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## COVID-10, Healthcare Interior Design + Provider Experience - How does your space work for you?

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# COVID-19, HEALTHCARE INTERIOR DESIGN & PROVIDER EXPERIENCE

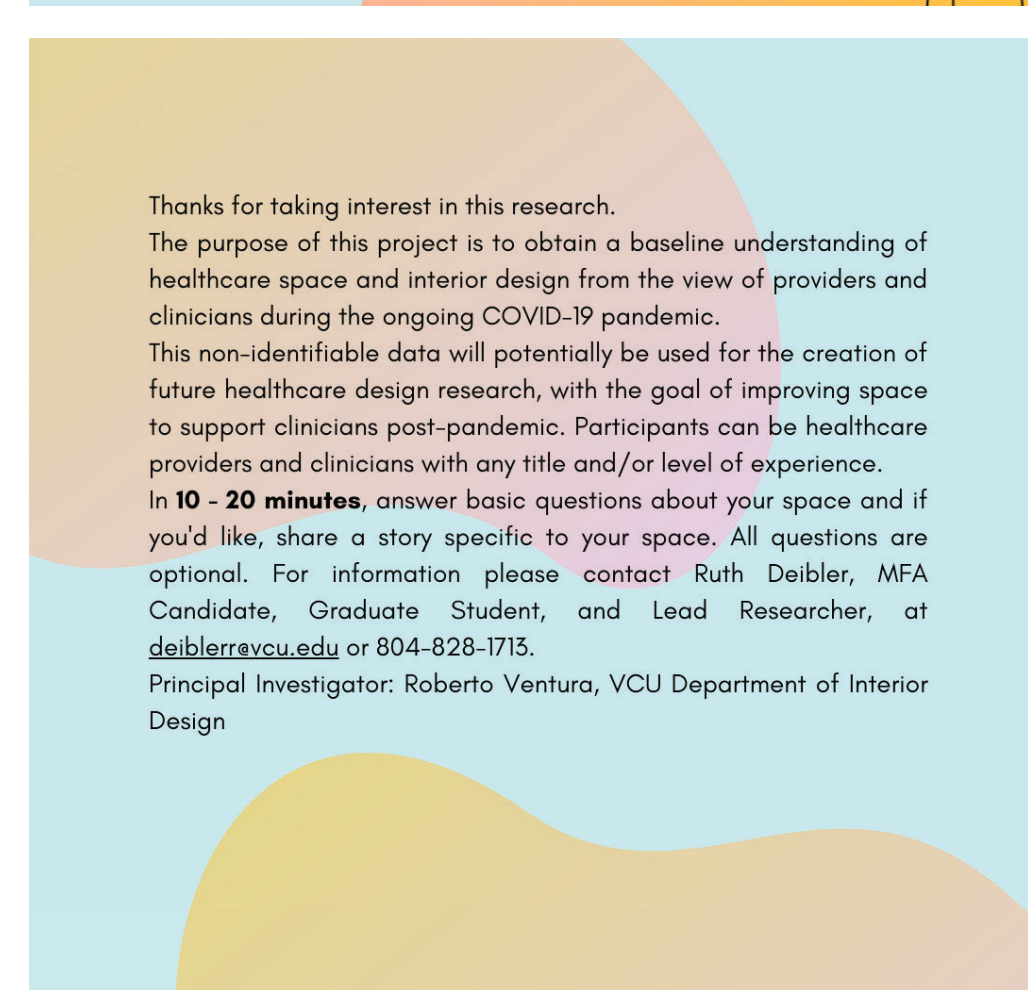
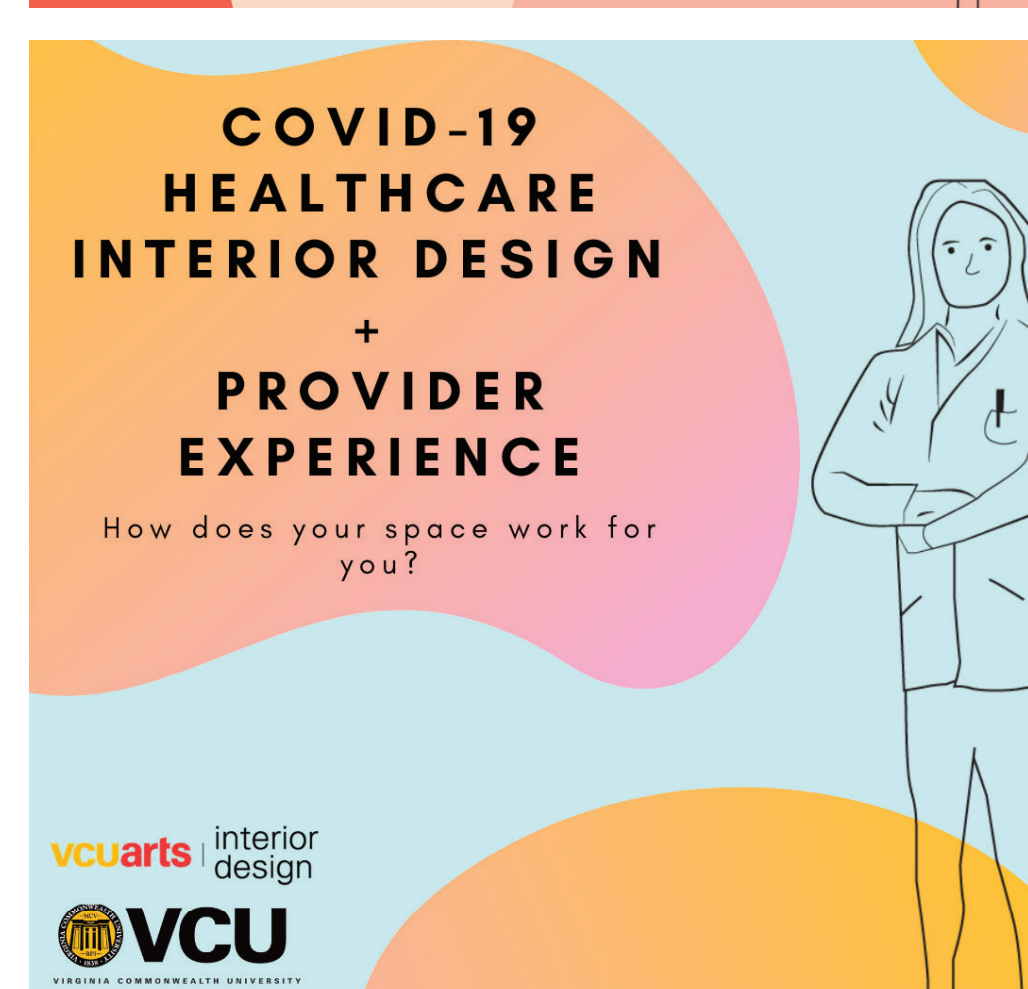
## How does your space work for you?

staff focused research to support a translational and transdisciplinary approach to healthcare interior design



# VCU

## School of the Arts



KEYWORDS:

Healthcare Interior Design, Interior Design, Healthcare Design, Translational Research, Transdisciplinary Research, Grounded-Theory, Design, Design Research, Healthcare Interiors, Healthcare Interior Designer, Participatory Design

## ABSTRACT

The lack of research on healthcare staff experience and interior design of the spaces they work in is evident. A focus on staff perspective is needed, particularly staff who navigated the COVID-19 pandemic. This research seeks to capture those stories to develop further research in order to improve staff experience. The initial phase of this mixed-methods approach is a survey.

Hypothetically, by placing providers at the center of qualitative research related to healthcare interior design, we can better understand existing healthcare spaces. Ideally, we can develop additional evidence-based, human-centered solutions to transform interior environments in healthcare.

The 20-year Women's Health Study generated essential data on women's health, but most importantly, the initial research has snowballed into 600+ research reports and continues to feed research that has made an indelible impact on women's health (About the Women's Health Study, n.d.).

In the same vein as the Women's Health Study, this research documents provider experience with interior space and may lead to new healthcare design research. In the long term, the qualitative, grounded-theory approach may lead to remediation of our healthcare spaces by applying transdisciplinary design solutions developed through the research.

Grounded theory research "sets out to discover or construct theory from data" (Chun et al., 2008). This grounded-theory survey is entitled, "COVID-19, Healthcare Interior Design + Provider Experience – How does your space work for you?" Participants are providers working in any level of healthcare with any level of experience. The survey questions allow the provider to identify specific components of their space. Additionally, they were offered the opportunity to share a story about their relationship with their interior work environment during the COVID-19 pandemic. Healthcare staff's ability to write about their interior environment experiences will offer additional clues about healthcare space and future research.

## CONTEXT & RELEVANCE

This research survey is a part of a thesis as an MFA candidate in the VCUarts Department of Interior Design. The MFA thesis requires developing a theoretical building/design project developed through a research-driven, socially conscious design process. The project consists of a program, curriculum, and implementation of a space for healthcare design scholars. The goal is to create a translational, transdisciplinary Healthcare Design Research Institute immersed within the VCU Health campus.

This hypothetical Institute's mission is to engage in qualitative, grounded theory research to capture healthcare providers' stories about their interior environment experiences.

This Institute will utilize principles and processes from translational and transdisciplinary approaches, such as VCU's C. Kenneth and Dianne Wright Center for Clinical and Translational Research and iCubed, a "transdisciplinary community of scholars who provide innovative solutions to challenges in urban environments," according to icubed.vcu.edu/.

Healthcare Interior Design is a specialty that practices

within the built environment and healthcare industry. In September of 2020, The Journal of Healthcare Contracting shares a prediction that healthcare construction will top \$200 billion in the United States from now until 2035. Interior Designers act as consultants to gather, disseminate, and apply design solutions that support the healthcare environment, business model, and the user's (patient, provider, caregiver) goals. The American Academy of Healthcare Interior Designers and The Center for Health Design are two organizations focused on this specialty industry within the built environment.

Professionally, the graduate researcher spent 12+ years working for Carilion Clinic, Department of Veterans Affairs, and Riverside Health System as an Interior Designer, Facilities Planner, and Construction Manager. After projects in acute care, ambulatory care, long-term care, administration, pediatrics, veterans affairs, women's health, food service, and more, I returned to VCU to develop healthcare design research, teach, and ultimately, create a professional strategy to drive institutional and transformational healthcare design change.

Healthcare Design deserves a rigorous, pragmatic, yet humanistic survey within the framework of a transdisciplinary and translational research environment. This research aims to start to engage in that conversation with a scholarly lens. It is crucial to document our experiences with space and design to improve upon or drastically redirect our existing paradigm.

As Dr. Walter Willett said about his landmark research, "In so many aspects of life, the Nurse's Health Studies have provided evidence that allows individuals, health care providers, and policymakers to reach informed decisions. This would have all been impossible without the amazing commitment of the participants." (The Nurses' Health Study, 2016). The volume, quantity, and longevity of the research offered so much and created a baseline for women's health research today. That is the goal of this research - to create a baseline understanding of how clinicians interact with their space.

## METHODS

The methodology of qualitative research this method prescribes to is described at <https://brenebrown.com/the-research/>. By listening to stories through formal interviews and roundtables and utilizing other qualitative methods, Dr. Brown has developed themes and unexpected theories in her social work field. Ultimately, it led her to the shame theory she is well-known for structuralizing and translating. This healthcare design research honors that process of capturing stories. As Brown indicates in her research philosophy, "acknowledging that it is virtually impossible to understand grounded theory methodology before using it is one of three challenges she outlines about her grounded theory process.

The purpose of this grounded theory research (phase 1: survey) is not to obtain answers. It will mitigate and maneuver through a process in which open-ended questions and narratives can be analyzed, coded, and organized. Ideally, it will be the start of research that provides a structure to understanding and improving interior environments.

This research's goal lies in the belief in the ability for healthcare interior design to improve lives. Unfortunately, collectively, we know that hospitals, nursing homes, and clinics are all places that often harm more than heal. However, they are also spaces that most people interact

with at some point in their lives. Why can't we figure out what we all agree is wrong and move forward to a new future of healthcare design?

Furthermore, why don't we talk to the people that work in the space? We need a qualitative lens to understand and relate those needs to our future healthcare spaces.

This research's ideological goal is to transform healthcare interior design to surpass employee satisfaction, ultimately creating better patient outcomes.

## RESEARCH DESIGN

This survey is the first significant component of the study. These survey results will help direct the scholarly approach to healthcare design to fill a gap in research. The initial survey was developed and distributed via social media accounts and professional LinkedIn accounts. The study was promoted over a 10-day deployment schedule via @healthcaredesignstories on Instagram, @healthinteriors on Twitter, and was promoted on the @vcuartsinteriordesign Facebook and Instagram pages as well. These boosts were paid for and funded by a VCU Arts Graduate Research Grant. Over ten days in March 2021, the survey's redcap.com link was shared throughout these platforms.

The survey was entitled *COVID-10, Healthcare Interior Design + Provider Experience - How does your space work for you?*

The twenty questions are in five (5) categories: Introduction, The Basics, Provider/Clinician Workspace, You & Your Breaks, and Tell Us a Story.

## RESULTS

After ten days of deployment and promotion on the social media platforms listed above, forty-three surveys were populated by non-identifiable, anonymous participants. Twenty-six sample participants shared personal stories about their space.

The results were insightful and thought-provoking. The stories shared by clinicians are pragmatic, thoughtful, descriptive, and insightful.

Additional stats and stories are shared page right.

## REFLECTION

Space is a service. Design is the vehicle to provide the best service. We must prioritize space + time for reflection. A comfortable space can curate those possibilities. Keep the simple things simple. Honor and prioritize routine, ritual, and rest. It is all personal. Design is personal. It is the most personal thing there is. Silence is powerful. Seek silence when you are unable to find the answer. Some find this in religion, some in yoga, some in nature, some in sleep. However, also recognize and acknowledge silence as dissent. Stories are the best research. Seek the precedent that exists in the people. We must capture these ideas strategically to prioritize change.

## NEXT STEPS

This research is just beginning. To follow the next phases research, please visit [healthcaredesignandstaffexperience.com](http://healthcaredesignandstaffexperience.com) after June 2021.

## THE INITIAL RESULTS YIELDED SEVERAL OBSERVATIONS\*:

Twenty-four respondents work in healthcare full time, eighteen work in acute care, and one worked at a COVID-specific site.

Experience ranged from 1 to 40 years, with a majority of the respondents reporting 4 to 7 years of healthcare work experience.

Nine respondents share a workspace during every shift.

Fifteen report that their workspace was clean but that they "clean it themselves".

Fifteen indicate that either do NOT or only sometimes have access to a dedicated space to eat.

Sixteen respondents indicate they do not have access to natural light in their break space.

Twenty-five indicate they do NOT have access to a dedicated on-call or rest space.

Ten respondents indicated they had been involved in the interior design and/or architecture of their space.

\*the survey closed one week prior to the due date for this research symposium poster. Results require formal qualitative analysis based on formal qualitative, grounded theory data analysis and memo methods.

THANK YOU TO VCU ARTS FOR THE GRANT SUPPORT PROVIDED TO FUND THIS RESEARCH.

## WORKS CITED

Study data were collected and managed using REDCap electronic data capture tools hosted at Virginia Commonwealth University | 1.2 REDCap (Research Electronic Data Capture) is a secure, web-based software platform designed to support data capture for research studies, providing: 1) an intuitive interface for validated data capture; 2) audit trails for tracking data manipulation and export procedures; 3) automated report generation for immediate data downloads to common statistical packages; and 4) procedures for data integration and interoperability with external sources.

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