2024 PROGRESS REPORT

DAVID AND NANCY AUTH-WASHINGTON RESEARCH FOUNDATION ENDOWED CHAIR FOR RESTORATIVE BURN SURGERY

INTRODUCTION

The UW Medicine Regional Burn Center continues with its mission to lead in clinical care, education and research. Admissions to the UW Medicine Regional Burn Center are once again very high in the past year. With ongoing socioeconomic inequities and a surge in violence, homelessness and drug addiction in our region, our center is caring for an ever-increasing number of vulnerable patients with burn and cold injuries. We have successfully integrated an additional attending burn surgeon into our practice and are recruiting for additional staff. Altogether, our service line continues to serve as an injury safety net for the King County Community and the Pacific Northwest.

YOUR IMPACT

Funds from the David and Nancy Auth-Washington Research Foundation Endowed Chair for Restorative Burn Surgery continue to be vital for supporting our Burn Center research and quality improvement infrastructure, including salary support for dedicated research, quality improvement/process improvement (QI/PI) staff. I will highlight two programs below:



CHAIR HOLDER

David and Nancy Auth-Washington Research Foundation Endowed Chair for Restorative Burn Surgery

Director of the UW Medicine Regional Burn Center

UW Professor of Surgery

1. BURN MODEL SYSTEM STUDY (BMS): The BMS a longitudinal study focused on patient-reported outcomes, research dissemination and burn survivor engagement. This program is led locally by Dr. Barclay Stewart, a burn/trauma/critical care surgeon who has established himself as a premier investigator in the field of injury. In a cost-sharing agreement with the BMS program, the Auth/WRF Chair partially supported the work of Caitlin Orton (research coordinator) and Gretchen Carrougher (research nurse supervisor) over the past year. Since summer 2023, Caitlin became lead coordinator for our BMS site as Gretchen has moved into partial retirement. Highlights of the BMS research output for 2023 included publications that addressed: 1) burn care in lower resource settings, 2) a holistic approach to scar management and rehabilitation, 3) community socioeconomic status and social participation outcomes, 4) impact of tracheostomy and long term outcomes, 5) impact of distance to burn center and long-term outcomes, 6) post-injury itch and fatigue as components of quality of life, 7) role of Patient-Reported Outcomes Measurement Information System (PROMIS) evaluation tool for pediatric survivors. Dr. Stewart successfully competed for renewed federal funding, a cycle that began in mid-2023. With the new funding cycle, the BMS team prioritized its focus on burn/cold injury prevention and care for the unhoused population.

2. OUTPATIENT REGISTRY IMPLEMENTATION: Throughout the burn care community, there is a push to understand the long-term and multifaceted impact of injury, rather than only examining the initial episode of care. Outpatient registries, however, do not yet exist within our field. At our center, we are seeking to accurately capture patient follow-up data and the trajectory of burn survivors from initial transfer center (or emergency department) encounter to follow-up in the burn clinic. We anticipate that this implementation project will take at least five years to achieve a mature outpatient burn registry for our regional burn center. Our efforts have coincided with the American Burn Association (ABA) call for long-term outcomes to be reported to the ABA national registry, the Burn Care Quality Platform (BCOP). The Auth/WRF Chair partially funded for David Crawford (research coordinator) and Gretchen Carrougher (research nurse) in this QI/PI work. The initial project (2023) defined essential outpatient data elements to include in our registry. Our current work is to convert pre-clinic questionnaires, such as depression, post-traumatic stress and scar impact screening tools, (all currently in paper format) into the Electronic Medical Record (EMR). In partnership with the hospital IT department, this EMR integration will improve visibility and tracking for treating providers, and data output can be electronically exported to the registry. As we care for vulnerable patients, we anticipate the need for additional support for our patients in this transition. Barriers such as limited healthcare access, English language proficiency, health literacy and technology challenges need to be mitigated. We are deploying additional kiosks in our clinic, recruiting additional help from interpreter services and will train our patient support staff to assist patients in this implementation.

COMMUNITY CONNECTION

Our community focus is to reduce the burden of burn/cold injuries in persons experiencing homelessness (PEH). In recent years, burn/cold injuries have markedly increased in this vulnerable group living in King County. Our preliminary work was to evaluate potential burn/cold injury prevention messages targeting PEH that are contextually appropriate. We are establishing key partnerships with injury survivors, alliance with community organizations to develop burn/cold injury prevention messages and delivery formats targeting PEH in King County.

PROGRAM HIGHLIGHTS

Thanks in part to the support of the Auth/WRF Chair, major achievements in 2023 were:

1. Dissemination of the 'Virtual-environment home rehabilitation' trial results that enrolled burn survivors to study adherence to post-discharge home exercises and activity. In 2023, we presented our research findings at the annual meeting of the American Burn Association (Dallas, TX). We are now submitting the corresponding research papers in burn specialty journals for review.

2. Completion of stakeholders interviews with people experiencing homelessness who were hospitalized at Harborview Medical Center for burn/cold injuries. We are now disseminating the results from this project at regional/national forums. The BMS team successfully garnered additional support from a UW Population Health Tier 1 Grant to develop King County-specific burn/cold injury prevention resources in the past year. We are now collaborating with the King County Regional Homeless Authority to elevate awareness of burn/cold injury risks and seek partnerships with additional community organizations.

THE YEAR AHEAD

Funds from the Auth/Washington Chair continue to be vital for supporting our Burn Center research infrastructure, including salary support for staff engaged in the dual role of research and QI/PI work. In keeping with our commitment to support and prioritize research and improvement in the burn center, I do not plan to utilize this endowment to support my salary.

Our priorities for 2024 are to:

1. Continue to support the work of the BMS program, specifically focusing on burn/cold injury prevention in persons experiencing homelessness (PEH)

2. Support the burn registry implementation with focus on EMR integration.

THANK YOU

I sincerely thank you for your enduring support to our burn program and hope that you remain in good health. The David and Nancy Auth-Washington Research Foundation Endowed Chair for Restorative Burn Surgery has been essential in supporting our research efforts and continues to allow the faculty and staff of the Burn Center to remain at the forefront of research and quality improvement in burn care. We are grateful for your generosity and friendship to our center.