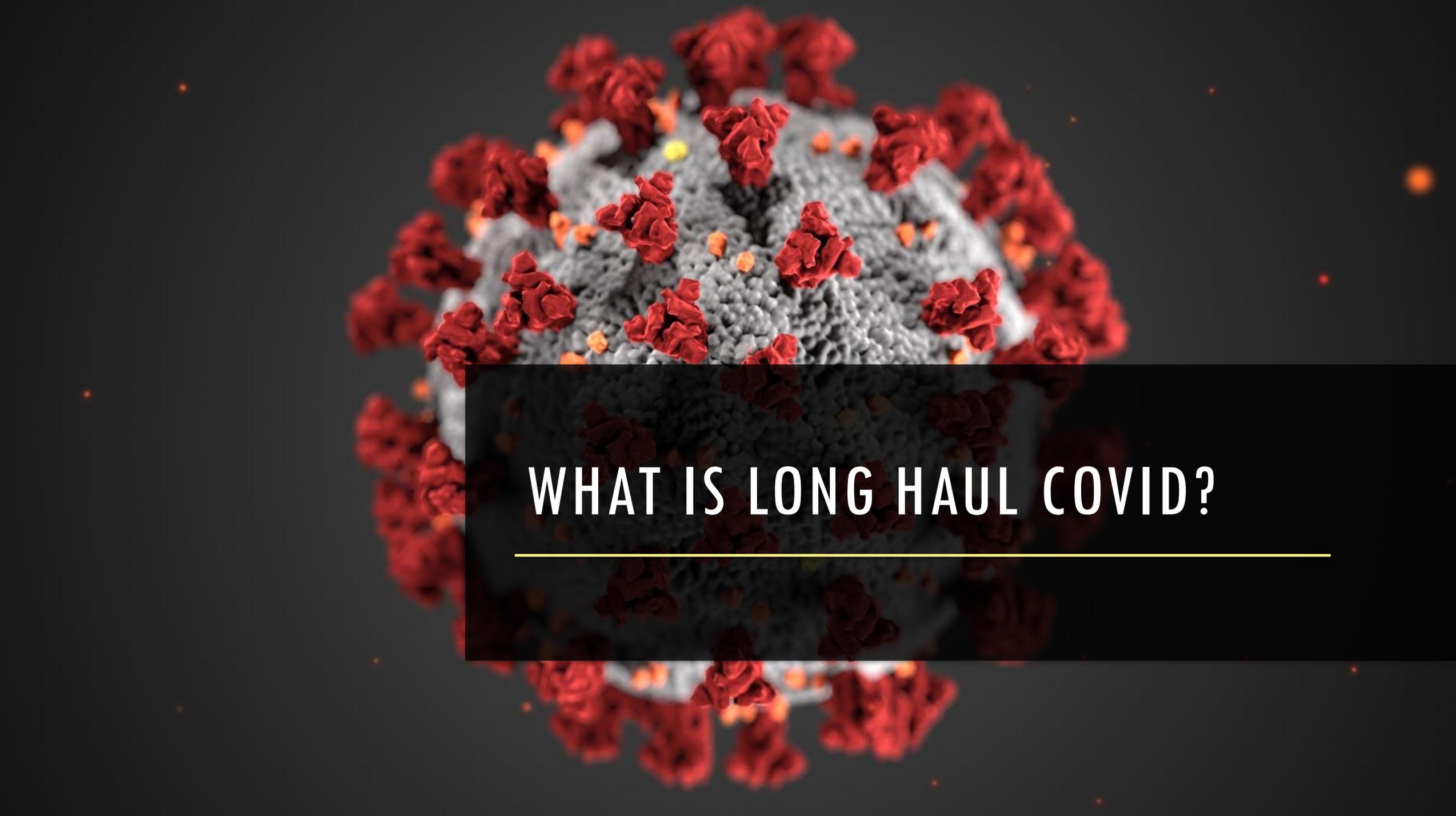# LONG HAUL COVID – 2022 UPDATE

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WHAT IS LONG HAUL COVID?

# WHAT IS IT?

**-No universal name**

**-No universal definition**

-World Health Organization – 10/6/2021
- A history of probable or confirmed SARS COV-2 infection
- Sx present $\geq$ 3 months from onset of infection
- Sx lasting $\geq$ 2 months
- Can't be explained by an alternative diagnosis

-CDC Definition
- Call it "Post-COVID Conditions"
- $\geq$ 4 weeks from acute infection start (symptoms or test)

1. Organization WH. A clinical case definition of post COVID-19 condition by a Delphi consensus. Accessed 10/6, 2021. https://www.who.int/publications/i/item/WHO-2019-nCoV-Post_COVID-19_condition-Clinical_case_definition-2021.1
2. @CDCgov. Post-COVID Conditions: Information for Healthcare Providers. @CDCgov. Updated 2021-09-10T04:38:34Z. https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/post-covid-conditions.html

# MAYO CLINIC CARP GROUP

Fatigue 80%

Respiratory 59%

Neurologic 59%

Cognitive impairment 45%

Sleep disturbance 30%

Mental health sx 26%

34% impaired ADLS

82% impaired IADLS

63% returned to work in some form

- Average time to between infection and presentation was 3 months
- 46% (29/63) were back at baseline work

# CARP CLINIC POPULATION FUNCTION

# RISK AND EPIDEMIOLOGY

75% not hospitalized

22% pre-existing respiratory/cardiac dx

34% pre-existing depression/anxiety

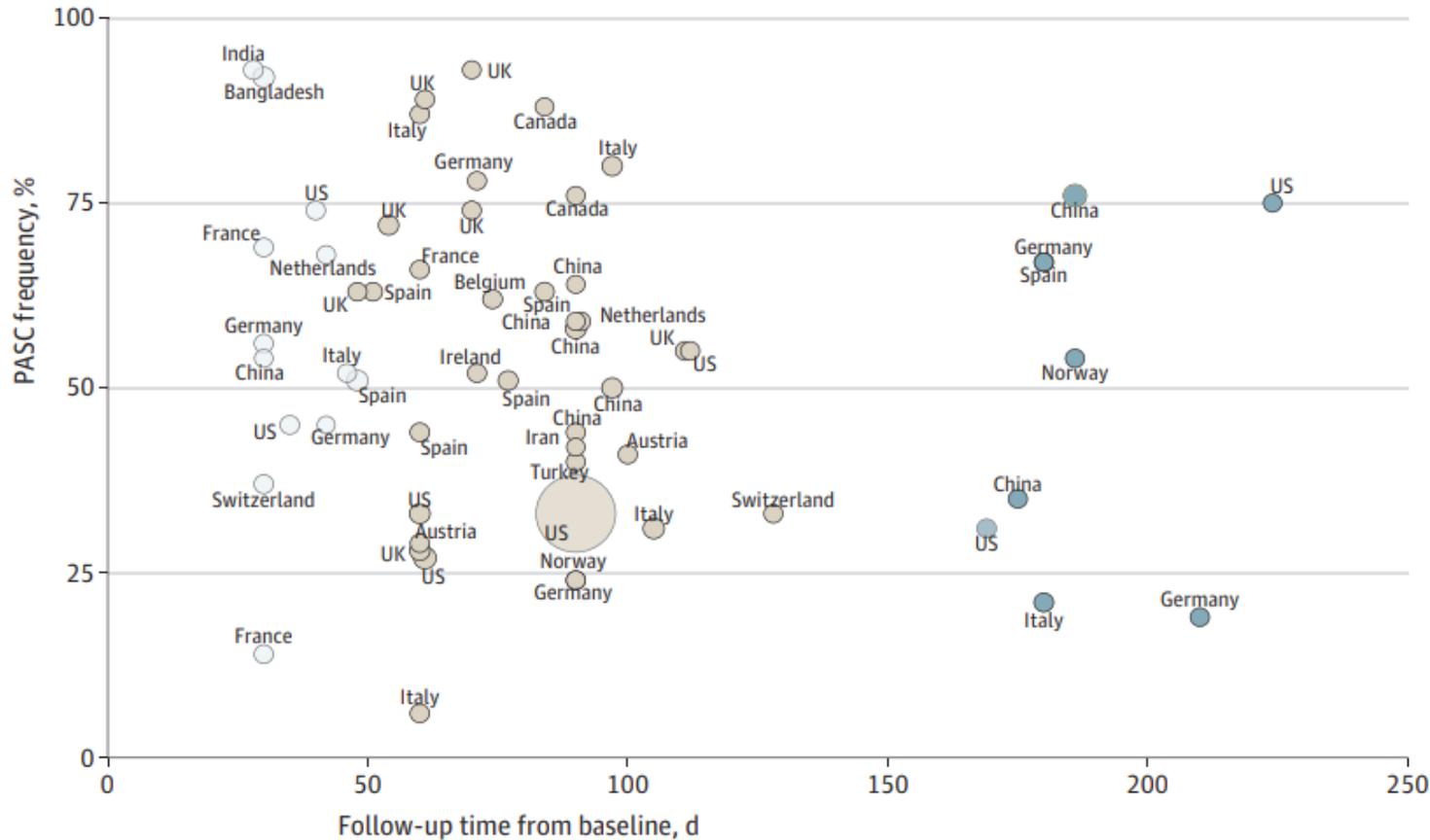4% pre-existing chronic fatigue/fibromyalgia

Average age 45.4

68% female

# INCIDENCE



A PASC frequency by follow-up length

JAMA November 2021

2100 studies

**At 6 months, 54% were still having symptoms**

**May be an overestimate**

**NOT RARE**

Groff D, Department of Surgery PSCoMaMSHMC, Hershey, Pennsylvania, Sun A, et al. Short-term and Long-term Rates of Postacute Sequelae of SARS-CoV-2 Infection: A Systematic Review. *JAMA Network Open*. 2021;4(10)doi:10.1001/jamanetworkopen.2021.28568

# PROGNOSIS

-530 patients at Weil Cornell Medicine

-Follow up at12 months

| | 12 months |
|---|---|
| Worse health | 41.5% |
| Persistent symptoms | 44.2% |
| Trouble lifting/carrying groceries | 36.5% |
| Limited ability to climb a flight of stairs | 38.1% |
| Troubles walking one block | 22.1% |

Adapted from Huang L, Yao Q, Gu X, et al. 1-year outcomes in hospital survivors with COVID-19: a longitudinal cohort study. *The Lancet*. 08/28/2021 2021;398(10302):747-758. doi:10.1016/s0140-6736(21)01755-4

# PATH TO CARE

# PATH TO CARE

Referred by providers

Self referred

Insurance referred (i.e., workers compensation)

**Consistent inconsistency and hardship**

# PATIENT CHALLENGES

**-Feel "abandoned"**

-Not a well understood condition

   Sx minimized

   Attributed to mental health issue

   "Impossible"

-Guilt/self doubt

-Clinical depression/anxiety/PTSD

Li Z, Zheng C, Duan C, et al. Rehabilitation needs of the first cohort of post-acute COVID-19 patients in Hubei, China. *Eur J Phys Rehabil Med.* 2020;56(3):339-344

MEDICAL RESPONSE

COVID Activity Rehabilitation Program
- CARP
- Started April/May 2020
- Patients 0-3 months from infection
- 200-300 patients

Post COVID Care Clinic
- Patients more than 3 months from infection

# MAYO CLINIC & LONG HAUL COVID

# ADDITIONAL CENTERS

Allina Health

Hennepin Healthcare

M Health Fairview

# RESEARCH

Ongoing at several academic centers

Currently focused on presentation of condition

Some early work into etiology
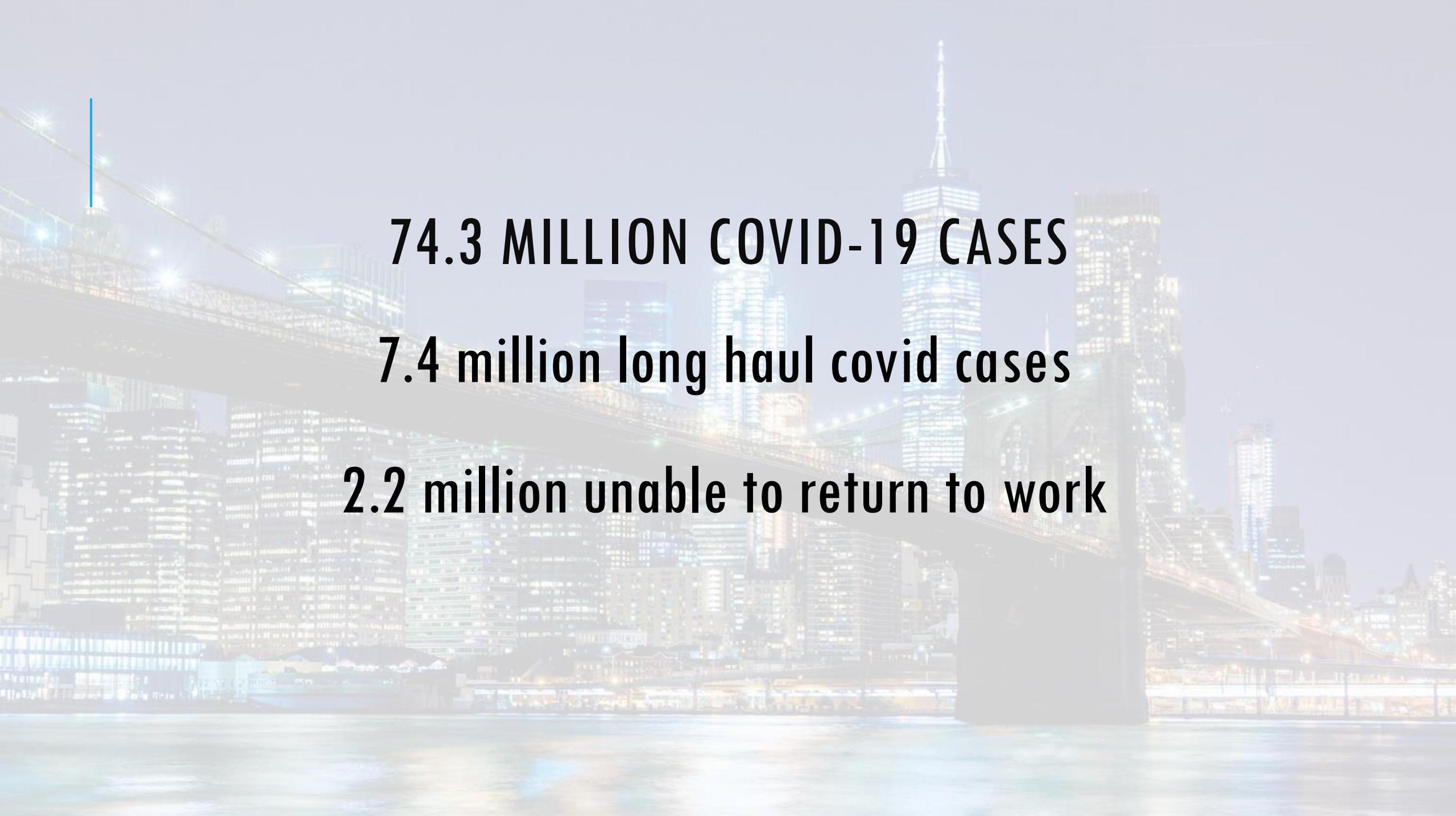
https://www.health.state.mn.us/diseases/longcovid/index.html

Not all patient population are represented

No method of assessing impact state-wide

Not enough providers

Potential impact on workforce

# CHALLENGES AHEAD

74.3 MILLION COVID-19 CASES

7.4 million long haul covid cases

2.2 million unable to return to work
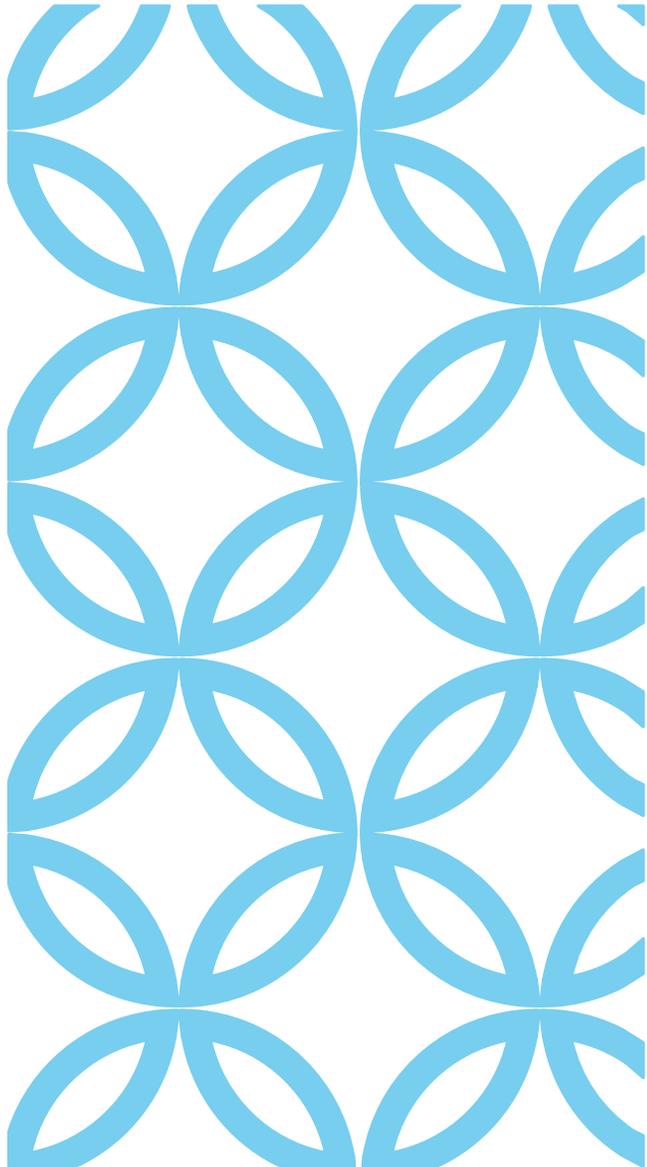
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