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Antimicrobial Resistance (AMR) Surveillance on Culture Specimens in Public Hospitals and Clinics - Hospital Authority AMR Data (2024)

December 2025

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Results - Blood Culture

Overview on patients with blood culture

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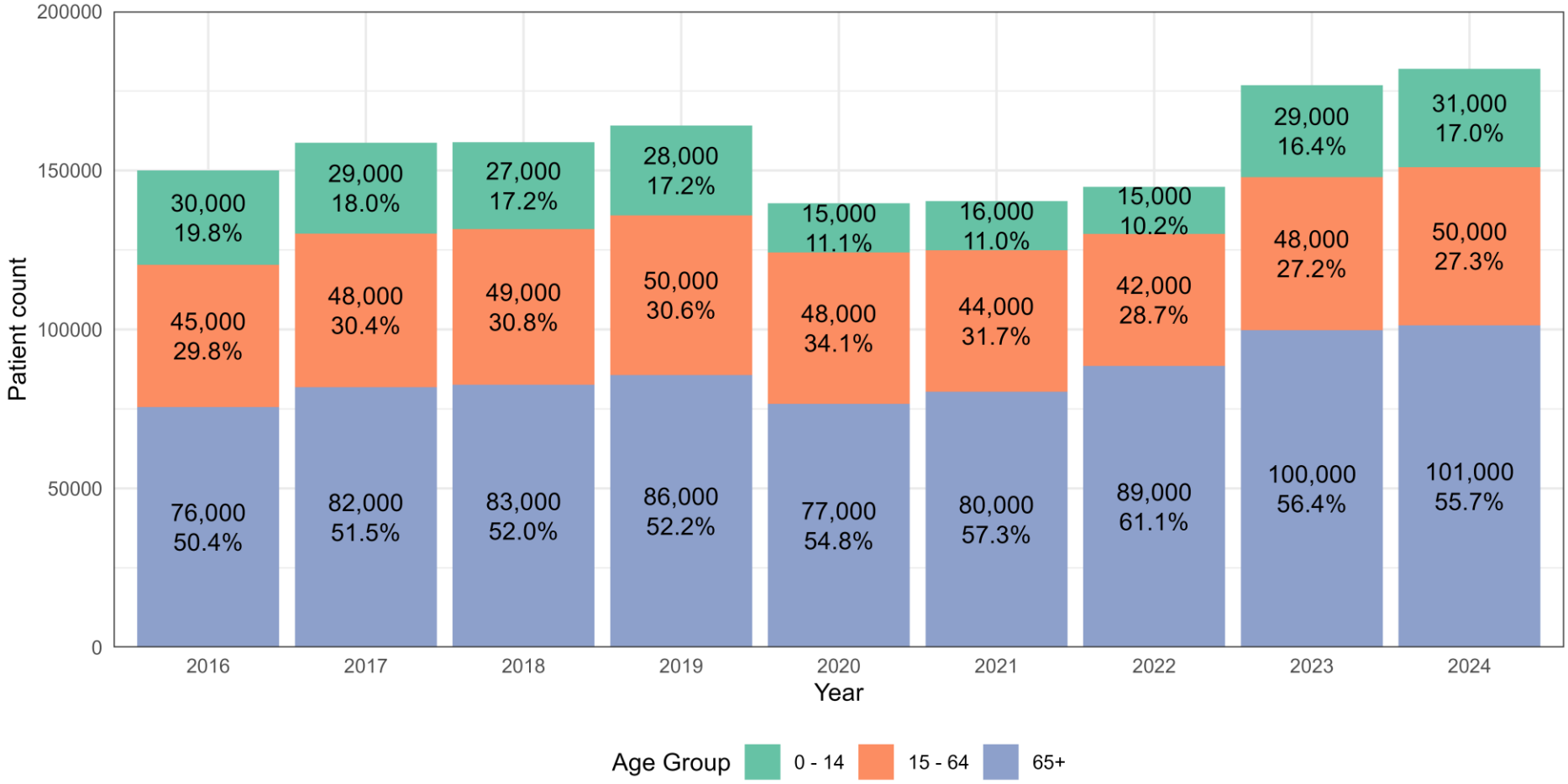
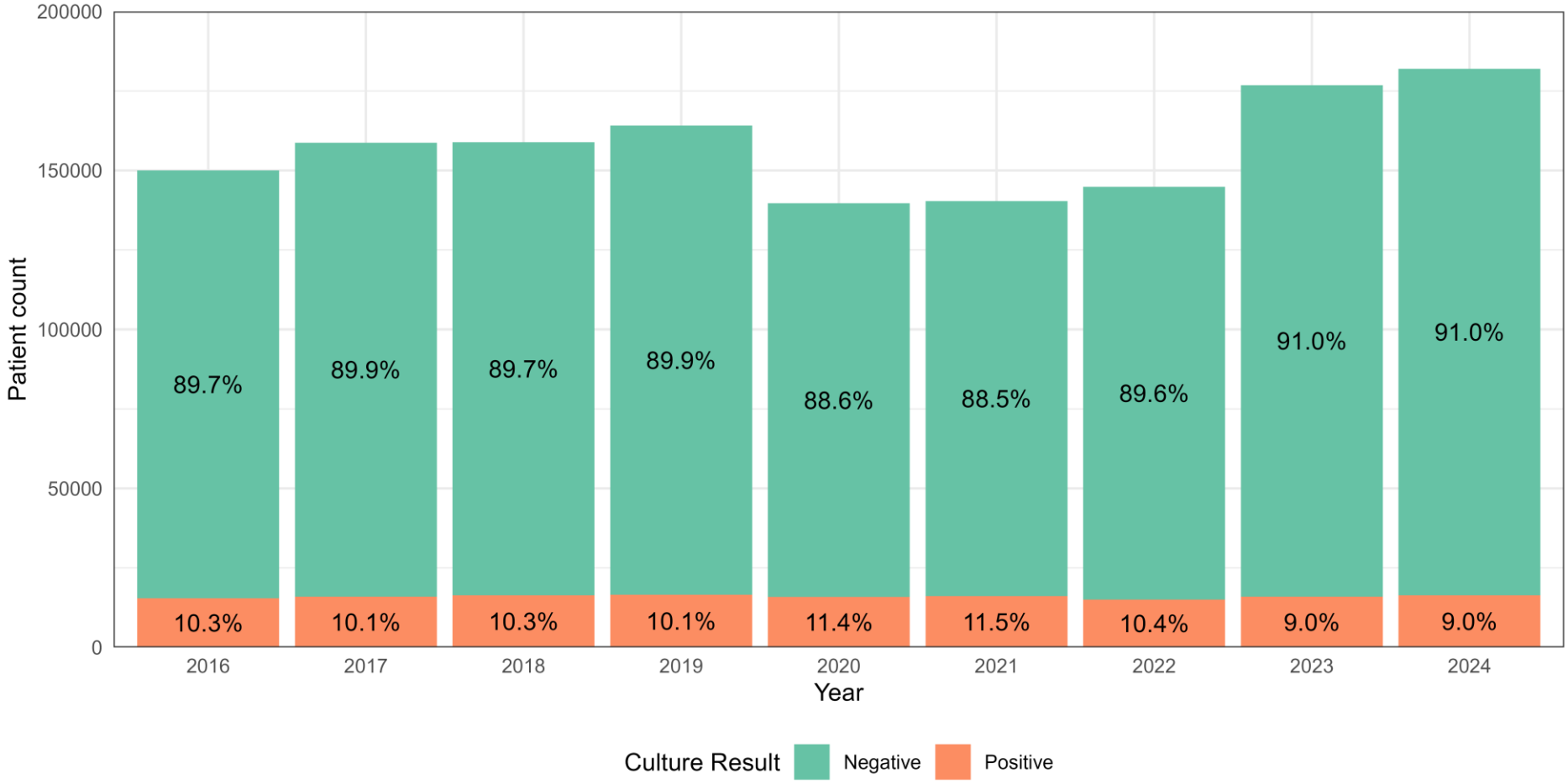
Age distribution of patients with blood culture



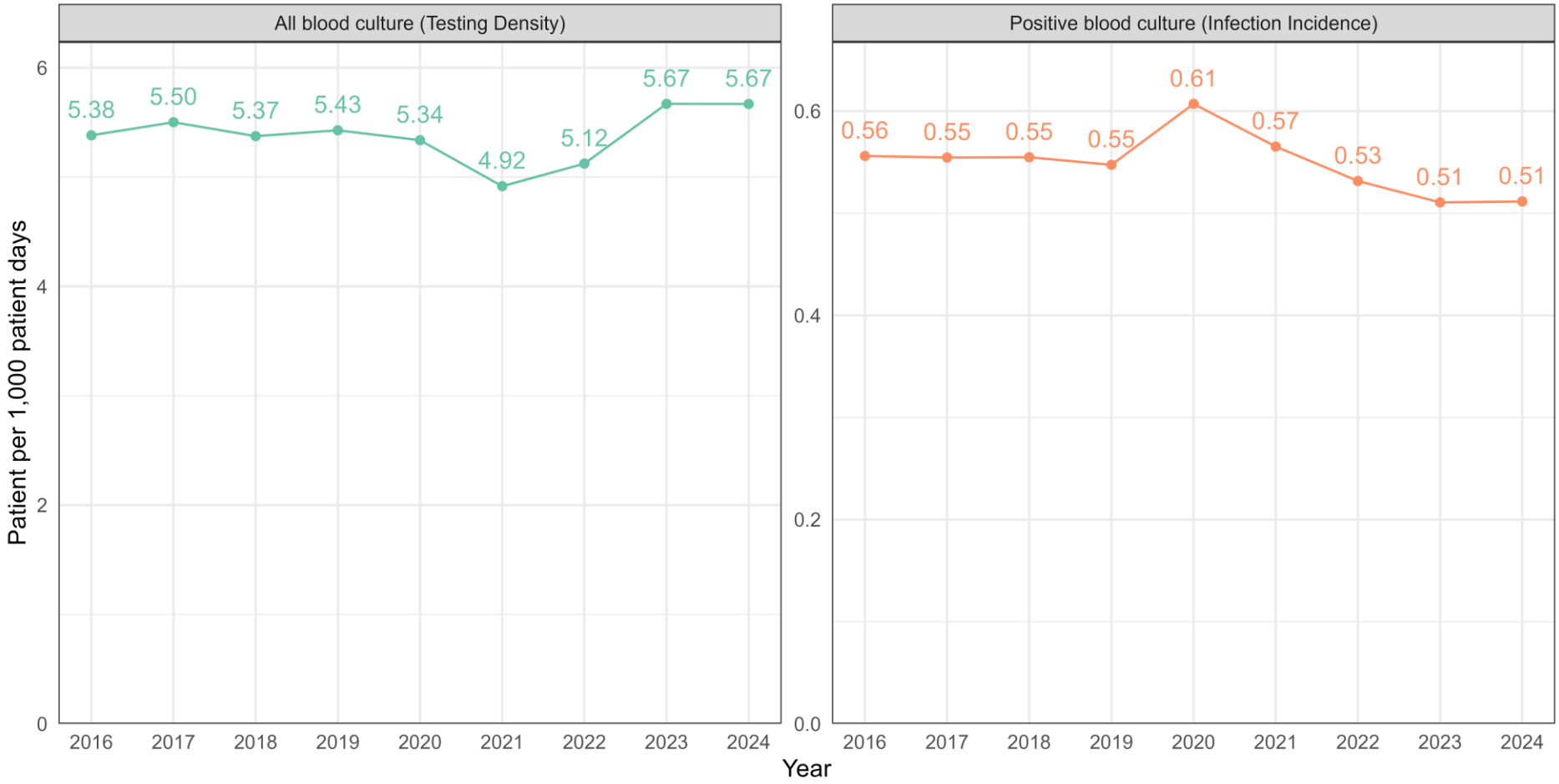
- No. of patients with blood culture increased from 177000 in 2023 to 182000 in 2024.
- >50% patients aged 65 years or above from 2016 to 2024.

Percentage of patients with positive blood culture



- % patients with positive blood culture remained stable over the past years at 9-11%.

Trend Analysis: Patient-level Testing Volume and Positivity Rates



- The rise in testing density from 4.92 to 5.67 patient/1000 patient-days, contrasted with the fall in infection incidence fell from 0.57 to 0.51 (2021-2024), suggests a gradual change in blood culture strategy.

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Results - Blood Culture

Overview on WHO priority organisms isolated from blood

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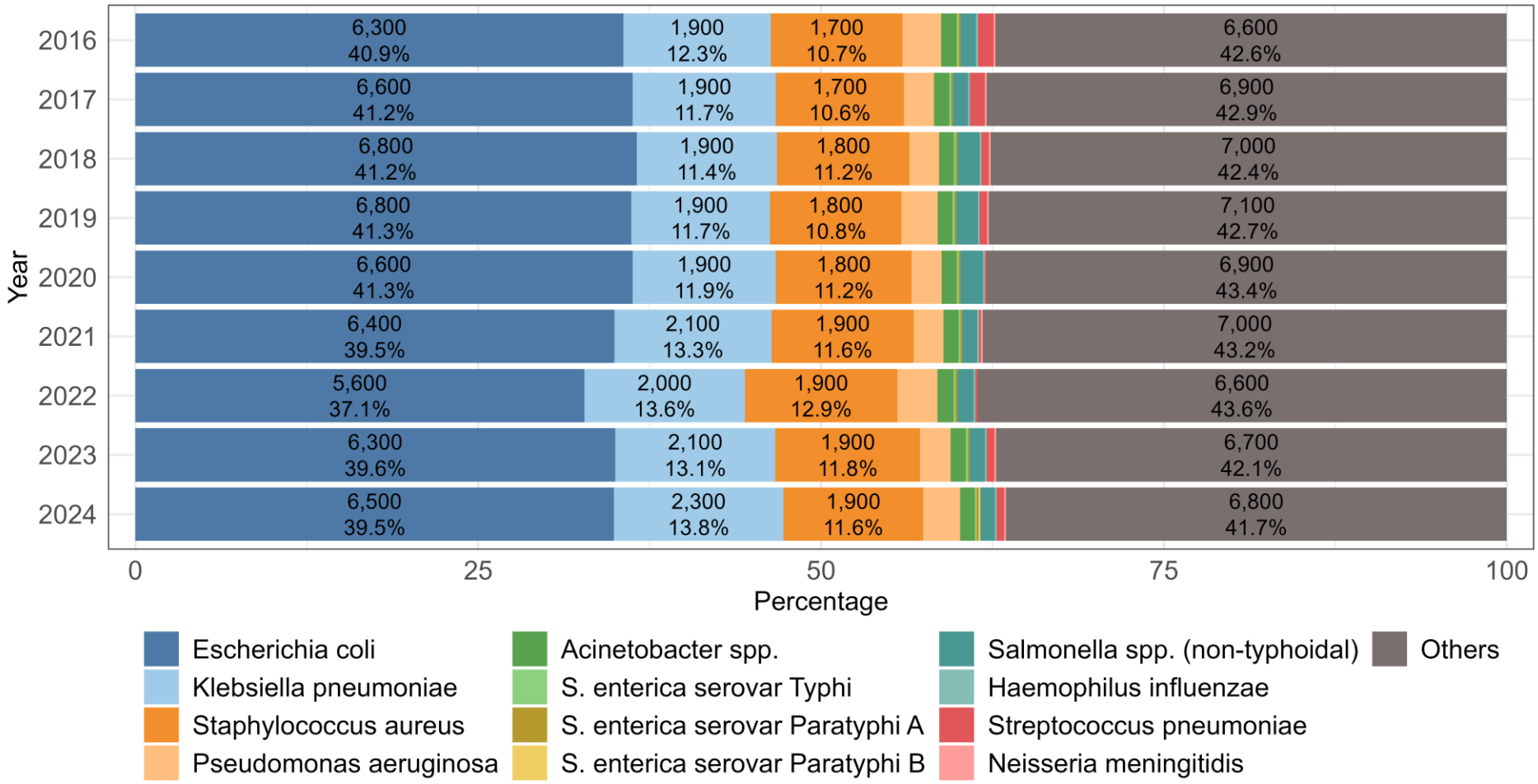
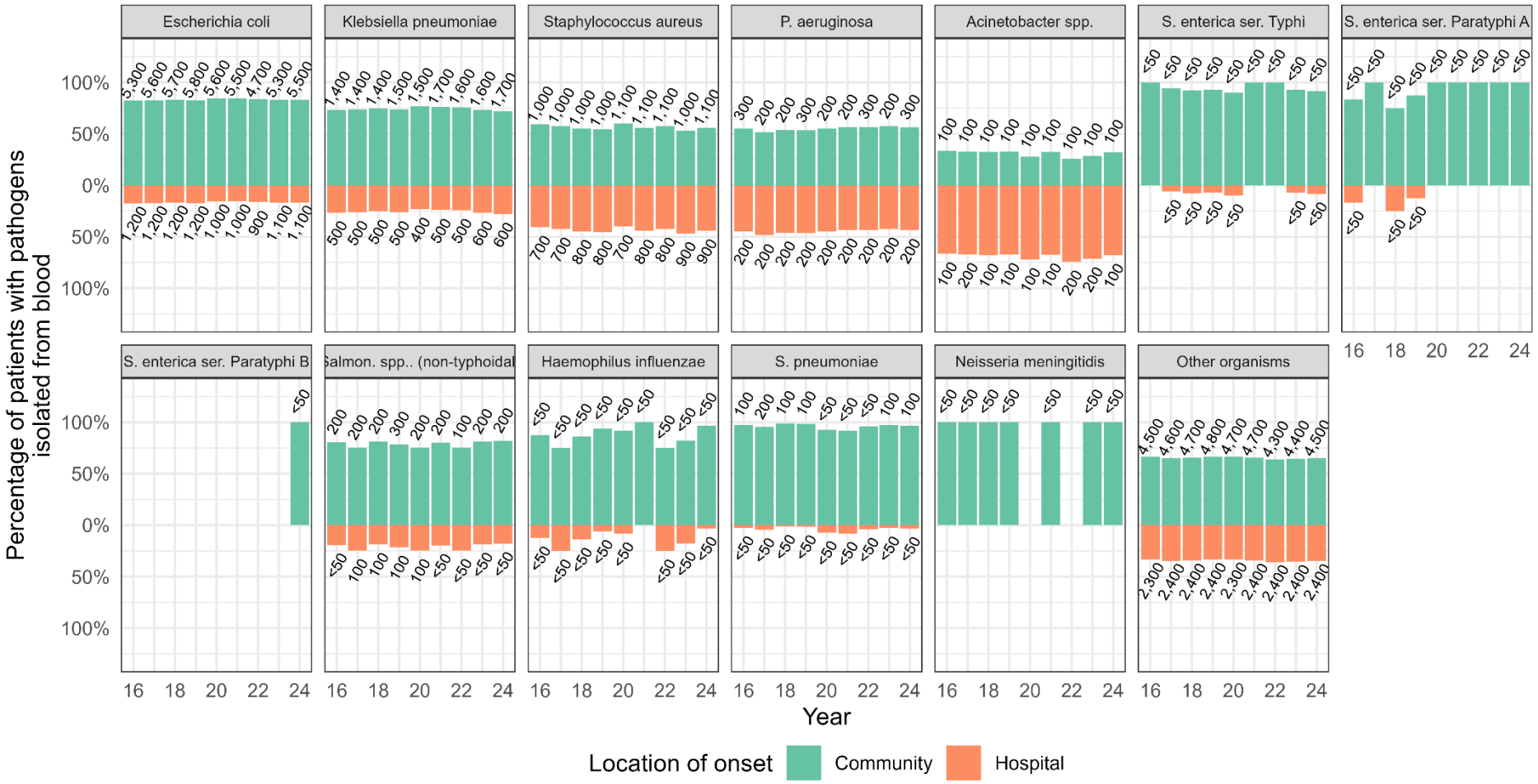
Distribution of organisms by year



- The three most common WHO priority organisms cultured from blood between 2016 and 2024 were E. coli, K. pneumoniae, and S. aureus, accounting for >50% of cases each year.
- Case count for other less common WHO priority organisms remained low and stable: P. aeruginosa (400 cases), Acinetobacter spp. (200 cases), Salmonella spp. (200 cases), H. influenzae (<50 cases), S. pneumoniae (100 cases), N. meningitidis (<50 cases).

Distribution of organisms by location of onset



- E. coli, K. pneumoniae, Salmonella spp., H. influenzae, S. pneumoniae and N. meningitidis were predominantly community-onset from 2016 to 2024.
- More than half of Staphylococcus aureus isolated were community-onset.
- Acinetobacter spp. was predominantly hospital-onset.

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Results - Blood Culture

AST results for WHO priority organisms isolated from blood

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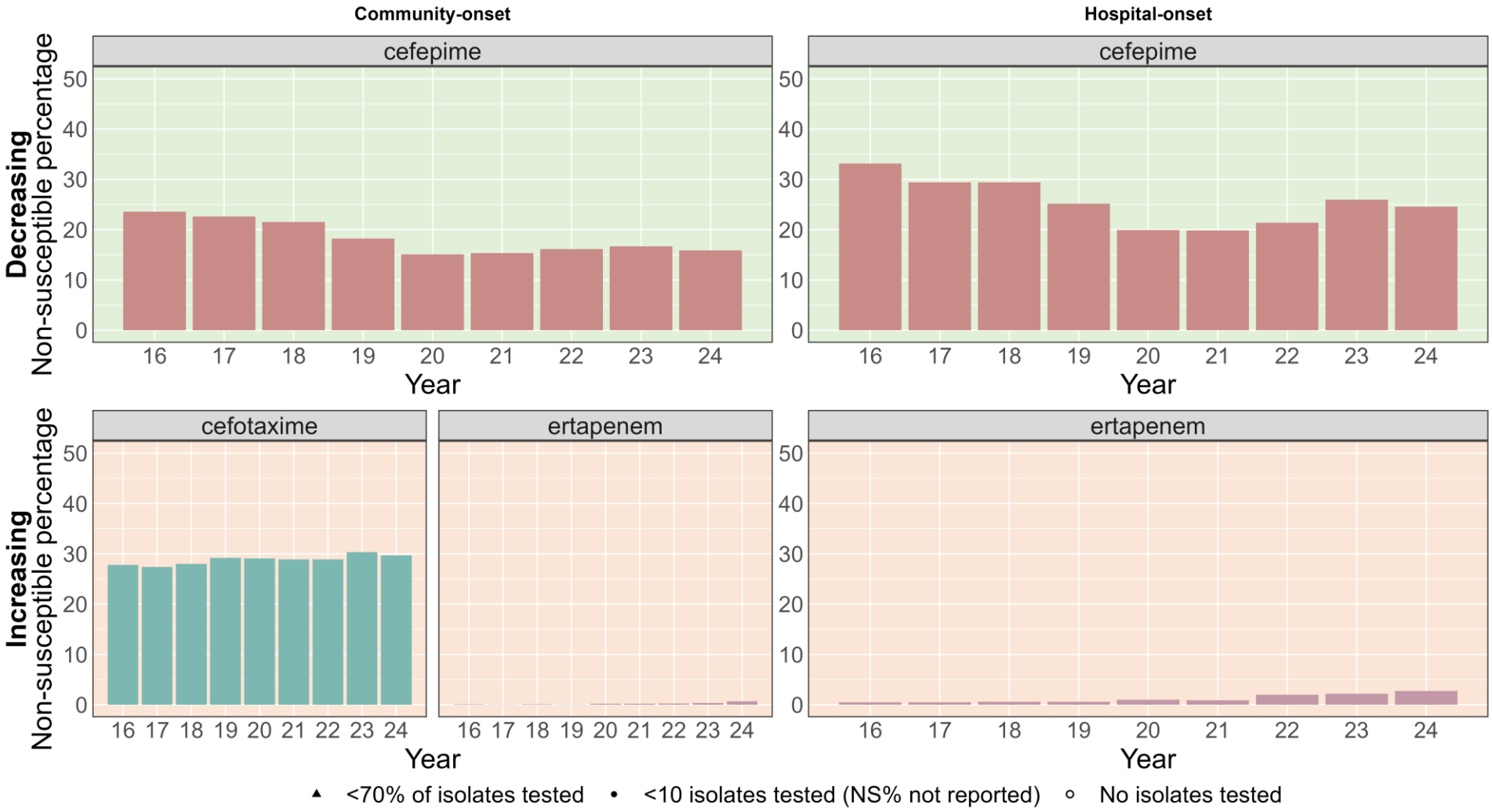
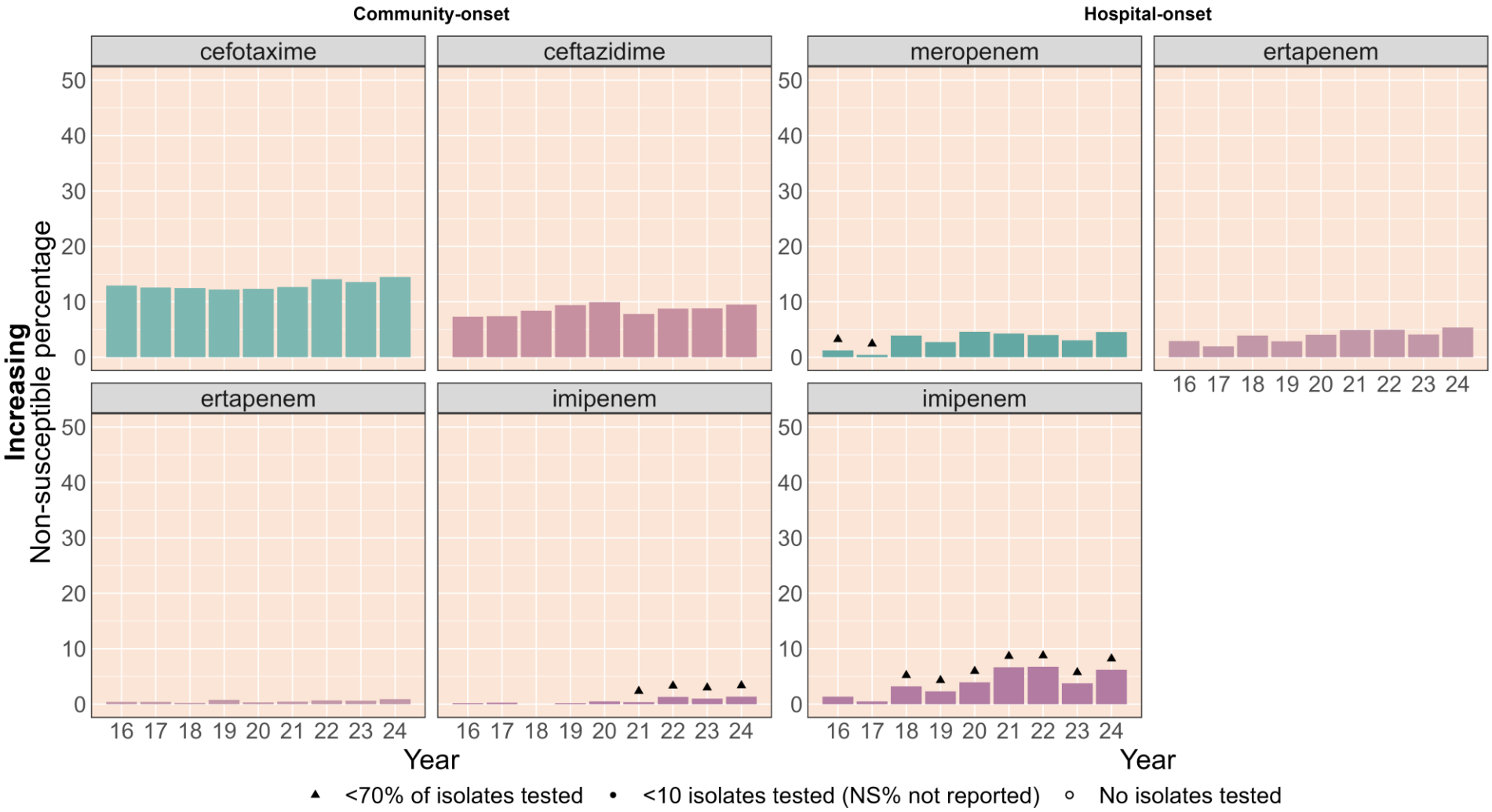
AST results with significant trend for E. coli (16 to 24)



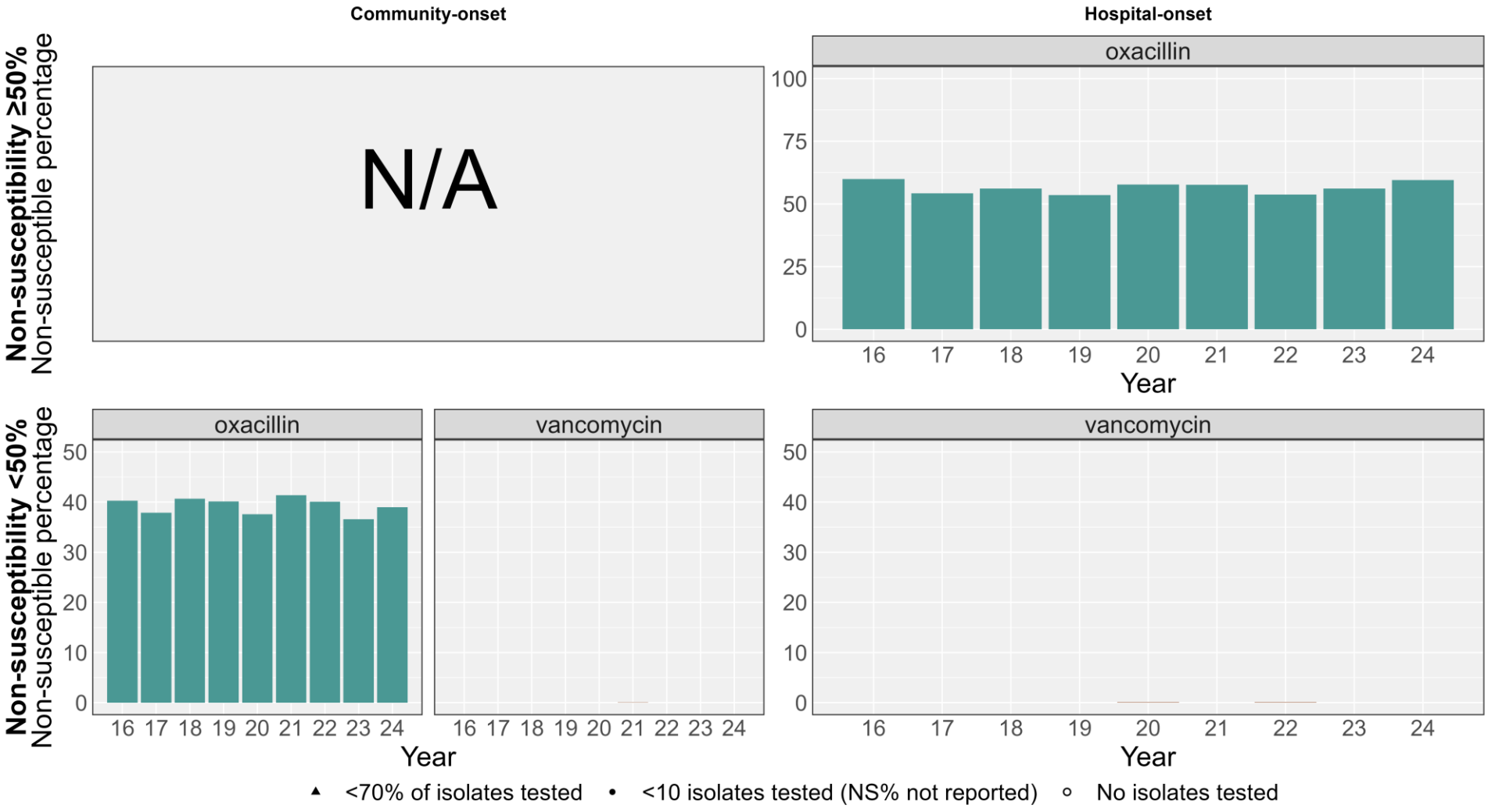
- Cefepime (both community and hospital-onset) shows a significant decreasing trend in non-susceptible percentage from 2016-2024.
- Community-onset cefotaxime and ertapenem (both community and hospital-onset) show a significant increasing trend in non-susceptible percentage from 2016-2024.

AST results with significant trend for K. pneumoniae (16 to 24)



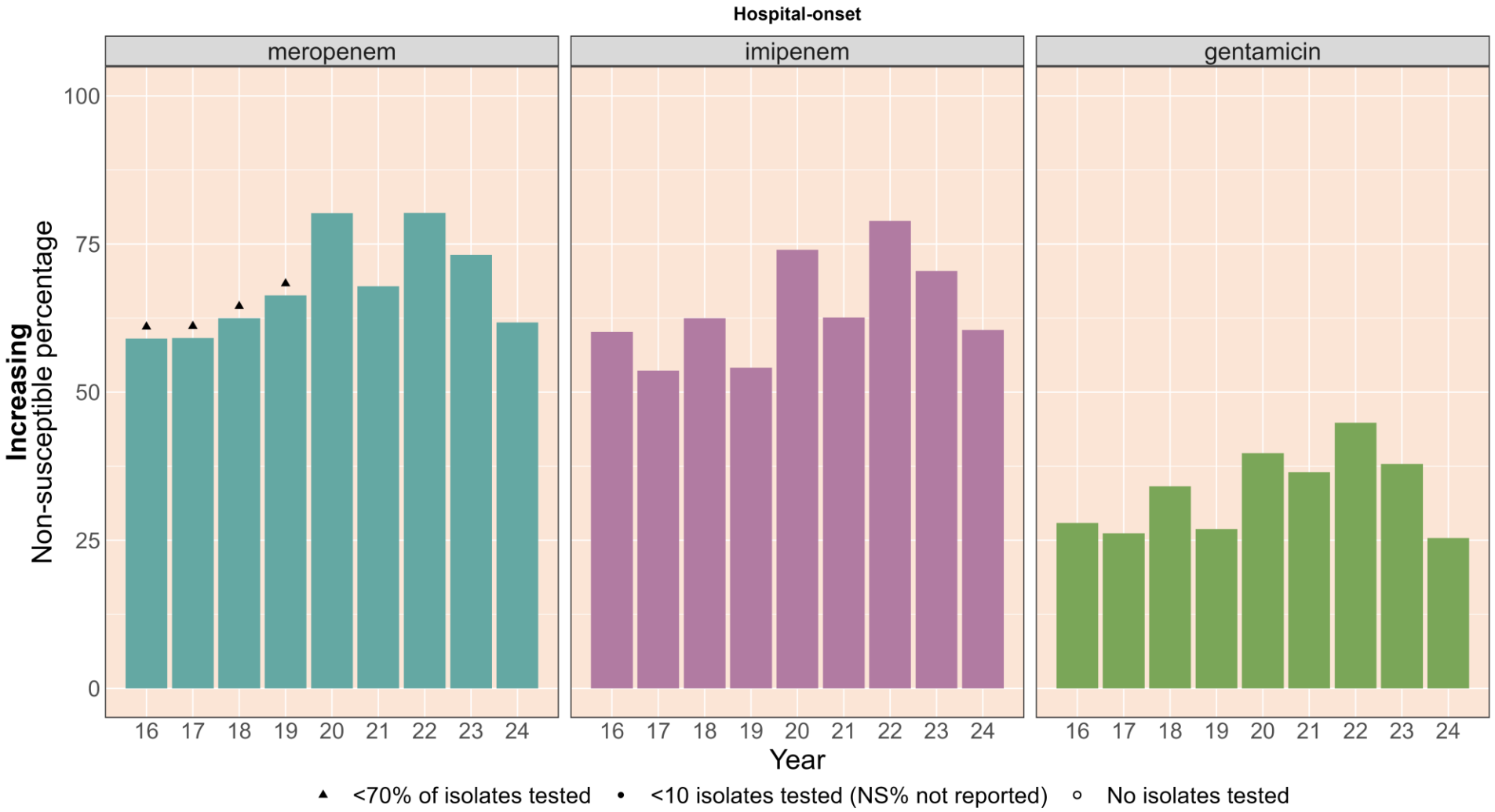
- Community-onset cefotaxime, ceftazidime, ertapenem, and imipenem, and hospital-onset ertapenem, imipenem, and meropenem show a significant increasing trend in non-susceptible percentage from 2016-2024.

AST results with no trend observed for S. aureus (16 to 24)



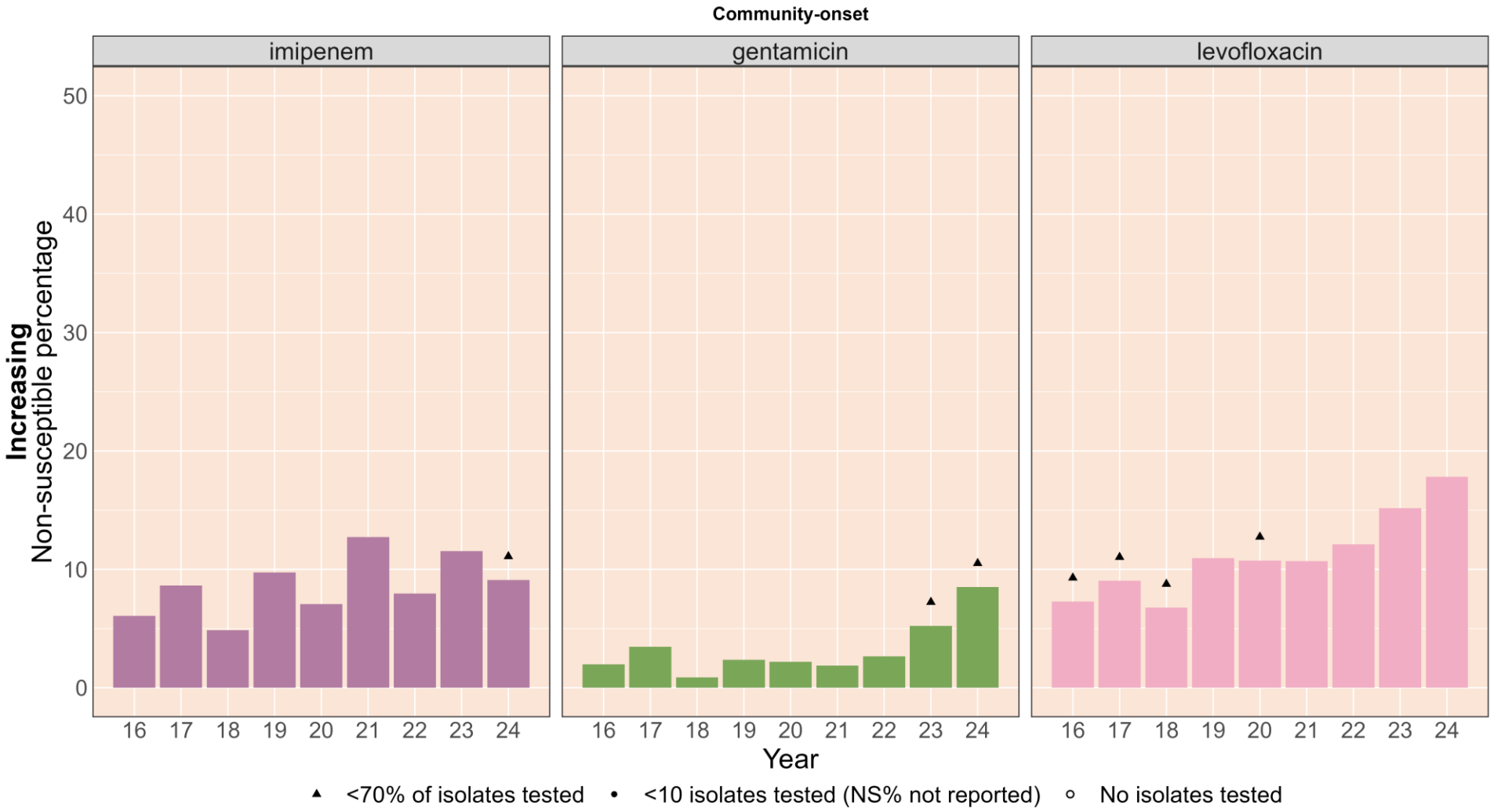
- Community-onset oxacillin and vancomycin, and hospital-onset oxacillin and vancomycin show no significant trend in non-susceptibility.

AST results with significant trend for Acinetobacter spp. (16 to 24)



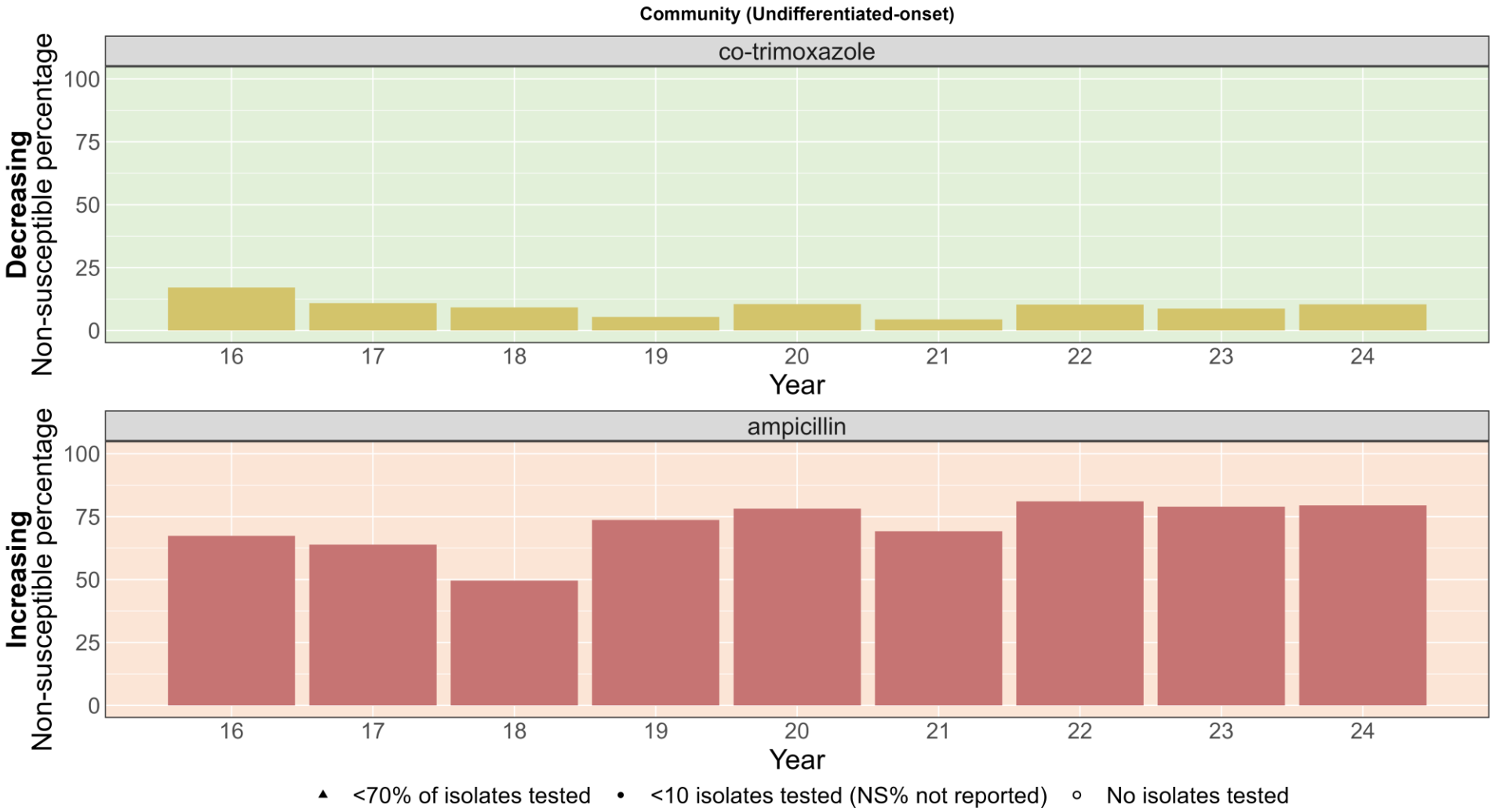
- For Acinetobacter spp., hospital-onset gentamicin, imipenem, and meropenem show a significant increasing trend in non-susceptibility from 2016-2024.

AST results with significant trend for P. aeruginosa (16 to 24)



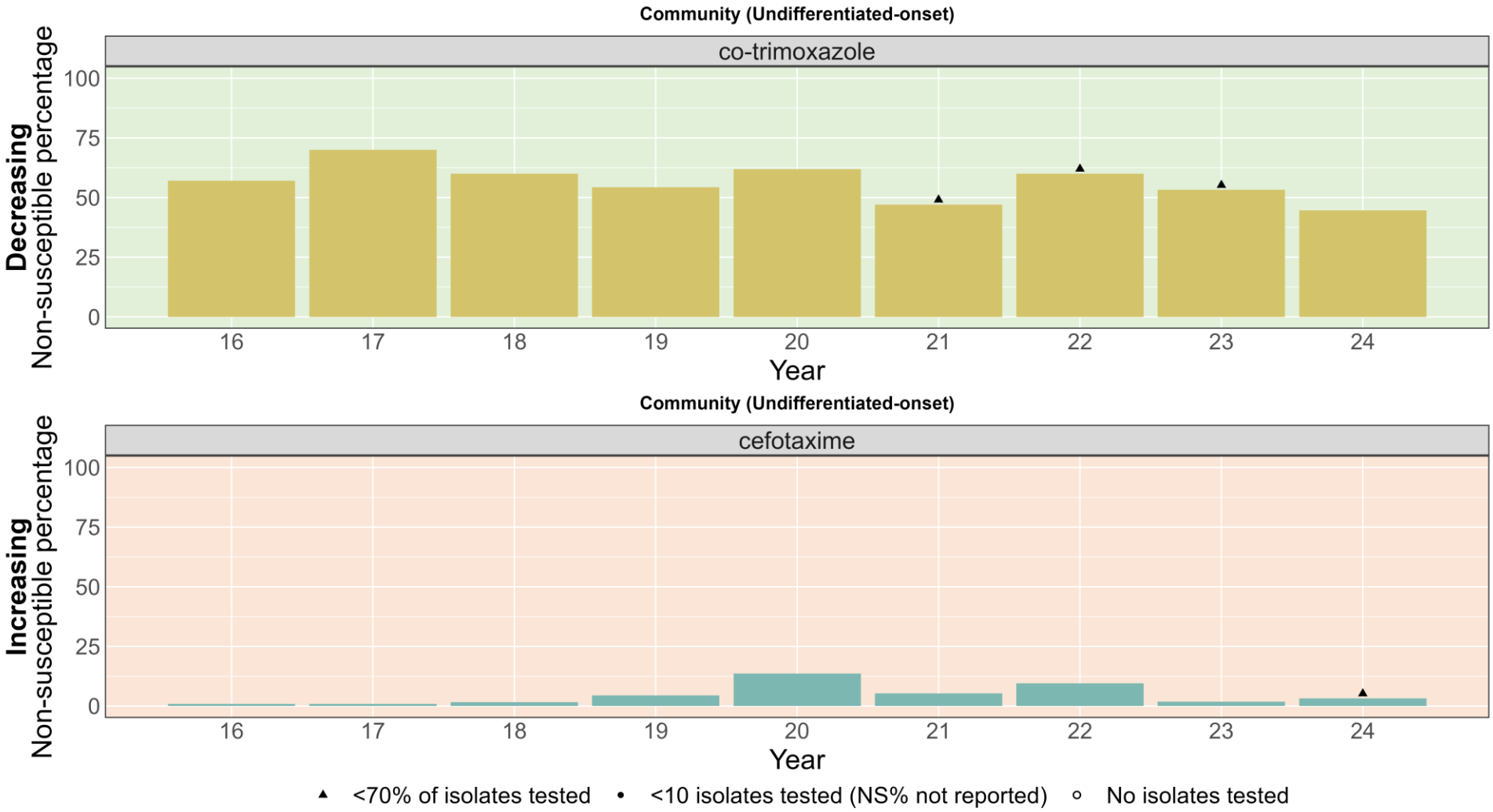
- For Pseudomonas aeruginosa, community-onset gentamicin, imipenem, and levofloxacin show a significant increasing trend in non-susceptible percentage from 2016-2024.

AST results with significant trend for Non-typhoidal Salmonella (16 to 24)



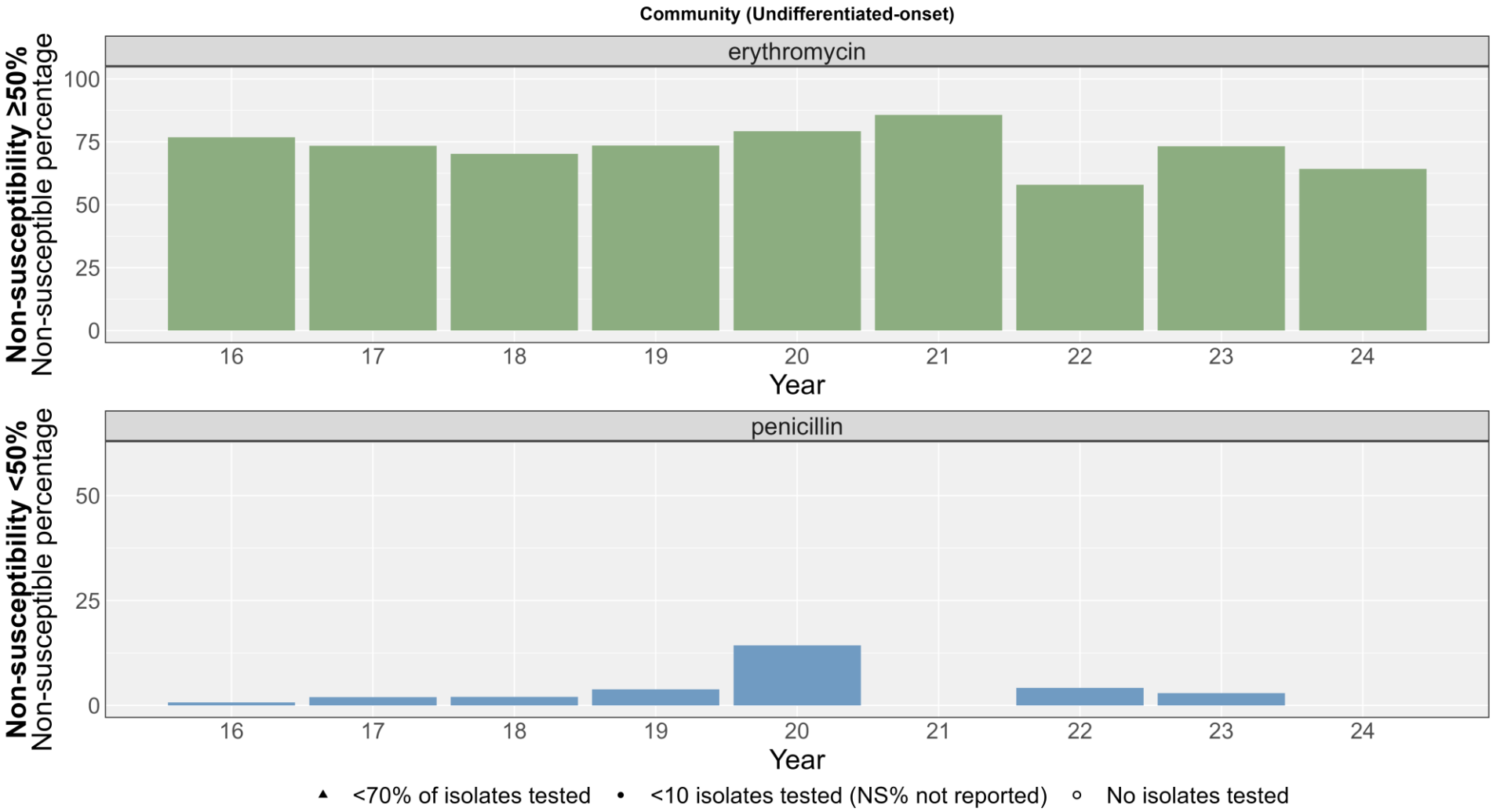
- Co-trimoxazole shows a significant decreasing trend in non-susceptible percentage from 2016-2024, while ampicillin shows a significant increasing trend in non-susceptible percentage from 2016-2024.

AST results with significant trend for S. pneumoniae (16 to 24)



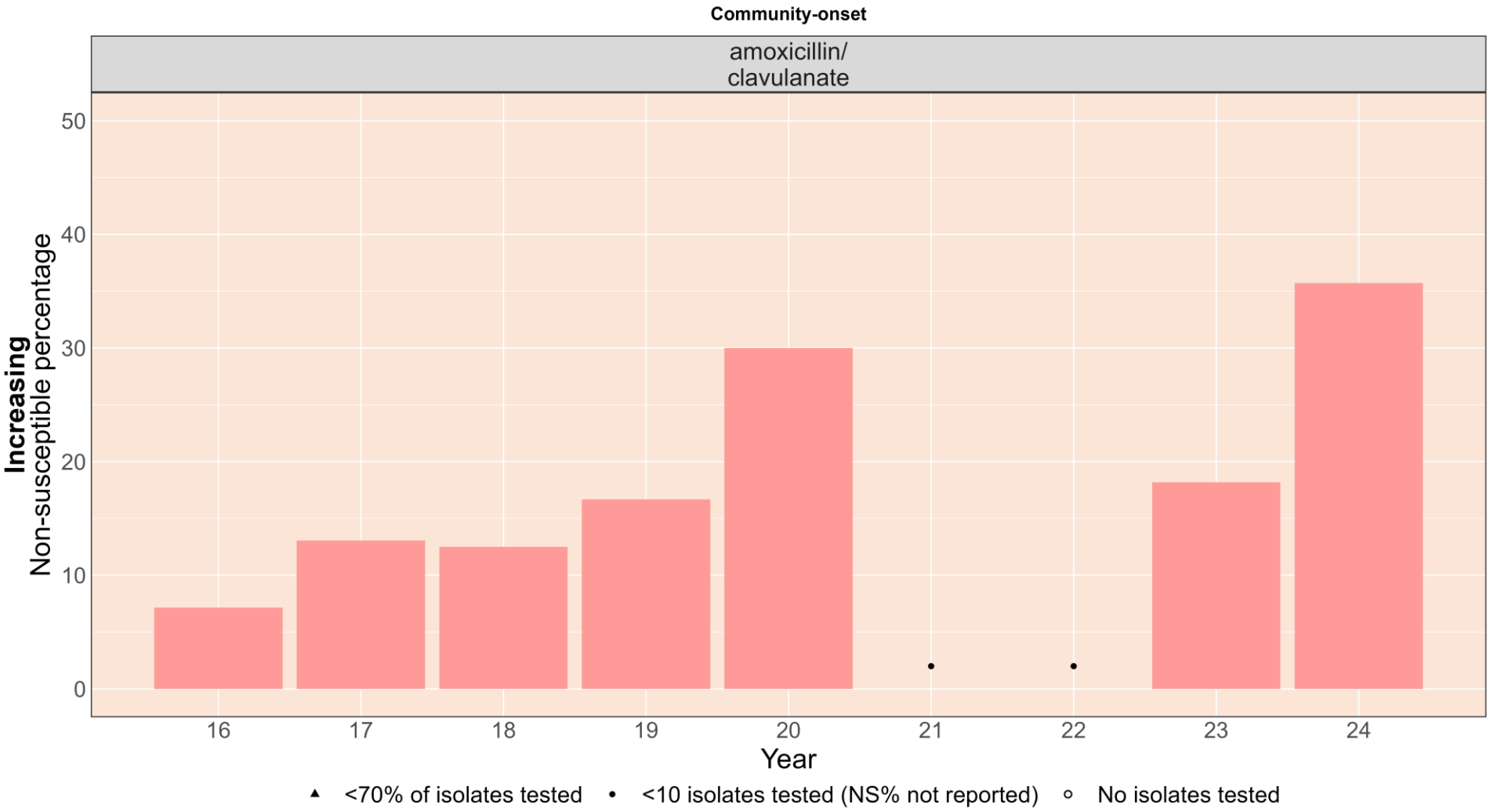
- Co-trimoxazole shows a significant decreasing trend in non-susceptible percentage from 2016-2024, while cefotaxime shows a gradual increase in non-susceptible percentage in 16-20, follows by a drop in 20-24.

AST results with no trend observed for S. pneumoniae (16 to 24)



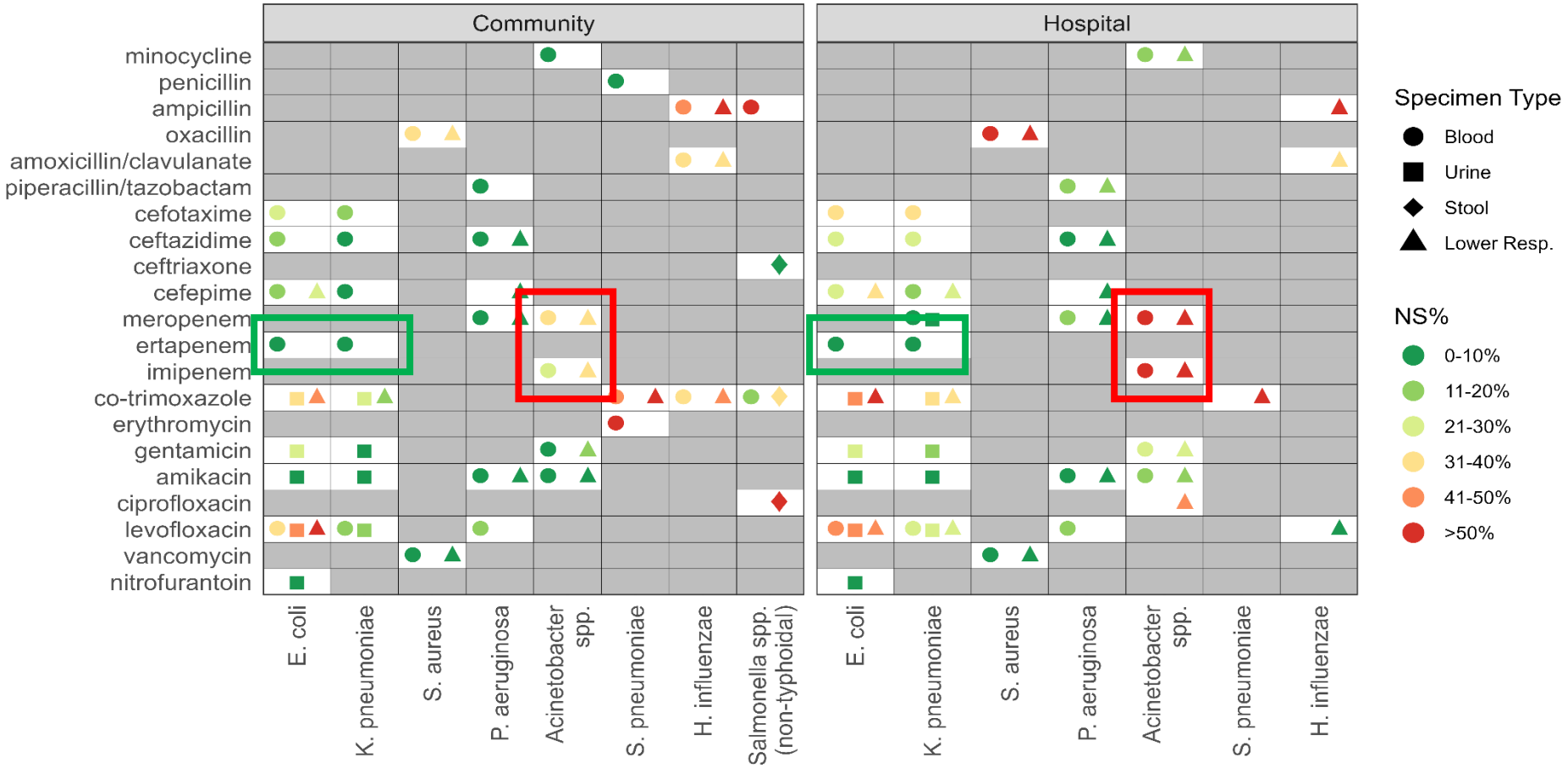
- Erythromycin and penicillin show no significant trend in non-susceptibility.
- Erythromycin shows the highest non-susceptibility rates, followed by penicillin.

AST results with significant trend for H. influenzae (16 to 24)



- Community-onset amoxicillin/ clavulanate shows a significant increasing trend in non-susceptible percentage from 2016-2024.

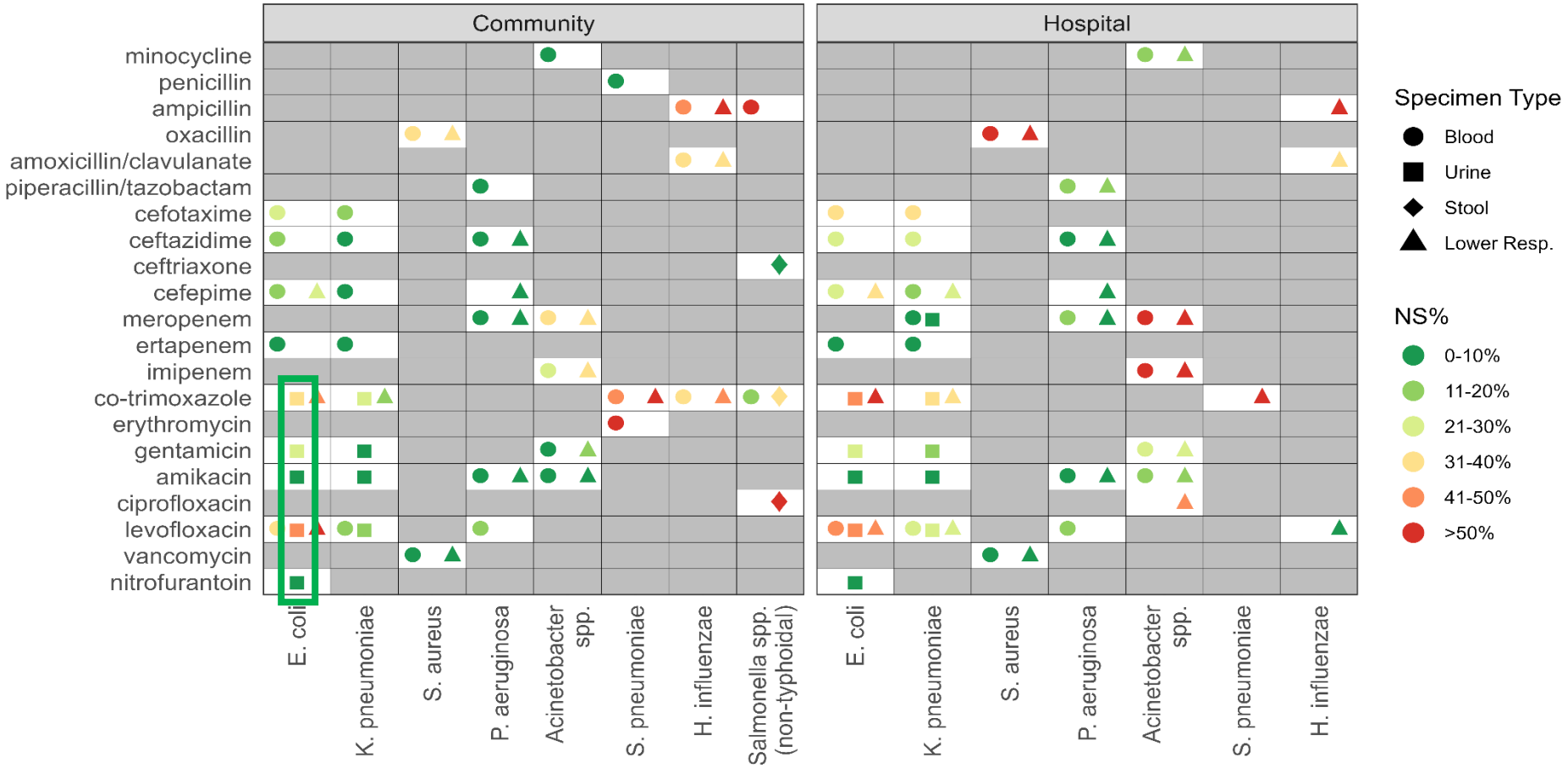
Summary



Note: Only drug-bug combinations with more than 10 isolates and at least 70% of isolates tested for susceptibility in 2024 are shown.

- Enterobacterales (E. coli, K. pneumoniae) remain sensitive to carbapenems (ertapenem/meropenem; 0-10% NS), Acinetobacter spp. exhibit high carbapenem resistance (>50% NS to imipenem/meropenem in hospital blood/respiratory isolates).

Summary



Note: Only drug-bug combinations with more than 10 isolates and at least 70% of isolates tested for susceptibility in 2024 are shown.

- Urinary E. coli: High Levofloxacin NS (41-50% Community & Hospital) and Co-trimoxazole NS (31-40% Comm, 41-50% Hosp) contrast with preserved Nitrofurantoin/Amikacin susceptibility (0-10% NS).