

Supplementary material

Effects of COVID-19 pandemic and lockdown on monitoring and treatment balance of Finnish coronary heart disease and type 2 diabetes patients

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Table of contents:

Supplementary table 1. Monthly frequencies (%) of CHD patients with LDL measurements during the follow-up in all patients and stratified by age and treatment balance at the time of the lockdown.

Supplementary table 2. Monthly mean LDL values (SD) among CHD patients during the follow-up in all patients and stratified by age and treatment balance at the time of the lockdown.

Supplementary table 3. Monthly frequencies (%) of T2D patients with HbA1c measurements during the follow-up in all patients and stratified by age and treatment balance at the time of the lockdown.

Supplementary table 4. Monthly mean HbA1c values (SD) among T2D patients during the follow-up in all patients and stratified by age and treatment balance at the time of the lockdown.

Supplementary table 1. Monthly frequencies (%) of CHD patients with LDL measurements during the follow-up in all patients and stratified by age and treatment balance at the time of the lockdown.

Year-month	All patients (n=1604)	≤70 years (n=687)	>70 years (n=917)	LDL <1.8 mmol/l (n=685)*	LDL ≥1.8 mmol/l (n=796)*
2019-01	211 (13.2)	92 (13.4)	119 (13.0)	97 (14.2)	114 (14.3)
2019-02	201 (12.5)	88 (12.8)	113 (12.3)	104 (15.2)	97 (12.2)
2019-03	162 (10.1)	73 (10.6)	89 (9.7)	71 (10.4)	91 (11.4)
2019-04	186 (11.6)	76 (11.1)	110 (12.0)	85 (12.4)	101 (12.7)
2019-05	163 (10.2)	69 (10.0)	94 (10.3)	66 (9.6)	97 (12.2)
2019-06	140 (8.7)	66 (9.6)	74 (8.1)	56 (8.2)	84 (10.6)
2019-07	132 (8.2)	61 (8.9)	71 (7.7)	64 (9.3)	68 (8.5)
2019-08	151 (9.4)	67 (9.8)	84 (9.2)	73 (10.7)	78 (9.8)
2019-09	151 (9.4)	70 (10.2)	81 (8.8)	76 (11.1)	75 (9.4)
2019-10	153 (9.5)	71 (10.3)	82 (8.9)	76 (11.1)	77 (9.7)
2019-11	175 (10.9)	88 (12.8)	87 (9.5)	79 (11.5)	96 (12.1)
2019-12	137 (8.5)	76 (11.1)	61 (6.7)	74 (10.8)	63 (7.9)
2020-01	183 (11.4)	69 (10.0)	114 (12.4)	99 (14.4)	84 (10.6)
2020-02	127 (7.9)	56 (8.2)	71 (7.7)	70 (10.2)	57 (7.2)
2020-03	87 (5.4)	42 (6.1)	45 (4.9)	47 (6.9)	40 (5.0)
2020-04	53 (3.3)	21 (3.1)	32 (3.5)	25 (3.6)	28 (3.5)
2020-05	83 (5.2)	28 (4.1)	55 (6.0)	35 (5.1)	48 (6.0)
2020-06	82 (5.1)	33 (4.8)	49 (5.3)	32 (4.7)	50 (6.3)
2020-07	70 (4.4)	35 (5.1)	35 (3.8)	26 (3.8)	44 (5.5)
2020-08	55 (3.4)	21 (3.1)	34 (3.7)	30 (4.4)	25 (3.1)
2020-09	72 (4.5)	32 (4.7)	40 (4.4)	32 (4.7)	40 (5.0)
2020-10	77 (4.8)	26 (3.8)	51 (5.6)	37 (5.4)	40 (5.0)
2020-11	80 (5.0)	37 (5.4)	43 (4.7)	37 (5.4)	43 (5.4)
2020-12	70 (4.4)	40 (5.8)	30 (3.3)	34 (5.0)	36 (4.5)
2021-01	85 (5.3)	37 (5.4)	48 (5.2)	41 (6.0)	44 (5.5)
2021-02	68 (4.2)	22 (3.2)	46 (5.0)	35 (5.1)	33 (4.1)
2021-03	87 (5.4)	43 (6.3)	44 (4.8)	45 (6.6)	42 (5.3)
2021-04	58 (3.6)	28 (4.1)	30 (3.3)	27 (3.9)	31 (3.9)
2021-05	80 (5.0)	24 (3.5)	56 (6.1)	35 (5.1)	45 (5.7)
2021-06	61 (3.8)	29 (4.2)	32 (3.5)	25 (3.6)	36 (4.5)
Total	3440	1520	1920	1633	1807

Abbreviations: CHD, coronary heart disease; LDL, low-density lipoprotein cholesterol.

*Among those with at least one LDL measurement during Jan 2019 – the lockdown.

Supplementary table 2. Monthly mean LDL values (SD) among CHD patients during the follow-up in all patients and stratified by age and treatment balance at the time of the lockdown.

Year-month	All patients (n=1546)	≤70 years (n=689)	>70 years (n=857)	LDL <1.8 mmol/l (n=685)*	LDL ≥1.8 mmol/l (n=796)*
2019-01	2.2 (1.0)	2.3 (1.0)	2.2 (0.9)	1.7 (0.5)	2.7 (1.0)
2019-02	2.1 (0.9)	2.1 (1.0)	2.1 (0.9)	1.7 (0.6)	2.6 (1.0)
2019-03	2.2 (0.9)	2.3 (0.9)	2.1 (0.9)	1.7 (0.5)	2.6 (1.0)
2019-04	2.2 (0.9)	2.3 (0.9)	2.1 (0.9)	1.6 (0.4)	2.6 (0.9)
2019-05	2.2 (0.9)	2.2 (0.9)	2.2 (0.9)	1.7 (0.5)	2.5 (1.0)
2019-06	2.1 (0.8)	2.4 (1.0)	1.9 (0.6)	1.5 (0.4)	2.6 (0.8)
2019-07	2.2 (0.9)	2.3 (0.8)	2.1 (1.0)	1.7 (0.6)	2.6 (0.9)
2019-08	2.2 (1.1)	2.3 (1.1)	2.1 (1.1)	1.7 (0.8)	2.6 (1.1)
2019-09	2.2 (1.0)	2.3 (1.0)	2.1 (0.9)	1.6 (0.6)	2.7 (1.0)
2019-10	2.1 (0.9)	2.1 (0.9)	2.1 (0.8)	1.6 (0.5)	2.6 (0.8)
2019-11	2.2 (0.9)	2.3 (1.0)	2.1 (0.8)	1.5 (0.4)	2.7 (0.9)
2019-12	2.0 (0.9)	2.1 (0.9)	2.0 (0.9)	1.5 (0.4)	2.6 (0.9)
2020-01	2.0 (0.9)	2.1 (1.0)	2.0 (0.9)	1.5 (0.4)	2.7 (0.9)
2020-02	1.9 (0.8)	2.0 (0.8)	1.8 (0.7)	1.4 (0.3)	2.5 (0.7)
2020-03	1.8 (0.7)	1.7 (0.7)	1.9 (0.7)	1.4 (0.5)	2.2 (0.6)
2020-04	1.9 (1.0)	1.9 (1.1)	2.0 (1.0)	1.7 (0.8)	2.2 (1.1)
2020-05	1.8 (0.8)	1.7 (0.5)	1.8 (0.9)	1.5 (0.6)	2.0 (0.8)
2020-06	1.7 (0.6)	1.6 (0.5)	1.8 (0.7)	1.5 (0.5)	1.9 (0.7)
2020-07	2.0 (0.8)	1.9 (0.9)	2.1 (0.8)	1.4 (0.3)	2.3 (0.8)
2020-08	1.8 (0.6)	2.0 (0.8)	1.6 (0.5)	1.5 (0.4)	2.0 (0.7)
2020-09	1.9 (0.8)	1.9 (0.7)	1.9 (0.9)	1.5 (0.4)	2.3 (0.9)
2020-10	1.7 (0.8)	1.7 (0.9)	1.7 (0.8)	1.4 (0.3)	2.1 (1.0)
2020-11	1.9 (0.9)	1.9 (0.9)	1.8 (0.9)	1.4 (0.4)	2.2 (1.1)
2020-12	1.9 (0.8)	1.9 (0.8)	1.8 (0.8)	1.6 (0.6)	2.2 (0.8)
2021-01	1.8 (0.7)	1.9 (0.9)	1.6 (0.5)	1.4 (0.4)	2.1 (0.8)
2021-02	1.7 (0.8)	1.7 (0.7)	1.7 (0.8)	1.3 (0.3)	2.1 (0.8)
2021-03	1.8 (0.7)	1.9 (0.8)	1.7 (0.6)	1.4 (0.3)	2.1 (0.8)
2021-04	1.9 (0.7)	2.0 (0.9)	1.8 (0.6)	1.6 (0.6)	2.2 (0.8)
2021-05	1.8 (0.9)	2.0 (1.1)	1.7 (0.8)	1.3 (0.3)	2.2 (1.0)
2021-06	1.8 (0.8)	1.8 (0.9)	1.8 (0.8)	1.5 (0.5)	2.1 (0.9)

Abbreviations: CHD, coronary heart disease; LDL, low-density lipoprotein cholesterol.

*Among those with at least one LDL measurement during Jan 2019 – the lockdown.

Supplementary table 3. Monthly frequencies (%) of T2D patients with HbA1c measurements during the follow-up in all patients and stratified by age and treatment balance at the time of the lockdown.

Year-month	All patients (n=10,136)	≤70 years (n=5306)	>70 years (n=4830)	HbA1c ≤53 mmol/mol* (n=5742)	HbA1c >53 mmol/mol* (n=2717)
2019-01	1178 (11.6)	587 (11.1)	591 (12.2)	746 (13.0)	432 (15.9)
2019-02	955 (9.4)	473 (8.9)	482 (10.0)	590 (10.3)	365 (13.4)
2019-03	1022 (10.1)	512 (9.6)	510 (10.6)	618 (10.8)	404 (14.9)
2019-04	1006 (9.9)	505 (9.5)	501 (10.4)	641 (11.2)	365 (13.4)
2019-05	1033 (10.2)	494 (9.3)	539 (11.1)	664 (11.6)	369 (13.6)
2019-06	908 (9.0)	446 (8.4)	462 (9.6)	554 (9.6)	354 (13.0)
2019-07	800 (7.9)	390 (7.4)	410 (8.5)	475 (8.3)	325 (12.0)
2019-08	976 (9.6)	461 (8.7)	515 (10.7)	576 (10.0)	400 (14.7)
2019-09	1100 (10.9)	530 (10.0)	570 (11.8)	667 (11.6)	433 (15.9)
2019-10	1087 (10.7)	544 (10.3)	543 (11.2)	661 (11.5)	426 (15.7)
2019-11	938 (9.3)	473 (8.9)	465 (9.6)	590 (10.3)	348 (12.8)
2019-12	857 (8.5)	432 (8.1)	425 (8.8)	504 (8.8)	353 (13.0)
2020-01	949 (9.4)	463 (8.7)	486 (10.1)	586 (10.2)	363 (13.4)
2020-02	915 (9.0)	479 (9.0)	436 (9.0)	528 (9.2)	387 (14.2)
2020-03	889 (8.8)	451 (8.5)	438 (9.1)	529 (9.2)	360 (13.2)
2020-04	593 (5.9)	294 (5.5)	299 (6.2)	349 (6.1)	244 (9.0)
2020-05	787 (7.8)	371 (7.0)	416 (8.6)	471 (8.2)	316 (11.6)
2020-06	812 (8.0)	388 (7.3)	424 (8.8)	508 (8.8)	304 (11.2)
2020-07	669 (6.6)	343 (6.5)	326 (6.7)	388 (6.8)	281 (10.3)
2020-08	842 (8.3)	403 (7.6)	439 (9.1)	509 (8.9)	333 (12.3)
2020-09	938 (9.3)	432 (8.1)	506 (10.5)	589 (10.3)	349 (12.8)
2020-10	831 (8.2)	406 (7.7)	425 (8.8)	517 (9.0)	314 (11.6)
2020-11	774 (7.6)	400 (7.5)	374 (7.7)	492 (8.6)	282 (10.4)
2020-12	699 (6.9)	338 (6.4)	361 (7.5)	415 (7.2)	284 (10.5)
2021-01	928 (9.2)	472 (8.9)	456 (9.4)	562 (9.8)	366 (13.5)
2021-02	1044 (10.3)	526 (9.9)	518 (10.7)	635 (11.1)	409 (15.1)
2021-03	1168 (11.5)	581 (10.9)	587 (12.2)	731 (12.7)	437 (16.1)
2021-04	996 (9.8)	491 (9.3)	505 (10.5)	616 (10.7)	380 (14.0)
2021-05	1092 (10.8)	547 (10.3)	545 (11.3)	673 (11.7)	419 (15.4)
2021-06	905 (8.9)	449 (8.5)	456 (9.4)	530 (9.2)	375 (13.8)
Total	27,691	13,681	14,010	16,914	10,777

Abbreviations: T2D, type 2 diabetes.

*Among those with at least one HbA1c measurement during Jan 2019 – the lockdown.

Supplementary table 4. Monthly mean HbA1c values (SD) among T2D patients during the follow-up in all patients and stratified by age and treatment balance at the time of the lockdown.

Year-month	All patients (n=8459)	≤70 years-old patients (n=4235)	>70 years-old patients (n=4224)	HbA1c ≤53 mmol/mol (n=5742)	HbA1c >53 mmol/mol (n=2717)
2019-01	51.2 (13.7)	51.6 (14.7)	50.8 (12.4)	44.9 (8.8)	62.1 (13.8)
2019-02	52.7 (14.1)	53.7 (14.9)	51.7 (13.2)	45.6 (8.7)	64.1 (13.6)
2019-03	53.1 (14.7)	52.8 (15.1)	53.4 (14.3)	45.8 (8.7)	64.4 (15.0)
2019-04	52.3 (13.5)	52.5 (14.1)	52.2 (12.3)	45.8 (8.3)	63.8 (13.2)
2019-05	53.6 (14.6)	54.2 (15.3)	53.0 (13.9)	46.7 (8.7)	66.0 (14.9)
2019-06	53.9 (14.6)	54.0 (16.0)	53.7 (13.1)	46.5 (8.8)	65.5 (14.2)
2019-07	54.7 (15.2)	54.3 (15.0)	55.1 (15.4)	47.1 (9.6)	65.8 (15.0)
2019-08	53.5 (14.4)	54.2 (14.9)	53.0 (13.8)	45.8 (8.0)	64.7 (14.0)
2019-09	53.1 (14.4)	54.1 (15.7)	52.3 (13.0)	45.6 (7.6)	64.7 (14.8)
2019-10	52.9 (14.0)	52.7 (14.5)	53.2 (13.6)	45.5 (7.2)	64.5 (14.2)
2019-11	52.6 (13.2)	53.3 (14.3)	51.9 (11.9)	46.0 (7.3)	63.9 (13.4)
2019-12	54.6 (15.2)	54.8 (15.7)	54.4 (14.7)	46.2 (7.9)	66.6 (15.1)
2020-01	53.4 (14.8)	54.6 (16.5)	52.4 (12.4)	45.5 (8.3)	66.2 (14.0)
2020-02	56.0 (14.9)	56.7 (15.7)	55.3 (14.0)	47.1 (7.1)	68.2 (14.2)
2020-03	55.3 (14.0)	56.0 (14.8)	54.4 (13.2)	47.6 (7.9)	66.6 (13.5)
2020-04	55.3 (13.8)	54.7 (13.8)	55.8 (13.7)	48.1 (7.6)	65.6 (14.0)
2020-05	54.2 (13.2)	53.7 (13.6)	54.5 (12.7)	47.1 (8.2)	64.6 (12.3)
2020-06	52.9 (13.2)	53.1 (13.4)	52.8 (13.1)	46.6 (8.1)	63.6 (13.3)
2020-07	54.8 (14.3)	54.5 (14.1)	55.1 (14.6)	47.3 (7.5)	65.2 (14.9)
2020-08	53.0 (11.5)	53.2 (12.0)	52.7 (11.2)	46.8 (6.2)	62.5 (11.7)
2020-09	54.3 (13.0)	53.8 (12.3)	54.8 (13.1)	47.7 (7.6)	65.4 (12.7)
2020-10	53.8 (13.9)	54.1 (14.7)	53.6 (13.0)	47.4 (7.7)	64.5 (15.1)
2020-11	54.3 (13.5)	53.6 (13.5)	55.1 (13.5)	47.3 (7.1)	66.6 (13.2)
2020-12	54.7 (14.9)	54.7 (15.3)	54.7 (14.5)	47.1 (9.0)	65.7 (14.9)
2021-01	56.3 (16.3)	57.8 (17.6)	54.8 (14.7)	46.9 (8.3)	70.8 (15.0)
2021-02	53.9 (14.6)	53.4 (14.8)	54.3 (14.4)	45.1 (6.4)	67.5 (13.3)
2021-03	53.0 (13.8)	53.4 (15.4)	52.6 (12.0)	45.0 (6.1)	66.2 (13.0)
2021-04	53.5 (14.3)	53.8 (15.0)	53.2 (13.6)	44.8 (5.7)	67.6 (12.8)
2021-05	53.5 (15.1)	53.7 (16.0)	53.4 (14.1)	44.5 (5.5)	68.1 (14.3)
2021-06	54.5 (15.0)	54.9 (15.7)	54.0 (14.3)	44.8 (5.4)	68.2 (13.5)

Abbreviations: T2D, type 2 diabetes.