



## Providing Better Healthcare Through Systems Engineering: Seminars and Discussions

### Improving Access to Medicines in Low- and Middle-Income Countries

*Michael Krautmann, MSE*

Monday November 4 at 4:30PM in 1123 LBME



Proven medicines and technologies already exist to address many of the world's biggest health challenges. But these products are only effective when they can be reliably delivered to the patients who need them, and in many low- and middle-income countries (LMICs), health product supply chains are not as efficient or reliable as they need to be. Patients and providers often lack access to quality, affordable medicines, and health outcomes suffer as a result.

Governments, businesses, multilateral agencies, and nonprofits all play a critical role in LMIC health supply chains, but each have their own unique perspectives, processes, and goals. Improving supply chain performance in this context requires a systems thinking approach, one that combines traditional logistics management and optimization techniques with a more holistic understanding of how to incentivize and align the actions of diverse organizations.

In this session we will explore the William Davidson Institute's work in improving LMIC health supply chain performance, and will highlight lessons and experiences that are applicable in any complex health system environment.

**Michael Krautmann** joined the William Davidson Institute's Healthcare Initiative in 2015. His research and consulting work focuses on modeling, investment decisionmaking, and strategy development to improve the operational efficiency and service levels of public health supply chains. While at WDI Michael has helped develop several Excel tools and white papers that inform key elements of the supply chain design and strategy development process. He has also conducted strategic evaluations of ongoing supply chain programs in several countries, helping client organizations improve their approach for providing technical assistance and delivering health products.

Michael holds master's and bachelor's degrees in Industrial and Operations Engineering from the University of Michigan. Prior to joining WDI, he worked for Lean Care Solutions, a healthcare technology startup that uses predictive analytics to help hospitals improve patient scheduling and postoperative care. He also served as a Peace Corps Volunteer in Zambia, where he helped evaluate clinic-level supply chain practices for a United States Agency for International Development-funded health project.

1123 LBME is room 1123 in the Ann & Robert H. Lurie Biomedical Engineering Building (LBME). The street address is 1101 Beal Avenue. A map and directions are available at: <http://www.bme.umich.edu/about/directions.php>.

This seminar series is presented by the U-M Center for Healthcare Engineering and Patient Safety (CHEPS): Our mission is to improve the safety and quality of healthcare delivery through a multi-disciplinary, systems-engineering approach.

For additional information and to be added to the weekly e-mail for the series, please contact [genekim@umich.edu](mailto:genekim@umich.edu).

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