

ABDULLAH I. ALIBRAHIM, Ph.D.

Assistant Professor, Industrial & Management Systems Engineering, Kuwait University

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EDUCATION

Ph.D. - University of Southern California, Los Angeles, CA, USA <i>Industrial & Systems Engineering - Health Systems Engineering Lab</i>	2013 – 2017
M.S. - University of Southern California, Los Angeles, CA, USA <i>Operations Research Engineering</i>	2014 – 2015
M.S. - University of Wisconsin, Madison, WI, USA <i>Industrial & Systems Engineering</i>	2010 – 2011
B.S. - University of Wisconsin, Madison, WI, USA <i>Industrial & Systems Engineering</i>	2007 – 2010

EXPERIENCE

Kuwait University <i>Assistant Professor, Industrial & Management Systems Engineering, College of Engineering and Petroleum</i>	2017 – Present <i>Kuwait</i>
Harvard University <i>Research Fellow, Middle East Initiative, Kennedy School of Government</i>	2023 – Present <i>Cambridge, MA, USA</i>
London School of Economics and Political Science <i>Research Fellow, Middle East Centre</i>	2019 <i>London, UK</i>
Dasman Diabetes Institute <i>Research Fellow, Geo-Health Lab</i>	2021 – Present <i>Kuwait</i>
Porter Express Logistics Company <i>Member, Board of Directors</i>	2021 – Present <i>Kuwait</i>
Abyat Megastore <i>Consultant, Strategic Operations Department</i>	2021 – 2022 <i>Kuwait</i>
Ministry of Health <i>Consultant, The Office of the Undersecretary of Planning</i>	2021 – 2022 <i>Kuwait</i>

EXPERTISE & PROJECTS

Health Financing and Policy Studies

*Fellow, Middle East Initiative, Kennedy School of Government, **Harvard University** 2023– Present*

- Launched and leading a 2-year research project on comparative health financing in the GCC countries
- Organizing roundtables for stakeholders from the GCC health system and producing 2 publications
- The objectives of the project are to gain transferrable policy lessons and chart contrasting health reform trajectories

*Fellow, **London School of Economics & Political Science** and the **Dasman Diabetes Institute** 2019 – Present*

- Leading studies on the economic burden of diabetes in Kuwait cutting across multiple levels of the healthcare system
- Published 5 papers on quantifying and mitigating the burden of diabetes and non-communicable diseases (NCD) leveraging advanced data analytics approaches
- Studies have influenced strategic objectives at the Ministry of Health and have been used to evaluate and motivate self-management education for patients with NCDs at primary care centers

*Consultant, **Ministry of Health, Kuwait***

2019 – 2020

- Influenced strategic planning initiatives relating to healthcare reimbursement reforms (DRG-based schemes) with the ministry's undersecretary

Computational Modeling for Healthcare Policy

*Ph.D. Researcher, Department of Industrial & Systems Engineering, **University of Southern California** 2013 – 2017*

- Authored 3 papers that explored the dynamics of healthcare competition in the context of collaborative reimbursement models
- Findings inform the design of accountable care organizations and offer a fresh perspective on healthcare markets through a complex adaptive systems lens

Consultant, *London School of Hygiene and Tropical Medicine, COSMIC Project*

2021 – Present

- Managed the agent-based modeling program, led 3 transformative papers (under review), and contributed to 5 notable conference presentations
- Our work sheds new light on the efficiency of financial incentives for healthcare providers, offers innovative methodologies for understanding policy impacts, and paves the way for enhanced evaluation of complex interventions in health systems

Data Analytics and Operations Improvement

Assistant Professor, *Industrial & Management Systems Engineering, Kuwait University*

2017 – Present

- Developed and taught new computational simulation courses at the undergraduate and graduate levels
- Taught Data Analytics (undergraduate and graduate), Decision Science, Engineering Economics, Quality in Healthcare, and Engineering Capstone Courses. Received an average student feedback rating of 95%
- Thesis supervisor for two master's students in the Industrial & Management Systems Engineering Department

Consultant, *Crown Family School of Social Work, Policy, and Practice, University of Chicago*

2021 – Present

- Managed and developed the program's geographically enabled analytics program and published 3 papers and 4 conference presentations
- Our collective insights spotlight disparities in opioid treatment accessibility and underscore the urgency for equitable healthcare solutions in substance use disorder treatment

Principal Investigator, *Team-Based Cancer Care in Kuwait Research Grant, Kuwait University*

2022 – Present

- Spearheaded the conceptualization, development, and successful acquisition of funding for a research initiative aimed at harnessing analytics to galvanize team-based cancer care in Kuwait
- Leveraged advanced data mining techniques to map and analyze pathways of cancer patients within the treatment system
- Findings are being refined and distilled into two high-impact publications and form the foundation for a series of workshops designed to drive care standardization and elevate experiences in the realm of cancer care

Consultant, *Abyat Furniture Megastore*

2021 – 2022

- Developed two business analytics solutions to inform new-item initial order quantity and warehouse efficiency

PUBLICATIONS

Select Peer-Reviewed Journal Publications

- Abdulsalam, Y., **Alibrahim, A.**, & Alhuwail, D. "A Supply Management Perspective on Diabetes Pharmaceutical Costs." *Health Science Reports* 2022 ([link](#))
- **Alibrahim, A.** Al-Ajeel, A., "Noncommunicable Diseases and Hospital Utilization in Kuwait: A Generalizable Approach Using the World Health Survey." *Medical Principles and Practice* ([link](#))
- **Alibrahim, A.**, Marsh, J., Amaro, H., Kong, K., Khachikian, T., Guerrero, E., "Disparities in Expected Driving Time to Opioid Treatment and Treatment Completion: Findings from an Exploratory Study." *BMC Health Services Research* 2022 ([link](#))
- **Alibrahim, A.**, Abdulsalam, Y., Al Mutawa, S., Behbehani, H., Al Jenaei, S., & Alhuwail, D. "Towards Value-Based Healthcare - Establishing Baseline Pharmacy Care Costs for Diabetes Management." *The International Journal of Health Planning and Management* 2021 ([link](#))
- **Alibrahim, A.**, Al Ramadan, D., Johny, S., Alhashemi, M., Alduwaisan, H., Al-Hilal, M. "The Effect of Structured Diabetes Self-Management Education on Type 2 Diabetes Patients Attending a Primary Health Center in Kuwait." *Diabetes Research and Clinical Practice* 2020 ([link](#))
- Guerrero, E. G., **Alibrahim, A.**, Howard, D. L., Wu, S., & D'Aunno, T. "Stability in a Large Drug Treatment System: Examining the Role of Program Size and Performance on Service Discontinuation." *International Journal of Drug Policy* 2020 ([link](#))
- **Alibrahim, A.** & Wu, S. "Modeling Competition in Healthcare Markets as a Complex Adaptive System: An Agent-based Framework." *Health Systems* 2020 ([link](#))
- **Alibrahim, A.**, & Wu, S. "An Agent-based Simulation Model of Patient Choice of Health Care Providers in Accountable Care Organizations." *Health Care Management Science* 2018 ([link](#))

GRANTS

Kuwait Foundation for the Advancement of Science CN2053MM01, Principal Investigator, *Team-Based Cancer Care in Kuwait – Assessing the Cancer Care Continuum*

National Institutes of Health Grant R01 DA038608, Consultant, *Disparities in Substance Use Disorder Treatment Programs*

UK Medical Research Council Grant MR/R013454/1, Consultant, *COSMIC: Using Computer Modeling to Optimise the Design of Health System Programmes*