

Table S1. Procedural Adaptation and Support in Response to COVID-19.

<i>Has your institution implemented any of the following support measures in response to the COVID-19 pandemic?</i>		
	Yes N (%)	No N (%)
1. Emotional support services	181 (65.3)	96 (34.7)
2. Enhanced ability to work from home	237 (85.6)	40 (14.4)
3. Time off for suspected/ confirmed COVID-19 infection	203 (73.3)	74 (26.7)
4. Pay enhancements/ incentive program	41 (14.8)	236 (85.2)
5. Quarantine accommodations	101 (36.5)	176 (63.5)
6. Others	11 (3.9)	266 (96.0)
<i>What considerations have been made at your institution for the safety of researcher's consenting COVID-19 patient's</i>		
1. Telephone consent	190 (68.6)	87 (31.4)
2. Email Consent	145 (52.4)	132 (47.7)
3. Text message consent	38 (13.7)	239 (86.3)
4. Telemedicine/ Video Calling	150 (54.2)	127 (45.9)
5. Electronic Consenting (REDCap, DocuSign, Sign Now)	238 (85.9)	39 (14.1)
6. Use of Tablet/ iPad to eliminate paper consent	182 (65.7)	95 (34.3)
7. Photograph of signed consent	192 (69.3)	85 (30.7)
8. Others	7 (2.5)	270 (97.5)

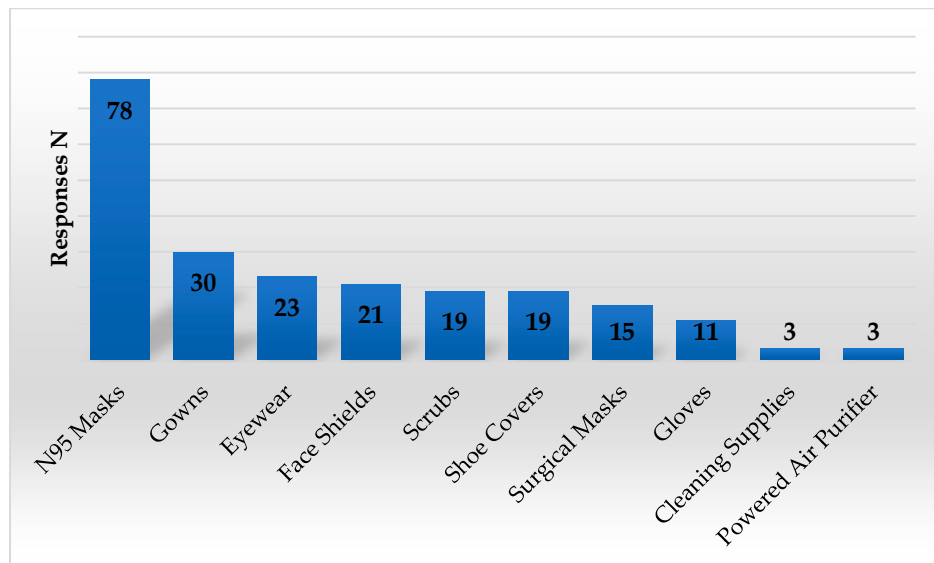
Table S2. Response Rate by US Region.

US Region	Frequency N (%)
Northeast	63 (21.9)
Midwest	65 (22.6)
South	68 (23.7)
West	101 (35.2)

Table S3. Role of PETAL Network Members and Assigned Research Related Responsibilities.

Role in the PETAL network	Assigned Responsibilities
<u>Research Staff:</u> Research Coordinator Research Assistant Research Associate	Overlapping responsibilities for <ul style="list-style-type: none"> ○ Screening of possible patients for enrollment ○ Coordination of enrollment between research and clinical teams ○ Consent documentation ○ Biological sample collection and processing ○ Documentation of research activities ○ Data collection ○ Assurance of Research Compliance
<u>Investigators:</u> Study Principal Investigator Study Sub/ Co Investigator	Overlapping responsibilities for <ul style="list-style-type: none"> ○ Study planning and scientific oversight ○ Procurement of funding ○ Screening of possible patients for enrollment ○ Coordination of enrollment between research and clinical teams ○ Consent documentation ○ Assurance of research compliance for all study team members/ study oversight
<u>Ancillary Research Staff:</u> Pharmacists Regulatory Coordinators Study Statistician	<i>Pharmacists</i> : Study drug related oversight and dispensing. <i>Regulatory Coordinators</i> : Regulatory documentation and research compliance oversight. Involved in coordinator level feedback on research activities for study design purposes. Management of study funding. <i>Statistician</i> : Oversight of research data.

Figure S1. Unavailable Personal Protective Equipment (PPE).



Supplemental Table S2 Information:

Research Survey.

Please read the following information below to continue the survey:

This research survey is being conducted by the Prevention and Early Treatment of Acute Lung Injury (PETAL) Network's clinical center in Michigan.

You are being asked to participate in an online survey about your institutional research policies during the Coronavirus Disease 2019 (COVID-19) pandemic. The goal of this research study is to evaluate the institutional and personal impact of COVID-19 on your ability to conduct research safely and successfully.

We encourage you to complete this survey to help the investigators understand the research practices across the PETAL Network sites to successfully conduct research studies across the network during the COVID-19 pandemic. Completion of the 37 questions will take approximately 20 minutes.

If you participate in this study the information you share with us will be kept confidential. The information collected will be analyzed and may be used for quality improvement initiatives. These results may be published and any publication will be credited to PETAL Network.

Your survey responses will be anonymous and no one at any clinical center or the PETAL Network will be able to identify you or know whether you participated in this study. The investigators will take all necessary measures to keep your information confidential. Email addresses are only used to provide a personalized link to the survey. The investigators will not be able to link your email address with your responses.

By completing this survey, you are consenting to participate in this study. If you have any questions about this survey or have any technical issues, please contact Jasreen Gill at jgill2@hfhs.org. Thank you for your participation in this survey.

Demographics

1. Gender ☐ Female
 - ☐ Male
 - ☐ Other: _____
 - ☐ Prefer not to answer
2. Age
 - ☐ < 18 years
 - ☐ ≥ 18 to 25 Years
 - ☐ > 25 to 35 Years
 - ☐ > 35 to 45 Years
 - ☐ >45 to 55 Years
 - ☐ >55 to 65 Years
 - ☐ >65 to 75 Years
 - ☐ >75 years
 - ☐ Prefer not to answer
3. Ethnic Group
 - ☐ Not Hispanic or Latino
 - ☐ Hispanic or Latino
 - ☐ Prefer not to answer
4. Race (Select all that apply)
 - ☐ White
 - ☐ Black/African American
 - ☐ Native Hawaiian/Pacific Islander
 - ☐ Asian ☐ Prefer not to answer
 - ☐ Other, Describe: _____
5. What is your highest level of education?
 - ☐ High School Graduate/GED
 - ☐ Some College, no degree
 - ☐ College degree
 - ☐ Medical Student
 - ☐ Graduate/Professional Degree
6. In which state is your PETAL Network site located?
Dropdown of US Continental states
7. What is the estimated size of your hospital?
 - ☐ Up to 100 beds
 - ☐ 101 to 200 beds
 - ☐ 251 to 500 beds
 - ☐ More than 500 beds
 - ☐ Do not know

8. Which of the following best describes the type of hospital you work at? (Select all that apply)
- ☐ Community
 - ☐ Public
 - ☐ Private – For profit
 - ☐ Private - Nonprofit
 - ☐ Rural
 - ☐ Urban
 - ☐ Teaching Hospital/ University affiliated
 - ☐ Teaching Hospital/ Not-University affiliated ☐ Other

Researcher/Institutional Research Status

9. What is your current title as it relates to research? *
- ☐ Research Assistant/Research Associate
 - ☐ Research Coordinator
 - ☐ Principal Investigator/Sub-I/Co-PI
 - ☐ Other, Describe: _____
10. Which of the following best describes your clinical background? *
- ☐ EMT/Paramedic
 - ☐ Registered Nurse
 - ☐ Medical assistant
 - ☐ Respiratory Therapist
 - ☐ Advanced Practice Provider
 - ☐ Pharmacist ☐ M.D. / D.O.
 - ☐ Other, Describe: _____
11. How many years have you been working in the medical field (Years – If less than 1 year enter 1, please round to the nearest number of numbers of experience)?*
- ☐ Integer Answer (0-50)
12. How many years have you been participating in research trials (Years – If less than 1 year enter 1 please round to the nearest number of numbers of experience,)? *
- ☐ Integer Answer (0-50)
13. Has COVID-19 research studies at your institution impacted non-COVID-19 research studies? ☐ Yes ☐ No
14. a) At any point have you been redeployed/reassigned to another role at your institution in response to COVID- 19? * ☐ Yes ☐ No

14 b) If yes, please specify your assigned role(s): Free Text

COVID-19 Exposure/Personal Protective Equipment (PPE)

15. Please indicate the clinical area where you primarily enroll patients in research studies.

- Emergency Department
 - Intensive Care Unit
 - General Practice Unit (telemetry, observation)
 - Other (Free text)
16. Have you had any **work-related exposure** to COVID-19 patients? (This includes presumptive positive and suspected positive COVID-19 patients)
Please specify: *
- Research Related Exposure
 - Clinical work-related
 - Both research and clinical work-related exposure
 - No work-related Exposure
17. a) Have you been tested for COVID-19 at any time during the COVID-19 Pandemic? * ○ Yes ○ No
b) If “Yes” was any test result positive?
- Yes
18. Do you think your institution has provided you with adequate PPE to conduct research since the beginning of the COVID 19 Pandemic? *
- Yes ○ No
19. Have PPE shortages affected your ability to conduct research? (i.e. Due to limited access to PPE the research team is unable to communicate with the patient’s care providers or are unable to discuss research enrollment with patients) *
- Yes ○ No
20. Have you completed gowning and de-gowning training within the past 12 months? * ○ Yes ○ No
21. At any time during the COVID-19 pandemic, has your institution **not been able to provide** any of the following PPE items for your research activities?
* Select all that Apply
- Scrubs ○ Gloves
 - Surgical/Procedure Masks
 - N95 Masks (or Equivalent)
 - Face Shield
 - Protective Eyewear
 - Gowns
 - Shoe Covers/Protective Footwear
 - All items have been available
 - Other: _____
22. Has PPE ever been reallocated from research to clinical use at your institution (i.e. N95 respirators taken from a research lab to equip clinical staff)? *
- Yes ○ No
23. Experience **prior** to the pandemic:
Prior to the COVID-19 pandemic, please rate your **highest level of fear** of being infected by any

infectious agent while working at your institution

Example 1: When you processed blood samples for patients with high levels of HIV RNA Example 2: Interacting with patients with treatment-resistant Tuberculosis. Scale: 0-No Fear to 10- Extreme Fear/ Not applicable

24. Experience **during** the pandemic:

Since the beginning of the COVID -19 pandemic please indicate your **highest level of fear** of being infected while working at your research institution * ☐
Scale: 0-No Fear to 10- Extreme Fear/Not applicable

Sample Collection and Processing for COVID-19

25. Rate **how comfortable you feel** in the laboratory while processing biological samples for research from suspected or confirmed positive COVID -19 patients (i.e. Blood, Plasma, Pax Gene, Nasopharyngeal swabs):

☐ Each rated on a Scale: 0-Not Comfortable to 10- Extremely Comfortable/Not Applicable

26. Does your institution have standard operating procedures for bio-specimens such as collection, sample processing, storage, and decontamination for suspected or confirmed COVID-19 positive patients for research? *

☐ Yes ☐ No

27. a) Does your institution have a designated negative pressure room or a flow hood area for research related to biological specimen processing? *

☐ Yes ☐ No

b) Does your research team **have access** to a designated negative pressure room or a flow hood area for research related biological specimen processing for COVID-19 samples? *

☐ Yes ☐ No

28. At any time during the pandemic have you or another person in your research department been:

Please mark all that apply:

- ☐ Hospitalized due to COVID-19
- ☐ Applied for disability benefits due to COVID-19
- ☐ Quarantined due to exposure to COVID-19
- ☐ Got infected and recovered from COVID-19
- ☐ Died from a COVID-19 infection
- ☐ None of the above

Obligations to Research/Institutional Support

29. Do you feel obligated to enroll suspected or confirmed COVID-19 patients in clinical trials? * ☐ Scale: 0-No obligation to 10- Extreme Obligation ☐ Not conducting clinical research

30. Please rate how comfortable you feel enrolling suspected or confirmed COVID-19 patients in research studies? * ☐ Scale: 0-Not Comfortable to 10- Extremely Comfortable/Not applicable
31. What considerations have been made at your institution for the safety of researchers consenting COVID-19 patients? * (Select all that apply)
- ☐ Phone consent
 - ☐ E-mail Consent
 - ☐ SMS/Text Messaging Consent
 - ☐ Tele-medicine/Video Calling
 - ☐ Electronic Consenting (Redcap, DocuSign, Sign Now)
 - ☐ Use of tablets to eliminate paper consent
 - ☐ Photographs of Signed Consent
 - ☐ Other, Describe:_____ (Free Text)
32. Please rate how willing your research co-workers are to share the procedural workload on suspected or confirmed COVID-19 patients. *Example: Willingness to help consent patients, process biological samples, talk to the primary team about potential study participation in clinical areas and conduct safety assessments of study-related procedures ☐ Scale: 0-Not Willing to 10- Extremely Willing /Not applicable
33. If given an option would you refuse to approach a suspected or confirmed COVID-19 patient for research enrollment? *
- ☐ Yes ☐ No
34. Do you believe PPE should be budgeted for in research grants during the pandemic for studies that expose researchers to suspected or confirmed COVID-19 patients or their biological samples? *
- ☐ Yes ☐ No
35. Has your institution implemented any of the following support measures in response to the COVID-19 pandemic? * (Check all that apply)
- ☐ Emotional support services
 - ☐ Enhanced ability to work from home
 - ☐ Time off for suspected or confirmed COVID-19 infection
 - ☐ Pay enhancements/Incentive Programs
 - ☐ Quarantine Accommodations
 - ☐ Other:__
 - ☐ None of the above
36. a. Overall, how would you rate your organization's **clinical** response to the COVID-19 pandemic?
- Rate on the scale of 0 to 10 0 Extremely Dissatisfied, 5 Neutral, 10 Extremely Satisfied
- b Overall, how would you rate your organization's **research** response to the COVID-19 pandemic?

END of the SURVEY