Antibiotics



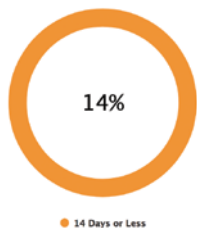
Residents with Antibiotics by Drug Group



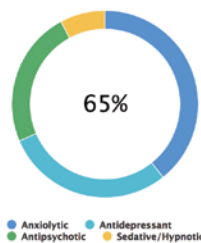
F758: PSYCHOTROPIC DRUG

(GDR, limits on PRN duration)

Residents on PRN Psychotropic Medications



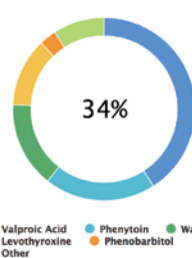
% of Routine Psychotropic Orders with No Change in Over 6 Months



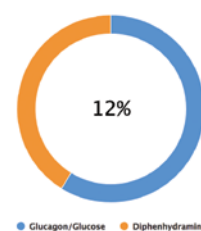
F757: UNNECESSARY DRUGS

(without adequate monitoring, in the presence of adverse consequences)

Residents on Narrow Therapeutic Medications



ADR Surveillance

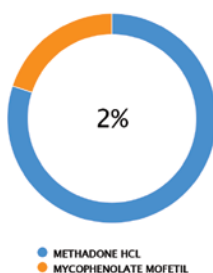


F755: PHARMACY SERVICES

(medication availability to meet the needs of residents)

Residents on FDA Risk Evaluation and Medication Strategies (REMS) Drugs have specific requirements that must be met before they can be dispensed from the pharmacy.

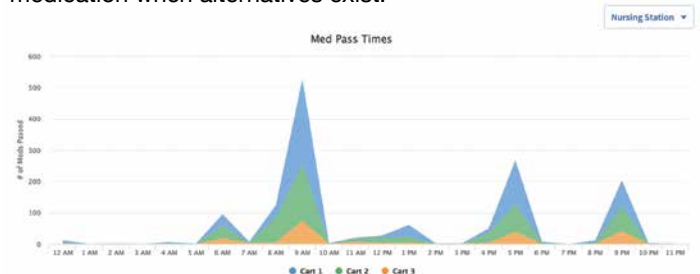
Residents with REMS Orders



F561: SELF-DETERMINATION

(residents' rights to choose their schedule)

Person-centered care and resident rights may be negatively impacted by disrupting a resident's sleep to administer a medication when alternatives exist.



COVID-19 Self-Care Strategies for Nurses

Full-sized cards.

After Work Checklist

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Symptoms of PTSD (persistent):

Detachment Hypervigilance
Re-experiencing/
reliving events Negative thoughts



Strategies for lowering PTSD risk:



Socializing



Meditation



Healthy lifestyle habits



Writing



Seeking help for feelings of distress



Source: American Journal of Respiratory and Critical Care Medicine