**Background**

- Measuring antimicrobial use (AU) is an important component of designing and monitoring antimicrobial stewardship activities.
- As stewardship expands to include long-term care facilities (LTCFs), measuring antimicrobial use data presents many challenges.
- As part of a city-wide initiative to curb Clostridium difficile infection (CDI), LTCF antimicrobial use was obtained from purchasing and dispensing data at a cohort of 3 facilities to determine the best metrics for guiding interventions.

**Purpose**

- To describe the method for obtaining antimicrobial use data from LTCFs, and to determine which AU metric could best guide future interventions.

**Methods**

- Antimicrobial purchasing and patient level data were obtained from each facility in collaboration with the facility pharmacist.
- Defined daily doses (DDDs) were obtained from purchasing and dispensing data at a cohort of 3 facilities to determine which AU metric could best guide future interventions.
- Days of therapy (DOTs) normalized to Defined Daily Doses (DDDs) were calculated from purchasing data as an alternative metric to DOT.
- Days of therapy (DOTs) normalized to 1,000 patient-days were calculated from dispensing data.
- When patient-level data provided indications for the antimicrobials.

**Results**

- Data were obtained from 3 LTCFs in Monroe County, New York.
- The DOTs ranged between 340 and 575 beds, and one was university-affiliated.
- The LTCFs ranged from 250 to 990 patient-days for 2014 from Dispensing Data at 3 LTCFs in Rochester, NY.
- Comparing DOT data among LTCFs shows variation in AU which ranged from 25 to 100 DOTs/1000 patient-days.
- When indications were available, urinary tract infection was the most common indication for the antimicrobials.
- Spikes seen with DDD purchasing data.

**Conclusion**

- Antimicrobial use for LTCFs is best reflected using DOTs to provide a more accurate measure, compared to DDDs which were affected by intermittent bulk purchasing. Moreover, LTCFs have a vulnerable population that doses are commonly adjusted for comorbidities such as renal impairment.
- DOT data allow LTCFs to trend usage over time and more accurately benchmark with other institutions.
- Furthermore, institution-specific information such as indications can be used to devise targeted stewardship interventions.

**DISCLOSURE:** Authors of this presentation have nothing to disclose concerning possible financial or personal relationships with commercial organizations that may have a direct or indirect interest in the subject matter of this presentation.

The project was funded by a grant from the New York State Department of Health.

**REFERENCES**

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**Poster 153**

**Antimicrobial Use for LTCFs**

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