

Adam Joseph VanDeusen

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EDUCATION

University of Michigan, Ann Arbor, MI

2017-2021

PhD, Industrial & Operations Engineering

Dissertation: "An Industrial Engineering-Based Approach to Designing and Evaluating Healthcare Systems to Improve Veteran Access to Care"

Advisor: Amy Cohn, PhD

Yale School of Public Health, New Haven, CT

2011-2013

MPH, Chronic Disease Epidemiology

Master's Thesis: "Cost-Effectiveness of Antiretroviral Therapy Regimens for HIV-Positive Pregnant Women in Ghana: A Case for Option B-Plus"

Thesis Advisors: Elisa Long, PhD, Elijah Paintsil, MD, and A. David Paltiel, PhD

University of Michigan, Ann Arbor, MI

2006-2010

BSE, Industrial & Operations Engineering

Graduated *cum laude*, minor in Music

PROFESSIONAL EXPERIENCE

Department of Veterans Affairs, Ann Arbor, MI

2024-present

Health Science Specialist, Center for Clinical Management Research

University of Michigan, Ann Arbor, MI

2024-present

Intermittent Lecturer, Industrial and Operations Engineering

Indiana University Kelley School of Business, Bloomington, IN

2021-2024

Clinical Assistant Professor, Operations and Decision Technologies

Mayo Clinic, Rochester, MN

2015-2017

Health Systems Engineer, Management Engineering & Internal Consulting

Instructor, Health Care Systems Engineering, Mayo Clinic College of Medicine

The Health Management Academy, Arlington, VA

2013-2015

Senior Director, Clinical Forums & Physician Leadership Program

TEACHING EXPERIENCE

University of Michigan College of Engineering

Introduction to Engineering, Section Focus: *Curing the Healthcare System* (ENGR 100)

WI26

Probability and Statistics for Engineers (IOE 265)

WI25

Economic Decision Making (IOE 201)

FA19

Indiana University Kelley School of Business

Quantitative Analysis (BUKD-C520)

SU22, WI21, SU24

Supply Chain Management with Digital Technologies (BUS-P319)

SP24

Supply Chain Operations (BUS-P509)	SP23, SP24
Supply Chain Management & Technologies (BUS-P561)	SP23, SP24
Introduction to Operations Management (BUS-P300)	SP22, FA22, SP23, FA23
Supply Chain Analytics (BUKD-E732)	FA22, FA23
Introduction to Spreadsheet Modeling (BUS-K507)	FA22, FA23
Technology and Business Analysis (BUS-K303)	FA21

University of Michigan School of Public Health

Operations Research and Control Systems (HMP 654), <i>Graduate Student Instructor</i>	FA20
Data Management in Health Care (HMP 553), <i>Graduate Student Instructor</i>	WI20

Department of Management Engineering & Consulting, Mayo Clinic

Orientation to Healthcare, <i>Course Developer & Instructor</i>	2015-2017
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Yale School of Public Health

Introduction to Statistical Teaching I & II (BIS 505a & 505b), <i>Teaching Fellow</i>	FA12, SP13
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Yale College/Yale Graduate School of Arts & Sciences

Stochastic Modeling in Decision Making (OPRS 237), <i>Teaching Fellow</i>	FA11
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PUBLICATIONS

VanDeusen, A., Maa, A., Cohn, A. Designing Hierarchical Networks to Improve Patient Access to Care: A Case Study in Veteran Eye Care. *J Def Model Simul.* 2022;19(4):679-689. doi:10.1177/15485129211021167

VanDeusen, A., Pasupathy, K.S., Huschka, T.R., Heaton, H.A., Hellmich, T.R., Sir, M.Y. Extended Patient Alone Time in Emergency Department Leads to Increased Risk of 30-Day Hospitalization. *J Patient Saf.* 2021; 17(8): e1458-e1464. doi: 10.1097/PTS.0000000000000545

VanDeusen, A., Paintsil, E., Agyarko-Poku, T., Long, E.F. Cost effectiveness of option B plus for prevention of mother-to-child transmission of HIV in resource-limited countries: evidence from Kumasi, Ghana. *BMC Infect Dis.* 2015; 15:130. doi: 10.1186/s12879-015-0859-2

PEER-REVIEWED CONFERENCE PROCEEDINGS

VanDeusen, A., Liao, C., Venkat, A., Cohn, A., Kurlander, J., Saini, S. Evaluating Patient Triage Strategies for Non-Emergency Outpatient Procedures Under Reduced Capacity Due to the COVID-19 Pandemic. *Proceedings of the 2020 Winter Simulation Conference*

VanDeusen, A., Zacharek, N., Springer, E., Venkat, A., Cohn, A., Adams, M., Kurlander, J., Saini, S. Discrete-Event Simulation with Consideration for Patient Preference when Scheduling Specialty Telehealth Appointments. *Proceedings of the 2020 Winter Simulation Conference*

PRESENTATIONS

VanDeusen, A., Saini, S., Gawron, A., Dominitz, J., Cohn, A., Hofer, T., Kerr, E., Kurlander, J. "Working Smarter Not Harder: Using Simulation to Evaluate Evidence-Based Strategies to Offload Endoscopy Backlogs Related to COVID-19." Oral Presentation, Digestive Disease Week, Virtual, 2021

VanDeusen, A., and Cohn, A. "Using Simulation to Inform Policy Decisions to Improve Access to Healthcare." Oral Presentation, INFORMS Annual Meeting, Virtual, 2020

VanDeusen, A. “Developing and Analyzing Hierarchical Healthcare Networks to Improve Access.” Oral Presentation, Data for Public Good Symposium, Ann Arbor, MI, 2020

VanDeusen, A., Saini, S., Adams, M., Kurlander, J., Cohn, A. “Using Simulation to Evaluate Scheduling Policies for Specialty Care to Consider Patient Preferences.” Oral Presentation, INFORMS Annual Meeting, Seattle, WA, 2019

VanDeusen, A., Maa, A., Cohn, A. “Evaluating Screening and Care of Diabetic Retinopathy in Veterans Using Mixed-Integer Programming and Simulation.” Oral Presentation, INFORMS Annual Meeting, Seattle, WA, 2019

VanDeusen, A., Hirth, L., Cohn, A., Ramaswamy, V., Nalliah, R.P., Murdoch-Kinch, C.A. “Evaluating Dental School Faculty Staffing and Clinical Supervision Using Simulation.” American Dental Education Association Annual Session and Exhibition, Chicago, IL, 2019

VanDeusen, A., Maa, A., Cohn, A. “Improving Veteran Access to Eye Care Using Facility Location Models.” Oral Presentation, Health Systems Process Improvement Conference, San Antonio, TX, 2019

VanDeusen, A., Maa, A., Cohn, A. “Evaluating Veteran Access to Eye Care Using Facility Location Models.” Oral Presentation, INFORMS Annual Meeting, Phoenix, AZ, 2018

VanDeusen, A., Parikh, S., Riba, M., Harrington, A., Garcia-Tosi, R., Greden, J. “Collaborating with Employers for Evidence-Based Workplace Mental Health Programs.” Poster Presentation, National Network of Depression Centers, Baltimore, MD, 2018

VanDeusen, A., Maa, A., Cohn, A. “Applying Systems Engineering Methods to Address Healthcare Access.” Oral Presentation, Health Systems Process Improvement Conference, Atlanta, GA, 2018

VanDeusen, A., Paintsil, E., Agyarko-Poku, T., Long, E.F. “A Case for Adopting Option B Plus for Prevention of Mother-to-Child Transmission of HIV in Resource-Limited Countries: Evidence from Kumasi, Ghana.” Oral Presentation, Pediatric Academic Societies Annual Meeting, Washington, DC, 2013

VanDeusen, A., Paintsil, E., Agyarko-Poku, T., Long, E.F. “Cost-effectiveness of Expanded HIV Treatment among Pregnant Women in Ghana.” Oral Presentation, INFORMS Annual Meeting, Phoenix, AZ, 2012

INVITED COMMUNITY PRESENTATIONS

“Simulation in Healthcare: Practical Design for Clinical Collaboration.” University of Michigan IOE 574 (*Simulation Design and Analysis*). Ann Arbor, MI 2019

“Systems Engineering and Ophthalmologic Telemedicine: Preventing Blindness.” University of Michigan IOE 813 (*Seminar in Healthcare Systems Engineering*). Ann Arbor, MI, 2018

“Analyzing Access to Healthcare with Operations Research Tools.” Research Education and Activities for Classroom Teachers (REACT), Ann Arbor, MI, 2018

“Applied Decision Analysis: Cost-Effectiveness of Antiretroviral Therapy Regimens for HIV-Positive Pregnant Women in Ghana.” University of Michigan IOE 460 (*Decision Analysis*), Ann Arbor, MI, 2017

HONORS AND AWARDS

Joel and Lorraine Brown Graduate Student Instructor Award, University of Michigan	2019
Seth Bonder Fellowship, University of Michigan	2018
Health Services Research Summer Fellowship, Institute for Healthcare Policy & Innovation	2018
Student Research Award, American Pediatric Association	2013
Volunteer of the Year, Unite For Sight	2013
Wilbur G. Downs International Health Research Fellowship, Yale University	2012
Second Place Poster, University of Michigan Student Global Health Day	2010
Carl J. Grapentine Scholarship, Michigan Marching Band	2009
University of Michigan Regents Merit Scholarship	2006

FUNDING

Scholarship of Teaching and Learning Exploratory Grant, Indiana University Center for Innovative Teaching and Learning	2022
Rackham Conference Travel Grant, University of Michigan (received annually)	2017-2020
Seth Bonder Fellowship, University of Michigan	2018
Rackham Funding for University of Michigan Summer Session in Epidemiology	2018
IHPI Health Services Research Fellowship, University of Michigan	2018
Wilbur G. Downs International Health Research Fellowship, Yale University	2012

PROFESSIONAL MEMBERSHIPS

Institute for Operations Research & Management Sciences (INFORMS)	2017-present
Early Career Teaching Network	2022
American Statistical Association (ASA), Twin Cities Chapter	2015-2017

COMMUNITY & CAMPUS INVOLVEMENT

Volunteer Tax Preparer Accounting Aid Society	2025-present
Volunteer Ann Arbor District Library	2024-present
Undergraduate Assurance of Learning Committee Kelley School of Business, Indiana University	2023-2024

Mathematical Modeling Common Ground Subcommittee Indiana University General Education Committee	2023-2024
Libraries Committee	2023-2024
International Affairs Committee Indiana University-Bloomington Faculty Council	2022-2023
Scholarship of Teaching & Learning Faculty Learning Community Indiana University Center for Innovative Teaching and Learning	2021-2022
Hometown Alumni Involvement Link University of Michigan College of Engineering	2015-2022
INFORMS at the University of Michigan	2017-2021
Past President	2020
President	2019
Vice President & Treasurer	2018
<i>Chapter received the INFORMS <u>Summa cum laude</u> Chapter Award in 2019, 2020, and 2021</i>	
University of Michigan Mentorship Program Graduate Student Mentor	2019
Research Policies Committee University of Michigan Faculty Senate Assembly	2017-2019