

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF INTERNAL MEDICINE

Theodore J. Iwashyna, M.D., Ph.D., associate professor of internal medicine, with tenure, Department of Internal Medicine, Medical School, is recommended for promotion to professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.

Academic Degrees:

M.D.	2002	University of Chicago, Pritzker School of Medicine
Ph.D.	2001	University of Chicago
A.B.	1994	Princeton University

Professional Record:

2013-present	Associate Professor of Internal Medicine, University of Michigan
2008-2013	Assistant Professor of Internal Medicine, University of Michigan

Summary of Evaluation:

Teaching: Dr. Iwashyna is a favored mentor and teacher to all levels of learners. One of his greatest strengths is his dedication to preparing trainees to embrace the entire spectrum of being a physician; from reading and understanding scientific evidence to providing emotional support and compassion to patients and their families. He does this in a variety of ways. While on service, he requires learners to read primary literature every night and come prepared the next day to actively discuss during rounds. He teaches on practical skills of emergency management and devotes a considerable amount of time mentoring in the skills of family meetings, and compassionate care of severely ill and dying patients. He presents on these topics in a variety of didactic settings. He has developed a seminar on advanced topics of teaching evidence-based medicine to prepare residents to run journal club and presents at morning report, noon lectures and Grand Rounds. He has taught, and now runs, a biweekly mentor session, "Research on Health Care Delivery, Financing and Policy," which focuses on the whole spectrum of a physician's responsibility in an academic setting. Perhaps Dr. Iwashyna's most rewarding achievement is his involvement as the co-director for the IHPI Clinical Scholars Program, formerly called the Robert Wood Johnson Foundation. In this role, he focuses his mentorship into advancing independent lines of research. His leadership in this program has resulted in a NHLBI-funded K12 training program – "Training to Advance Care through Implementation Science in Cardiac and Lung Illnesses," which will be jointly administered between the IHPI Clinical Scholars and Learning Health Sciences. Dr. Iwashyna has been recognized formally having received several teaching awards, including the "American Medical Women's Student Association Gender Equity Award," the Excellence in Clinical Teaching Award" and the "H. Marvin Pollard Award for Outstanding Teaching of Residents."

Research: Dr. Iwashyna describes himself as a “health services researcher and clinical epidemiologist who seeks to understand, prevent and ameliorate the adverse long-term consequences of acute serious illness.” Reviewers describe him as “the consummate academic” and “an international expert in his field.” Dr. Iwashyna has 145 peer-reviewed publications, numerous national and international presentations, peer-review contributions to 27 national and international journals, continuous federal funding, and extensive teaching involvement. His development of the “critical illness survivorship” concept has received international recognition. In a recent resolution to develop strategies and tools for reducing the long-term complications of sepsis on behalf of the Global Sepsis Alliance, The World Health Assembly of the World Health Organization noted that Dr. Iwashyna’s scientific work played a “direct role in informing the WHA resolution...” and was “the most robust in terms of documenting the sequelae of critical illness with proper accounting for premorbid state.” Dr. Iwashyna continues to lead a team of talented researchers working to expand our knowledge of mortality associated with sepsis. His concept to structure the study of, and clinical approach to, survivorship and recovery after critical illness influenced the randomized clinical trial (RCT) NHLBI-funded Prevention and Early Treatment of Acute Lung Injury (PETAL) network and Dr. Iwashyna now leads the nationwide follow-up for that RCT through the Follow Up Neuropsychiatric and Cognitive Teaching Intensive Care Outcomes Nexus (FUNCTION). He has developed international collaborations with colleagues in Australia, Scotland, France, and Canada to explore specific mechanisms that lead patients to stay in the ICU for prolonged periods of time. He was approached by the International Consensus Conference to design an analytical plan which resulted in the new Sepsis 3 “Quick SOFA score” and his expertise was sought by New York State to evaluate and provide feedback on their methodology to improving sepsis care. Through his role at the Veterans Affairs, he is leading a new initiative set forth by the CDC to estimate the burden of sepsis nationally and develop a system to document these incidents electronically so the information can be shared on a national level.

Recent and Significant Publications:

Liu V, Escobar GJ, Greene JD, Soule J, Whippy A, Angus DC, Iwashyna TJ: Hospital deaths in patients with sepsis from two independent cohorts. *JAMA* 312:90-92, 2014.

Iwashyna TJ, Burke JF, Sussman JB, Prescott HC, Hayward RA, Angus DC: Implications of heterogeneity of treatment effect for reporting and analysis of randomized trials in critical care. *Am J Resp Crit Care Med* 192:1045-1051, 2015.

Miller MA, Govindan S, Watson SR, Hyzy RC, Iwashyna TJ: ABCDE, but in that order? A cross-sectional survey of Michigan ICU sedation, delirium and early mobility practices. *Annals Am Thoracic Soc* 12:1066-1071, 2015.

Prescott HC, Osterholzer JJ, Langa KM, Angus DC, Iwashyna TJ: Late mortality after sepsis: A propensity-matched cohort study. *BMJ* 353:i2375, 2016.

Iwashyna TJ, Hodgson CL, Pilcher D, Bailey M, van Lint A, Chavan S, Bellomo R: Timing of onset and burden of persistent critical illness: A retrospective population-based observational study. *Lancet Resp Med* 2016; 4:566-573, 2016.

Service: Dr. Iwashyna is a health services researcher with a strong interest in long-term adverse cognitive and disability consequences of sepsis. He earned his Ph.D. in health and public policy, which has provided him with the training and expertise to address leading public health problems through analysis, implementation and evaluation of public health policies. Dr. Iwashyna has designed several long-term outcomes assessments for clinical trials related to critical illnesses, as well as studies designed to promote ICU survivorship. He helped found the Australia and New Zealand Intensive Care Society long-term outcomes working group and was a member of the 2016 Brussels Round Table on consequences of critical care. His expertise is recognized through several leadership roles which include his service as the associate editor and now innovation editor for the *Annals of American Thoracic Society*. He actively participates in the Society of Critical Care Medicine's THRIVE initiative aimed at collaborating internationally for policy change on managing survivorship after sepsis. Dr. Iwashyna chairs the Advisory Council for the Inpatient Evaluation Center and leads the Clinical Management Research Core at the VA Ann Arbor Healthcare System. He is heavily involved in the IHPI Clinical Scholars program at the University of Michigan, currently leading a group charged with designing a data and computer core.

External Reviewers:

Reviewer A: "He is sought after by many people at other institutions because he is so capable with his methodologies, hardworking, productive, insightful, and inspiring to work with. The quality of his research is consistently of the highest caliber, and his work has had a very substantial impact on our field. A second very impressive aspect of Jack's curriculum vitae is his grant support. He lists nine currently active grants. A third very impressive aspect of Jack's curriculum vitae is his list of post-doctoral fellows since 2008. Jack lists 18 mentees who were fellows. I recognize the names of many of these because they have continued on to make important contributions in our field of critical care....Jack is at the University of Michigan, one of our best institutions and one where the expectations for promotion are so high. In relation to the question how to evaluate Jack's standing in relation to others in his peer group, he is at the top."

Reviewer B: "He is widely respected for the methodological rigor and meticulous analysis he and his team apply to their research efforts. His significant contributions represent a quantum enhancement for the discipline far beyond his years in academic medicine. Dr. Iwashyna's academic output, publication history and scientific impact is quite simply, extraordinary. He has been a leader in the ongoing national efforts to achieve gender parity and enhanced representation in professional society guideline and statement panels. His admirable and tireless efforts with colleagues are yielding important changes....When considered in aggregate, Dr. Iwashyna is a highly accomplished and internationally acclaimed clinical expert in critical care health services, epidemiology and quality of care."

Reviewer C: "Dr. Iwashyna's work is nationally and internationally recognized, and he is a collaborator with many groups around the world....he has conducted independent investigator initiated research, as well as led trans-institutional large-scale investigations that have required work together with investigators worldwide. He is able to marry multiple disciplines...as well as provide important leadership...nationally and internationally in bringing together clinicians and scientists to study the impact of critical illness. His trajectory is most remarkable... ..he has mentored several junior investigators who have had first author publications in high impact

journals... He has been an important part of the national and international networks...providing a very fertile training environment for the next generation of health services researchers.”

Reviewer D: “In addition to his emerging high profile in Critical Care Medicine literature, Jack was a sought after speaker and contributor at these meetings and left an indelible impression on delegates and colleagues....speaking on the extension of critical illness beyond the ICU and this became a key area of expertise for which he is recognised [sic] as a world leader. These extend to his published and current work in long-term physical and neuropsychiatric outcomes – fields where he is regarded as a leading world expert. ...I would regard the leading papers in his submitted CV as outstanding, particularly his paper in BJM on late mortality after sepsis.”

Reviewer E: “His record of publication and grant funding is outstanding and he has had highly impactful publications in top journals such as JAMA and the NEJM. His national reputation was established many years ago and he is clearly also an international expert in his field, as evidenced by an astonishing number of international talks and numerous invitations to serve on study sections. He has an outstanding record of mentoring and teaching. He is an asset on committees because of his demeanor and intelligence.”

Summary of Recommendation:

Dr. Iwashyna is truly an exceptional researcher and leader in the field of cognitive and neuropsychiatric outcomes after critical illness. His ability to form strong national and international collaborations and his dedication to critical care and health policy is unrivaled. Dr. Iwashyna’s track record of success makes him a strongly sought after mentor. His reputation as a thoughtful leader has long been established and will continue to gain personal recognition and recognition for the University of Michigan. It is for these reasons that I recommend Theodore J. Iwashyna, M.D., Ph.D. for promotion to professor of internal medicine, with tenure, Department of Internal Medicine, Medical School.



Marschall S. Runge, M.D., Ph.D.
Executive Vice President for Medical Affairs
Dean, Medical School

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