

Table 1. Results of joinpoint analysis on the proportion of intravenous broad-spectrum antibiotic use

Hospital	Data available	Annual Percentage Change (%) [95% CI]		Average Annual Percentage Change (%) [95% CI]
		Period 1	Period 2	
A	2019–2022	–	–	3.7 [–0.7 to 8.5]
B	2014–2022	–	–	–0.7 [–1.5 to 0.1]
C	2014–2022	–	–	–1.9 [–5.6 to 1.9]
D	2016–2022	–2.7 [–6.8 to 2.8] (2016–2018)	3.7 (0.6 to 9.1)* (2018–2022)	1.5 [0.2 to 3.3]
E	2014–2022	–	–	–7.1 [–9.8 to –4.4]*
F	2016–2022	–12.3 [–26.1 to 1.2] (2016–2019)	3.1 [–10.9 to 22.5] (2019–2022)	–4.9 [–9.5 to 0]
G	2014–2022	–	–	–3.1 [–5.5 to –0.7]*

CI, confidence interval. *Statistically significant.

A significant change point was not identified at Hospitals A, B, C, E, and G.

Table 2. Gaps between recommended and actual full-time equivalent (FTE) allocations for Antimicrobial Stewardship (AS)

Hospital	Hospital beds	Engagement time* (AS Leader)	Minimal FTE given in previous studies**	Recommended engagement time per week*	Actual engagement time per week	Gap (hours)
A	1,172	32 (Ns)	4	160	62	98
B	853	30 (Ph)	2.6	104	42	62
C	515	30 (Dr)	2.6	104	94	10
D	473	15 (Ph)	1.6	64	40	24
E	400	40 (Ph)	1.6	64	93.9	-29.9
F	395	0.5 (Ph)	1.6	64	2	62
G	318	40 (Ph)	1.6	64	80	-16

*Engagement time was calculated by multiplying FTE by 40 h.

**Referring to Clin Infect Dis 2018;67:1168–74.

Data from 2022 are presented in this study.

MD, medical doctor. Ph, pharmacist. Ns, nurse.

Table 3. Overall summary of Antimicrobial Stewardship (AS) activities in the hospitals

Hospital	AS leader (Involvement)	FTE allocation for AS activities (Gap with recommended FTE, hours)	Trends in the proportion of broad-spectrum antibiotic use during the study period
A	Ns. (Part-time)	Suboptimal (98 h)	No change
B	Ph. (Part-time)	Suboptimal (62 h)	No change
C	Dr. (Part-time)	Suboptimal (10 h)	No change
D	Ph. (Part-time)	Suboptimal (24 h)	Fluctuated
E	Ph. (Full-time)	Optimal (Fulfilled)	Decreasing
F	Ph. (Part-time)	Suboptimal (62 h)	Fluctuated
G	Ph. (Full-time)	Optimal (Fulfilled)	Decreasing

FTE: full-time equivalent