

Supplementary Material

Decline in antimicrobial consumption and stagnation in reducing disease burden due to antimicrobial resistance

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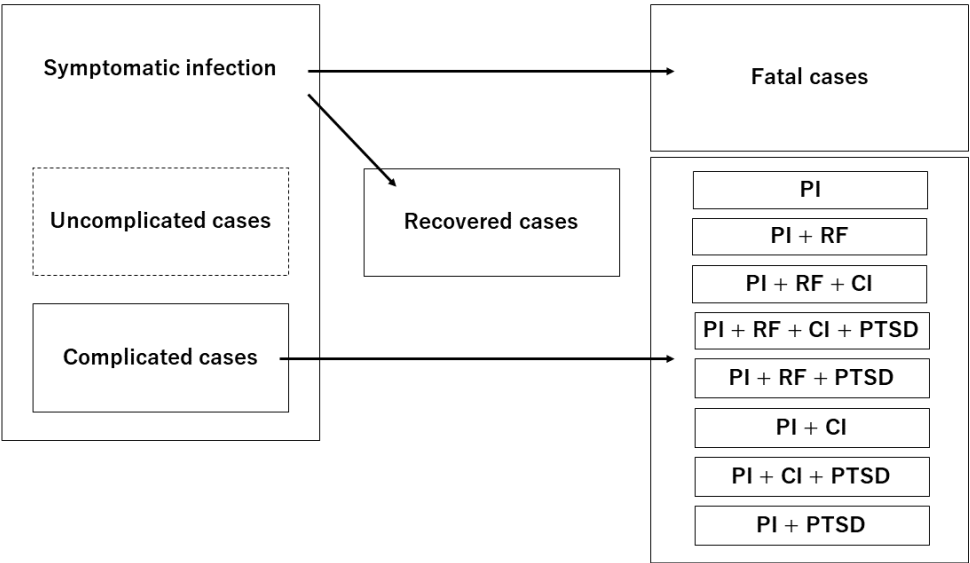
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Supplementary Figure S1. Disease outcome tree of bloodstream infection



PI, physical impairment; RF, renal failure; CI, cognitive impairment; PTSD, post-traumatic stress disorder

Supplementary Table S1. Fatality of blood stream infections by each causative organism

	Fatality	Reference
Methicillin-resistant <i>Staphylococcus aureus</i>	0.25	(Takeshita et al., 2017)
Fluoroquinolone-resistant <i>Escherichia coli</i>	0.22	(Abernethy et al., 2015)
Third-generation cephalosporin-resistant <i>E. coli</i>*	0.21	(Nagao, 2013)
Third-generation cephalosporin-resistant <i>Klebsiella pneumoniae</i>	0.32	(Gallagher et al., 2014)
Carbapenem-resistant <i>Pseudomonas aeruginosa</i>	0.35	(Cassini et al., 2018)
Penicillin-resistant <i>Streptococcus pneumoniae</i>	0.16	(Takeshita et al., 2017)
Carbapenem-resistant <i>Enterobacterale</i>	0.15	(Saito et al., 2020)
Vancomycin-resistant <i>Enterococcus</i>	0.23	(Cassini et al., 2018)
Multidrug-resistant <i>Acinetobacter spp.</i>	0.15	(Takeshita et al., 2017)

Supplementary Table S2. Probability and disability weight of each health status

	Probability		Disability weight	
	Mode	Range	Mode	Range
PI	0.584	0.441-0.734	0.033	0.012-0.052
PI + RF	0.288	0.071-0.489	0.288	0.071-0.489
PI + RF + CI	0.0026	0.001-0.0044	0.328	0.117-0.516
PI + RF + CI + PTSD	0.0005	0.0002-0.001	0.388	0.194-0.56
PI + RF + PTSD	0.0013	0.0008-0.002	0.353	0.154-0.534
PI + CI	0.236	0.0958-0.378	0.084	0.058-0.107
PI + CI + PTSD	0.0483	0.0187-0.0855	0.166	0.136-0.194
PI + PTSD	0.118	0.0799-0.173	0.119	0.09-0.146

PI, physical impairment; RF, renal failure; CI, cognitive impairment; PTSD, post-traumatic stress disorder

We assume that all of these follow a PERT distribution in accordance with the reference.

All values are derived from the ECDC BCoDE toolkit, version 2.0.0.

References

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