



VCU

May 29, 2024

Jacole Thomas
 CNI Program Specialist
 Commonwealth Neurotrauma Initiative Trust Fund
 Brain Injury Services Coordination Unit
 Virginia Department for Aging & Rehabilitative Services
 8004 Franklin Farms Dr., Henrico, VA 23229

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 Ginger.wood@vcuhealth.org

RE: No-Cost Extension Request - Transitions and Disparities in Care and Outcomes (TDCO) for Neurotrauma (Award # A262-90012)

Dear Ms. Thomas,

This No-Cost Extension request is for the CNI award A262-90012. We are requesting the 3-month automatic extension and an additional 9 months, for a total of 12 months. The extension will create a new year of the project for the following dates: October 1, 2024 – September 30, 2025. The reason we are requesting this extension is to finalize the dissemination and implementation plan as described in detail in the accompanying Scope of Work document. Additionally, we will use the time to publish peer-reviewed publications that were developed as part of this award. We plan to continue engaging with our advisory committee as their feedback was very valuable throughout the duration of this award. Based on our projections, we estimate \$120,352 in direct costs and \$12,035 in F&A costs remain.

We appreciate your consideration of this request.

Very Respectfully,

Amol M. Karmarkar, PhD
 Professor
 Department of Physical Medicine & Rehabilitation
 School of Medicine (SOM)
 Virginia Commonwealth University (VCU)
 Director of Research Sheltering Arms Institute (SAI)
 Research Associate, Central Virginia VA Healthcare System-Richmond, VA

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 1223 East Marshall Street
 PO Box 980677
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DocuSigned by:

Andrea J. Publow
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5/31/2024

Andrea J. Publow
 Director of Sponsored Programs
 Government/Non-profit Support
 Authorized Organizational
 Representative for VCU

**Commonwealth of Virginia, Department For Aging and Rehabilitative Services
Transitions and Disparities in Care and Outcomes (TDCO) for Neurotrauma
(Award # A262-90012)
No-Cost Extension Request
October 1, 2024 - September 30, 2025**

PROJECT GOALS AND DELIVERABLES

**Dissemination and Implementation Plan –
Amol Karmarkar, and Amber Walter (Sheltering Arms Institute)**

We will focus on dissemination of the research findings. As these findings have continued to be developed, we request an extension for these materials.

1. Author and edit scripts for a 6-video patient education video series by 7/1/2024 focusing on transitions in care (setting types) and known risk factors in transitions of care (selecting a primary care provider, transportation considerations, home environment setup). Each video is expected to be about 2-3 minutes or about 500 words.
2. Produce video series to provide education on transitions of care by 9/1/2024.
 - a. Video shoot of pre-scripted material.
 - b. Edit videos of any out-takes and prepare for file transfer.
 - c. Load videos into GetWell Network patient engagement system.
 - d. Transfer videos to SAI YouTube Channel to allow for accessibility in other settings or by the community.
 - e. Video closed captioning for accessibility.
 - f. Collect basic use data through the GetWell Network integration – allows understanding of how many times videos were ordered, completed, or watched without an order.
3. Develop dissemination of video series and research findings.
 - a. Internal inservice for Sheltering Arms Institute on new available education and instructions on access – material will be recorded to be available as an internal resource for perpetual staff training by 12/2024.
 - b. Deliver an update on study findings to Sheltering Arms Institute as a part of Grand Rounds Educational Series by 2/2025 with external stakeholders invited.
4. Complete hospital rounds with people who have been assigned video series and seek stakeholder feedback by 5/2025 – information will be utilized to make note of any necessary changes but not recorded in any specific way outside of usual patient rounding, performance improvement processes.

Advisory Committee Meetings-In-Person

We will continue to conduct the Advisory Committee Meetings, however, we will shift them from being virtual to in-person at Sheltering Arms Institute. The tentative timeline for these meeting will be:

1. October-November 2024
2. March-April, 2025
3. July-August, 2025

Dissemination –

- 1. Disparities in Care Transitions and Outcomes for Individuals with TBI (Targeted Journal: Brain Injury).**
 - Use of APCD data 2017-2021
 - Risk adjusted and risk standardized variations in care transition across Virginia
 - Differences in outcomes
- 2. Disparities in Care Transitions and Outcomes for Individuals with SCI (Targeted Journal: Journal of Spinal Cord Injury Medicine).**
 - Use of APCD data 2017-2021
 - Risk adjusted and risk standardized variations in care transition across Virginia
 - Differences in outcomes
- 3. American Congress of Rehabilitation Medicine (ACRM)-Presentation: November, 2024.**

Transitions and Disparities in Care and Outcomes (TDCO) for Neurotrauma

October 1, 2024 - September 30 2025

Amol Karmarkar, Principal Investigator

May 30, 2024

Name	Role	Cal. Mos	FTE	Year 4	Total
Amol Karmarkar	Principal Investigator	2.40	20.00%	49,691	49,691
Britney Tsui		0.84	7.00%	2,826	2,826
William Carter		0.72	6.00%	3,101	3,101
Charmi Kanani		1.94	16.15%	13,709	13,709
Dylan Marcuson		0.33	2.78%	1,433	1,433
Total Salaries				70,760	70,760
Benefits					
Benefits - Faculty & Classified Staff			39.7%	28,092	28,092
Total Benefits				28,092	28,092
Total Salaries and Benefits				98,852	98,852
Other Direct Costs					
Consumer Advisory	SWAM			1,500	1,500
Sheltering Arms Institute	Subaward			20,000	20,000
Total Other Direct Costs				21,500	21,500
Total Direct Costs				120,352	120,352
Total Modified Direct Costs				120,352	120,352
Indirect Costs			10.00%	12,035	12,035
Total Costs				132,387	132,387



VCU

Transitions & Disparities in Care & Outcomes (TDCO) for Neurotrauma

Amol M. Karmarkar, PhD

Department of Physical Medicine & Rehabilitation

Center for Rehabilitation Science & Engineering

Sheltering Arms Institute

Central Virginia VA Healthcare System-Richmond, VA

June 21, 2024

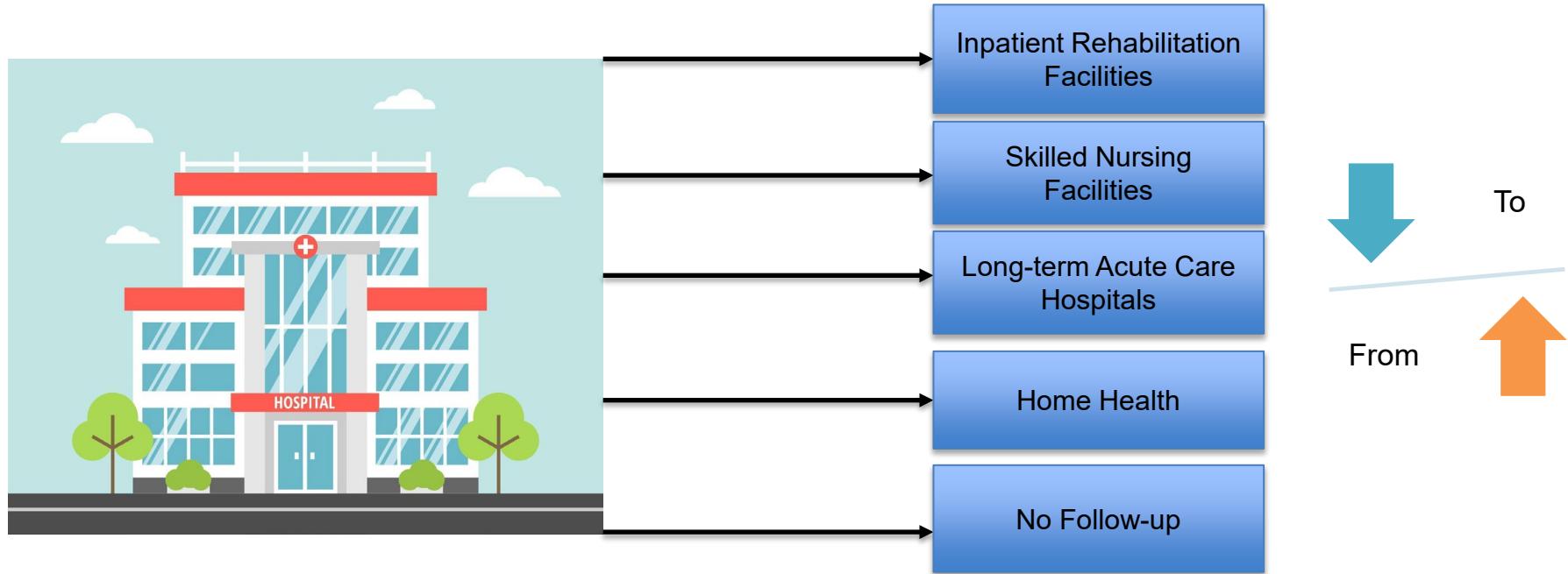
Acknowledgments

- ❖ This work is supported by the Commonwealth Neurotrauma Initiative (CNI): Transitions and Disparities in Care and Outcomes (TDCO) for Neurotrauma (Award # A262-90012).
- ❖ VCU C. Kenneth and Dianne Wright Center for Clinical and Translational Research (Grant # UM1TR004360).
- ❖ Virginia Health Information (VHI).
- ❖ Department of Physical Medicine & Rehabilitation & Center for Rehabilitation Science & Engineering, VCU School of Medicine.
 - ❖ Long-Term Impact of Military-Relevant Brain Injury Consortium Chronic Effects of Neurotrauma Consortium (<https://www.limbic-cenc.org/>)
 - ❖ Traumatic Brain Injury Model System (<https://tbims.vcu.edu/>)

Care Transitions

- ❖ For individuals with Neurotrauma (Traumatic Brain Injury & Spinal Cord Injury), while access to (appropriate) health services is especially critical during the early stages of injury, effective transitions between care settings (acute-postacute-outpatient/community), & efficient care delivery throughout the continuum of care is equally important.
- ❖ When the right transitions are not made at the right times, individuals with Neurotrauma have poor health outcomes.
- ❖ Disparities in access to care post-hospitalization: **Race/Ethnicity, Gender, Insurance Status, Geography.**

Care Transitions



Study Objectives

- ✓ Provide information about how Virginians with TBI & Virginians with SCI transition from acute hospitalization to post-acute care.
- ✓ Examine disparities and variations in these transitions of care by Gender, Race/Ethnicity, Insurance type, & geographical regions.
- ✓ Test the relationships between these transitions with outcomes.
- Explore disruption in care transitions associated with the COVID-19 pandemic.

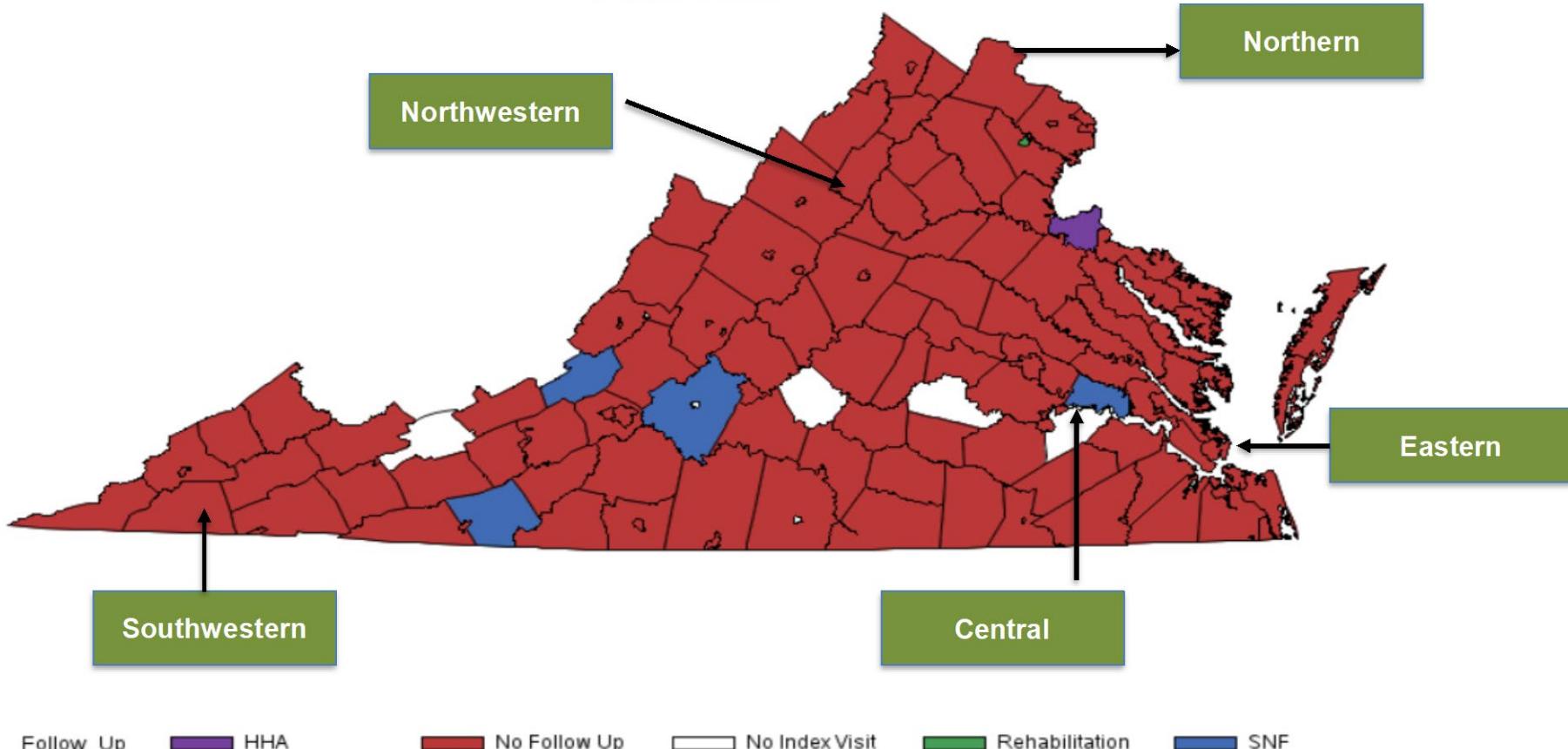
Virginia All-Payer Claims Data (APCD)

- ❖ Medical & pharmacy claims information for ~5 millions individuals from the Commonwealth of Virginia.
- ❖ Medical & Pharmacy Claims:
 - ❖ Inpatient, Post-acute care, Outpatient services.
- ❖ Data Available: 2011-2022 (Medicare fee-for-service {FFS} started in January 2015-present).
 - ❖ For this study: 2016*-2021
- ❖ Payers: Medicare (FFS & Medicare Advantage), Medicaid (including managed care), Commercial.

Results: Traumatic Brain Injury

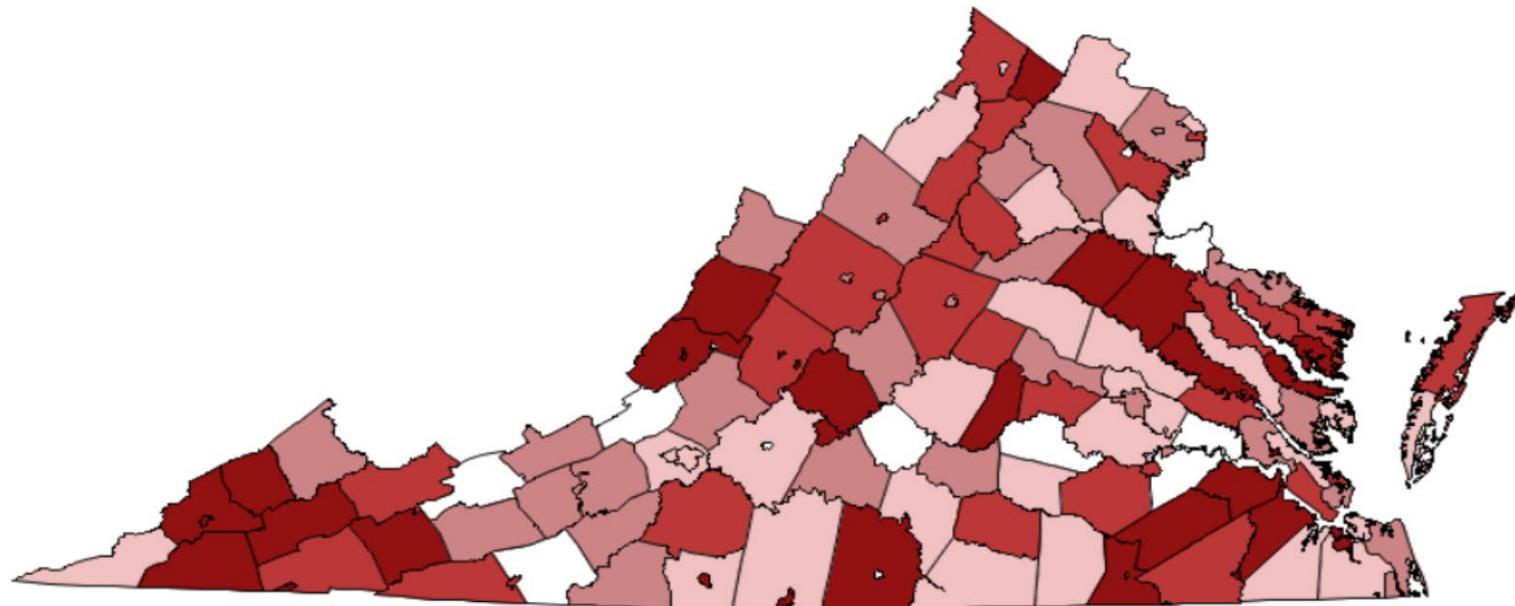
2017-2021 APCD TBI Patient Demographics			
	Total (N=8662)	Pre-COVID (N=7119)	COVID (N=1543)
Age			
Mean (SD)	73.6 (16.6)	75.8 (14.6)	63.2 (21.0)
18-24	183 (2.1%)	87 (1.2%)	96 (6.2%)
25-40	374 (4.3%)	184 (2.6%)	190 (12.3%)
41-65	1378 (15.9%)	938 (13.2%)	440 (28.5%)
66-84	4337 (50.1%)	3766 (52.9%)	571 (37.0%)
84+	2390 (27.6%)	2144 (30.1%)	246 (15.9%)
Gender			
Female	4224 (48.8%)	3578 (50.3%)	646 (41.9%)
Male	4438 (51.2%)	3541 (49.7%)	897 (58.1%)
Ethnicity			
Black	974 (11.2%)	744 (10.5%)	230 (14.9%)
Non-Hispanic White	5856 (67.6%)	5179 (72.7%)	677 (43.9%)
Other	1517 (17.5%)	1037 (14.6%)	480 (31.1%)
Location			
Rural	455 (5.3%)	377 (5.3%)	78 (5.1%)
Urban	8176 (94.4%)	6722 (94.4%)	1454 (94.2%)
Insurance			
Commercial	845 (9.8%)	590 (8.3%)	255 (16.5%)
Medicaid	979 (11.3%)	322 (4.5%)	657 (42.6%)
Medicare	6819 (78.7%)	6196 (87.0%)	623 (40.4%)
Other	19 (0.2%)	11 (0.2%)	*

Results



Predicted Rate: RWJF County Rating (Clinical Care & Socioeconomic Characteristics), US Census Data, & CMS Data (estimate availability of each type of post-acute care settings).

Results: No Follow-up Distribution



PredRateQuartile

Below 38.1%

Over 45.0%

Between 38.1% and 41.5%

No Data

Between 41.5% and 45.0%

Predicted Rate: RWJF County Rating (Clinical Care & Socioeconomic Characteristics), US Census Data, & CMS Data (estimate availability of each type of post-acute care settings).



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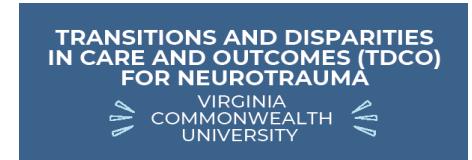
No Cost Extension Request (10/1/2024-9/30/2025)

- ❖ Additional data analysis with the data from 2022: Higher number for post-COVID time period.
- ❖ Stakeholder Advisory Committee: Resume meeting from September 2024 onwards.
 - ❖ Providers
 - ❖ Representative from VHI
 - ❖ Advocacy Groups: United Spinal-VA & BIAV

No Cost Extension Request

(10/1/2024-9/30/2025)

- ❖ Dissemination of information: In addition to scientific outlets (e.g., conference presentation, papers).
- ❖ GetWell Network:
 - ❖ Developing education & training material based on the study findings & other evidence for individuals with TBI & SCI and caregivers/family members
 - ❖ Providers assigning the material-individuals using the resources for planning care transitions



TRANSITIONS AND DISPARITIES IN CARE AND OUTCOMES (TDCO) FOR NEUROTRAUMA
VIRGINIA COMMONWEALTH UNIVERSITY

WHY?
Improving transitions and care continuity between health care settings to minimize adverse health outcomes and improve long-term outcomes in individuals with Traumatic Brain Injury (TBI) & Spinal Cord Injury (SCI).
This study will contribute to this work.

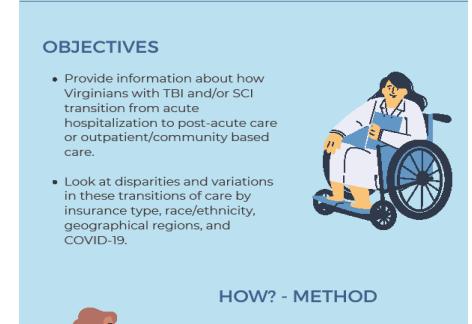
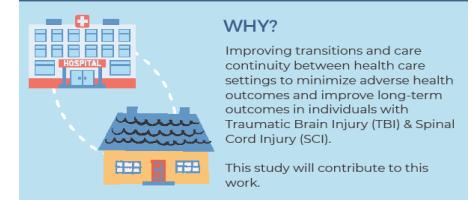
OBJECTIVES

- Provide information about how Virginians with TBI and/or SCI transition from acute hospitalization to post-acute care or outpatient/community based care.
- Look at disparities and variations in these transitions of care by insurance type, race/ethnicity, geographical regions, and COVID-19.

HOW? - METHOD

- Using Virginia's All-Payer Claims Database to engage with our Consumer and Stakeholder Advisory Committee to help us identify critical gaps in understanding.
- Disseminate and share our findings to ensure we are answering the most relevant questions and addressing the most pertinent concerns of community members and stakeholders.

For more information, please contact Laura.Albert@vcuhealth.org



VCU
School of Medicine
Physical Medicine and Rehabilitation

Thank You!

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