## **Antibiotic Stewardship Report - Prescriber B**

Houston Methodist Hospital (HMH) Antimicrobial Stewardship Team 2024 ID Prescriber Data at Houston Methodist Hospital

### **Background**

The 2019 CDC Core Elements of Hospital Antibiotic Stewardship recognizes prospective audit and feedback as a core element of an antibiotic stewardship program. Similarly, the 2007 IDSA/SHEA guidelines emphasize that prospective audit and feedback form the foundation of a stewardship program.

#### What is included in this report?

The HMH Antimicrobial Stewardship Team has reviewed your individual antibiotic prescribing patterns, including:

- duration of therapy (measured via Days of Therapy)
- spectrum of activity (measured via Days of Antibiotic Spectrum Therapy as described on next page)
  - de-identified comparison to other ID prescribers at HMH

Patient volume (number of unique encounters) and acuity (Case Mix Index) were also incorporated to present a comprehensive picture. Prescribers within the ellipse represent inliers of typical prescribing patterns among your peers.

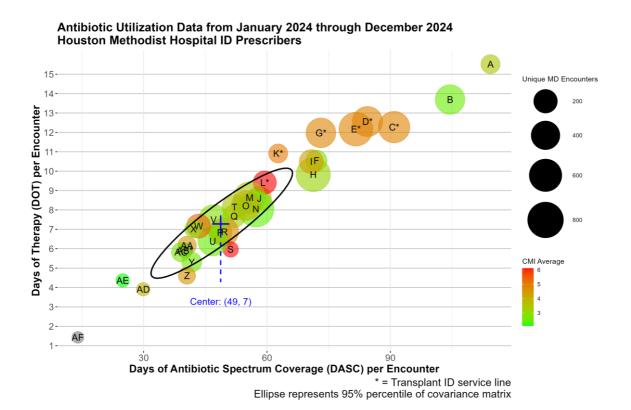
Please, take a moment to review the information in this document for assess your antibiotic utilization performance and prescribing habits.

### Using Spectrum Score to help assess antibiotic utilization

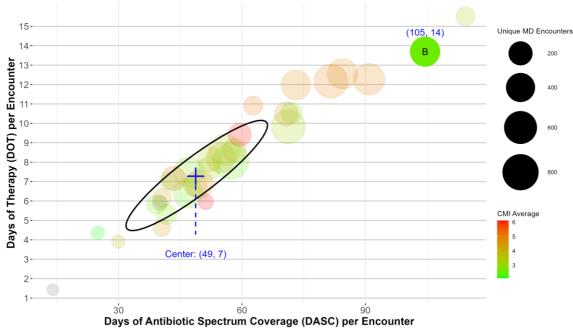
Spectrum scores are a relatively novel metric for assessing the appropriateness of antibiotic utilization and address some limitations of traditional metrics. These scoring systems aim to objectively quantify antibiotic activity based on the spectrum of activity against common pathogens. Higher scores represent broader antibiotic utilization.

In this report, we have further optimized the Days of Antibiotic Spectrum Coverage (DASC) score described by Kakiuchi et al. (Clinical Infectious Diseases, 2022), to provide a more meaningful assessment in the context of inpatient antibiotic stewardship at Houston Methodist Hospital.

Please see below graph for a peer comparison visual of the prescribing habits of all the ID prescribers at HMH in the 2024 year where the x-axis is the spectrum of activity prescribed and the y-axis is the duration prescribed.



# Antibiotic Utilization Data from January 2024 through December 2024 Specific Prescriber Report for B



\* = Transplant ID service line Ellipse represents 95% percentile of covariance matrix

#### **Key observations:**

#### You are Prescriber B.

- Your prescribing patterns are an outlier to your peers so you may have opportunities to refine your antibiotic selection. Table 1 highlights antibiotics that contribute most to your spectrum score. Table 2 summarizes your most commonly prescribed antibiotics.
- In 2024, 96.8% of your peers prescribed narrower-spectrum antibiotics than you did.
- In 2024, 96.8% of your peers prescribed shorter days of antibiotic therapy than you did.

Top 5 Antibiotics Contributing to your Antibiotic Spectrum Coverage Score:

Prescriber	Antibiotic	Percentage
В	eravacycline	24.8%
В	meropenem	18.5%
В	cefepime	10.8%
В	linezolid	6.5%
В	ertapenem	5%

Top 5 Antibiotics Contributing to your Days of Therapy (DOT):

Prescriber	Antibiotic	Percentage
В	meropenem	14.8%
В	cefepime	12.9%
В	eravacycline	10.8%
В	linezolid	10.4%
В	metronidazole	8.9%

If you have any questions, feedback, or comments for this report, please reach out to any member of the HMH Antimicrobial Stewardship Team.