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Post-Intensive Care Syndrome: The Role of Geriatric Psychiatry in Research, Practice, and Policy

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Wang et al.'s review¹ of the Post-Intensive Care Syndrome (PICS) accomplishes three goals: 1) it describes PICS as an enormous public health problem with far-reaching consequences; 2) it summarizes gaps in knowledge about functional impairments in PICS; and 3) it envisions the role of geriatric psychiatry in clinical care and research to improve patient and family outcomes in PICS. The first point cannot be over-stated. PICS consists of new or worsened physical, cognitive, and psychological impairments after critical illness. It affects more than half of the rapidly growing population of intensive care unit (ICU) survivors and their families. And although PICS may be less a formal “syndrome” rooted in a common physiological mechanisms and more a marker of vulnerability,² the named condition permits identification of “canaries in the coal mine”: individuals with existing functional impairments, at high risk of poor long-term outcomes, and vulnerable to every weak link at every transition along the healthcare chain.^{3,4}

Because these patients are so identifiable and so vulnerable, they are an ideal population for translational geroscience—both to unlock many mysteries of biology and to develop systems of interdisciplinary transitional care and rehabilitation. Wang et al. outline many of the gaps relevant to geriatric psychiatry.

Among the most important gaps is that physical, cognitive, and psychological impairments in PICS have poorly characterized relationships to each other and to health-related quality of life. An extensive literature including the MacArthur studies on successful aging demonstrates important associations between these outcomes for older adults.⁵ The BRAIN-ICU study and others suggest similar patterns in ICU survivors,⁶ although they are currently undercharacterized. Inadequate attention to relationships among functional domains may be an important reason for the disappointing results of most interventional studies in PICS.⁷ For example, cognitive impairment and lack of motivation can both make consistent engagement in a physical rehabilitation program challenging if not impossible; persistent physical impairment can contribute to ongoing depression.⁸ As Wang et al. suggest, further study of these relationships is critical, and geriatric psychiatry should have a leading role.¹ This field has a strong history of understanding relationships between functional domains and

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leveraging them in complex interventions that improve patient outcomes. For example, behavioral activation therapy uses physical engagement to treat depression. Approaches addressing multiple functional domains would be novel in PICS and could be key to successful recovery.

One other point from Wang et al.'s article deserves special emphasis: Rates of psychiatric comorbidity among ICU survivors are four to six times population norms, and families also commonly suffer from psychological sequelae of critical illness.¹ This reality strongly supports the key role for geriatric psychiatry in clinical care, research, and policy-making surrounding PICS. Such psychiatric complexity is completely outside the training of most intensivists, hospitalists, and primary care providers who treat ICU survivors. It may underlie the common use of neuroactive medications such as anticholinergics and benzodiazepines in this population despite consistent evidence that such medications are associated with worse cognitive outcomes. Geriatric psychiatrists are accustomed to working with families as the unit of care, and treating patients with psychiatric and medical comorbidity who struggle to navigate a complex healthcare system. Although the geriatric psychiatry workforce is limited, its assistance and leadership are necessary to correctly diagnose and treat these patients.

Therefore, Wang et al.'s vision for the role of geriatric psychiatry in PICS is timely, and its implementation is urgently needed. We second their call for a comprehensive health systems approach, including: 1) interdisciplinary collaboration to develop guidelines and protocols for the diagnosis and management of post-ICU cognitive and mental health impairments; 2) healthcare system-based interventions for older ICU survivors (e.g., proactive assessment of psychiatric comorbidity in patients and family members, a plan for ongoing management, oversight by a recovery care coordinator working closely with a geriatric psychiatrist, and protocol-driven interventions and monitoring that leverage technology to minimize staff burden and ensure consistency); 3) development of evidence about valid, reliable, effective, and efficient tools for diagnosis and management; and 4) cross-disciplinary education.

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