

**Tier 2 Pilot Grant Letter of Intent: Establishing Proof-of-Concept  
Winter 2024**

**Project Information**

<b>Proposed Project Title</b>	Leveraging data to measure risk factors affecting post-acute care access and outcomes among patients within and outside of care networks
<b>Approximate Budget Request</b>	\$50,000

**Applicant Information**

- Rachel Prusynski, DPT, PhD, Assistant Professor, Division of Physical Therapy, Department of Rehabilitation Medicine, School of Medicine; [rachelp1@uw.edu](mailto:rachelp1@uw.edu) (Multi-PI)
- Tracy Mroz, PhD, OTR/L, Associate Professor, Division of Occupational Therapy, Department of Rehabilitation Medicine, School of Medicine; [tmroz@uw.edu](mailto:tmroz@uw.edu) (Multi-PI)
- Thuan Ong, MD, Associate Professor, Division of Gerontology and Geriatric Medicine, Department of Medicine, School of Medicine; Medical Director, UW Post-Acute Care; [thuano@uw.edu](mailto:thuano@uw.edu) (Multi-PI)
- Hanh Pan, MHA, Director, UW Post-Acute Care; [hmtran@uw.edu](mailto:hmtran@uw.edu) (Key Personnel)
- TBD- Clinical Lead, Social Work, UW Medicine (Key Personnel)
- TBD- Analyst, Analytics Team, UW Medicine
- [Add CSDE if approved- Center for Studies in Demography and Ecology (CSDE) will provide in-kind support for secure data management and hosting through the UW Data Collaborative and expertise regarding best practices for integration of sensitive data]

**Overview of Proposed Research Plan**

The long-term goal of this new line of research is to evaluate the impacts of care networks on access to and outcomes of post-acute care (PAC) services for patients following hospital discharge. Skilled nursing facilities (SNFs) and home health agencies (HHAs) provide PAC services as a bridge from hospital to home for patients who require additional skilled nursing and/or rehabilitation services for safe return to the community.<sup>1-3</sup> Care networks, including the UW Medicine PAC Network, aim to increase access to SNFs and HHAs, facilitate care transitions, provide care coordination, and improve outcomes for patients discharging from the hospital.<sup>4,5</sup> UW Medicine formed its PAC Network by partnering with SNFs and HHAs that have been vetted for quality and have agreed to coordinate care and accept UW patients. PAC Network clinicians follow patients after hospital discharge to provide medical care and coordination services within the 13 SNF and 3 HHA partners. The PAC Network also specifically aims to benefit patients with socioeconomic, behavioral, or other social barriers to accessing PAC.<sup>6-8</sup> However, a major challenge to determining whether the PAC Network is improving access to care and patient outcomes is lack of adequate data.

This Tier 2 project will bring together researchers, clinicians, administrators, and data experts to establish proof-of-concept for integrating Medicare administrative data and hospital medical records. As a first step to enable evaluation the PAC Network's impact on access to SNFs and HHAs and outcomes of care, this proposal addresses human health and social and economic equity pillars of population health via two aims:

1. Integrate Medicare administrative data (enrollment, claims, and assessment data) and UW Medicine electronic health record data (social work, physical therapy, and occupational therapy notes) from stays at all four UW hospitals for a subset of patients at high risk for inequitable access to PAC (e.g., beneficiaries dually eligible for Medicare and Medicaid) to acquire more comprehensive data on clinical, social, behavioral, environmental, and community factors that may influence access to PAC and subsequent care outcomes.
2. Identify characteristics of UW Medicine patients discharged to SNFs and HHAs following hospitalization and compare patients served by network partners versus non-partners.

This proposal addresses current data inadequacy by identifying novel combinations of data sources to capture key patient characteristics that may impact PAC access and outcomes as well as determining feasible methods to integrate data efficiently. This work will provide a critical foundation for future learning health systems research, including a planned proposal with partner SNFs and HHAs to systematically evaluate PAC Network outcomes and guide future program operations and interventions to foster equitable PAC services. Results from this study can also aid other research and program evaluation design within UW Medicine via proof-of-concept of data integration. Further, this line of research ultimately has the potential to benefit patients outside of UW Medicine through dissemination of findings to external learning health systems and research on care networks more broadly.

## References

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2. Prusynski RA. Medicare payment policy in Skilled Nursing Facilities: lessons from a history of mixed success. *J Am Geriatr Soc*. 2021;(July):1-7. doi:10.1111/jgs.17490
3. Mroz TM, Meadow A, Colantuoni E, Leff B, Wolff JL. Home Health Agency Characteristics and Quality Outcomes for Medicare Beneficiaries With Rehabilitation-Sensitive Conditions. *Arch Phys Med Rehabil*. 2018;99(6):1090-1098.e4. doi:10.1016/j.apmr.2017.08.483
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6. Freburger JK, Holmes GM, Ku LJE, et al. Disparities in post-acute rehabilitation care for joint replacement. *Arthritis Care Res*. 2011;63(7):1020-1030. doi:10.1002/acr.20477
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8. Freburger JK, Holmes GM, Ku LJ, et al. Disparities in Post-Acute Rehabilitation Care for Stroke. *Arch Phys Med Rehabil*. 2011;92(8):1220-1229. doi:10.1016/j.apmr.2011.03.019