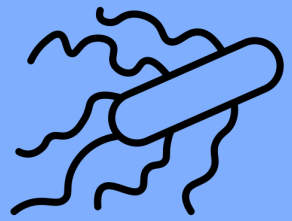
Extended-Spectrum Beta-Lactamase-Producing *Escherichia coli* (ESBL-*E. coli)* causing bacteriuria in a San Francisco Public Healthcare System, 2014-2020

ESBL-*E. coli is* a serious public health threat (CDC 2019)

- Drivers: prior hospitalization and antibiotic use; other factors?
- Increase in ESBL-*E. coli* in overall SF public health care system in prior study

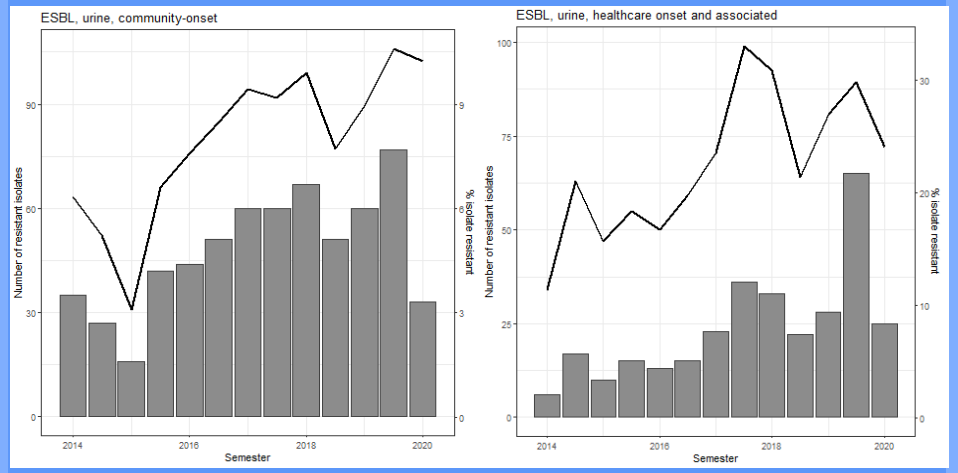


Hypothesis: Increase in ESBL-*E. coli* in various clinical setting

Methods: Electronic health records from outpatients, inpatients, skilled nursing facility residents; Multivariate logistic regressions

Results

Increase in bacteriuria caused by ESBL-*E. coli* per semester



0.91% community-onset

2.38% healthcare-onset/associated

1.08% in outpatients

1.14% in inpatients

1.20% in skilled nursing facility residents

Risk factors for bacteriuria caused by ESBL-*E. coli*

Community-onset:

>65 years OR[CI] = 2.01 [1.21, 3.35]

Male gender OR[CI] = 2.35 [1.73, 3.19]

Latinx race/ethnicity OR[CI] = 1.60 [1.01, 2.51]

Healthcare-onset/associated:

Male gender OR[CI] = 1.80 [1.07, 3.03]

Conclusion

While ESBL-*E. coli* increased in both community-onset and healthcare-onset/associated bacteriuria, there were differences in risk factors suggesting differences in exposures

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E. coli icon by Léa Lortal from the Noun Project