1 Supplementary Material 1: Supplementary statistics

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3 **Supplementary Table 1**. Descriptive statistics.

		2017	2018	2019	2020
Age (years)		6.4	6.5	6.3	5.3
		(2.0 - 13.2)	(1.9 - 12.6)	(2.1 - 12.5)	(1.8 - 12.0)
Sex (male)	all n (%)	915 (53.2%)	980 (54.6%)	1001 (54.1%)	753 (55.1%)
	n per week median (IQR)	67.0 (61.0 - 82.0)	75.0 (65.0 - 80.0)	76.0 (71.0 - 80.0)	53.0 (48.0 - 70.0)
	% per week median (IQR)				
		55.3% (51.7% - 55.6%)	55.2% (53.7% - 56.1%)	52.3% (51.8% - 58.3%)	54.3% (52.7% - 56.2%)
Native language (Finnish or Swedish)	all n (%)	1327 (81.8%)	1310 (77.7%)	1377 (79.1%)	991 (74.7%)
	n per week median (IQR)	104.0 (91.0 - 109.0)	104.0 (91.0 - 106.0)	102.0 (95.0 - 110.0)	69.0 (66.0 - 91.0)
	% per week median (IQR)				
		82.6% (78.8% - 84.8%)	77.5% (76.3% - 79.1%)	79.7% (76.8% - 80.7%)	72.8% (71.8% - 78.4%)

4 IQR = Interquartile Range

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1 Supplementary Table 2. The number of EMS contacts during the control periods for each month and

- 2 their proportions (%) of all control-period EMS contacts. The Chi-squared test was used to calculate the
- 3 significance of the variation within the control periods.

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Year	March	April	June	р
2017	602 (11%)	516 (10%)	606 (11%)	
2018	621 (12%)	524 (10%)	656 (12%)	0,10
2019	643 (12%)	606 (11%)	609 (11%)	

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1 **Supplementary Table 3**. Change in the dispatch and transportation codes.

		2017	2018	2019	2020
All EMS	all n (%)	1724 (100.0%)	1801 (100.0%)	1858 (100.0%)	1369 (100.0%)
contacts	n per week median (IQR)	128.0 (122.0 - 140.0)	142.0 (125.0 - 146.0)	142.0 (130.0 - 152.0)	91.0 (86.0 - 132.0)
	all n (%)	42 (2.4%)	43 (2.4%)	81 (4.4%)	90 (6.6%)
Dispatch priority A*	n per week median (IQR)	3.0 (2.0 - 4.0)	3.0 (2.0 - 4.0)	5.0 (2.0 - 5.0)	8.0 (7.0 - 8.0)
priority A	% per week median (IQR)	2.3% (1.6% - 2.6%)	2.1% (1.6% - 2.9%)	3.3% (1.6% - 4.1%)	6.1% (5.7% - 8.4%)
	all n (%)	693 (40.2%)	677 (37.6%)	702 (37.8%)	478 (34.9%)
Dispatch	n per week median (IQR)	53.0 (47.0 - 58.0)	49.0 (46.0 - 53.0)	53.0 (46.0 - 59.0)	37.0 (30.0 - 43.0)
priority B*	% per week median (IQR)	38.8% (37.3% - 42.3%)	39.0% (32.4% - 40.4%)	38.7% (34.4% - 40.7%)	36.1% (31.5% - 38.1%)
	all n (%)	882 (51.2%)	969 (53.8%)	947 (51.0%)	658 (48.1%)
Dispatch priority C*	n per week median (IQR)	65.0 (63.0 - 70.0)	74.0 (69.0 - 86.0)	72.0 (69.0 - 80.0)	44.0 (43.0 - 57.0)
	% per week median (IQR)	52.1% (50.4% - 54.3%)	54.0% (51.7% - 56.0%)	52.0% (47.3% - 56.9%)	49.4% (45.7% - 51.4%)
	all n (%)	107 (6.2%)	112 (6.2%)	128 (6.9%)	143 (10.4%)
Dispatch priority D*	n per week median (IQR)	7.0 (7.0 - 10.0)	8.0 (7.0 - 10.0)	10.0 (7.0 - 13.0)	10.0 (8.0 - 12.0)
	% per week median (IQR)	5.7% (4.8% - 7.1%)	5.8% (4.7% - 7.3%)	5.9% (5.6% - 8.8%)	9.5% (8.1% - 11.4%)
	all n (%)	902 (52.4%)	930 (51.6%)	950 (51.2%)	578 (42.3%)
Transported patients	n per week median (IQR)	67.0 (64.0 - 71.0)	74.0 (65.0 - 79.0)	71.0 (65.0 - 78.0)	36.0 (34.0 - 54.0)
patients	% per week median (IQR)	51.8% (50.0% - 55.7%)	50.9% (48.0% - 55.6%)	52.5% (48.5% - 53.8%)	41.9% (39.1% - 44.8%)
	all n (%)	8 (0.5%)	15 (0.8%)	14 (0.8%)	6 (0.4%)
Transportation priority A*	n per week median (IQR)	1.0 (1.0 - 1.8)	1.0 (1.0 - 2.0)	1.0 (1.0 - 2.0)	1.0 (1.0 - 1.0)
. ,	% per week median (IQR)	0.9% (0.8% - 1.2%)	0.8% (0.7% - 1.4%)	0.8% (0.7% - 1.3%)	1.2% (0.9% - 1.2%)
	all n (%)	89 (5.2%)	84 (4.7%)	104 (5.6%)	62 (4.5%)
Transportation priority B*	n per week median (IQR)	6.0 (5.0 - 8.0)	7.0 (4.0 - 8.0)	8.0 (5.0 - 11.0)	5.0 (3.0 - 5.0)
	% per week median (IQR)	4.7% (3.9% - 5.7%)	5.1% (3.4% - 5.5%)	6.4% (3.4% - 6.6%)	5.0% (3.5% - 5.7%)
	all n (%)	587 (34.1%)	601 (33.4%)	618 (33.3%)	398 (29.2%)
Transportation priority C*	n per week median (IQR)	44.0 (40.0 - 47.0)	47.0 (42.0 - 50.0)	45.0 (41.0 - 50.0)	25.0 (22.0 - 41.0)
, .	% per week median (IQR)	33.3% (32.0% - 36.6%)	34.2% (30.4% - 37.1%)	33.3% (29.6% - 35.1%)	29.1% (25.6% - 31.2%)
	all n (%)	218 (12.7%)	230 (12.8%)	213 (11.5%)	113 (8.3%)
Transportation priority D*	n per week median (IQR)	15.0 (13.0 - 20.0)	17.0 (14.0 - 21.0)	15.0 (14.0 - 19.0)	7.0 (6.0 - 9.0)
priority D	% per week median (IQR)	13.0% (10.3% - 14.6%)	12.9% (11.7% - 14.4%)	11.3% (9.9% - 13.2%)	7.4% (6.6% - 8.6%)
	all n (%)	605 (35.1%)	564 (31.3%)	649 (34.9%)	504 (36.8%)
Trauma patients	n per week median (IQR)	42.0 (40.0 - 50.0)	41.0 (33.0 - 48.0)	50.0 (40.0 - 56.0)	36.0 (31.0 - 41.0)
	% per week median (IQR)	33.8% (30.5% - 38.1%)	28.4% (25.5% - 32.9%)	34.0% (29.3% - 40.7%)	39.0% (33.3% - 41.7%)
	all n (%)	820 (47.6%)	871 (48.4%)	907 (48.9%)	786 (57.6%)
Non- transported patients	n per week median (IQR)	64.0 (58.0 - 70.0)	63.0 (61.0 - 72.0)	68.0 (63.0 - 78.0)	56.0 (50.0 - 68.0)
	% per week median (IQR)	48.2% (44.3% - 50.0%)	49.1% (44.4% - 52.0%)	47.5% (46.4% - 51.5%)	58.1% (55.2% - 60.9%)

2 * the priority class from A to D referres to the urgency of the dispatch /transportation and /or to

the risk of the symptom to a patient – A being the contact with highest urgency and risk and D the
lowest urgency and risk

5 ENAS - Emorgon - NA-di--i

5 EMS = Emergency Medical Services

6 IQR = Interquartile Range

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		2017	2018	2019	2020
	all n (%)	81 (4.7%)	74 (4.1%)	105 (5.7%)	94 (6.9%)
additional help	n per week median (IQR)	6.0 (5.0 - 6.0)	5.0 (3.0 - 8.0)	7.0 (5.0 - 7.0)	7.0 (5.0 - 9.0)
requested	% per week median (IQR)	4.1% (3.9% - 4.7%)	3.4% (2.6% - 4.9%)	4.5% (4.1% - 5.4%)	6.8% (4.5% - 8.5%)
	all n (%)	25 (1.5%)	23 (1.3%)	30 (1.6%)	24 (1.8%)
MICU on-scene	n per week median (IQR)	2.0 (1.8 - 2.2)	2.0 (1.5 - 2.0)	2.0 (1.5 - 3.5)	2.0 (2.0 - 2.8)
	% per week median (IQR)	1.6% (1.2% - 1.9%)	1.4% (1.0% - 1.7%)	1.6% (1.1% - 2.6%)	2.3% (1.4% - 2.5%)
	all n (%)	308 (17.9%)	261 (14.5%)	305 (16.4%)	236 (17.2%)
emergency physician consulted by phone	n per week median (IQR)	23.0 (22.0 - 27.0)	20.0 (18.0 - 23.0)	23.0 (21.0 - 25.0)	18.0 (15.0 - 20.0)
	% per week median (IQR)	17.9% (16.8% - 20.0%)	15.4% (11.6% - 17.6%)	16.0% (14.3% - 18.5%)	17.6% (15.6% - 18.1%)
	all n (%)	1615 (93.7%)	1695 (94.1%)	1769 (95.2%)	1280 (93.5%)
any measurements done on-scene	n per week median (IQR)	120.0 (116.0 - 130.0)	131.0 (112.0 - 141.0)	135.0 (121.0 - 144.0)	88.0 (78.0 - 124.0)
	% per week median (IQR)	93.0% (92.2% - 94.9%)	94.9% (93.0% - 95.5%)	95.7% (93.8% - 96.3%)	93.9% (91.9% - 95.3%)
	all n (%)	2 (0.1%)	3 (0.2%)	1 (0.1%)	3 (0.2%)
intubation*	n per week median (IQR)	1.0 (1.0 - 1.0)	1.0 (1.0 - 1.0)	1.0 (1.0 - 1.0)	1.5 (1.2 - 1.8)
	% per week median (IQR)	0.8% (0.8% - 0.8%)	0.7% (0.7% - 0.7%)	0.6% (0.6% - 0.6%)	1.3% (1.2% - 1.3%)
supplementary oxygen	all n (%)	38 (2.2%)	47 (2.6%)	40 (2.2%)	16 (1.2%)
given	n per week median (IQR)	3.0 (2.0 - 4.0)	3.0 (2.0 - 5.0)	3.0 (2.0 - 4.5)	2.0 (1.0 - 2.2)
given	% per week median (IQR)	2.4% (1.6% - 2.8%)	2.2% (1.7% - 3.6%)	2.4% (1.3% - 3.0%)	1.5% (1.2% - 2.4%)
intravenous	all n (%)	128 (7.4%)	123 (6.8%)	149 (8.0%)	65 (4.7%)
connection established	n per week median (IQR)	10.0 (8.0 - 11.0)	9.0 (7.0 - 11.0)	10.0 (10.0 - 14.0)	5.0 (3.0 - 7.0)
connection established	% per week median (IQR)	8.5% (5.6% - 8.7%)	6.4% (5.8% - 7.5%)	8.0% (6.5% - 8.9%)	4.4% (2.9% - 5.8%)
	all n (%)	170 (9.9%)	206 (11.4%)	209 (11.2%)	111 (8.1%)
any medication given	n per week median (IQR)	14.0 (12.0 - 15.0)	14.0 (14.0 - 18.0)	15.0 (13.0 - 18.0)	7.0 (6.0 - 9.0)
	% per week median (IQR)	10.4% (8.8% - 12.1%)	10.3% (9.6% - 12.5%)	10.7% (9.0% - 13.1%)	7.6% (6.6% - 9.1%)

1 **Supplementary Table 4**. Change in the interventions performed on-scene

2 * not enough data for calculating difference in intubation rates

3 ** invasive means any intravenous or intranasal or intramuscular or intraosseal medication given

4 MICU = mobile intensive care unit