

Table S1. Number of isolates (N) and susceptibility rate (%) of *Enterobacter* spp. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	Cefotaxime	Imipenem
1998	Annual	38	50	100
1999	Annual	33	88	100
2000	T1	2	100	100
2000	T2	5	80	100
2000	T3	7	57	100
2000	T4	1	100	100
2001	T1	4	25	50
2001	T2	3	67	100
2001	T3	1	100	100
2001	T4	4	100	100
2002	T1	1	0	100
2002	T2	2	0	100
2002	T3	3	33	67
2002	T4	4	50	75
2003	T1	4	50	100
2003	T2	4	50	100
2003	T3	0		
2003	T4	3	67	100
2004	T1	1	100	100
2004	T2	5	100	100
2004	T3	4	50	75
2004	T4	2	100	100
2005	T1	3	67	100
2005	T2	2	100	50
2005	T3	2	100	100
2005	T4	8	100	88
2006	T1	1	0	100
2006	T2	3	100	100
2006	T3	4	75	75
2006	T4	3	100	67
2007	T1	3	67	67
2007	T2	2	100	50
2007	T3	2	ND	100
2007	T4	3	0	100
2008	T1	3	100	33
2008	T2	4	100	100
2008	T3	6	33	83
2008	T4	5	80	100
2009	T1	4	75	100
2009	T2	1	100	100
2009	T3	5	100	100
2009	T4	4	100	100

2010	T1	1	100	100
2010	T2	3	67	33
2010	T3	2	0	50
2010	T4	2	50	100
2011	T1	6	83	100
2011	T2	8	100	100
2011	T3	5	40	100
2011	T4	6	75	83
2012	T1	4	100	100
2012	T2	1	100	100
2012	T3	5	40	100
2012	T4	6	67	100
2013	T1	1	ND	100
2013	T2	2	100	100
2013	T3	5	60	100
2013	T4	0		

Table S2. Number of isolates (N) and susceptibility rate (%) of *E. coli*. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	Amoxicillin/ clavulanic acid	Cefepime	Cefotaxime	Ceftazidime	Ciprofloxacin	Gentamycin	Levofloxacin	Piperacillin/ tazobactam
1998	Annual	38	92	97	97	97	82	76	ND	100
1999	Annual	39	92	100	97	100	82	90	ND	100
2000	T1	13	85	100	100	100	85	85	100	100
2000	T2	9	67	100	100	100	56	67	100	100
2000	T3	8	88	100	80	100	75	75	80	100
2000	T4	7	86	100	100	100	100	100	100	100
2001	T1	17	82	100	100	94	100	100	100	88
2001	T2	6	33	100	100	100	100	100	100	67
2001	T3	8	88	100	100	100	75	63	50	100
2001	T4	8	75	100	83	88	50	75	50	100
2002	T1	9	78	83	83	89	89	100	83	89
2002	T2	3	67	100	100	100	100	100	100	100
2002	T3	1	100	100	100	100	100	100	100	100
2002	T4	4	50	100	100	100	100	100	100	75
2003	T1	12	75	100	88	100	100	100	100	92
2003	T2	4	100	100	100	100	100	100	100	100
2003	T3	9	67	100	100	100	100	100	100	89
2003	T4	4	75	100	100	100	100	100	100	75
2004	T1	15	73	90	100	100	73	87	70	93
2004	T2	8	50	100	100	100	100	63	100	100
2004	T3	8	75	100	100	100	88	88	80	100
2004	T4	6	67	100	100	100	83	100	83	83
2005	T1	8	63	100	100	88	88	88	100	88
2005	T2	7	71	75	75	86	100	100	100	100
2005	T3	10	90	89	89	90	90	100	89	100

2005	T4	6	100	100	100	100	100	100	100	100	100
2006	T1	9	78	100	100	100	89	100	100	100	100
2006	T2	6	100	100	100	100	100	100	100	100	100
2006	T3	7	86	83	83	100	86	86	83	100	100
2006	T4	8	63	100	83	88	75	88	83	88	88
2007	T1	11	73	100	100	91	73	91	57	100	
2007	T2	13	54	100	100	100	77	85	80	92	
2007	T3	6	83	100	100	100	100	100	100	83	
2007	T4	9	89	100	100	100	67	89	57	89	
2008	T1	10	70	78	89	90	80	90	78	70	
2008	T2	18	94	92	92	94	61	94	69	94	
2008	T3	11	73	88	100	91	82	82	88	100	
2008	T4	14	64	100	89	86	57	79	67	93	
2009	T1	11	64	100	100	91	91	91	100	100	
2009	T2	9	89	100	83	89	100	100	100	100	
2009	T3	7	57	100	100	100	100	86	100	86	
2009	T4	12	92	100	100	100	83	100	100	100	
2010	T1	10	60	100	88	90	80	100	88	90	
2010	T2	9	44	100	83	100	67	89	67	78	
2010	T3	12	33	100	75	83	50	83	67	92	
2010	T4	10	70	78	78	90	80	70	78	100	
2011	T1	9	33	63	38	78	67	78	63	100	
2011	T2	10	44	89	67	70	78	100	78	90	
2011	T3	10	50	100	67	100	80	90	78	90	
2011	T4	9	44	80	80	78	56	67	80	89	
2012	T1	17	77	90	80	94	71	88	70	88	
2012	T2	8	75	100	100	100	63	63	50	100	
2012	T3	5	60	100	50	80	20	80	25	100	

2012	T4	14	79	62	88	93	64	86	63	100
2013	T1	8	63	0	ND	88	25	50	ND	88
2013	T2	6	33	17	50	83	67	83	100	83
2013	T3	5	75	80	80	80	60	80	60	100
2013	T4	6	83	17	100	100	83	100	100	100

Table S3. Number of isolates (N) and susceptibility rate (%) of *K. pneumoniae*. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	Cefotaxime	Ceftazidime
1998	Annual	5	100	100
1999	Annual	3	100	100
2000	T1	2	100	100
2000	T2	1	100	100
2000	T3	4	100	100
2000	T4	2	0	50
2001	T1	3	100	100
2001	T2	5	80	80
2001	T3	1	100	100
2001	T4	5	100	100
2002	T1	2	100	100
2002	T2	1	100	100
2002	T3	2	100	100
2002	T4	3	67	100
2003	T1	1	100	100
2003	T2	4	75	75
2003	T3	2	50	50
2003	T4	2	50	50
2004	T1	0		
2004	T2	4	100	100
2004	T3	1	0	0
2004	T4	1	100	100
2005	T1	0		
2005	T2	1	100	100
2005	T3	3	100	100
2005	T4	2	100	100
2006	T1	0		
2006	T2	0		
2006	T3	2	100	100
2006	T4	3	100	100
2007	T1	1	100	100
2007	T2	1	ND	100
2007	T3	1	100	100
2007	T4	4	100	100
2008	T1	4	100	100
2008	T2	2	100	100
2008	T3	3	50	33
2008	T4	1	100	100
2009	T1	1	100	100
2009	T2	1	0	0
2009	T3	9	75	89
2009	T4	4	100	100
2010	T1	0		
2010	T2	0		
2010	T3	1	ND	0
2010	T4	3	100	100
2011	T1	3	100	67

2011	T2	1	100	100
2011	T3	4	100	100
2011	T4	4	100	100
2012	T1	0		
2012	T2	5	100	100
2012	T3	5	80	80
2012	T4	3	100	67
2013	T1	1	100	100
2013	T2	0		
2013	T3	2	100	100
2013	T4	2	100	50

Table S4. Number of isolates (N) and susceptibility rate (%) of *P. mirabilis*. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

AÑO	TRIMESTRE	N	Amoxicillin/ clavulanic acid	Cefepime	Cefotaxime	Ceftazidime	Ciprofloxacin	Gentamycin	Levofloxacin	Piperacillin/ tazobactam
1998	Annual	9	100	100	100	100	44	100	ND	100
1999	Annual	13	95	100	100	100	100	92	ND	100
2000	T1	2	100	100	100	100	100	100	ND	100
2000	T2	0								
2000	T3	0								
2000	T4	1	100	100	100	100	100	100	100	100
2001	T1	2	50	100	100	50	100	100	100	50
2001	T2	2	100	100	100	100	100	100	100	100
2001	T3	1	100	100	100	100	100	100	100	100
2001	T4	1	0	ND	ND	100	100	0	ND	100
2002	T1	3	100	100	100	100	100	100	100	100
2002	T2	0								
2002	T3	0								
2002	T4	0								
2003	T1	1	100	100	100	100	100	100	100	100
2003	T2	0								
2003	T3	1	100	ND	ND	100	100	100	ND	100
2003	T4	0								
2004	T1	4	100	100	100	100	50	100	50	100
2004	T2	1	0	100	100	100	100	100	100	100
2004	T3	1	100	100	100	100	100	100	100	100
2004	T4	1	0	100	100	100	100	0	100	100
2005	T1	1	100	100	100	100	100	100	100	100
2005	T2	3	33	100	100	100	67	67	67	100

2012	T3	1	100	100	100	100	100	100	100	100
2012	T4	2	100	50	100	100	100	100	100	100
2013	T1	2	100	100	100	100	50	100	100	100
2013	T2	0								
2013	T3	0								
2013	T4	0								

Table S5. Number of isolates (N) and susceptibility rate (%) of *Serratia* spp. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

2012	T3	1	0	100	100	100	100	0	100	100
2012	T4	2	0	100	50	100	100	100	100	100
2013	T1	0	0	100	100	100	100	100	100	100
2013	T2	1	0	100	100	100	100	100	100	100
2013	T3	1	0	100	100	100	100	100	100	100
2013	T4	2	0	100	100	100	100	100	100	100

Table S6. Number of isolates (N) and susceptibility rate (%) of *Acinetobacter* spp. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	Imipenem
1998	Annual	9	100
1999	Annual	0	
2000	T1	1	100
2000	T2	0	
2000	T3	3	100
2000	T4	1	100
2001	T1	0	
2001	T2	1	100
2001	T3	0	
2001	T4	14	0
2002	T1	5	0
2002	T2	1	100
2002	T3	1	100
2002	T4	1	0
2003	T1	0	
2003	T2	0	
2003	T3	0	
2003	T4	0	
2004	T1	1	100
2004	T2	0	
2004	T3	0	
2004	T4	2	50
2005	T1	0	
2005	T2	0	
2005	T3	0	
2005	T4	0	
2006	T1	0	
2006	T2	0	
2006	T3	0	
2006	T4	0	
2007	T1	1	100
2007	T2	0	
2007	T3	0	
2007	T4	0	
2008	T1	1	0
2008	T2	0	
2008	T3	0	
2008	T4	0	
2009	T1	1	0
2009	T2	0	
2009	T3	0	
2009	T4	0	
2010	T1	0	
2010	T2	0	
2010	T3	1	100
2010	T4	2	50

2011	T1	0	
2011	T2	1	100
2011	T3	1	100
2011	T4	0	
2012	T1	0	
	T2	0	
	T3	0	
	T4	0	
2013	T1	1	0
2013	T2	0	
2013	T3	0	
2013	T4	0	

Table S7. Number of isolates (N) and susceptibility rate (%) of *P. aeruginosa*. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	Amikacin	Cefepime	Ceftazidime	Ciprofloxacin	Colistin	Imipenem	Levofloxacin	Meropenem	Piperacillin/tazobactam	Tobramycin
1998	Annual	27	100	70	78	81	ND	93	ND	93	78	93
1999	Annual	47	96	74	81	94	ND	89	ND	85	77	91
2000	T1	7	100	71	71	100	ND	86	ND	86	86	86
2000	T2	5	60	75	80	60	0	80	ND	60	80	80
2000	T3	2	50	0	50	50	0	50	0	0	50	50
2000	T4	7	100	100	100	86	0	100	100	71	100	100
2001	T1	7	100	75	71	100	0	86	100	57	66	86
2001	T2	12	100	92	100	83	ND	75	83	75	92	100
2001	T3	11	100	100	82	91	ND	82	82	73	82	91
2001	T4	15	87	60	60	73	ND	60	80	73	53	87
2002	T1	6	100	67	83	83	ND	83	83	83	83	83
2002	T2	4	100	67	100	75	0	50	100	75	75	100
2002	T3	8	88	75	75	88	ND	63	75	50	88	63
2002	T4	6	83	67	67	67	ND	83	67	83	67	83
2003	T1	8	100	57	63	88	0	75	71	75	75	88
2003	T2	7	100	100	86	86	ND	100	86	100	71	100
2003	T3	3	100	50	67	100	0	100	100	67	67	100
2003	T4	6	100	83	83	83	ND	100	83	100	67	83
2004	T1	6	100	67	83	100	ND	83	100	100	83	100
2004	T2	7	100	86	71	57	ND	71	57	57	57	57
2004	T3	6	100	80	83	67	0	67	60	67	67	83
2004	T4	7	100	80	86	71	0	71	60	57	86	86
2005	T1	5	100	60	80	80	ND	80	80	80	80	80

2005	T2	10	90	88	90	80	0	80	75	50	80	80
2005	T3	5	80	100	100	80	ND	100	80	80	100	60
2005	T4	3	100	100	100	100	ND	100	100	100	100	100
2006	T1	5	100	80	80	80	ND	60	80	80	40	80
2006	T2	6	100	100	100	67	0	83	60	67	83	67
2006	T3	7	100	100	100	43	0	14	33	57	86	57
2006	T4	8	100	50	50	38	ND	38	38	38	38	63
2007	T1	5	100	100	80	60	ND	20	60	80	80	80
2007	T2	4	100	67	100	75	0	25	100	50	75	75
2007	T3	6	67	67	67	33	ND	67	33	67	83	33
2007	T4	10	100	50	40	10	ND	30	20	30	30	40
2008	T1	8	88	75	88	63	ND	50	50	38	88	75
2008	T2	10	100	75	80	40	0	30	38	40	60	50
2008	T3	16	94	67	88	44	0	31	47	31	56	38
2008	T4	9	89	67	89	22	ND	44	22	56	56	56
2009	T1	4	100	100	100	50	ND	50	50	75	75	50
2009	T2	4	100	100	100	50	0	50	67	50	75	50
2009	T3	16	94	81	88	44	82	44	56	38	44	44
2009	T4	11	100	70	64	46	82	55	60	46	64	55
2010	T1	4	100	100	100	75	100	75	75	100	75	100
2010	T2	6	100	83	67	25	83	67	40	67	33	50
2010	T3	10	60	100	70	20	80	50	25	30	70	20
2010	T4	7	86	86	86	57	86	71	57	71	86	43
2011	T1	7	100	57	71	29	100	43	29	43	43	29
2011	T2	8	100	63	63	63	75	63	63	50	63	50
2011	T3	13	92	69	69	64	69	62	77	62	69	67
2011	T4	12	100	83	75	80	83	67	83	67	67	83
2012	T1	4	100	75	50	75	75	50	75	50	25	50

2012	T2	11	100	82	82	50	82	18	55	27	46	27
2012	T3	18	100	83	72	61	78	61	61	56	50	59
2012	T4	9	89	78	67	56	67	44	56	78	56	67
2013	T1	4	75	100	100	25	100	50	25	50	50	25
2013	T2	6	67	67	67	50	50	50	75	50	50	33
2013	T3	1	100	100	100	100	100	100	100	100	100	100
2013	T4	6	100	83	100	67	100	67	67	67	67	67

Table S8. Number of isolates (N) and susceptibility rate (%) of *E. faecalis*. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	High concentration of gentamycin (500 mg/L)	High concentration of streptomycin (1,000 mg/L)	Vancomycin
1998	Annual	14	100	100	100
1999	Annual	24	42	58	96
2000	T1	6	67	67	100
2000	T2	5	60	40	100
2000	T3	8	88	75	100
2000	T4	5	40	60	100
2001	T1	5	60	60	100
2001	T2	8	63	38	100
2001	T3	8	25	13	100
2001	T4	12	50	42	100
2002	T1	8	50	50	100
2002	T2	12	25	58	100
2002	T3	24	25	79	100
2002	T4	13	46	54	100
2003	T1	15	7	73	100
2003	T2	8	13	50	100
2003	T3	15	20	27	100
2003	T4	7	29	14	100
2004	T1	25	4	8	100
2004	T2	11	27	18	91
2004	T3	23	13	9	100
2004	T4	5	60	60	100
2005	T1	14	21	7	100
2005	T2	14	14	21	100
2005	T3	16	13	25	100
2005	T4	20	20	25	100
2006	T1	10	50	80	100
2006	T2	14	14	29	100
2006	T3	24	17	8	100
2006	T4	20	20	20	100
2007	T1	14	36	7	100
2007	T2	24	21	21	100
2007	T3	24	4	0	100
2007	T4	21	14	10	100
2008	T1	25	4	24	100
2008	T2	22	18	23	100
2008	T3	33	9	21	100
2008	T4	25	8	8	100
2009	T1	13	23	23	100
2009	T2	6	17	33	100
2009	T3	18	22	11	100
2009	T4	16	13	6	100
2010	T1	14	7	7	100
2010	T2	8	38	25	100
2010	T3	11	9	9	100

2010	T4	10	40	60	100
2011	T1	17	6	19	100
2011	T2	12	17	17	100
2011	T3	18	11	17	100
2011	T4	10	20	10	100
2012	T1	21	19	19	100
2012	T2	17	6	18	94
2012	T3	25	32	28	100
2012	T4	10	20	20	100
2013	T1	8	25	63	100
2013	T2	6	67	50	100
2013	T3	5	60	80	100
2013	T4	6	50	33	100

Table S9. Number of isolates (N) and susceptibility rate (%) of *E. faecium*. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	High concentration of gentamycin (500 mg/L)	High concentration of streptomycin (1,000 mg/L)	Vancomycin
1998	ANUAL	1	100	100	100
1999	ANUAL	2	100	50	100
2000	T1	1	0	0	100
2000	T2	0			
2000	T3	0			
2000	T4	0			
2001	T1	1	100	100	100
2001	T2	0			
2001	T3	0			
2001	T4	0			
2002	T1	0			
2002	T2	0			
2002	T3	0			
2002	T4	3	0	100	100
2003	T1	3	0	100	100
2003	T2	6	50	83	100
2003	T3	3	0	100	100
2003	T4	2	50	100	100
2004	T1	1	0	100	100
2004	T2	0			
2004	T3	1	0	0	100
2004	T4	1	100	100	100
2005	T1	1	0	0	100
2005	T2	0			
2005	T3	6	17	67	100
2005	T4	1	100	0	100
2006	T1	4	25	25	100
2006	T2	1	100	100	100
2006	T3	1	0	0	100
2006	T4	1	100	100	100
2007	T1	3	67	33	100
2007	T2	4	75	25	100
2007	T3	3	67	33	100
2007	T4	4	100	50	100
2008	T1	11	36	55	100
2008	T2	5	20	60	100
2008	T3	3	33	33	100
2008	T4	1	100	100	100
2009	T1	2	50	100	100
2009	T2	0			
2009	T3	0			
2009	T4	0			
2010	T1	1	100	0	100
2010	T2	0			
2010	T3	3	33	67	100
2010	T4	10	40	40	90

2011	T1	13	23	8	100
2011	T2	7	14	0	100
2011	T3	3	33	33	100
2011	T4	4	75	50	100
2012	T1	7	43	43	100
2012	T2	12	50	50	100
2012	T3	5	25	25	100
2012	T4	11	46	27	91
2013	T1	1	100	0	100
2013	T2	0			
2013	T3	4	25	25	100
2013	T4	3	33	67	100

Table S10. Number of isolates (N) and susceptibility rate (%) of *S. aureus*. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	Cloxacillin	Vancomycin
1998	Annual	13	92	100
1999	Annual	30	83	100
2000	T1	11	82	100
2000	T2	17	35	100
2000	T3	9	67	89
2000	T4	5	60	100
2001	T1	8	88	100
2001	T2	9	100	100
2001	T3	6	83	100
2001	T4	13	92	100
2002	T1	10	90	100
2002	T2	9	100	100
2002	T3	6	83	100
2002	T4	9	89	100
2003	T1	6	83	100
2003	T2	4	100	100
2003	T3	8	88	100
2003	T4	3	100	100
2004	T1	10	100	90
2004	T2	6	83	100
2004	T3	9	67	100
2004	T4	3	100	100
2005	T1	7	86	100
2005	T2	7	86	100
2005	T3	8	88	100
2005	T4	7	100	100
2006	T1	7	100	100
2006	T2	6	100	100
2006	T3	5	100	100
2006	T4	7	57	100
2007	T1	13	92	100
2007	T2	7	100	100
2007	T3	7	86	100
2007	T4	5	80	100
2008	T1	5	100	100
2008	T2	3	100	100
2008	T3	7	100	100
2008	T4	6	100	100
2009	T1	7	100	100
2009	T2	3	67	100
2009	T3	12	83	100
2009	T4	14	100	100
2010	T1	6	66	100
2010	T2	4	100	100
2010	T3	9	67	100
2010	T4	10	80	100
2011	T1	8	61	100

2011	T2	7	43	100
2011	T3	4	100	100
2011	T4	9	89	100
2012	T1	7	86	100
	T2	6	67	83
	T3	5	60	100
	T4	6	83	100
2013	T1	3	100	100
	T2	3	100	100
	T3	2	100	100
	T4	6	67	100

Table S11. Number of isolates (N) and susceptibility rate (%) of CoNS. The susceptibility data were re-interpreted on the CLSI clinical breakpoints,¹ and managed with Whonet.²

Year	Trimester	N	Cloxacillin	Vancomycin
1998	Annual	31	45	100
1999	Annual	88	45	100
2000	T1	17	12	100
2000	T2	13	15	100
2000	T3	15	0	93
2000	T4	15	27	100
2001	T1	16	19	100
2001	T2	13	31	100
2001	T3	11	55	100
2001	T4	14	50	100
2002	T1	12	83	100
2002	T2	10	90	100
2002	T3	15	47	100
2002	T4	11	55	100
2003	T1	8	100	100
2003	T2	4	100	100
2003	T3	11	27	100
2003	T4	13	54	100
2004	T1	13	69	100
2004	T2	11	27	100
2004	T3	12	17	100
2004	T4	13	23	100
2005	T1	12	42	100
2005	T2	7	14	100
2005	T3	13	15	100
2005	T4	13	62	100
2006	T1	9	33	100
2006	T2	12	42	100
2006	T3	11	9	100
2006	T4	10	20	100
2007	T1	10	30	100
2007	T2	13	23	100
2007	T3	12	17	100
2007	T4	13	15	100
2008	T1	21	19	100
2008	T2	17	24	100
2008	T3	15	33	100
2008	T4	15	40	100
2009	T1	8	38	100
2009	T2	5	0	100
2009	T3	6	50	100
2009	T4	9	11	100
2010	T1	10	0	100
2010	T2	9	11	100
2010	T3	9	33	100
2010	T4	18	6	100

2011	T1	15	20	100
2011	T2	6	17	100
2011	T3	5	40	100
2011	T4	14	29	100
2012	T1	9	33	89
2012	T2	10	30	100
2012	T3	7	14	86
2012	T4	15	20	100
2013	T1	6	17	100
2013	T2	2	0	100
2013	T3	11	18	100
2013	T4	0		

Table S12. Comparison of the susceptibility rates of all organism-antibiotic combinations studied before and after the implantation of the SDD. In bold, p<0.05.

Microorganism	Antimicrobial agent	Difference in the susceptibility rate pre and post-SDD		
		p value	%Change (Susceptibility rate in post-SDD, 95% CI)	
Gram-negative organisms				
Enterobacterales				
<i>Enterobacter</i> spp.	Cefotaxime	0.2658		
	Imipenem	0.1498		
<i>Escherichia coli</i>	Amoxicillin/clavulanic acid	0.0009	-20 (78, 66-91)	
	Ceftazidime	0.2891		
	Cefepime	0.4868		
	Cefotaxime	0.4438		
	Ciprofloxacin	0.6759		
	Gentamycin	0.4658		
	Levofloxacin	0.6986		
	Piperacillin/tazobactam	0.2472		
<i>Klebsiella pneumoniae</i>	Cefotaxime	0.3826		
	Ceftazidime	0.3466		
<i>Proteus mirabilis</i>	Amoxicillin/clavulanic acid	0.0401	-27 (72, 49-100)	
	Cefepime	0.2412		
	Cefotaxime	0.3405		
	Ceftazidime	0.4479		
	Ciprofloxacin	0.2593		
	Gentamycin	0.1744		
	Levofloxacin	0.4742		
	Piperacillin/tazobactam	0.4122		
<i>Serratia</i> spp.	Cefepime	0.4161		
	Cefotaxime	0.5610		
	Ceftazidime	0.4741		
	Ciprofloxacin	0.5338		
	Gentamycin	0.5203		
	Levofloxacin	0.7044		
	Piperacillin/tazobactam	0.5320		
Non-fermenters				
<i>Acinetobacter</i> spp.	Imipenem	0.9650		
<i>Pseudomonas aeruginosa</i>	Amikacin	0.4031		
	Tobramycin	0.5216		
	Cefepime	0.7726		
	Ceftazidime	0.4203		
	Ciprofloxacin	0.2395		
	Levofloxacin	0.5473		
	Imipenem	0.2629		
	Meropenem	0.1881		
	Colistin	0.5044		
	Piperacillin/tazobactam	0.1405		
Gram-positive organisms				
<i>Enterococcus faecalis</i>	High concentration of gentamycin (500 mg/L)	0.0421	-32 (36, 13-92)	
	High concentration of streptomycin (1,000 mg/L)	0.8161		
	Vancomycin	0.5691		
<i>Enterococcus faecium</i>	High concentration of gentamycin (500 mg/L)	0.0712		
	High concentration of streptomycin (1,000 mg/L)	0.5623		
	Vancomycin	0.5046		
<i>Staphylococcus aureus</i>	Cloxacillin	0.7003		
	Vancomycin	0.4560		
CoNS	Cloxacillin	0.7489		
	Vancomycin	0.4832		

Table S13. Comparison of the susceptibility trends before and after the implantation of the SDD when the consumption of all beta-lactams and piperacillin/tazobactam was included in the model.

Organism-antibiotic	Antibiotic consumption	Difference in the susceptibility trends pre and post-SDD
		P value
<i>E. coli</i> vs amoxicillin/clavulanic acid	Piperacillin/tazobactam	0.0070
	All beta-lactams	0.0148
<i>P. mirabilis</i> vs amoxicillin/clavulanic acid	Piperacillin/tazobactam	0.0706
	All beta-lactams	0.0214

Table S14.Trend of antimicrobial consumption in the pre- and post-DDS periods in the ICU of the HUA.

	Pre-DDS period			Post-DDS period		
	p value	Correlation coefficient (r)	Trend	p value	Correlation coefficient (r)	Trend
Amikacin	0.017	0.57	increasing	0.043	0.31	increasing
Amoxicillin/clavulanic acid	0.716	-0.10		0.105	-0.25	
Cefepime	0.088	0.44		0.020	-0.35	decreasing
Cefotaxime	0.009	-0.63		<0.0001	-0.56	decreasing
Ceftazidime	0.130	-0.059		0.596	0.08	
Ceftriaxone	0.313	-0.27		<0.0001	0.58	increasing
Cloxacillin	0.901	-0.03		0.819	0.04	
Ciprofloxacin	0.558	-0.16		0.012	-0.38	decreasing
Colistin	-	-		<0.0001	-0.62	
Daptomycin	-	-		0.224	0.26	
Gentamycin	0.004	-0.67		<0.0001	-0.70	decreasing
Imipenem	0.975	-0.01		0.010	-0.39	decreasing
Levofloxacin	0.733	0.14		0.340	0.15	
Linezolid	-	-		<0.001	0.74	increasing
Meropenem	0.222	0.29		0.001	0.47	increasing
Piperacillin/tazobactam	0.150	-0.33		0.002	0.45	increasing
Tigecycline	-	-		0.331	-0.21	
Tobramycin	0.005	-0.60		<0.0001	-0.75	decreasing
Vancomycin	0.268	-0.026		<0.0001	-0.69	decreasing
All beta-lactams	0.750	0.071		0.750	-0.05	
All antimicrobials*	0.977	-0.013		0.203	0.42	

*: all antibiotics used in the ICU except the gentamycin and colistin used in the SDD protocol.

Yearly data were used.

In bold, p<0.05 and r≥0.7.

Table S15. Trends in the rate of resistant microorganism acquisition before and after the implantation of the SDD.

		Pre-DDS period			Post-DDS period			
		p value	Correlation coefficient (r)	Trend	p value	Correlation coefficient (r)	Trend	
Gram-negative organisms								
Enterobacterales								
<i>Enterobacter</i> spp.	Cefotaxime	0.417	0.478	-	0.871	-0.047	-	
	Imipenem	0.111	0.775	-	0.398	-0.270	-	
<i>Escherichia coli</i>	Amoxicillin/clavulanic acid	0.178	0.711	-	0.372	0.299	-	
	Ceftazidime	0.252	0.656	-	0.086	0.571	-	
	Cefepime	0.262	0.622	-	0.090	0.557	-	
	Cefotaxime	0.175	0.702	-	0.116	0.513	-	
	Ciprofloxacin	0.910	0.078	-	0.071	0.560	-	
	Gentamycin	0.907	-0.081	-	0.071	0.567	-	
	Levofloxacin	0.690	-0.024	-	0.357	0.305	-	
	Piperacillin/tazobactam	0.175	0.724	-	0.739	-0.108	-	
<i>Klebsiella pneumoniae</i>	Cefotaxime	0.332	0.568	-	0.231	-0.388	-	
	Ceftazidime	0.604	0.284	-	0.601	-0.175	-	
<i>Proteus mirabilis</i>	Amoxicillin/clavulanicacid	0.495	0.438	-	0.799	-0.079	-	
	Cefepime	*	*	-	0.712	0.119	-	
	Cefotaxime	*	*	-	0.714	0.069	-	
	Ceftazidime	0.474	0.354	-	0.692	-0.037	-	
	Ciprofloxacin	0.158	-0.707	-	0.810	-0.021	-	
	Gentamycin	0.604	0.247	-	0.759	-0.0002	-	
	Levofloxacin	*	*	-	0.538	-0.216	-	
	Piperacillin/tazobactam	0.474	0.353	-	0.229	0.390	-	
<i>Serratia</i> spp.	Cefepime	0.081	0.833	-	0.052	-0.595	-	
	Cefotaxime	0.193	0.695	-	0.747	-0.061	-	
	Ceftazidime	0.767	0.171	-	0.343	-0.301	-	
	Ciprofloxacin	0.799	-0.047	-	0.191	-0.411	-	

	Gentamycin	0.799	-0.047	-	0.759	0.117	-
	Levofloxacin	0.896	0.071	-	*	*	-
	Piperacillin/tazobactam	0.769	0.000	-	0.497	-0.234	-
Non-fermenters							
<i>Acinetobacter</i> spp.	Imipenem	0.229	0.659	-	0.578	0.173	-
<i>Pseudomonas aeruginosa</i>	Amikacin	0.188	0.707	-	0.162	0.447	-
	Tobramycin	0.002	0.982	increasing	0.054	0.594	-
	Cefepime	0.018	0.950	increasing	0.683	-0.141	-
	Ceftazidime	0.131	0.765	-	0.691	0.134	-
	Ciprofloxacin	0.055	0.871	-	0.219	0.404	-
	Levofloxacin	0.193	0.700	-	0.527	0.216	-
	Imipenem	0.074	0.839	-	0.271	0.366	-
	Meropenem	0.095	0.816	-	0.287	0.353	-
	Colistin	0.503	0.396	-	0.113	-0.507	-
	Piperacillin/tazobactam	0.223	0.661	-	0.226	0.396	-
Gram-positive organisms							
<i>Enterococcus faecalis</i>	High concentration of gentamycin (500 mg/L)	0.031	0.912	increasing	0.082	-0.546	-
	High concentration of streptomycin (1,000 mg/L)	0.005	0.975	increasing	0.177	-0.438	-
	Vancomycin	*	*	-	0.497	-0.079	-
<i>Enterococcus faecium</i>	High concentration of gentamycin (500 mg/L)	0.179	0.728	-	0.464	0.248	-
	High concentration of streptomycin (1,000 mg/L)	0.651	-0.094	-	0.064	0.579	-
	Vancomycin	*	*	-	0.117	0.449	-
<i>Staphylococcus aureus</i>	Cloxacillin	0.807	0.150	-	0.428	0.262	-
	Vancomycin	*	*	-	0.497	-0.058	-
CoNS	Cloxacillin	0.561	0.354	-	0.332	-0.324	-
	Vancomycin	*	*	-	0.229	0.400	-

*: Resistance rate was always 0.

In bold, p<0.05 and r≥0.7.

Figure S1. Frequency (number of isolates) of the organisms collected from 1998 to 2013 in the ICU of the HUA.

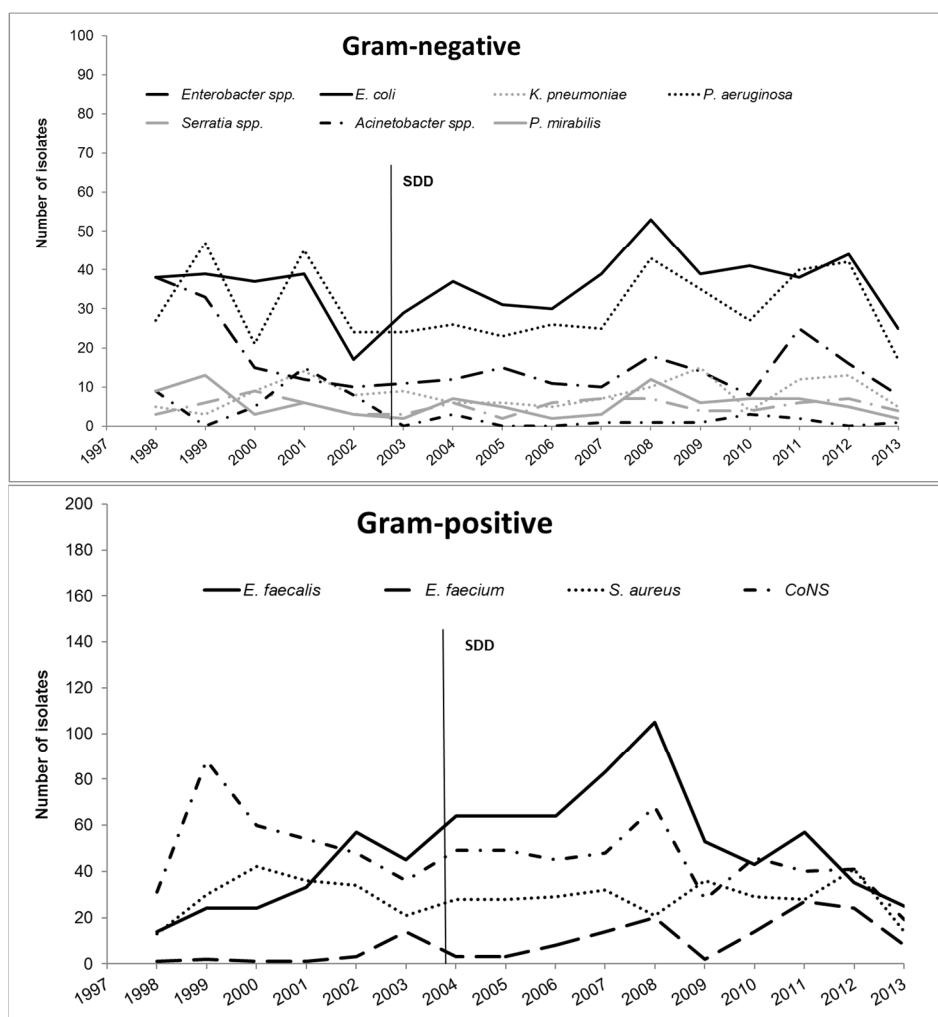
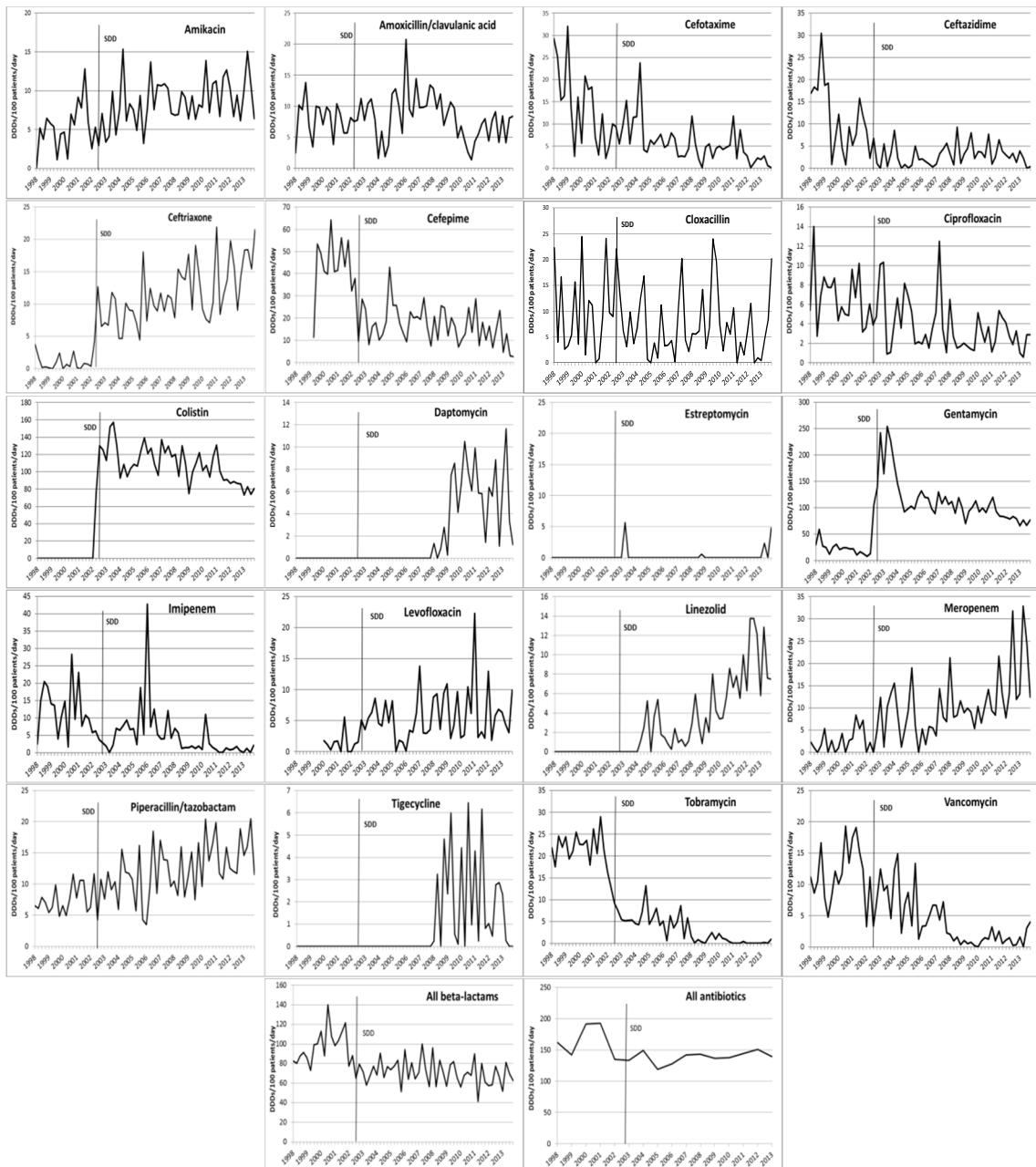


Figure S2. Quarterly consumption of the antimicrobials used in the ICU of the HUA. In all antibiotics (yearly data), we included all those used in the ICU except the gentamycin and colistin used in the SDD protocol. Datomycin, linezolid and tigecycline were introduced in the post-SDD period.



References

1. Clinical and Laboratory Standards Institute. *Performance Standards for Antimicrobial Susceptibility Testing: Twenty-Eighth Edition. Supplement M100*. CLSI, Wayne, PA, USA, 2018.
2. WHONET 5.6. Available from <http://www.whonet.org/>.