



ER DET SIKKERT AT BLIVE INDLAGT I AKUTAFDELINGEN I WEEKENDEN, OG HVAD KAN ÅRSAGERNE VÆRE, HVIS DET IKKE ER?

IBEN DUVALD

SOCIALANTROPOLOG, PHD-STUDERENDE

FORSKNINGSASSISTENT I AKUTAFDELINGEN, HEM





PROGRAM

- › Kort præsentation af ph.d.-afhandling

- › **Er det sikkert at blive indlagt i weekenden?**
 - Længde af hospitalsophold
 - Dødelighed

- › **Hvad kan årsagerne være?**
 - Patientens karakteristika og sværhedsgrad af sygdom
 - Organiseringen af akutafdelingen
 - Akutlægernes strategier

Konklusion og spørgsmål



PRÆSENTATION AF AFHANDLING

Exploring and explaining the weekend effect in a Danish emergency department

Mixed methods studie

- 1) Kohortestudie byggende på EPJ-data
- 2) Mixed Methods studie af utilsigtede hændelser og registreringspraksis
- 3) Etnografisk feltstudie af akutafdelingens organisering og sociale praksisser





AKUTAFDELINGEN, HEM

35,459 patienter i 2014-2015 (29% i weekend)

Kategorier; medicinske, organkirurgiske, ortopædkirurgiske, neurologiske, urologiske og gynækologiske

2 afsnit; A1 og A2 på 2. og 4. etage

2 akutklinikker; Silkeborg og Skive

3 kommuner; Viborg, Silkeborg og Skive

Flytter i ny bygning i maj 2019



PROGRAM

- › Kort præsentation af ph.d.-afhandling

- › **Weekend effekten: eksistensen**
 - Længde af hospitalsophold
 - Dødelighed

- › **Weekend effekten: mulige årsager**
 - Patientens karakteristika og sværhedsgrad af sygdom
 - Organiseringen af akutafdelingen
 - Akutlægernes strategier

Konklusion og spørgsmål



WEEKEND EFFEKTEN: EKSISTENSEN

> Længden af hospitalsophold

Table 3.4: Patients' LOS within the emergency department and within the hospital including their stay within the emergency department by time of admission

	Weekday (From 7:00 am on Monday to 2:59 p.m. on Friday)			Weekend (From 3:00 p.m. on Friday to 6:59 a.m. on Monday)		
	Daytime (7:00 a.m. - 2:59 p.m.)	Evening (3:00 p.m. - 10:59 p.m.)	Nighttime (11:00 p.m. - 6:59 a.m.)	Daytime (7:00 a.m. - 2:59 p.m.)	Evening (3:00 p.m. - 10:59 p.m.)	Nighttime (11:00 p.m. - 6:59 a.m.)
	n (% of group)					
Overall	15494 (43.7)	7674 (21.6)	1856 (5.2)	3192 (9.0)	5277 (14.9)	1966 (5.5)
Length of stay within the emergency department						
0-59 minutes (<1 hour)	2389 (15.4)	1082 (14.1)	254 (13.7)	528 (16.5)	858 (16.3)	350 (17.8)
60-179 minutes (1-2.59 hours)	4640 (30.0)	2523 (32.9)	511 (27.5)	994 (31.1)	1802 (34.2)	576 (29.3)
180-259 minutes (3-5.59 hours)	3291 (21.2)	1459 (19.0)	162 (8.7)	618 (19.4)	939 (17.8)	237 (12.1)
360-719 minutes (6-11.59 hours)	2529 (16.3)	376 (4.9)	477 (25.7)	427 (13.4)	225 (4.3)	395 (20.1)
720-1439 minutes (12-23.59 hours)	937 (6.1)	1837 (23.8)	362 (19.6)	203 (6.4)	1888 (35.8)	277 (14.1)
1440-2879 minutes (24-47.59 hours)	1407 (9.1)	355 (4.6)	74 (4.0)	350 (11.0)	288 (5.5)	113 (5.8)
More than 2880 minutes (>48 hours)	301 (1.9)	42 (0.6)	15 (0.8)	72 (2.3)	76 (1.4)	18 (0.9)
Length of stay within the hospital						
0-59 minutes (<1 hour)	1923 (12.4)	859 (11.2)	171 (9.2)	427 (13.4)	676 (12.8)	248 (12.6)
60-179 minutes (1-2.59 hours)	3718 (24.0)	2029 (26.4)	366 (19.7)	740 (23.2)	1401 (26.6)	438 (22.3)
180-259 minutes (3-5.59 hours)	2310 (14.9)	990 (12.9)	102 (5.5)	404 (12.7)	614 (11.6)	180 (9.2)
360-719 minutes (6-11.59 hours)	1432 (9.2)	228 (3.0)	302 (16.3)	247 (7.7)	131 (2.5)	327 (16.6)
720-1439 minutes (12-23.59 hours)	727 (4.7)	1259 (16.4)	237 (12.8)	132 (4.1)	816 (15.5)	206 (10.5)
1440-2879 minutes (24-47.59 hours)	1474 (9.5)	578 (7.5)	173 (9.3)	332 (10.4)	364 (6.9)	131 (6.7)
More than 2880 minutes (>48 hours)	3910 (25.2)	1731 (22.6)	505 (27.2)	910 (28.5)	1275 (24.2)	436 (22.2)



WEEKEND EFFEKTEN: EKSISTENSEN

> Længden af hospitalsophold

Table 3.4: Patients' LOS within the emergency department and within the hospital including their stay within the emergency department by time of admission

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Overall	1966 (5.5)						
Length of department stay							
0-59 minutes	350 (17.8)						
60-179 minutes	576 (29.3)						
180-259 minutes	237 (12.1)						
360-719 minutes	395 (20.1)						
720-1439 minutes	277 (14.1)						
1440-2879 minutes	113 (5.8)						
More than 2880 minutes (>48 hours)	18 (0.9)						
Length of hospital stay							
0-59 minutes	248 (12.6)						
60-179 minutes	438 (22.3)						
180-259 minutes	180 (9.2)						
360-719 minutes	327 (16.6)						
720-1439 minutes	206 (10.5)						
1440-2879 minutes (24-47.59 hours)	1474 (9.5)	578 (7.5)	173 (9.3)	332 (10.4)	364 (6.9)	131 (6.7)	
More than 2880 minutes (>48 hours)	3910 (25.2)	1731 (22.6)	505 (27.2)	910 (28.5)	1275 (24.2)	436 (22.2)	

Sammenlignes hverdag og weekend, stiger andelen af patienter, som har et ophold i akutafdelingen, der er længere end 24 timer, med **2 procent** i weekenden – uanset indlæggelsestidspunkt.



WEEKEND EFFEKTEN: EKSISTENSEN

> Dødelighed

Table 3.5: Crude and age- and sex standardized 30-day mortality rates for variation in discharge and for the six different triage colors among patients by time of admission to the emergency department

The patient's last visit to the ED (21,736)	Weekday (From 7:00 am on Monday to 2:59 p.m. on Friday)						Weekend (From 3:00 p.m. on Friday to 6:59 a.m. on Monday)						
	Daytime (7:00 a.m. – 2:59 p.m.)		Evening (3:00 p.m. – 10:59 p.m.)		Nighttime (11:00 p.m. – 6:59 a.m.)		Daytime (7:00 a.m. – 2:59 p.m.)		Evening (3:00 p.m. – 10:59 p.m.)		Nighttime (11:00 p.m. – 6:59 a.m.)		
	Reference	Crude (%)	Adj. % (95% CI)	Crude (%)	Adj. % (95% CI)	Crude (%)	Adj. % (95% CI)	Crude (%)	Adj. % (95% CI)	Crude (%)	Adj. % (95% CI)	Crude (%)	Adj. % (95% CI)
Overall	2.8 (2.5-3.1)	3.0	3.4 (2.9-3.9)	3.5	3.5 (2.4-4.5)	3.5	3.2 (2.5-4.0)	3.3	3.8 (3.1-4.4)	3.5	4.7 (3.4-5.9)		
Discharge													
Discharged from the ED	0.9 (0.7-1.1)	1.0	1.2 (0.8-1.6)	1.4	1.7 (0.7-2.8)	1.2	1.1 (0.6-1.7)	0.8	1.0 (0.6-1.5)	1.4	2.1 (1.0-3.2)		
Discharged from another department	7.2 (6.3-8.1)	8.0	7.9 (6.5-9.3)	7.0	6.6 (4.3-8.9)	8.6	8.0 (6.0-10.0)	9.1	9.4 (7.6-11.2)	9.3	10.0 (6.9-13.1)		
Triage missing	1.9 (1.4-2.3)	2.5	2.8 (1.9-3.7)	5.3	5.4 (2.8-8.0)	3.5	2.2 (1.2-3.1)	3.0	3.0 (1.9-4.2)	4.4	5.9 (2.6-9.1)		
Triage 5 (blue)	0.2 (0.1-0.4)	0.3	0.3 (0.0-0.7)	0	0 (0.0-0.0)	0.2	0.2 (0.0-0.6)	0	0 (0.0-0.0)	0.3	0.9 (0.0-2.2)		
Triage 4 (green)	2.8 (2.2-3.4)	2.8	3.2 (2.2-4.2)	1.9	2.3 (0.7-3.8)	2.3	2.4 (1.1-3.0)	2.8	3.2 (2.0-4.4)	2.9	4.4 (2.2-8.7)		
Triage 3 (yellow)	6.8 (5.2-8.4)	5.8	6.1 (4.1-8.0)	4.9	5.2 (1.8-8.5)	9.2	8.1 (4.6-11.6)	6.2	7.1 (4.4-9.8)	4.2	5.4 (1.6-9.3)		
Triage 2 (orange)	15.0 (10.0-19.2)	15.0	18.0 (11.5-24.6)	8.6	8.1 (1.1-11.7)	20.3	23.9 (12.0-35.9)	18.8	20.9 (10.7-28.9)	11.7	20.0 (6.3-31.5)		
Triage 1 (red)	20.0 (13.3-26.7)	21.7	25.0 (0-)	21.4	29.6 (9.9-49.2)	13.3	10.7 (1.8-19.7)	28.9	34.6 (2.1-47.7)	23.8	32.9 (0-)		

WEEKEND EFFEKTEN: EKSISTENSEN

> Dødelighed

Table 3.5: Crude and age- and sex standardized 30-day mortality rates for variation in discharge and for the six different triage colors among patients by time of admission to the emergency department

The patient's last visit to the ED (21,736)	Time of admission to the emergency department (weekdays)									
	Daytime (7:00 a.m. – 6:59 p.m.)					Nighttime (7:00 p.m. – 6:59 a.m.)				
	Crude %	Crude %	Crude %	Crude %	Crude %	Crude %	Crude %	Crude %	Crude %	Crude %
	Adj. % (95% CI)									
Overall	6.8	5.8	6.1	4.9	5.2	9.2	8.1	6.2	7.1	4.2
Discharge	2.1 (1.0-3.2)									
Discharged from ED	10.0 (6.9-13.1)									
Discharged from another department	5.9 (2.6-9.1)									
Triage missing	0.9 (0.0-2.2)									
Triage 5 (blue)	4.4 (2.2-6.7)									
Triage 4 (green)	5.4 (1.6-9.3)									
Triage 3 (yellow)	20.0 (8.6-31.5)									
Triage 2 (orange)	32.9 (0-)									
Triage 1 (red)	0- (0-)									

Sammenlignes hverdag og weekend, er der en tendens til at risikoen for at dø inden for 30 dage, stiger, hvis patienten indlægges i weekenden – især for de kritisk syge patienter.



PROGRAM

- › Kort præsentation af ph.d.-afhandling

- › **Weekend effekten: eksistensen**
 - Længde af hospitalsophold
 - Dødelighed

- › **Weekend effekten: mulige årsager**
 - Patientens karakteristika og sværhedsgrad af sygdom
 - Organiseringen af akutafdelingen
 - Akutlægernes strategier

Konklusion og spørgsmål



WEEKEND EFFEKTEN: ÅRSAGER

> Patientens karakteristika og sværhedsgrad af sygdom

*“We cannot exclude the **possibility that patients admitted on weekends are sicker than those admitted on weekdays**. However, a greater severity of illness among patients admitted to acute care hospitals on weekends would still raise questions about the adequacy of medical care and staffing patterns”*

(Bell & Redelmeier, 2001)

Table 3.1: Demographic and clinical characteristics by time of admission

	Weekday (From 7:00 am on Monday to 2:59 p.m. on Friday)			Weekend (From 3:00 p.m. on Friday to 6:59 a.m. on Monday)		
	Daytime (7:00 a.m. – 2:59 p.m.)	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)	Daytime (7:00 a.m. – 2:59 p.m.)	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)
Overall	15494 (43.7)	7674 (21.6)	1856 (5.2)	3192 (9.0)	5277 (14.9)	1966 (5.5)
Age groups						
0-19	2515 (16.2)	1646 (21.5)	220 (11.9)	492 (15.4)	1059 (20.1)	286 (14.6)
20-39	3090 (19.9)	1830 (23.9)	534 (28.8)	739 (23.2)	1322 (25.1)	642 (32.7)
40-59	3525 (22.8)	1622 (21.1)	408 (22.0)	686 (21.5)	1119 (21.2)	429 (21.8)
60-79	4146 (26.8)	1625 (21.2)	458 (24.7)	806 (25.3)	112 (21.4)	406 (20.7)
>80	2218 (14.3)	951 (12.4)	236 (12.7)	469 (14.7)	649 (12.3)	203 (10.3)
Gender						
Female	7742 (50.0)	3948 (51.5)	868 (46.8)	1576 (49.4)	2666 (50.5)	892 (45.4)
Male	7752 (50.0)	3726 (48.6)	988 (53.2)	1616 (50.6)	2611 (49.5)	1074 (54.6)
CCI score						
Low (0)	10698 (69.1)	5503 (71.7)	1280 (69.0)	2221 (69.6)	3899 (73.9)	1409 (71.7)
Moderate (1-2)	3122 (20.2)	1488 (19.4)	373 (20.1)	652 (20.4)	966 (18.3)	348 (17.7)
High (>=3)	1674 (10.8)	683 (8.9)	203 (10.9)	319 (10.0)	412 (7.8)	209 (10.6)
Admission source						
GP	11026 (71.2)	6281 (81.9)	1342 (72.3)	2506 (78.5)	4353 (82.5)	1318 (67.0)
Another hospital department	2717 (17.5)	524 (6.8)	101 (5.4)	349 (10.9)	322 (6.1)	75 (3.8)
No reference	519 (3.4)	209 (2.7)	46 (2.5)	75 (2.4)	138 (2.6)	119 (6.1)
Other	1232 (8.0)	660 (8.6)	367 (19.8)	262 (8.2)	464 (8.8)	454 (23.1)
Primary diagnosis						
Infectious diseases	1062 (6.9)	399 (5.2)	88 (4.7)	194 (6.1)	257 (4.9)	80 (4.1)
Neoplasm	11 (0.1)	5 (0.1)	1 (0.1)	2 (0.1)	1 (0.0)	0 (0)
Hematological diseases	164 (1.1)	45 (0.6)	2 (0.1)	16 (0.5)	16 (0.3)	0 (0)
Endocrine and nutritional diseases	143 (0.9)	113 (1.5)	22 (1.2)	21 (0.7)	54 (1.0)	17 (0.9)
Mental and behavioral disorders	94 (0.6)	106 (1.4)	43 (2.3)	19 (0.6)	68 (1.3)	94 (4.8)
Diseases of the nervous system	89 (0.6)	47 (0.6)	10 (0.5)	31 (1.0)	52 (1.0)	12 (0.6)
Diseases of the circulatory system	368 (2.4)	120 (1.6)	27 (1.5)	64 (2.0)	71 (1.4)	28 (1.4)
Diseases of the respiratory system	101 (0.7)	54 (0.7)	12 (0.7)	17 (0.5)	30 (0.6)	5 (0.3)
Diseases of the digestive system	398 (2.6)	145 (1.9)	53 (2.9)	82 (2.6)	112 (2.1)	55 (2.8)
Diseases of the musculoskeletal system	317 (2.1)	87 (1.1)	15 (0.8)	45 (1.4)	59 (1.1)	22 (1.1)
Diseases of the genitourinary system	183 (1.2)	66 (0.9)	21 (1.1)	55 (1.7)	51 (1.0)	25 (1.3)
Injury and poisoning	4144 (26.8)	2841 (37.0)	496 (26.7)	1125 (35.2)	2001 (37.9)	680 (34.6)
Factors influencing health status	7020 (45.3)	2952 (38.5)	782 (42.1)	1255 (39.3)	2018 (38.2)	703 (35.8)
Symptoms, signs, and abnormal findings	1308 (8.4)	644 (8.4)	271 (14.6)	233 (7.3)	432 (8.2)	224 (11.4)
Other	92 (0.6)	50 (0.7)	13 (0.7)	33 (1.0)	55 (1.0)	21 (1.1)

Table 3.1: Demographic and clinical characteristics by time of admission

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	n (% of group)					
Overall	15494 (42.7)	7674 (21.6)	1056 (5.2)	2102 (9.0)	6277 (14.0)	1066 (5.8)
Age groups						
0-19	2515 (16.2)	1646 (21.5)	220 (11.9)	492 (15.4)	1059 (20.1)	286 (14.6)
20-39	3090 (19.9)	1830 (23.9)	534 (28.8)	739 (23.2)	1322 (25.1)	642 (32.7)
40-59	3525 (22.8)	1622 (21.1)	408 (22.0)	686 (21.5)	1119 (21.2)	429 (21.8)
60-79	4146 (26.8)	1625 (21.2)	458 (24.7)	806 (25.3)	112 (21.4)	406 (20.7)
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Gender						
Female	7742 (50.0)	3948 (51.5)	868 (46.8)	1576 (49.4)	2666 (50.5)	892 (45.4)
Male	7752 (50.0)	3726 (48.6)	988 (53.2)	1616 (50.6)	2611 (49.5)	1074 (54.6)
CCI score						
Low (0)	10698 (69.1)	5503 (71.7)	1280 (69.0)	2221 (69.6)	3899 (73.9)	1409 (71.7)
Moderate (1-2)	3122 (20.2)	1488 (19.4)	373 (20.1)	652 (20.4)	966 (18.3)	348 (17.7)
High (>=3)	1674 (10.8)	683 (8.9)	203 (10.9)	319 (10.0)	412 (7.8)	209 (10.6)
Admission source						
GP	11026 (71.2)	6281 (81.9)	1342 (72.3)	2506 (78.5)	4353 (82.5)	1318 (67.0)
Another hospital department	2717 (17.5)	524 (6.8)	101 (5.4)	349 (10.9)	322 (6.1)	75 (3.8)
No reference	519 (3.4)	209 (2.7)	46 (2.5)	75 (2.4)	138 (2.6)	119 (6.1)
Other	1232 (8.0)	660 (8.6)	367 (19.8)	262 (8.2)	464 (8.8)	454 (23.1)
Primary diagnosis						
Infectious diseases	1062 (6.9)	399 (5.2)	88 (4.7)	194 (6.1)	257 (4.9)	80 (4.1)
Neoplasm	11 (0.1)	5 (0.1)	1 (0.1)	2 (0.1)	1 (0.0)	0 (0)
Hematological diseases	164 (1.1)	45 (0.6)	2 (0.1)	16 (0.5)	16 (0.3)	0 (0)
Endocrine and nutritional diseases	143 (0.9)	113 (1.5)	22 (1.2)	21 (0.7)	54 (1.0)	17 (0.9)
Mental and behavioral disorders	94 (0.6)	106 (1.4)	43 (2.3)	19 (0.6)	68 (1.3)	94 (4.8)
Diseases of the nervous system	89 (0.6)	47 (0.6)	10 (0.5)	31 (1.0)	52 (1.0)	12 (0.6)
Diseases of the circulatory system	368 (2.4)	120 (1.6)	27 (1.5)	64 (2.0)	71 (1.4)	28 (1.4)
Diseases of the respiratory system	101 (0.7)	54 (0.7)	12 (0.7)	17 (0.5)	30 (0.6)	5 (0.3)
Diseases of the digestive system	398 (2.6)	145 (1.9)	53 (2.9)	82 (2.6)	112 (2.1)	55 (2.8)
Diseases of the musculoskeletal system	317 (2.1)	87 (1.1)	15 (0.8)	45 (1.4)	59 (1.1)	22 (1.1)
Diseases of the genitourinary system	183 (1.2)	66 (0.9)	21 (1.1)	55 (1.7)	51 (1.0)	25 (1.3)
Injury and poisoning	4144 (26.8)	2841 (37.0)	496 (26.7)	1125 (35.2)	2001 (37.9)	680 (34.6)
Factors influencing health status	7020 (45.3)	2952 (38.5)	782 (42.1)	1255 (39.3)	2018 (38.2)	703 (35.8)
Symptoms, signs, and abnormal findings	1308 (8.4)	644 (8.4)	271 (14.6)	233 (7.3)	432 (8.2)	224 (11.4)
Other	92 (0.6)	50 (0.7)	13 (0.7)	33 (1.0)	55 (1.0)	21 (1.1)



Table 3.2: Triage color of patients admitted to the emergency department by time of admission

	Weekday (From 7:00 am on Monday to 2:59 p.m. on Friday)			Weekend (From 3:00 p.m. on Friday to 6:59 a.m. on Monday)		
	Daytime (7:00 a.m. – 2:59 p.m.)	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)	Daytime (7:00 a.m. – 2:59 p.m.)	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)
	n (% of group)					
Overall	15494 (43.7)	7674 (21.6)	1856 (5.2)	3192 (9.0)	5277 (14.9)	1966 (5.5)
<u>Triage 5 (blue, minor injury)</u>	3687 (23.8)	2130 (27.8)	336 (18.1)	850 (26.6)	1527 (28.9)	428 (21.8)
<u>Triage 4 (green, not urgent)</u>	4856 (31.3)	2172 (28.3)	679 (36.6)	934 (29.3)	1465 (27.8)	720 (36.6)
<u>Triage 3 (yellow, less urgent)</u>	1728 (11.2)	944 (12.3)	290 (15.6)	374 (11.7)	695 (13.2)	288 (14.7)
<u>Triage 2 (orange, urgent)</u>	496 (3.2)	294 (3.8)	110 (5.9)	119 (3.7)	231 (4.4)	101 (5.1)
<u>Triage 1 (red, life-threatening)</u>	246 (1.6)	113 (1.5)	52 (2.8)	49 (1.5)	85 (1.6)	51 (2.6)
<u>Triage missing</u>	1181 (8.0)	2021 (26.2)	380 (21.0)	866 (27.1)	1274 (24.1)	278 (10.3)

ICU:
1.7%
vs.
3.3%

Blå:
24.6% vs. 26.9%
Grøn:
30.8% vs. 29.9%
Gul:
11.8% vs. 13.0%
Orange:
3.6% vs. 4.3%
Rød:
1.6% vs. 1.8%

Table 3.3: Number of patients transferred to other departments after initial treatment within the emergency department by time of admission

	Weekday (From 7:00 am on Monday to 2:59 p.m. on Friday)			Weekend (From 3:00 p.m. on Friday to 6:59 a.m. on Monday)		
	Daytime (7:00 a.m. – 2:59 p.m.)	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)	Daytime (7:00 a.m. – 2:59 p.m.)	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)
	n (% of group)					
Overall	5293 (43.6)	2566 (21.1)	730 (6.0)	1146 (9.4)	1784 (14.7)	628 (5.2)
Departments within the hospital						
Cardiology department	402 (7.6)	137 (5.3)	48 (6.6)	67 (5.9)	93 (5.2)	25 (4.0)
Neurological department	166 (3.1)	78 (3.0)	24 (3.3)	29 (2.6)	46 (2.6)	11 (1.8)
Other medical departments	1238 (23.4)	607 (23.7)	148 (20.3)	217 (18.9)	385 (21.6)	123 (19.6)
Orthopedic surgery department	805 (15.2)	469 (18.3)	146 (20.0)	285 (24.9)	353 (19.8)	117 (18.6)
Other surgical departments	1358 (25.7)	620 (24.2)	199 (27.3)	263 (23.0)	418 (23.4)	179 (28.5)
Gynecology department/obstetrics	249 (4.7)	151 (5.9)	38 (5.2)	75 (6.5)	93 (5.2)	23 (3.7)
Psychiatry	56 (1.1)	23 (0.9)	11 (1.5)	2 (0.2)	31 (1.7)	10 (1.6)
Pediatric ward	229 (4.3)	132 (5.1)	11 (1.5)	53 (4.6)	103 (5.8)	9 (1.4)
Intensive care unit	574 (10.8)	310 (12.1)	52 (7.4)	86 (7.5)	130 (7.8)	62 (9.9)
ICU (intensive care unit)	49 (0.9)	61 (2.4)	37 (5.1)	25 (2.2)	49 (2.8)	43 (6.9)
Departments at other hospitals						



Table 3.2: Triage color of patients admitted to the emergency department by time of admission

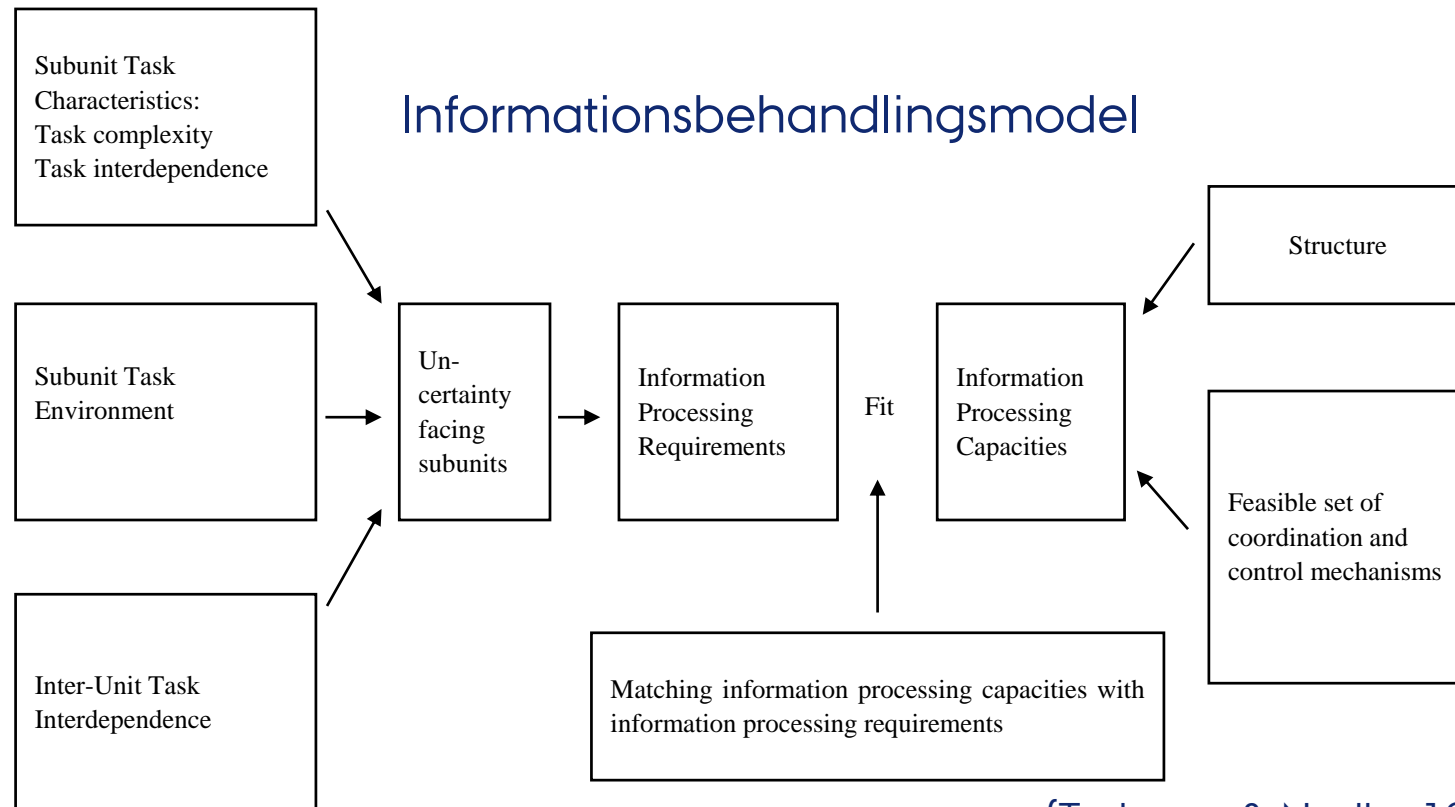
	Weekday (From 7:00 am on Monday to 2:59 p.m. on Friday)			Weekend (From 3:00 p.m. on Friday to 6:59 a.m. on Monday)		
	Daytime (7:00 a.m. – 2:59 p.m.)	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)	Daytime (7:00 a.m. – 2:59 p.m.)	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)
	n (% of group)					
Overall	15494 (43.7)	7674 (21.6)	1856 (5.2)	3192 (9.0)	5277 (14.9)	1966 (5.5)
Triage 5 (blue, minor injury)	3687 (23.8)	2130 (27.8)	336 (18.1)	850 (26.6)	1527 (28.9)	428 (21.8)
Triage 4 (green, not urgent)	4856 (31.3)	2172 (28.3)	679 (36.6)	934 (29.3)	1465 (27.8)	720 (36.6)
Triage 3 (yellow, less urgent)	1728 (11.2)	944 (12.3)	200 (10.8)	374 (11.7)	605 (11.7)	288 (14.7)
Triage 2 (orange, urgent)						151 (5.1)
Triage 1 (red, life-threatening)						126 (2.6)
Triage missing						192 (0.9)

Sammenlignes hverdag og weekend, er der flere patienter, der indlægges i weekenden, som triageres orange og røde, og der er flere patienter, der overflyttes til intensiv afdelingen.

	Weekend (From 3:00 p.m. on Friday to 6:59 a.m. on Monday)	
	Evening (3:00 p.m. – 10:59 p.m.)	Nighttime (11:00 p.m. – 6:59 a.m.)
Cardiology department	402 (7.6)	137 (5.3)
Neurological department	166 (3.1)	78 (3.0)
Other medical departments	1238 (23.4)	607 (23.7)
Orthopedic surgery department	805 (15.2)	469 (18.3)
Other surgical departments	1358 (25.7)	620 (24.2)
Gynecology department/obstetrics	249 (4.7)	151 (5.9)
Psychiatry	56 (1.1)	23 (0.9)
Pediatric ward	229 (4.3)	132 (5.1)
Intern transferring within the ED	574 (10.8)	219 (8.5)
ICU (intensive care unit)	49 (0.9)	61 (2.4)
	1784 (14.7)	628 (5.2)
	93 (5.2)	25 (4.0)
	46 (2.6)	11 (1.8)
	385 (21.6)	123 (19.6)
	353 (19.8)	117 (18.6)
	418 (23.4)	179 (28.5)
	93 (5.2)	23 (3.7)
	31 (1.7)	10 (1.6)
	103 (5.8)	9 (1.4)
	139 (7.8)	62 (9.9)
	49 (2.8)	43 (6.9)

WEEKEND EFFEKTEN: ÅRSAGER

> Organiseringen af akutafdelingen



(Tushman & Nadler 1977:622)

ORGANISERING

Subunit Task
Characteristics:
Task complexity
Task interdependence

Subunit Task
Environment

Inter-Unit Task
Interdependence

Kompleksitet: akut syge patienter med forskellige symptomer indlagt på forskellige tidspunkter

Indbyrdes afhængighed: patienterne går igennem fortløbende processer – opgaven løses i samarbejde

Un-
certainty
facing
subunits

Information
Processing
Requirements

Den arbejdsrelaterede usikkerhed er høj og behovet for informationsbehandling er højt på hverdage og i weekenden

Omgivelser: Omgivelserne ændres og er dynamiske. Brugen af eksterne vikarer som “akutlæger”.

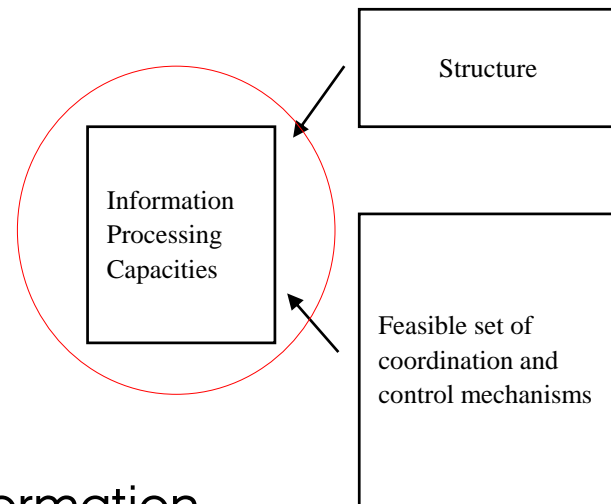
Indbyrdes afhængighed mellem afdelingerne: Akutafdelingen er afhængig af andre afdelinger. Usikkerhed omkring tidspunkter og kompetencer.

ORGANISERING

Struktur: Akutafdelingen har en matrix struktur.
I weekenden “outsources” flere opgaver.

Informationsbehandlings-
kapaciteten er høj på hverdage
men lav i weekenden.

Koordination og kontrolmekanismer:
Regler, samarbejdsaftaler, elektronisk information
system, selvkørende enheder og en visitation.
Personlige: flowmaster, koordinerende sygeplejerske,
og skemalagte gruppekoordinationsmekanismer.

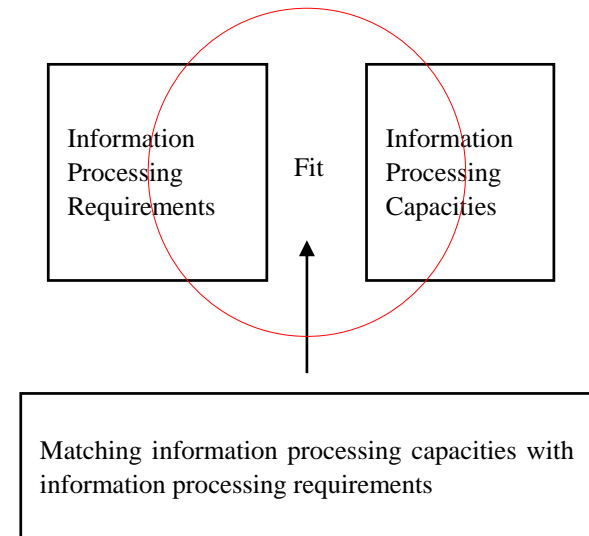


RESULTS

Der er et match mellem det høje informationsbehandlingsbehov og matrixstrukturen og mængden af forskellige koordinations- og kontrolmekanismer

Informationsbehandlingskapaciteten varierer hverdag og weekend

Information Processing Requirements	Information Processing Capacities	
	High	Low
Extensive	Match Weekdays	Mismatch Weekends
Minimal	Mismatch	Match





WEEKEND EFFEKTEN: ÅRSAGER

> Akutlægernes strategier

Dagvagt hverdag: **3-4**

(Aften-, natte-) og
weekendvagter: **1**



Opgaver:

Koordination

Supervision

Orange og røde patienter

Stuegang (medicinske patienter)

Telefonopkald

Hjælpe hospitalsvisitationen

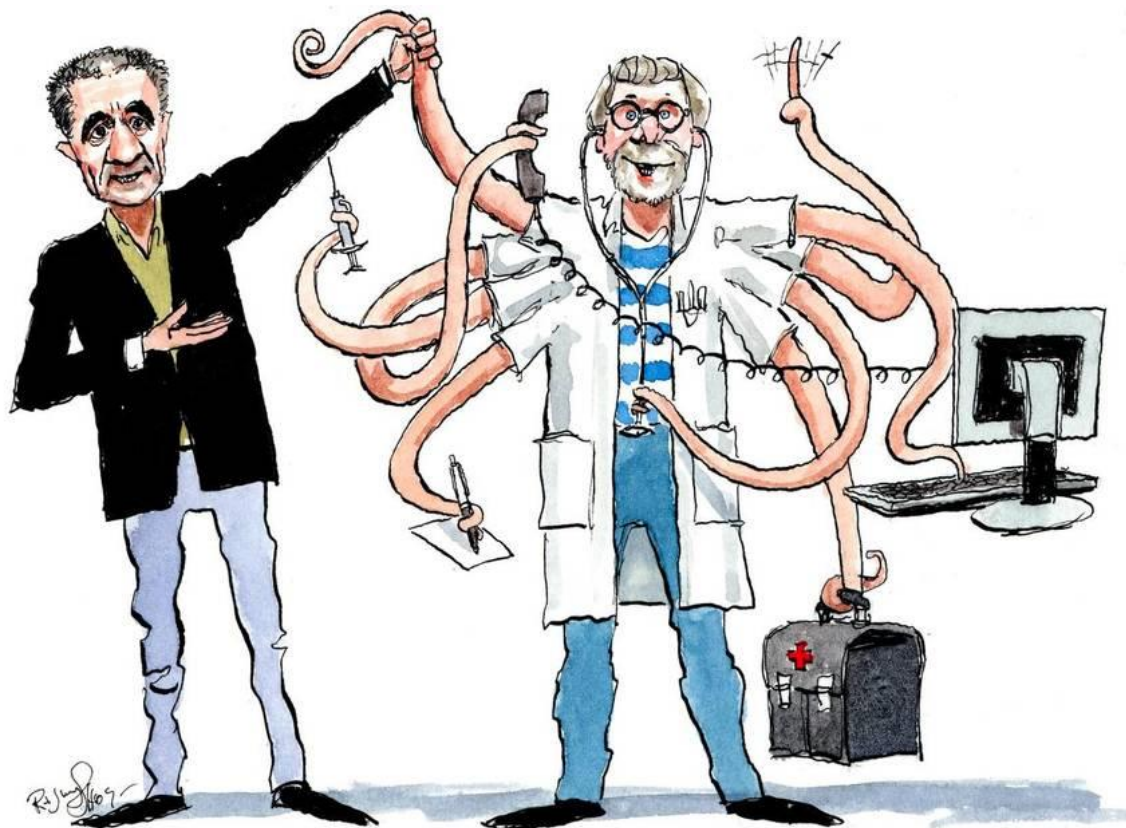


WEEKEND EFFEKTEN: ÅRSAGER

> Akutl

Dagva

(Aften-
weeke



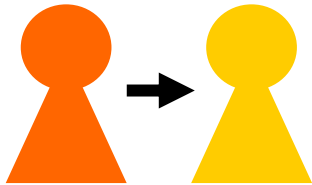
enter
e patienter)

Hjælpe hospitalsvisitationen

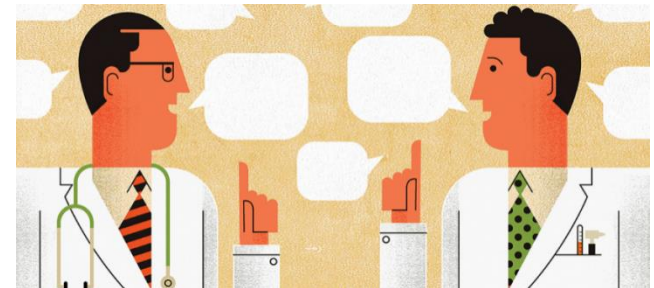


STRATEGIER

Triage farve	Triageniveau	Tid [min]
Rød	Livstruende	0
Orange	Haster	15
Gul	Haster mindre	60
Grøn	Haster ikke	180
Blå	Haster ikke	240



VS.





STRATEGIER

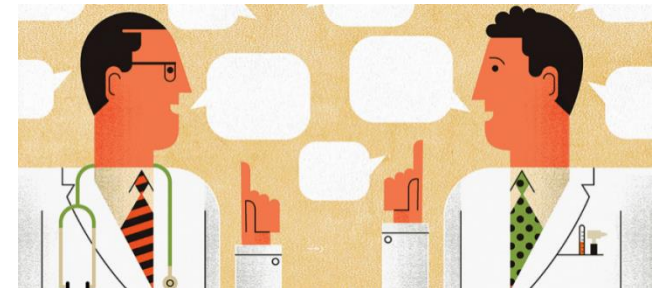
Triage farve	Triageniveau	Tid [min]
Rød	Livstruende	0
Orange	Haster	15
Gul	Haster mindre	60



VS.



DETTE PÅVIRKER PATIENTBEHANDLINGEN





KONKLUSION

> **DER ER EN FORSKEL**

Tendens til at dødeligheden stiger for kritisk syge patienter
Andelen af patienter med et langt ophold stiger

> **DER ER FLERE FORSKELLIGE MULIGE FORKLARINGER**

Andelen af kritisk syge patienter stiger

Akutafdelingens organisering ændres

Medarbejderne udvikler strategier for at "takle" ændringer



SPØRGSMÅL?

TAK FOR OPMÆRKSOMHEDEN

STOR **TAK** TIL ALLE I
AKUTAFDELINGEN,
HOSPITALSENHED MIDT

