

PROMOTION RECOMMENDATION

The University of Michigan  
School of Public Health  
College of Engineering

David W. Hutton, associate professor of health management and policy, with tenure, associate professor of global public health, without tenure, School of Public Health, and associate professor of industrial and operations engineering, without tenure, College of Engineering, is recommended for promotion to professor of health management and policy, with tenure, professor of global public health, without tenure, School of Public Health, and professor of industrial and operations engineering, without tenure, College of Engineering.

Academic Degrees:

Ph.D.	2010	Stanford University, Stanford, CA
M.S.	1999	Stanford University, Stanford, CA
B.A.	1998	Stanford University, Stanford, CA
B.S.	1998	Stanford University, Stanford, CA

Professional Record:

2021 - Present	Associate Chair, Department of Health Management and Policy, School of Public Health, University of Michigan, Ann Arbor, MI
2018 - Present	Associate Professor of Global Public Health, School of Public Health, University of Michigan, Ann Arbor, MI
2016 - Present	Associate Professor, Department of Health Management and Policy, School of Public Health, University of Michigan, Ann Arbor, MI
2016 - Present	Associate Professor, Department of Industrial and Operations Engineering, College of Engineering, University of Michigan, Ann Arbor, MI
2016 - 2018	Visiting Professor, West China Hospital Biomedical Big Data Center, Sichuan University, Chengdu City, Sichuan Province, China
2010 - 2016	Assistant Professor, Department of Industrial and Operations Engineering, College of Engineering, University of Michigan, Ann Arbor, MI
2010 - 2016	John G. Searle Assistant Professor, Department of Health Management and Policy, School of Public Health, University of Michigan, Ann Arbor, MI

Summary of Evaluation:

Teaching: Professor Hutton has a strong teaching record, with Q1 evaluations averaging 4.21 and Q2 evaluations averaging 4.57 across his courses. Notably, he received his highest ratings (4.83 and 4.95) in large core courses. In 2017, he was nominated for the Golden Apple Award for teaching at the University of Michigan. He has taught a number of core courses in the Department of Health Policy and Management including core courses in the residential master's program (HMP610) and Ph.D. program (HMP805) as well as elective courses in both programs (HMP654, 655, 680, and 835). Based on his expertise and student interest in the topic, he developed a new course, "Pandemic Policy," in Fall 2020, which was timely and well-received. In addition to teaching for the university, Professor Hutton has also taught short-courses and workshops for the Society for Medical Decision Making and the World Health Organization (WHO).

Professor Hutton is a significant mentor and advisor to students and other trainees. He has mentored and co-authored papers with 24 trainees since his promotion to associate professor, including

undergraduates, Ph.D. students, medical trainees, and post-doctoral fellows. In addition to research mentorship, each year Professor Hutton also advises a large number of master's students in the Department of Health Management and Policy's two professional master's degree programs

Research: Professor Hutton is a leading cost-effectiveness and decision sciences researcher and has had a significant impact on health policy and public health practice. His work has focused on the cost-effectiveness and economic impact of vaccines, evaluation of ophthalmological interventions and the health policy implications related to hepatitis B. He combines his engineering background with methodologically rigorous health economics and cost-effectiveness models and his understanding of decision science to study important policy and clinical questions. His work with the Centers for Disease Control and Prevention (CDC) and the Department of Health and Human Services directly informed CDC immunization practice policies and Medicare's vaccination investments.

Professor Hutton has a total of 101 peer-reviewed publications, with 62 of those coming in 2017 or later after he was promoted to associate professor, averaging approximately 10-12 publications per year. Moreover, many of his publications are in high-impact journals like *Vaccine*, *Health Affairs*, *Journal for the American Medical Association (JAMA)*, and *American Journal of Public Health*. Professor Hutton's areas of expertise became very timely in recent years. According to his Google Scholar profile, since 2017 his work has been cited 5,628 times (out of a 7,126 career total) and his h-index is 28. Professor Hutton currently has 5-10% effort as a co-investigator on three large federal grants. Since 2016, he has obtained one assignment with the Department of Health and Human Services as the principal investigator (PI) and completed another as the PI from the CDC titled "Joint Initiative in Vaccine Economics 5," which he began as an assistant professor. He also served as the PI for a two month small grant from the WHO for which he evaluated international hepatitis B costing and cost-effectiveness and led a workshop.

#### Recent and Significant Publications:

- Harvey, M.J., Prosser, L.A., Messonnier, M.L., Hutton, D.W. (2016) Hitting the Optimal Vaccination Percentage and the Risks of Error: Why to Miss Right. *PLoS ONE* 11(6): e0156737. doi:10.1371/journal.pone.0156737. PMID: 27332996; PMCID: PMC4917240.
- Hutton, D.W., Rose, A., Singer, D.C., Bridges, C.B., Kim, D., Pike, J., Prosser, L.A. (2019) Importance of reasons for stocking adult vaccines. *Am J Manag Care*. Nov 1;25(11):e334-e341. PMID: 31747238; PMCID: PMC9004468.
- Hutton, D.W., Stein, J.D., Bressler, N.M., Jampol, L.M., Browning, D., Glassman, A.R., Diabetic Retinopathy Clinical Research Network. (2017) Cost-effectiveness of Intravitreal Ranibizumab Compared With Panretinal Photocoagulation for Proliferative Diabetic Retinopathy: Secondary Analysis From a Diabetic Retinopathy Clinical Research Network Randomized Clinical Trial. *JAMA Ophthalmol*. Jun 1;135(6):576-584. doi: 10.1001/jamaophthalmol.2017.0837. PMID: 28492920; PMCID: PMC5540054.
- Steimle, L.N., Havumaki, J., Eisenberg, M.C., Eisenberg, J.N.S., Prosser, L.A., Pike, J., Ortega-Sanchez, I.R., Mattison, C.P., Hall, A.J., Steele, M.K., Lopman, B.A., Hutton, D.W. (2021) Cost-effectiveness of pediatric norovirus vaccination in daycare settings. *Vaccine*. Apr 8;39(15):2133-2145. doi: 10.1016/j.vaccine.2021.02.066. Epub 2021 Mar 23. PMID: 33741192; PMCID: PMC8656173.
- Toy, M., Hutton, D., Harris, A.M., Nelson, N., Salomon, J.A., So, S. (2022) Cost-Effectiveness of 1-Time Universal Screening for Chronic Hepatitis B Infection in Adults in the United States. *Clin Infect Dis*. Jan 29;74(2):210-217. doi: 10.1093/cid/ciab405. PMID: 33956937.

Service: Professor Hutton's internal and external service contributions are varied and commensurate with what is expected of an associate professor. He has taken on leadership tasks in his department, including currently serving as an associate chair, and previously chairing the residential master's committee and serving as interim program director of the residential master's program. Professor Hutton led accreditation efforts for the Department of Health Management and Policy with the Commission on Accreditation of Healthcare Management Education. He has also served on university committees for COVID advice and for the Detroit Center for Innovation. He is a prolific ad hoc reviewer for journals. He is an associate editor for *Healthcare Management Science*, serves on the editorial board of two field journals: *Medical Decision Making* and *Medical Decision Making Policy and Practice*, and was a guest editor for *PLOS ONE*. He was a reviewer for the Society for Medical Decision Making's COVID grants, a reviewer for the Society for Medical Decision Making Lee Lusted Student Research Prize, and a reviewer for the INFORMS Pierskalla Prize. Professor Hutton has also served as a consultant for the WHO, including participating on the leadership team for their 2019 workshop on development of costed action plans for viral hepatitis in South-East Asia Region. During the height of the COVID-19 pandemic, Professor Hutton worked with the Department of Health and Human Services on an Intergovernmental Personnel Act project evaluating vaccine economics.

External Reviewers:

Reviewer A: "Dr. Hutton has a very impressive history of research accomplishments since his appointment. He already has an international reputation for his scholarly work; his links to decision makers at the CDC and WHO are particularly impressive as is the direct policy relevance of his work. His accomplishments in publication and impact are greater than other scientists at a similar stage in their career, although his funding accomplishments are slightly less."

Reviewer B: "Dr. Hutton has made enormous progress in the seven years since I last formally reviewed his work and is poised to continue to make important and substantive contributions to the lines of research in which he is working, likely to new lines of research given his strong and repeatedly demonstrated collaborative capacity, and continue to contribute to the University of Michigan School of Public Health community and to his profession... He would be considered a valuable asset at the...if he were here at [my institution]."

Reviewer C: "In summary, Dr. Hutton is a leader in the field of public health decision making. His research is innovative and relevant, and he is active in teaching, mentoring, and service activities. I give my unconditional recommendation for David Hutton, Ph.D., for promotion to professor with tenure in the Department of Health Management and Policy."

Reviewer D: "The methods represented in his model-based cost-effectiveness analyses adhere to good practice recommendations, incorporating parameter uncertainty, and extensive sensitivity and scenario analyses...his work and that of his mentees is increasingly innovative as it evolves to address questions of broader health policy interest...What sets Dr. Hutton apart is his serving as PI of a cooperative agreement with the CDC, which has led to a new CDC cooperative agreement in collaboration with Stanford. I believe that more than any other factor is a testament to his technical skills and collaborative nature...I believe that Dr. Hutton demonstrates excellence in research, teaching, and service, the three areas that are considered for promotion to professor."

Reviewer E: "Professor Hutton's scholarly activity addresses timely and important public health challenges in the U.S. and globally. His extensive work on vaccine economics since his promotion to associate professor is particularly relevant in the current policy environment...Dr. Hutton's peer

group includes the best scholars conducting clinically applied health services research using the tools of decision science... Dr. Hutton ranks equally among these peers, each of whom is a national or international leader in the field.”

Summary of Recommendation: Professor Hutton has a very good research record in the field of cost-effectiveness and decision sciences with significant impact on policy and practice. He has an excellent teaching record and a strong record in service. It is with the support of the School of Public Health Executive Committee that I recommend David W. Hutton for promotion to professor of health management and policy, with tenure, professor of global public health, without tenure, School of Public Health, and professor of industrial and operations engineering, without tenure, College of Engineering.



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F. DuBois Bowman, Ph.D.  
Dean, School of Public Health

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Alec D. Gallimore, Ph.D.  
Robert J. Vlasic Dean of Engineering  
College of Engineering

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