Dr. Matthew Baldwin

Rationale: Americans age 65 and older comprise more than half of all intensive care unit (ICU) admissions. With technological advances, many critically ill older adults now survive what were previously fatal illnesses, but disability and mortality in the first 6-months after hospital discharge remain high. We need to understand better how to risk-stratify and identify patients most suitable for palliative, rehabilitative, and/or therapeutic interventions in the post-ICU care period (which includes post-ICU acute care, post-acute facility care, or home care after hospital discharge). Candidate: As a pulmonary-critical care physician and Assistant Professor of Medicine at Columbia University, the PI has published original investigations that suggest frailty is an unmeasured phenotype that may help risk-stratify older ICU survivors for post-ICU interventions. The PI's long term career goal is to become an independent clinical investigator who integrates the fields of critical care and geriatrics into a novel career niche dedicated to improving the quality-of-life and survival of older ICU survivors across care transitions. Career Development: The PI's short term objectives are to obtain formal training in geriatric and palliative care assessments, to learn advanced statistical modeling and epidemiological methods, and to gain expertise in clinical trial conduct while receiving multidisciplinary mentorship from leaders in the fields of gerontology, palliative care, and pulmonary-critical care. Environment: Columbia University has committed abundant resources to support this proposal including use of the NIH-CTSA funded Irving Institute for Clinical Research, and the recent KL2 training award for the PI. Research: We aim to advance the burgeoning field of post-ICU medicine for older adults in two ways. First (Aim 1), we will perform a prospective single-center cohort study of older ICU survivors of respiratory failure to (1A) determine whether frailty measured during the week before hospital discharge is associated independently with 6-month mortality and disability at 1 and 6 months, and to (1B) measure their palliative care needs during the week before hospital discharge. Aim 1 will lead to novel frailty-based risk-stratification models that may help identify older ICU survivors for post-ICU interventions, and will generate new knowledge about the palliative care needs of older ICU survivors that in turn will inform investigators, clinicians, and policymakers about what aspects of palliative care need to be better incorporated into post-ICU acute care. Second (Aim 2), we will pilot a post-ICU palliative care consultation intervention among frail older ICU survivors of respiratory failure and their surrogates during the week prior to anticipated hospital discharge. Aim 2 will provide feasibility data and effect size estimates that will inform the design of a future R01 proposal for a post-ICU palliative care intervention trial in older ICU survivors. By pursuing these studies, the PI will address the spectrum of needs of older ICU survivors while garnering the expertise needed to emerge as an independent investigator who leads clinical studies and trials aimed at improving the quality-of-life and survival of this rapidly growing population of debilitated older adults.