

REGION

The Capital Region of Denmark

Task Force for Reduction of Hospital acquired Infections

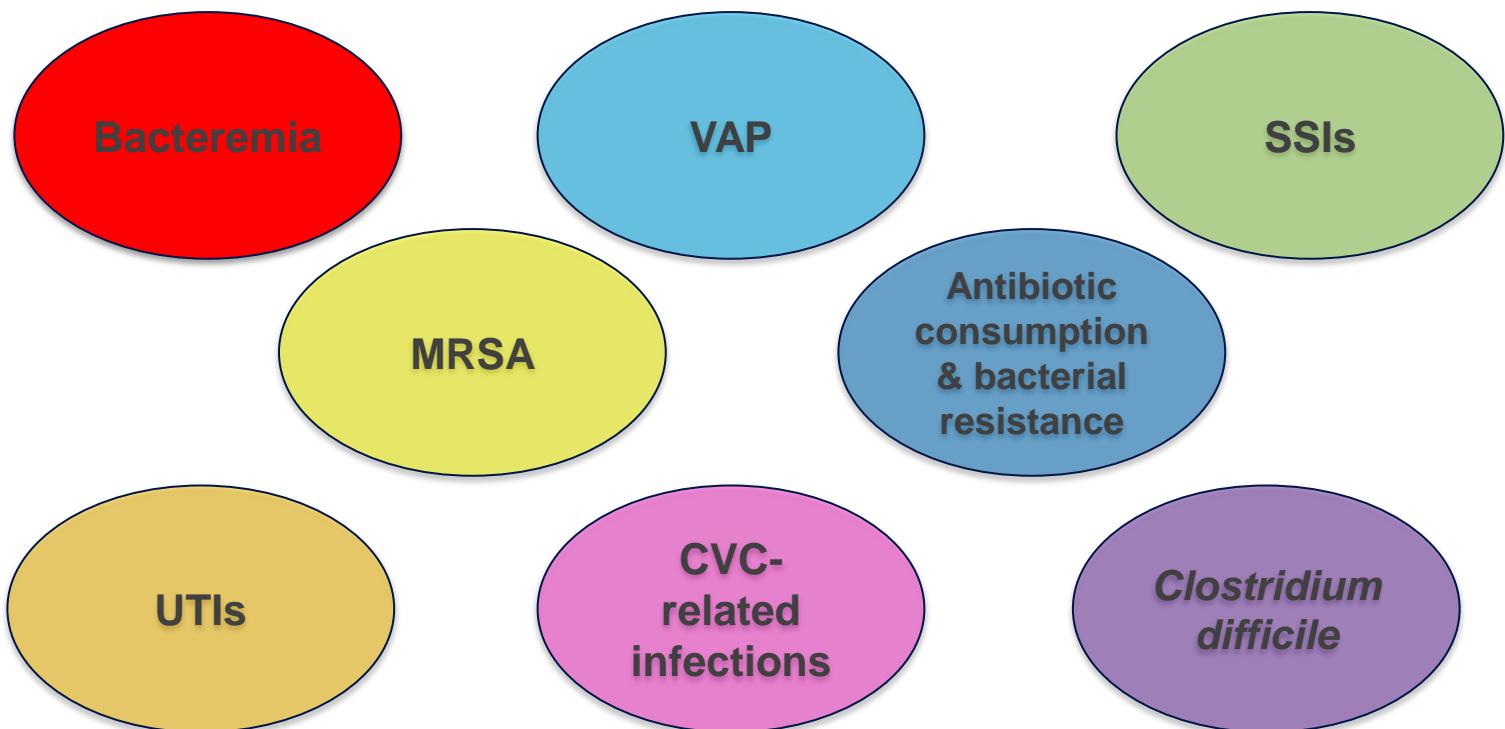
Clostridium difficile i Region H

- Bente Olesen MD, Ph.D.

Organization

***Committee for Infection Control and Hygiene,
the Capital Region of Denmark***

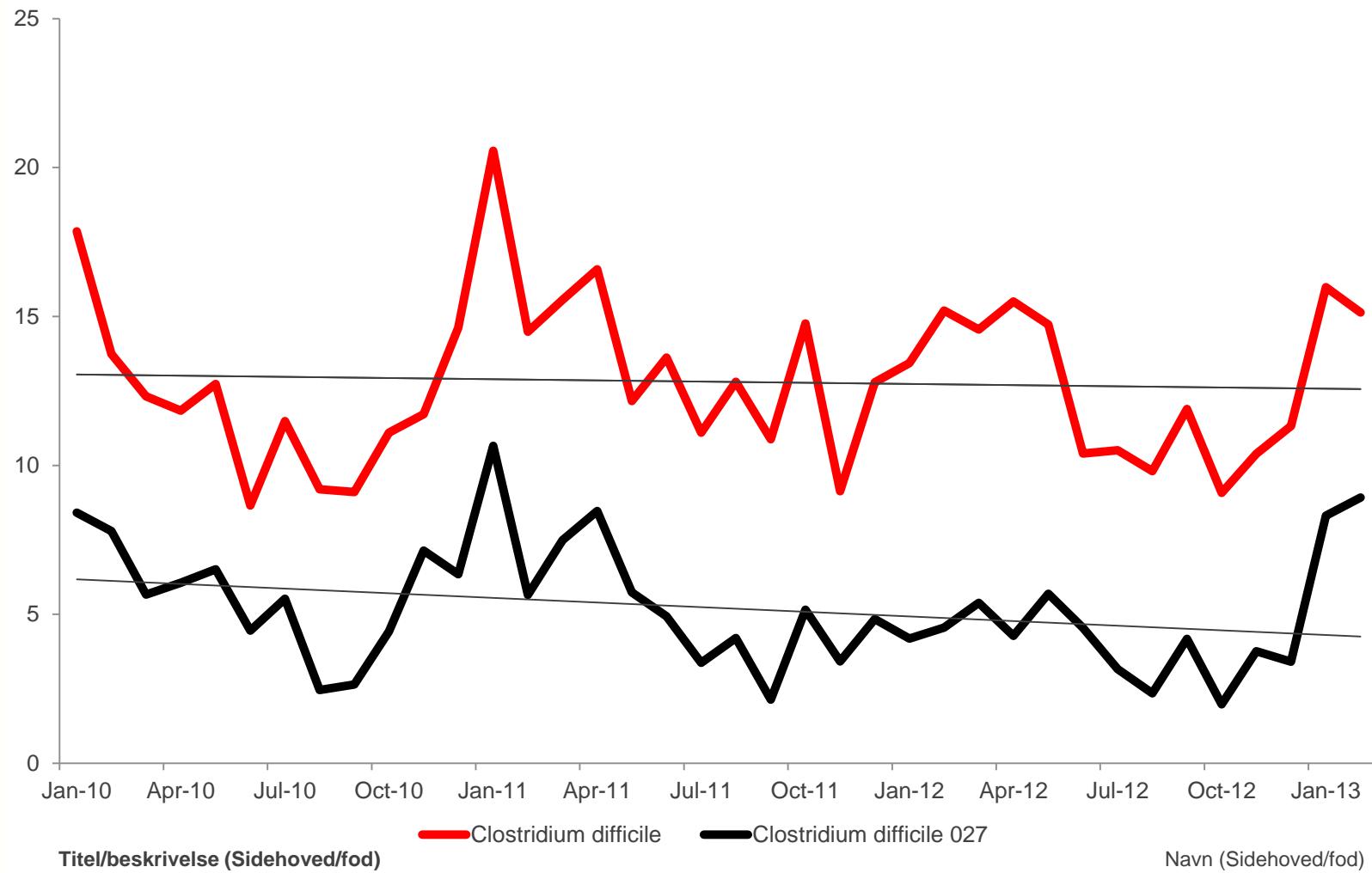
**Task Force for Reduction of Hospital
acquired Infections**



Strategy for change

- A mandatory laboratory surveillance of the incidence of new cases of CDI, including CD027, in patients > 2 years of age was initiated by the Copenhagen region
- Baselines were defined as the medians of new cases from January 1, 2010 to June 30, 2011.

New cases of CDI and CD27 per 10,000 bed days in Copenhagen 2010 - 2012

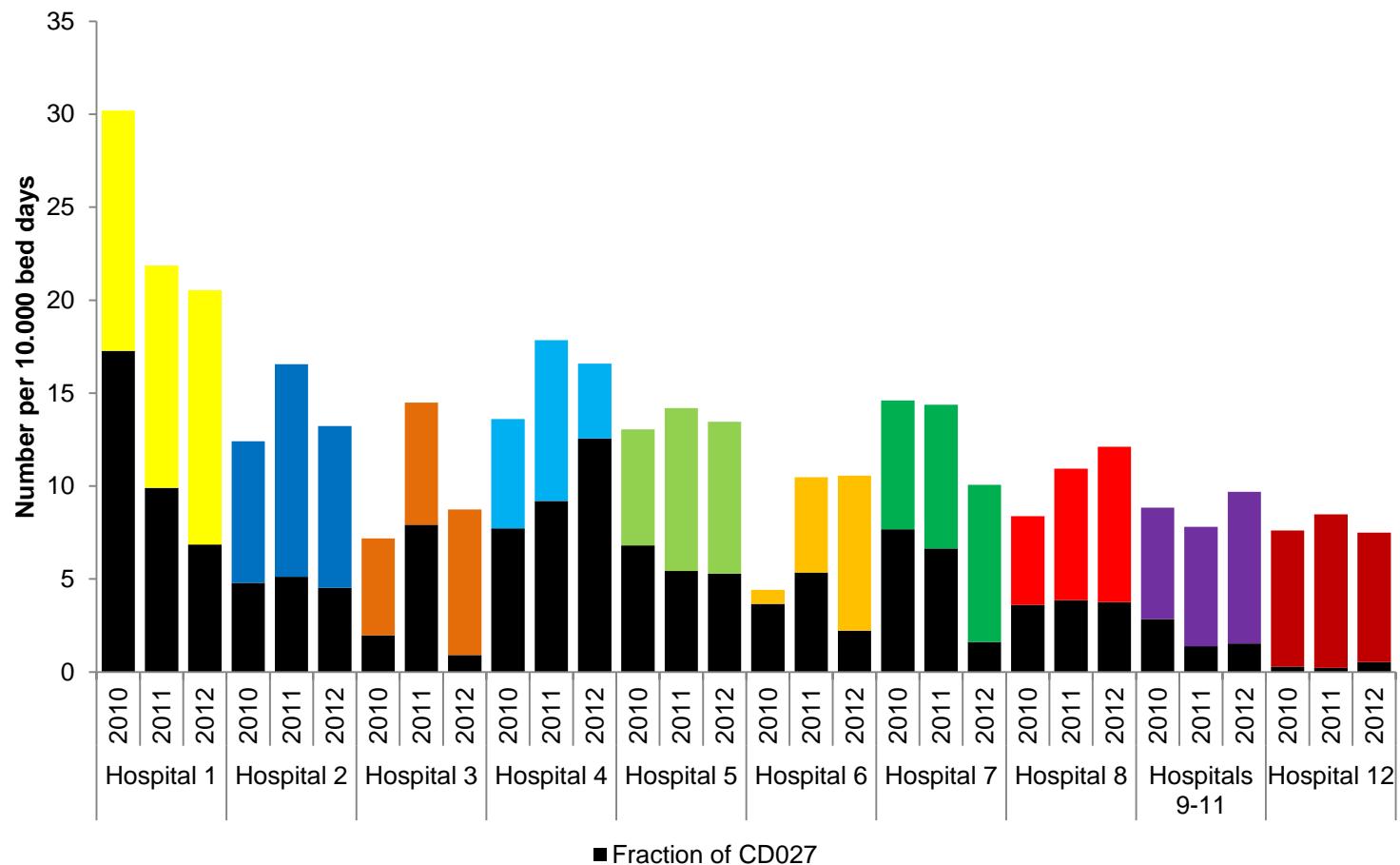




New cases of CDI and CD027 in Copenhagen 2010 - 2012

		Jan	Feb	Mar	Apr	Maj	Jun	Jul	Aug	Sep	Okt	Nov	Dec	Total 2012
Hospital 1	CDI	3	8	5	12	10	5	7	5	9	4	8	7	83
	CD027	0	2	2	4	1	4	2	1	3	0	6	3	28
Hospital 2	CDI	23	28	12	18	17	20	13	9	28	17	13	10	208
	CD027	6	12	10	5	3	13	4	1	7	2	5	4	72
Hospital 3	CDI	3	2	5	2	1	2	3	1	2	2	2	3	28
	CD027	0	0	0	0	0	0	0	1	0	0	1	1	3
Hospital 4	CDI	13	11	18	4	14	5	5	3	5	2	5	7	92
	CD027	7	9	11	3	14	5	5	1	4	3	3	2	67
Hospital 5	CDI	9	16	10	14	15	6	5	7	4	4	4	8	102
	CD027	5	3	6	7	8	1	1	0	2	0	0	6	39
Hospital 6	CDI	12	8	5	14	7	7	3	8	6	11	2	11	94
	CD027	1	2	3	2	1	2	0	3	2	3	0	1	20
Hospital 7	CDI	27	25	27	17	18	19	21	12	13	13	23	22	237
	CD027	8	2	7	2	5	5	1	2	1	3	2	1	39
Hospital 8	CDI	23	19	26	26	21	17	10	26	17	15	17	22	239
	CD027	5	4	3	6	4	6	5	10	10	7	4	8	72
Hospital 9-11	CDI	42	22	25	22	26	15	12	17	14	24	29	30	278
	CD027	8	4	3	2	4	2	1	2	2	2	5	3	39
Hospital 12	CDI	18	22	41	27	15	25	21	15	12	19	22	22	259
	CD027	6	3	2	0	0	1	3	0	2	1	0	0	19
GP's	CDI	10	9	15	9	10	16	9	16	14	22	27	11	168
The Copenhagen Region	CDI	183	170	189	165	154	137	109	119	124	133	152	153	1788
	CD027	46	41	47	31	40	41	22	21	33	21	26	29	398

The incidence of CDI and CD027 per 10,000 bed days in Copenhagen 2010 - 2012



Regional interventions

- A multidisciplinary regional group sharing knowledge on CDI
- Specific CDI control guideline
- Daily disinfection of rooms with chlorine-containing agent
- Disinfection of rooms using Glosair® in cases of local outbreaks
- Guidelines for medical treatment of CDI

Regional interventions

- Free medical treatment for both hospitalized and outpatients with CDI
- Five specialized outpatient clinics for all CDI out-patients
- PCR screening of stools for faster CD diagnosis
- Use of fluoroquinolones reduced

Effects of Changes

- 30% reduction of new cases of CD027 was obtained by 2012
- A 10% reduction of CDI was obtained by 2012
- The total burden of CDI including recurrences has not yet declined

Lessons learned

- Rapid diagnosis is essential
- Focus on the out-patients is important
- Disinfection with chlorine of common ward areas, as well as isolation rooms, proved helpful
- Multidisciplinary communication and leadership is necessary
- Interventions need to be data-driven

Acknowledgements

Task Force *Clostridium difficile* working group :

Michael Tvede, Rigshospitalet

Jette Bangsborg, Herlev Hospital

Søren Thorsen, Hillerød Hospital

Anne Lester, Hvidovre Hospital

Marie Stangerup, Bispebjerg Hospital

Jette Nygaard Jensen Herlev Hospital

Task Force Steering committee:

Bettina Lundgren, Chairman, Rigshospitalet

Christian Østergaard Andersen, Hvidovre Hospital

Jens Otto Jarløv, Herlev Hospital

Helle Krogh Johansen, Rigshospitalet

Jan Utzon, Capital Region of Denmark

Jenny Dahl Knudsen, Hvidovre Hospital

Rie Mikkelsen, Hvidovre Hospital

Christian von Plessen, Hillerød Hospital

Bente Olsen, Hillerød/Herlev Hospital