**Supplemetnary Figure Legends**

**Figure S1. Seasonal changes in Abcoccurrence is inversely related to antibiotic resistance rates.** In both panels, values correspond to total Abcisolates identified in each seasonal quarter. Amounts of isolation events per quarter are normalized as a proportion of total events in the corresponding year (solid black lines, left y-axis). Dashed lines plot the quarterly resistance rates against commonly tested intravenous (top panel) and oral (bottom panel) antibiotics. Shaded areas highlight Q3 and Q4.

**Figure S2. Seasonality is exhibited only by Abcclinical isolates that are susceptible to antibiotics, independent of antibiotic class.** Each graph depicts all isolates grouped according to their susceptibility to one antibiotic or antibiotic class. The amount of antibiotic resistant (R) or susceptible (S) isolates occurring in each quarter were normalized as a proportion of total isolates for that year. Multiyear Q2-Q4 averages were compared to corresponding Q1 averages, by independent t-test. #, *p*≤0.005. Non-significant *p-*values <0.2 are noted. In all panels, error bars represent standard deviations. TZP/TIM, piperacillin-tazobactam/ticarcillin-clavulanate; MEM/IPM, meropenem/imipenem; CRO, ceftriaxone; FEP, cefepime; CAZ, ceftazidime; SAM, ampicillin-sulbactam; TET/DOX, tetracycline/doxycycline; GM, gentamicin; SXT, trimethoprim-sulfamethoxazole; CIP/LVX, ciprofloxacin/levofloxacin.

**Figure S3. Abc isolates exhibit lower antibiotic resistance rates from June to November, independent of antibiotic class and epidemiologic subgroup.** A) Average resistance rates exhibited by isolates obtained in each quarter. B) Average MEM/IPM resistance rate exhibited by isolates from each epidemiologic compartment, by quarter. In both panels, error bars represent standard deviations. Multiyear averages were compared between quarters by independent t test. For clarity, only *p-*values under 0.20 are demonstrated. \*, p<0.05; \*\*, p≤0.005. TET/DOX, tetracycline/doxycycline; GM, gentamicin; SXT, trimethoprim-sulfamethoxazole; CIP/LVX, ciprofloxacin/levofloxacin; TZP/TIM, piperacillin-tazobactam/ticarcillin-clavulanate; SAM, ampicillin-sulbactam; IMI/MEM, imipenem/meropenem; CRO, ceftriaxone; FEP, cefepime; CAZ, ceftazidime; HA, hospital-acquired; CA, community-acquired; RESP, respiratory isolates; SST/MSK, skin and soft tissue/musculoskeletal isolates; URI, urinary isolates.