PRESCRIBING PATTERNS IN LONG-TERM CARE FACILITIES

Question

Do antibiotic prescription patterns in longterm care facilities depend on a physician's historical tendencies?

Background

In long-term care settings, antibiotics are often inappropriately prescribed, inappropriately selected or used for too long.

Study

- Retrospective cohort study of all physicians who prescribed to residents in long-term care facilities in Ontario between Jan. 1 and Dec. 31, 2014.
- 1695 physicians prescribed 219 157 antibiotic prescriptions to 93 132 residents.
- Three outcome measures: start of treatment, duration exceeding 7 days, selection of fluoroquinolones.*

 $\label{eq:continuous} {}^{\star} \text{The authors chose fluoroquinolones as a representative class of antibiotics to test whether prescriber-specific tendencies govern the choice of a specific agent.}$

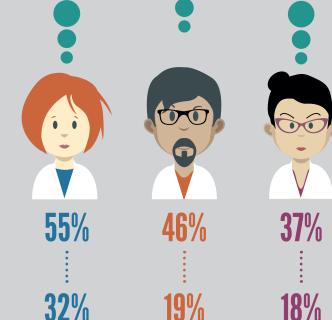
Results

Wide variability in:

Tendency to start treatment with antibiotics

Tendency
to use antibiotics
for prolonged
durations

Tendency to select a **specific class** of antibiotic



Interquartile range (spread of middle values)

Interpretation

- 1. The likelihood of a resident in a long-term care facility being started on an antibiotic, and the likelihood that it will be prolonged in duration or include a fluoroquinolone agent, are all highly dependent on the historical tendencies of the prescribing clinician.
- 2. These tendencies were consistent over time.
- **3.** The quality of prescribing in long-term care facilities could benefit from prescriber-level interventions such as audit and feedback.

