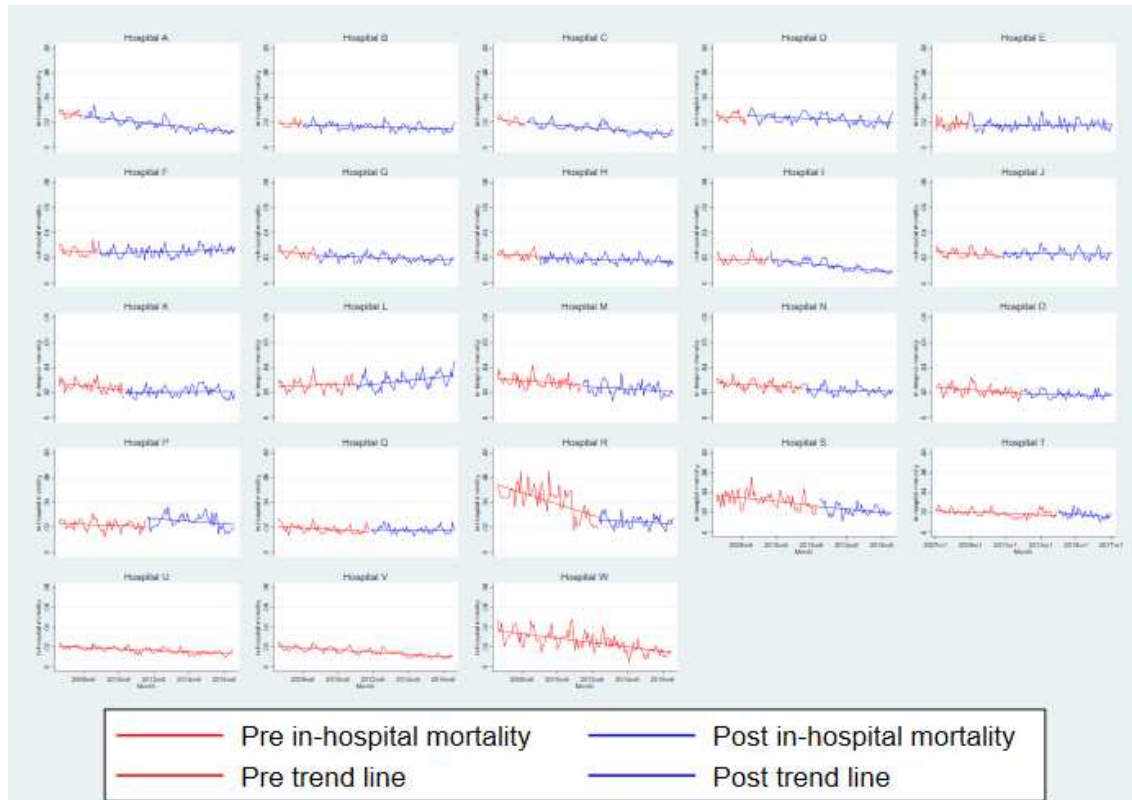


Supplementary information

Supplementary Figure 1



Raw unadjusted monthly in-hospital mortality rate at the 23 hospitals in Denmark from 2007-2016. Hospital U, V, and X have not reconfigured and therefore only consist of an before period. Red line represents the in-hospital mortality rate before the reconfiguration. Blue line represents the in-hospital mortality rate after the reconfiguration.

Supplementary Figure 2



Raw unadjusted monthly 30-day mortality rate at the 23 hospitals in Denmark from 2007-2016. Hospital U, V, and X have not reconfigured and therefore only consist of an before period. Red line represents the 30-day mortality rate before the reconfiguration. Blue line represents the 30-day mortality rate after the reconfiguration.

Supplementary Table 1 ICD-10 codes for subgroups

Subgroups diagnoses	ICD-10 codes
Myocardial infarction	I21* I23* I24*
Stroke	I61 I63 I64 G645 I60.0-.7
Pneumonia	J12* J13* J14* J15* J16* J17* J18*
Aortic aneurism	I713 I715 I718
Bowel perforation	K251* K252* K255* K261* K262* K265* K271 K272 K275 K276 K281* K282* K284* K285* K286* K570 K570B K570C K572 K572B K572C K574 K574A K578 K631 K631A K822 K832
Hip fracture	S72*
Major trauma	T01-T07

Supplementary Table 2. Odds ratios for in-hospital mortality for myocardial infarction for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanne d contacts	Unadjusted analyses			Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value
Overall	114,164				104,580			
Pre-trend		0.927	0.902 0.953	<0.001		0.934 0.914 0.956	<0.001	
Slope change		1.006	0.951 1.064	0.840		0.973 0.943 1.005	0.093	
Weekday vs. weekend								
Weekday	76,422				69,980			
Pre-trend		0.924	0.895 0.953	<0.001		0.926 0.904 0.947	<0.001	
Slope change		1.005	0.949 1.064	0.863		0.974 0.943 1.006	0.115	
Weekend	37,742				34,443			
Pre-trend		0.933	0.908 0.959	<0.001		0.951 0.919 0.984	0.004	
Slope change		1.008	0.951 1.068	0.796		0.972 0.937 1.009	0.137	
Time of admission								
7 am to 3 pm	53,870				49,005			
Pre-trend		0.922	0.887 0.958	<0.001		0.932 0.907 0.958	<0.001	
Slope change		1.004	0.937 1.077	0.902		0.972 0.939 1.007	0.121	
3 pm-11 pm	37,396				34,091			
Pre-trend		0.924	0.901 0.949	<0.001		0.930 0.905 0.956	<0.001	
Slope change		1.012	0.963 1.063	0.644		0.979 0.947 1.012	0.209	
11 pm-7 am	22,898				20,905			
Pre-trend		0.944	0.919 0.970	<0.001		0.948 0.902 0.995	0.032	
Slope change		0.999	0.948 1.052	0.962		0.965 0.914 1.020	0.207	

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

Supplementary Table 3. Hazard ratios for 30-day mortality for myocardial infarction for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses			Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value
Overall	114,164				105,008			
Pre-trend		0.945	0.934 0.957	<0.001		0.951 0.937 0.966	<0.001	
Slope change		0.996	0.979 1.014	0.685		0.979 0.960 0.998	0.031	
Weekday vs. weekend								
Weekday	76,422				70,259			
Pre-trend		0.940	0.926 0.954	<0.001		0.940 0.922 0.958	<0.001	
Slope change		1.001	0.979 1.023	0.924		0.988 0.965 1.011	0.308	
Weekend	37,742				34,749			
Pre-trend		0.958	0.938 0.977	<0.001		0.970 0.946 0.995	0.020	
Slope change		0.985	0.956 1.014	0.297		0.962 0.934 0.991	0.010	
Time of admission								
7 am to 3 pm	53,870				49,541			
Pre-trend		0.935	0.919 0.952	<0.001		0.948 0.927 0.969	<0.001	
Slope change		1.005	0.979 1.031	0.718		0.983 0.956 1.010	0.220	
3 pm-11 pm	37,396				34,395			
Pre-trend		0.947	0.927 0.966	<0.001		0.947 0.923 0.972	<0.001	
Slope change		0.993	0.964 1.023	0.634		0.978 0.949 1.008	0.149	
11 pm-7 am	22,898				21,072			
Pre-trend		0.968	0.942 0.995	0.018		0.964 0.932 0.997	0.031	
Slope change		0.979	0.943 1.017	0.280		0.968 0.932 1.005	0.089	

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

Supplementary Table 4. Odds ratios for in-hospital mortality for stroke for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odd ratio	95% CI	P-value	No. of unplanned contacts	Odd ratio	95% CI	P-value	
Overall	218,237				207,362				
Pre-trend		0.953	0.932 0.975	<0.001		0.954	0.931 0.978	<0.001	
Slope change		0.994	0.968 1.020	0.634		0.982	0.955 1.010	0.214	
Weekday vs. weekend									
Weekday	149,975				138,320				
Pre-trend		0.951	0.931 0.972	<0.001		0.951	0.928 0.975	<0.001	
Slope change		1.000	0.974 1.027	0.983		0.991	0.963 1.019	0.520	
Weekend	68,262				62,869				
Pre-trend		0.957	0.929 0.985	0.003		0.959	0.931 0.988	0.007	
Slope change		0.980	0.950 1.011	0.206		0.966	0.933 0.999	0.046	
Time of admission									
7 am to 3 pm	112,418				103,286				
Pre-trend		0.953	0.935 0.971	<0.001		0.952	0.926 0.978	<0.001	
Slope change		1.004	0.981 1.028	0.712		0.993	0.971 1.016	0.556	
3 pm-11 pm	83,808				77,112				
Pre-trend		0.951	0.916 0.988	0.009		0.952	0.921 0.985	0.004	
Slope change		0.978	0.941 1.016	0.252		0.971	0.933 1.011	0.150	
11 pm-7 am	22,011				20,207				
Pre-trend		0.965	0.936 0.994	0.020		0.976	0.934 1.019	0.266	
Slope change		0.994	0.956 1.034	0.761		0.969	0.926 1.013	0.160	

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

Supplementary Table 5. Hazard ratios for 30-day mortality for stroke for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value	
Overall	218,237				201,366				
Pre-trend		0.982	0.973	0.992	<0.001	0.978 ^a	0.966	0.990	<0.001
Slope change		0.984	0.972	0.997	0.016	0.978 ^a	0.965	0.992	0.003
Weekday vs. weekend									
Weekday	149,975				149,975				
Pre-trend		0.981	0.970	0.993	<0.001	0.982 ^b	0.969	0.995	0.006
Slope change		0.990	0.975	1.006	0.226	0.986 ^b	0.970	1.002	0.083
Weekend	68,262				68,262				
Pre-trend		0.983	0.968	0.998	0.030	0.985 ^b	0.967	1.003	0.100
Slope change		0.973	0.953	0.993	0.010	0.964 ^b	0.944	0.985	0.001
Time of admission									
7 am to 3 pm	112,418				112,350				
Pre-trend		0.988	0.975	1.001	0.073	0.984 ^c	0.969	0.998	0.029
Slope change		0.986	0.969	1.004	0.125	0.980 ^c	0.963	0.998	0.030
3 pm-11 pm	83,808				83,754				
Pre-trend		0.974	0.960	0.988	<0.001	0.977 ^c	0.961	0.994	0.009
Slope change		0.982	0.963	1.002	0.074	0.980 ^c	0.960	1.000	0.046
11 pm-7 am	22,011				21,995				
Pre-trend		0.986	0.963	1.010	0.263	1.001 ^c	0.972	1.030	0.966
Slope change		0.983	0.952	1.016	0.311	0.970 ^c	0.938	1.003	0.073

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

^b Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, and CCI.

^c Adjusted for seasonality, the changes in the out of hours system in the Capital Region the implementation of a referral system to EDs, sex, age, income level, and CCI.

Supplementary Table 6. Odds ratios for in-hospital mortality for pneumonia for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odd ratio	95% CI	P-value	No. of unplanned contacts	Odd ratio	95% CI	P-value	
Overall	446,154				404,398				
Pre-trend		0.925	0.903 0.948	<0.001		0.934 0.912 0.956	<0.001		
Slope change		1.013	0.979 1.047	0.457		1.005 0.974 1.037	0.749		
Weekday vs. weekend									
Weekday	302,186				273,981				
Pre-trend		0.933	0.913 0.953	<0.001		0.932 0.910 0.955	<0.001		
Slope change		1.013	0.983 1.044	0.402		1.006 0.974 1.040	0.712		
Weekend	143,968				130,054				
Pre-trend		0.909	0.879 0.940	<0.001		0.937 0.914 0.960	<0.001		
Slope change		1.012	0.967 1.060	0.606		1.002 0.973 1.033	0.870		
Time of admission									
7 am to 3 pm	219,260				199,187				
Pre-trend		0.920	0.897 0.945	<0.001		0.924 0.898 0.952	<0.001		
Slope change		1.019	0.982 1.058	0.310		1.014 0.978 1.052	0.438		
3 pm-11 pm	169,390				152,375				
Pre-trend		0.919	0.890 0.949	<0.001		0.935 0.916 0.954	<0.001		
Slope change		1.012	0.972 1.054	0.556		1.002 0.973 1.032	0.883		
11 pm-7 am	57,504				51,194				
Pre-trend		0.962	0.940 0.985	0.001		0.965 0.935 0.996	0.027		
Slope change		0.988	0.958 1.020	0.452		0.979 0.944 1.015	0.240		

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

Supplementary Table 7. Hazard ratios for 30-day mortality for pneumonia for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odd ratio	95% CI	P-value	No. of unplanned contacts	Odd ratio	95% CI	P-value	
Overall	446,154				404,408				
Pre-trend		0.958	0.952 0.964	<0.001		0.966 0.959 0.974	<0.001		
Slope change		1.001	0.993 1.009	0.856		0.997 0.988 1.006	0.526		
Weekday vs. weekend									
Weekday	302,186				273,985				
Pre-trend		0.968	0.961 0.976	<0.001		0.968 0.959 0.978	<0.001		
Slope change		0.995	0.985 1.005	0.346		0.993 0.982 1.004	0.190		
Weekend	143,968				130,423				
Pre-trend		0.938	0.929 0.948	<0.001		0.962 0.949 0.975	<0.001		
Slope change		1.012	0.999 1.026	0.074		1.006 0.991 1.021	0.433		
Time of admission									
7 am to 3 pm	219,260				199,643				
Pre-trend		0.954	0.946 0.962	<0.001		0.956 0.946 0.967	<0.001		
Slope change		1.005	0.994 1.017	0.389		1.005 0.992 1.018	0.440		
3 pm-11 pm	169,390				152,823				
Pre-trend		0.952	0.943 0.961	<0.001		0.969 0.957 0.981	<0.001		
Slope change		1.004	0.991 1.017	0.565		0.998 0.984 1.012	0.751		
11 pm-7 am	57,504				51,942				
Pre-trend		0.987	0.973 1.002	0.098		0.985 0.966 1.004	0.122		
Slope change		0.985	0.966 1.005	0.141		0.981 0.961 1.001	0.067		

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

Supplementary Table 8. Odds ratios for in-hospital mortality for aortic aneurism for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses			Adjusted analyses ^a				
		Odd ratio	95% CI	P-value	Odd ratio	95% CI	P-value		
Overall	4,049				3,768				
Pre-trend		1.024	0.999 1.049	0.064		0.986 0.942 1.032	0.537		
Slope change		0.962	0.930 0.995	0.026		0.919 0.874 0.967	0.001		
Weekday vs. weekend									
Weekday	2,680				2,472				
Pre-trend		1.020	0.991 1.050	0.181		0.968 0.920 1.020	0.222		
Slope change		0.963	0.926 1.001	0.059		0.916 0.866 0.970	0.003		
Weekend	1,369				1,266				
Pre-trend		1.035	0.996 1.076	0.081		1.024 0.945 1.108	0.566		
Slope change		0.952	0.904 1.003	0.066		0.915 0.841 0.997	0.042		
Time of admission									
7 am to 3 pm	1,656				1,535				
Pre-trend		1.006	0.969 1.045	0.758		0.969 0.909 1.032	0.324		
Slope change		0.984	0.935 1.036	0.547		0.943 0.882 1.007	0.082		
3 pm-11 pm	1,565				1,452				
Pre-trend		1.039	1.004 1.076	0.030		0.989 0.937 1.044	0.695		
Slope change		0.935	0.894 0.978	0.004		0.881 0.832 0.934	<0.001		
11 pm-7 am	828				728				
Pre-trend		1.043	0.993 1.096	0.096		1.014 0.899 1.142	0.825		
Slope change		0.945	0.887 1.007	0.079		0.926 0.851 1.007	0.071		

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

Supplementary Table 9. Hazard ratios for 30-day mortality for aortic aneurism for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses			Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value
Overall	4,049				3,811			
Pre-trend		1.024	0.999 1.049	0.064		0.995 ^a	0.963 1.027	0.743
Slope change		0.962	0.930 0.995	0.026		0.947 ^a	0.916 0.980	0.002
Weekday vs. weekend								
Weekday	2,680				2,514			
Pre-trend		1.020	0.991 1.050	0.181		0.977 ^a	0.939 1.016	0.239
Slope change		0.963	0.926 1.001	0.059		0.951 ^a	0.916 0.988	0.010
Weekend	1,369				1,297			
Pre-trend		1.035	0.996 1.076	0.081		1.024 ^a	0.971 1.081	0.382
Slope change		0.952	0.904 1.003	0.066		0.932 ^a	0.881 0.986	0.015
Time of admission								
7 am to 3 pm	1,656				1,656			
Pre-trend		1.006	0.969 1.045	0.758		0.983 ^b	0.937 1.030	0.472
Slope change		0.984	0.935 1.036	0.547		0.965 ^b	0.916 1.016	0.175
3 pm-11 pm	1,565				1,565			
Pre-trend		1.039	1.004 1.076	0.030		1.038 ^b	0.991 1.087	0.113
Slope change		0.935	0.894 0.978	0.004		0.932 ^b	0.891 0.975	0.002
11 pm-7 am	828				828			
Pre-trend		1.043	0.993 1.096	0.096		1.044 ^b	0.976 1.117	0.206
Slope change		0.945	0.887 1.007	0.079		0.933 ^b	0.876 0.995	0.034

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

^b Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs and sex.

Supplementary Table 10. Odds ratios for in-hospital mortality for bowel perforation for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odd ratio	95% CI	P-value	No. of unplanned contacts	Odd ratio	95% CI	P-value	
Overall	13,194				11,954				
Pre-trend		0.912	0.893 0.932	<0.001		0.934 0.900 0.970	<0.001		
Slope change		0.986	0.948 1.025	0.473		0.973 0.940 1.006	0.110		
Weekday vs. weekend									
Weekday	9,088				8,180				
Pre-trend		0.906	0.879 0.933	<0.001		0.934 0.888 0.984	0.010		
Slope change		0.990	0.954 1.028	0.608		0.976 0.939 1.014	0.216		
Weekend	4,106				3,533				
Pre-trend		0.926	0.899 0.955	<0.001		0.944 0.905 0.984	0.006		
Slope change		0.977	0.921 1.036	0.428		0.961 0.921 1.003	0.069		
Time of admission									
7 am to 3 pm	6,284				5,584				
Pre-trend		0.891	0.863 0.919	<0.001		0.918 0.882 0.955	<0.001		
Slope change		0.976	0.920 1.034	0.407		0.939 0.889 0.991	0.023		
3 pm-11 pm	4,831				4,204				
Pre-trend		0.926	0.894 0.959	<0.001		0.949 0.888 1.015	0.125		
Slope change		0.989	0.944 1.038	0.660		0.997 0.944 1.054	0.927		
11 pm-7 am	2,079				1,755				
Pre-trend		0.941	0.907 0.976	0.001		0.947 0.874 1.025	0.177		
Slope change		1.007	0.954 1.062	0.800		0.999 0.932 1.070	0.976		

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

Supplementary Table 11. Hazard ratios for 30-day mortality for bowl perforation for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value	
Overall	13,194				13,173				
Pre-trend		0.939	0.917 0.962	<0.001		0.958 ^a	0.933 0.985	0.002	
Slope change		0.976	0.945 1.008	0.136		0.975 ^a	0.949 1.003	0.077	
Weekday vs. weekend									
Weekday	9,088				9,088				
Pre-trend		0.930	0.904 0.957	<0.001		0.943 ^b	0.911 0.975	<0.001	
Slope change		0.982	0.946 1.020	0.352		0.989 ^b	0.953 1.026	0.559	
Weekend	4,106				4,106				
Pre-trend		0.952	0.904 0.991	0.017		0.962 ^b	0.916 1.010	0.122	
Slope change		0.982	0.921 1.024	0.276		0.973 ^b	0.921 1.027	0.315	
Time of admission									
7 am to 3 pm	6,284				6,284				
Pre-trend		0.922	0.889 0.957	<0.001		0.938 ^c	0.899 0.979	0.004	
Slope change		0.965	0.919 1.013	0.154		0.971 ^c	0.923 1.021	0.247	
3 pm-11 pm	4,831				4,831				
Pre-trend		0.943	0.911 0.976	0.001		0.946 ^c	0.905 0.989	0.014	
Slope change		0.984	0.942 1.028	0.462		0.984 ^c	0.941 1.028	0.463	
11 pm-7 am	2,079				2,079				
Pre-trend		0.962	0.915 1.012	0.131		0.979 ^c	0.919 1.043	0.504	
Slope change		1.009	0.949 1.074	0.768		1.015 ^c	0.952 1.082	0.645	

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

^b Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, and sex.

^c Adjusted for seasonality, the changes in the out of hours system in the Capital Region, and the implementation of a referral system to EDs.

Supplementary Table 12. Odds ratios for in-hospital mortality for hip fracture for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value	
Overall	107,959				90,145				
Pre-trend		0.967	0.938 0.997	0.033		0.955 ^a	0.926 0.984	0.003	
Slope change		1.001	0.952 1.052	0.972		1.000 ^a	0.961 1.040	0.995	
Weekday vs. weekend									
Weekday	71,675				59,451				
Pre-trend		0.972	0.945 1.000	0.054		0.961 ^a	0.930 0.992	0.014	
Slope change		0.995	0.951 1.042	0.845		0.993 ^a	0.956 1.032	0.721	
Weekend	36,284				29,895				
Pre-trend		0.957	0.920 0.995	0.028		0.940 ^a	0.903 0.978	0.002	
Slope change		1.012	0.950 1.077	0.715		1.013 ^a	0.962 1.067	0.624	
Time of admission									
7 am to 3 pm	48,840				48,004				
Pre-trend		0.962	0.930 0.995	0.025		0.959 ^b	0.934 0.985	0.002	
Slope change		1.002	0.951 1.057	0.935		1.009 ^b	0.968 1.051	0.683	
3 pm-11 pm	43,847				43,130				
Pre-trend		0.966	0.930 1.002	0.064		0.965 ^b	0.940 0.991	0.009	
Slope change		1.009	0.950 1.072	0.776		1.006 ^b	0.959 1.056	0.799	
11 pm-7 am	15,272				14,839				
Pre-trend		0.983	0.950 1.017	0.326		0.965 ^b	0.925 1.007	0.101	
Slope change		0.979	0.944 1.016	0.270		0.969 ^b	0.932 1.006	0.103	

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

^b Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, and income level.

Supplementary Table 13. Hazard ratios for 30-day mortality for hip fracture for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value	
Overall	107,959				90,556				
Pre-trend		0.999	0.985 1.013	0.880		1.003 ^a	0.982 1.024	0.779	
Slope change		0.987	0.969 1.006	0.172		0.984 ^a	0.962 1.005	0.139	
Weekday vs. weekend									
Weekday	71,675				60,140				
Pre-trend		0.995	0.978 1.012	0.553		0.997 ^a	0.973 1.022	0.826	
Slope change		0.990	0.969 1.012	0.368		0.987 ^a	0.962 1.011	0.289	
Weekend	36,284				30,416				
Pre-trend		1.004	0.981 1.027	0.733		1.009 ^a	0.974 1.044	0.629	
Slope change		0.986	0.957 1.016	0.372		0.986 ^a	0.952 1.022	0.441	
Time of admission									
7 am to 3 pm	48,840				48,840				
Pre-trend		0.998	0.978 1.018	0.845		1.007 ^b	0.983 1.032	0.565	
Slope change		0.977	0.952 1.004	0.090		0.975 ^b	0.948 1.003	0.082	
3 pm-11 pm	43,847				43,847				
Pre-trend		0.998	0.979 1.018	0.842		1.006 ^b	0.982 1.031	0.627	
Slope change		1.005	0.981 1.029	0.711		1.007 ^b	0.981 1.033	0.590	
11 pm-7 am	15,272				15,272				
Pre-trend		0.995	0.967 1.023	0.706		0.994 ^b	0.958 1.030	0.731	
Slope change		0.992	0.958 1.026	0.629		0.878	0.766 1.007	0.062	

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

^b Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, and sex.

Supplementary Table 14. Odds ratios for in-hospital mortality for Major trauma for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value	
Overall	43,841				41,377				
Pre-trend		1.090	0.981 1.210	0.108		1.096	0.959 1.252	0.177	
Slope change		0.860	0.752 0.983	0.027		0.818	0.721 0.928	0.002	
Weekday vs. weekend									
Weekday	26,815				25,354				
Pre-trend		1.081	0.972 1.202	0.150		1.092	0.944 1.264	0.234	
Slope change		0.859	0.748 0.987	0.032		0.825	0.717 0.949	0.007	
Weekend	17,026				15,639				
Pre-trend		1.105	0.993 1.229	0.066		1.101	0.973 1.246	0.128	
Slope change		0.860	0.752 0.984	0.028		0.810	0.721 0.909	<0.001	
Time of admission									
7 am to 3 pm	17,068				16,085				
Pre-trend		1.109	1.006 1.222	0.038		1.122	0.991 1.271	0.070	
Slope change		0.838	0.726 0.968	0.016		0.799	0.705 0.906	<0.001	
3 pm-11 pm	19,428				17,988				
Pre-trend		1.086	0.965 1.222	0.170		1.092	0.932 1.279	0.279	
Slope change		0.854	0.746 0.977	0.022		0.801	0.690 0.929	0.003	
11 pm-7 am	7,345				6,579				
Pre-trend		1.052	0.942 1.175	0.366		1.062	0.940 1.199	0.336	
Slope change		0.931	0.817 1.060	0.280		0.878	0.766 1.007	0.062	

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

Supplementary Table 15. Hazard ratios for 30-day mortality for Major trauma e for the pre-trend and slope change related to the reconfiguration of the emergency healthcare system. Adjusted analyses were performed on a complete case basis.

	No. of unplanned contacts	Unadjusted analyses				Adjusted analyses ^a			
		Odds ratio	95% CI	P-value	No. of unplanned contacts	Odds ratio	95% CI	P-value	
Overall	43,841				41,378				
Pre-trend		1.045	1.008 1.083	0.017		1.001 ^a	0.959 1.044	0.973	
Slope change		0.924	0.875 0.976	0.004		0.955 ^a	0.897 1.018	0.161	
Weekday vs. weekend									
Weekday	26,815				26,815				
Pre-trend		1.049	1.003 1.098	0.037		1.008 ^b	0.959 1.061	0.746	
Slope change		0.910	0.850 0.974	0.006		0.947 ^b	0.878 1.022	0.162	
Weekend	17,026				17,026				
Pre-trend		1.051	0.992 1.114	0.094		1.003 ^b	0.939 1.072	0.922	
Slope change		0.930	0.853 1.014	0.099		0.931 ^b	0.845 1.024	0.142	
Time of admission									
7 am to 3 pm	17,068				17,008				
Pre-trend		1.074	1.018 1.134	0.010		1.028 ^c	0.967 1.094	0.371	
Slope change		0.887	0.818 0.961	0.004		0.931 ^c	0.850 1.020	0.123	
3 pm-11 pm	19,428				19,346				
Pre-trend		1.048	0.991 1.109	0.100		1.013 ^c	0.951 1.080	0.681	
Slope change		0.920	0.846 1.001	0.052		0.913 ^c	0.831 1.004	0.060	
11 pm-7 am	7,345				7,297				
Pre-trend		1.016	0.937 1.101	0.703		0.978 ^c	0.889 1.077	0.656	
Slope change		0.967	0.859 1.088	0.574		0.962 ^c	0.842 1.100	0.570	

^a Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, CCI, ethnicity, education, and income level.

^b Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, and CCI.

^c Adjusted for seasonality, the changes in the out of hours system in the Capital Region, the implementation of a referral system to EDs, sex, age, income level, and CCI.