

# 2018 Zambia



## Characterization of antibiotic use at University Teaching Hospital, Lusaka, Zambia

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### Project Summary

The overall goal of the project was to characterize antimicrobial utilization at the University Teaching Hospital (UTH) in Lusaka, Zambia, to lay the groundwork for optimizing antimicrobial stewardship while establishing a sustainable, international research and learning opportunity for UMB students.

Students traveled to Lusaka during the summer of 2018 to lead an antibiotic-related quality improvement project in the context of designing the framework for implementing and evaluating antimicrobial stewardship in a resource-limited environment. While at UTH, the students participated in daily interprofessional infectious diseases consult rounds to understand the current inpatient antibiotic prescribing practices. The students participated in the adult third-line HIV clinic where they observed the roles of the physicians, pharmacists and nurses in the clinic. The students also provided education to medicine/infectious diseases resident trainees from UTH.

To characterize antibiotic administration practices, the student team conducted a point prevalence study to assess antibiotics administered, including dose, route, and indication, and total antibiotic consumption in medicine wards at UTH. Additionally, the students evaluated a process to quantify antibiotic consumption using the pharmacy inventory system. Results from this project will be used to optimize antibiotic use in resource-limited settings as part of antimicrobial stewardship efforts at UTH.

## **Reflections**

"We are grateful of CGEI for this opportunity. Working with the trainees, other faculty and staff both at UMB and UTH is a humbling experience and without a doubt a bilateral learning structure. UMB strives to ensure all students are introduced and practice interprofessionalism, and it is amazing to see our trainees take their skills and apply them in a setting that is brand new for them." — Dr. Emily Heil