

# Adam Joseph VanDeusen

1205 Beal Ave., Ann Arbor, MI 48109

(810) 334-0028

[ajvandeu@umich.edu](mailto:ajvandeu@umich.edu)

## EDUCATION

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**PhD, Industrial & Operations Engineering** 2017-present

University of Michigan, Ann Arbor, MI

Advisor: Amy Cohn, PhD

**MPH, Chronic Disease Epidemiology** 2011-2013

Yale School of Public Health, New Haven, CT

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

**BSE, Industrial & Operations Engineering** 2006-2010

University of Michigan, Ann Arbor, MI

Graduated *cum laude*, minor in Music

## PROFESSIONAL EXPERIENCE

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**Mayo Clinic, Rochester, MN** 2015-2017

*Health Systems Engineer, Management Engineering & Internal Consulting*

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

- Engaged with Mayo Clinic research arm on projects including reducing 30-day readmissions of pediatric patients, increasing net operating income through optimal selection of clinical trials, and expediting data sharing in pharmacogenomics studies.
- Designed research billing workflows for use across the enterprise and managed provider content for pediatric specialty departments as a member of Mayo Clinic's Epic implementation/electronic medical record convergence team.

**The Health Management Academy, Alexandria, VA** 2013-2015

*Senior Director, Clinical Forums & Physician Leadership Program*

- Curated strategy and operations content for meetings of Chief Medical Officers and oncology executives from the nation's leading systems of integrated hospitals and healthcare facilities.
- Developed and led a new program that provided experiential leadership education to high-potential physicians from health systems across the country. The program provided in-depth training for physician students on topics including health policy, health finance, and leading change.

## TEACHING EXPERIENCE

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**Operations Research and Control Systems (HMP 654), Graduate Student Instructor** 2020

School of Public Health, University of Michigan

**Data Management in Health Care (HMP 553), Graduate Student Instructor** 2020

School of Public Health, University of Michigan

<b>Economic Decision Making (IOE 201), Course Instructor</b> College of Engineering, University of Michigan	2019
<b>Orientation to Healthcare, Course Developer &amp; Instructor</b> Department of Management Engineering & Internal Consulting, Mayo Clinic	2015-2017
<b>Introduction to Statistical Thinking I &amp; II (BIS 505a &amp; 505b), Teaching Fellow</b> Yale School of Public Health	2012-2013
<b>Stochastic Modeling in Decision Making (OPRS 237), Teaching Fellow</b> Yale College/Yale Graduate School of Arts & Sciences	2011

## PUBLICATIONS

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**VanDeusen, A.J.**, 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.* 2018. EPub Ahead of Print. 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.

## PEER-REVIEWED CONFERENCE PROCEEDINGS

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**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 (Accepted).*

## PRESENTATIONS

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**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

Buechler, T., Gross, T., Meyer, T., Milburn, A., McGarry, K., Harris, P., Sogla, C., Mielke, C., Swenson, L., Hegard, T., Freet, J., Clark, S., Moore, M., Ingram, T., **VanDeusen, A.,** Botz, C., Berninger, D. “Reducing Hospital Length of Stay through Development of Standardized and Translatable Discharge Processes.” Poster Presentation, Mayo Clinic Quality Conference, Rochester, MN, 2017

**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

**VanDeusen, A.,** Tamarelli, C., Misra A., Weist, M. “Assessing Technological Needs of Nicaraguan Maternal Health Clinics.” Poster Presentation, University of Michigan Student Global Health Day, Ann Arbor, MI, 2010

## INVITED COMMUNITY PRESENTATIONS

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“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

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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 and 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 & GRANTS

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Rackham Conference Travel Grant (received annually)	2017-2020
Seth Bonder Fellowship	2018
Rackham Funding for University of Michigan Summer Session in Epidemiology	2018
IHPI Health Services Research Fellowship	2018
Wilbur G. Downs International Health Research Fellowship	2012

## PROFESSIONAL MEMBERSHIPS

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Institute for Operations Research & Management Science (INFORMS)	2017-present
American Statistical Association (ASA), Twin Cities Chapter	2015-2017

## COMMUNITY & CAMPUS INVOLVEMENT

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<b>INFORMS at the University of Michigan</b>	2017-present
President	2019
Vice President & Treasurer	2018
<i>Chapter received the INFORMS Summa cum laude Chapter Award in 2019</i>	
<b>Hometown Alumni Involvement Link, U-M College of Engineering</b>	2015-present
<b>University of Michigan Mentorship Program</b>	2019
Graduate Student Mentor	
<b>University of Michigan Library Student Advisory Group</b>	2018-2019
<b>University of Michigan Faculty Senate Assembly</b>	
Graduate Student Representative, Research Policies Committee	2017-2019
<b>Department of Management Engineering &amp; Internal Consulting, Mayo Clinic</b>	
Mentor, New Hire Mentorship Program	2016-2017
Member, Applied Analytics Expert Group	2016-2017
<b>The Health Management Academy</b>	
Mentor, New Employee Peer Mentorship Program	2014-2015
<b>Unite For Sight</b>	
Session Coordinator, Global Health & Innovation Conference	2012-2013
Global Impact Corps Volunteer (Accra, Ghana)	2012
Chair, University of Michigan Chapter	2009-2010
Director of Elementary Education, University of Michigan Chapter	2008-2009
<b>Yale Healthcare Conference</b>	
Chair, Logistics	2012-2013
<b>HAVEN Free Clinic</b>	
Director, IT & Communications	2012