

Appendix 1. Baseline characteristics by level of refill adherence during implementation of lipid-lowering medications, for primary prevention patients.

		All n = 74,909		≤20% n = 4,884		21-40% n = 6,168		41-60% n = 7,490		61-80% n = 10,579		>80% n = 45,788	
		n	%	n	%	n	%	n	%	n	%	n	%
Sex	Men	41,470	55.4	2,652	54.3	3,508	56.9	4,231	56.5	6,110	57.8	24,969	54.5
Age (years)	18–40	2,205	2.9	261	5.3	302	4.9	326	4.4	389	3.7	927	2.0
	41–60	29,372	39.2	2,167	44.4	2,709	43.9	3,206	42.8	4,499	42.5	16,791	36.7
	61–80	40,741	54.4	2,296	47.0	2,996	48.6	3,750	50.1	5,363	50.7	26,336	57.5
	>80	2,591	3.5	160	3.3	161	2.6	208	2.8	328	3.1	1,734	3.8
	Mean (SD)	62.0	(10.9)	60.2	(11.7)	60.1	(11.5)	60.6	(11.4)	60.9	(11.1)	62.9	(10.4)
Country of birth	Median (IQR)	63.0	(14.0)	61.0	(15.0)	61.0	(16.0)	61.0	(16.0)	62.0	(16.0)	63.0	(14.0)
	Sweden	59,619	79.6	3,629	74.3	4,573	74.1	5,648	75.4	8,134	76.9	37,635	82.2
	Other Nordic country	3,977	5.3	264	5.4	338	5.5	441	5.9	574	5.4	2,360	5.2
	Other EU27 country	2,009	2.7	160	3.3	205	3.3	230	3.1	336	3.2	1,078	2.4
	Rest of Europe	2,869	3.8	237	4.9	298	4.8	343	4.6	469	4.4	1,522	3.3
	Africa	1,048	1.4	124	2.5	160	2.6	166	2.2	181	1.7	417	0.9
	The Americas/Oceania	733	1.0	75	1.5	92	1.5	119	1.6	134	1.3	313	0.7
	Asia	1,133	1.5	99	2.0	134	2.2	146	2.0	191	1.8	563	1.2
	Middle East country	3,521	4.7	296	6.1	368	6.0	397	5.3	560	5.3	1,900	4.2
	Unmarried	12,398	16.6	859	17.6	1,092	17.7	1,299	17.3	1,866	17.6	7,282	15.9
	Married/registered partner	42,147	56.3	2,628	53.8	3,333	54.0	4,057	54.2	5,805	54.9	26,324	57.5
	Divorced	13,501	18.0	1,014	20.8	1,257	20.4	1,479	19.8	2,027	19.2	7,724	16.9
Education level	Widow/widower	6,863	9.2	383	7.8	486	7.9	655	8.7	881	8.3	4,458	9.7
	Compulsory school or lower	27,433	36.6	1,710	35.0	2,149	34.8	2,657	35.5	3,775	35.7	17,142	37.4
	Upper secondary school	33,510	44.7	2,248	46.0	2,887	46.8	3,377	45.1	4,711	44.5	20,287	44.3
Employment status	Post-secondary	13,966	18.6	926	19.0	1,132	18.4	1,456	19.4	2,093	19.8	8,359	18.3
	Unemployed	11,035	14.7	844	17.3	1,042	16.9	1,154	15.4	1,639	15.5	6,356	13.9
	Employed	39,724	53.0	2,649	54.2	3,399	55.1	4,217	56.3	5,850	55.3	23,609	51.6
	Retired*	24,150	32.2	1,391	28.5	1,727	28.0	2,119	28.3	3,090	29.2	15,823	34.6
Profession	Upper white collar	22,369	29.9	1,391	28.5	1,772	28.7	2,236	29.9	3,133	29.6	13,837	30.2

Individual income (TSEK [†])	Lower white collar	6,252	8.4	381	7.8	449	7.3	633	8.5	820	7.8	3,969	8.7
	Blue collar	44,363	59.2	2,998	61.4	3,803	61.7	4,441	59.3	6,363	60.2	26,758	58.4
	Others	1,925	2.6	114	2.3	144	2.3	180	2.4	263	2.5	1,224	2.7
	Mean (SD)	195	(297)	194	(362)	195	(256)	192	(188)	194	(180)	195	(330)
	Median (IQR)	160	(120)	157	(110)	160	(113)	163	(116)	164	(116)	160	(111)
Diabetes medications	No diabetes	32,951	44.0	2,159	44.2	2,671	43.3	3,209	42.8	4,721	44.6	20,191	44.1
	Insulin only	6,054	8.1	521	10.7	615	10.0	725	9.7	919	8.7	3,274	7.2
	Other glucose- lowering	28,184	37.6	1,663	34.1	2,258	36.6	2,782	37.1	3,906	36.9	17,575	38.4
	medications only												
	Insulin and other glucose lowering medications	7,720	10.3	541	11.1	624	10.1	774	10.3	1,033	9.8	4,748	10.4
Anticoagulants	Yes	18,699	25.0	1,124	23.0	1,392	22.6	1,737	23.2	2,568	24.3	11,878	25.9
Antihypertensives	Yes	43,978	58.7	2,523	51.7	3,229	52.4	4,090	54.6	5,853	55.3	28,283	61.8
Cancer diagnosis	Yes	3,514	4.7	221	4.5	279	4.5	330	4.4	454	4.3	2,230	4.9
Diabetes duration	Mean (SD)	4.8	(2.4)	5.2	(3.0)	5.0	(3.0)	5.0	(3.0)	4.9	(2.1)	4.7	(2.0)
	Median (IQR)	6.3	(7.0)	6.4	(8.0)	6.2	(7.0)	6.4	(7.0)	6.5	(7.0)	6.3	(7.0)
HbA1c	<5 [<42]	6,285	8.4	340	7.0	492	8.0	581	7.8	892	8.4	3,980	8.7
(% [mmol/mol])	5-6 [42–52]	36,392	48.6	2,174	44.5	2,803	45.4	3,442	46.0	4,973	47.0	23,000	50.2
	>6 [>52]	32,232	43.0	2,370	48.5	2,873	46.6	3,467	46.3	4,714	44.6	18,808	41.1
	Mean (SD)	6.2	(2.2)	6.3	(2.3)	6.3	(2.3)	6.3	(2.3)	6.2	(2.2)	6.1	(2.2)
		[53.7]	[12.4]	[55.1]	[13.0]	[54.6]	[13.0]	[54.6]	[13.2]	[53.9]	[12.5]	[53.2]	[12.1]
	Median (IQR)	51.0	(2.2)	6.0	(2.2)	6.0	(2.3)	6.0	(2.3)	5.9	(2.2)	5.9	(2.1)
		[5.9]	[12.0]	[52.0]	[12.0]	[51.4]	[12.8]	[51.5]	[12.7]	[51.0]	[12.1]	[50.3]	[11.0]
eGFR	<60	5,684	7.6	322	6.6	385	6.2	522	7.0	696	6.6	3,759	8.2
(ml/min/1.73 m ²)	≥60	69,225	92.4	4,562	93.4	5,783	93.8	6,968	93.0	9,883	93.4	42,029	91.8
	Mean (SD)	85.9	(20.1)	88.1	(20.6)	87.9	(20.0)	87.3	(20.6)	87.4	(20.9)	84.8	(19.8)
	Median (IQR)	84.9	(22.7)	87.0	(22.8)	87.1	(23.1)	86.3	(22.9)	86.2	(22.9)	83.9	(22.5)
BMI	≤24.9	7,651	10.2	4,884	9.7	561	9.1	726	9.7	1,025	9.7	4865	10.6
(kg/m ²)	25.0–29.9	31,553	42.1	2,089	42.8	2,664	43.2	3,149	42.0	4,413	41.7	19,238	42.0
	≥30.0	35,705	47.7	2,321	47.5	2,943	47.7	3,615	48.3	5,141	48.6	21,685	47.4
	Mean (SD)	30.2	(4.6)	30.1	(4.4)	30.2	(4.6)	30.3	(4.6)	30.3	(4.6)	30.2	(4.7)
	Median (IQR)	29.8	(5.1)	29.8	(4.9)	29.8	(4.8)	29.8	(5.1)	29.9	(5.0)	29.7	(5.2)
LDL cholesterol	<2.5	3,630	4.9	180	3.7	233	3.8	330	4.4	520	4.9	2,367	5.2
(mmol/L)	≥2.5	71,279	95.2	4,704	96.3	5,935	9.2	7,160	95.6	10,059	95.1	43,421	94.8
	Mean (SD)	3.6	(0.6)	3.6	(0.6)	3.6	(0.6)	3.6	(0.6)	3.6	(0.6)	3.5	(0.6)
	Median (IQR)	3.6	(0.6)	3.6	(0.6)	3.6	(0.6)	3.6	(0.6)	3.6	(0.6)	3.6	(0.7)

HDL cholesterol (mmol/L)	<1.0 (men)/1.3 (women)	19,060	25.4	1,329	27.2	1,584	25.7	1,929	25.8	2,733	25.8	11,485	25.1
	≥1.0 (men)/1.3 (women)	55,849	74.6	3,555	72.8	4,584	74.3	5,561	74.3	7,846	74.2	34,303	74.9
	Mean (SD)	1.2/1.4	(0.3/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.3/0.3)	1.2/1.4	(0.3/0.3)	1.2/1.4	(0.3/0.3)	1.2/1.4	(0.3/0.3)
	Median (IQR)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)
Triglycerides (mmol/L)	<2.0	44,225	59.0	2,773	56.8	3,499	56.7	4,315	57.6	6,020	56.9	27,618	60.3
	≥2.0	30,684	41.0	2,111	43.2	2,669	43.3	3,175	42.4	4,559	43.1	18,170	39.7
	Mean (SD)	2.0	(1.0)	2.1	(1.0)	2.1	(1.0)	2.1	(1.0)	2.1	(1.0)	2.0	(0.9)
	Median (IQR)	1.8	(0.8)	1.9	(0.9)	1.9	(0.8)	1.9	(0.9)	1.9	(0.9)	1.8	(0.8)
Systolic pressure (mmHg)	<130	17,388	23.2	1,187	24.3	1,512	24.5	1,795	24.0	2,555	24.2	10,339	22.6
	≥130	57,521	76.8	3,697	75.7	4,656	75.5	5,695	76.0	8,024	75.9	35,449	77.4
	Mean (SD)	137.6	(14.4)	137.3	(14.3)	137.3	(14.4)	137.4	(14.8)	137.4	(14.7)	137.8	(14.3)
	Median (IQR)	136.8	(15.0)	136.0	(14.8)	136.0	(15.6)	136.0	(15.0)	136.2	(15.3)	137.1	(15.0)
Diastolic pressure (mmHg)	<80	33,568	44.8	2,169	44.4	2,649	43.0	3,258	43.5	4,578	43.3	20,914	45.7
	≥80	41,341	55.2	2,715	55.6	3,519	57.1	4,232	56.5	6,001	56.7	24,874	54.3
	Mean (SD)	79.2	(8.4)	79.6	(8.2)	79.7	(8.2)	79.6	(8.5)	79.6	(8.5)	79.0	(8.4)
	Median (IQR)	80.0	(6.8)	80.0	(6.6)	80.0	(6.8)	80.0	(7.0)	80.0	(7.0)	80.0	(6.8)
Microalbuminuria	Yes	7,124	9.5	419	8.6	553	9.0	707	9.4	1,028	9.7	4,417	9.7
Macroalbuminuria	Yes	2,543	3.4	137	2.8	202	3.3	272	3.6	370	3.5	1,562	3.4
Physical activity [‡]	< once per week	15,914	21.2	1,116	22.9	1,338	21.7	1,643	21.9	2,368	22.4	9,449	20.6
	1-2 times/week	14,374	19.2	920	18.8	1,184	19.2	1,476	19.7	2,029	19.2	8,765	19.1
	3-5 times/week	17,025	22.7	1,020	20.9	1,287	20.9	1,631	21.8	2,365	22.4	10,722	23.4
	Daily	27,596	36.8	1,828	37.4	2,359	38.3	2,740	36.6	3,817	36.1	16,852	36.8
Smoking [§]	Yes	9,578	12.8	744	15.2	972	15.8	1,079	14.4	1,541	14.6	5,242	11.5

Abbreviations: eGFR, estimated glomerular filtration rate; HbA1c, glycated hemoglobin (A1c); HDL, high-density lipoprotein; IQR, inter quartile range; LDL, low-density lipoprotein; SD, standard deviation; TSEK, thousands of Swedish Krona).

* If age ≥65 years and unemployed

† One TSEK is equal to approximately 119 USD

‡ 30-minute walk or equivalent

§ At least one cigarette or pipe per day or stopped smoking within three month

Appendix 2. Baseline characteristics by level of refill adherence during implementation of lipid-lowering medications, for secondary prevention patients.

		All <i>n</i> = 11,659		≤20% <i>n</i> = 598		21-40% <i>n</i> = 666		41-60% <i>n</i> = 870		61-80% <i>n</i> = 1,343		>80% <i>n</i> = 8,182	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Sex	Men	7,666	65.8	379	63.4	416	62.5	537	61.7	878	65.4	5,456	66.7
Age (years)	18–40	57	0.5	5	0.8	3	0.5	3	0.3	8	0.6	38	0.5
	41–60	2,451	21.0	134	22.4	173	26.0	198	22.8	270	20.1	1,676	20.5
	61–80	7,705	66.1	386	64.6	418	62.8	556	63.9	922	68.7	5,423	66.3
	>80	1,446	12.4	73	12.2	72	10.8	113	13.0	143	10.7	1,045	12.8
	Mean (SD)	68.5	(10.2)	68.1	(10.4)	67.3	(10.5)	68.3	(10.1)	68.3	(10.1)	68.6	(10.2)
Country of birth	Median	69.0	(15.0)	68.0	(15.0)	68.0	(15.0)	68.0	(15.0)	69.0	(14.0)	69.0	(14.0)
	Sweden	9,403	80.7	458	76.6	483	72.5	664	76.3	1,045	77.8	6,753	82.5
	Other Nordic country	771	6.6	59	9.9	59	8.9	69	7.9	93	6.9	491	6.0
	Other EU27 country	373	3.2	14	2.3	34	5.1	30	3.5	49	3.7	246	3.0
	Rest of Europe	459	3.9	31	5.2	41	6.2	41	4.7	54	4.0	292	3.6
	Africa	91	0.8	6	1.0	6	0.9	13	1.5	17	1.3	49	0.6
	The Americas/Oceania	80	0.7	7	1.2	9	1.4	6	0.7	10	0.7	48	0.6
	Asia	98	0.8	6	1.0	4	0.6	8	0.9	14	1.0	66	0.8
	Middle East country	384	3.3	17	2.8	30	4.5	39	4.5	61	4.5	237	2.9
	Marital status												
Education level	Unmarried	1,380	11.8	73	12.2	73	11.0	121	13.9	146	10.9	967	11.8
	Married/registered partner	6,384	54.8	322	53.9	337	50.6	440	50.6	698	52.0	4,587	56.1
	Divorced	2,246	19.3	133	22.2	165	24.8	190	21.8	309	23.0	1,449	17.7
	Widow/widower	1,649	14.1	70	11.7	91	13.7	119	13.7	190	14.2	1,179	14.4
	Compulsory school or lower	5,386	46.2	263	44.0	295	44.3	404	46.4	600	44.7	3,824	46.7
Employment status	Upper secondary school	4,640	39.8	249	41.6	271	40.7	352	40.5	559	41.6	3,209	39.2
	Post-secondary	1,633	14.0	86	14.4	100	15.0	114	13.1	184	13.7	1,149	14.0
	Unemployed	1,420	12.2	110	18.4	104	15.6	137	15.8	174	13.0	895	10.9
	Employed	4,067	34.9	182	30.4	222	33.3	276	31.7	451	33.6	2,936	35.9
	Retired*	6,172	52.9	306	51.2	340	51.1	457	52.5	718	53.5	4,351	53.2
Profession	Upper white collar	3,247	27.9	152	25.4	174	26.1	218	25.1	390	29.0	2,313	28.3
	Lower white collar	814	7.0	40	6.7	54	8.1	52	6.0	99	7.4	569	7.0
	Blue collar	7,203	61.8	380	63.6	421	63.2	584	67.1	802	59.7	5,016	61.3
	Others	395	3.4	26	4.4	17	2.6	16	1.8	52	3.9	284	3.5

Individual income (TSEK [†])	Mean (SD)	195	(297)	154	(107)	155	(938)	161	(122)	170	(143)	178	(207)
	Median (IQR)	160	(112)	132	(693)	133	(732)	132	(763)	149	(741)	141	(841)
Diabetes medications	No diabetes	5,901	50.6	268	44.8	311	46.7	377	43.3	613	45.6	4,332	53.0
	Insulin only	1,083	9.3	81	13.6	81	12.2	95	10.9	131	9.8	695	8.5
	Other glucose-lowering medications only	3,364	28.9	175	29.3	190	28.5	282	32.4	429	31.9	2,288	28.0
	Insulin and other glucose lowering medications	1,311	11.2	74	12.4	84	12.6	116	13.3	170	12.7	867	10.6
Anticoagulants	Yes	6,658	57.1	420	70.2	435	65.3	594	68.3	889	66.2	4,320	52.8
Antihypertensives	Yes	7,822	67.1	440	73.6	449	67.4	621	71.4	964	71.8	5,348	65.4
Cancer diagnosis	Yes	814	7.0	32	5.4	37	5.6	51	5.9	93	6.9	601	7.4
Diabetes duration (years)	Mean (SD)	5.8	(7.6)	6.9	(8.8)	6.5	(7.6)	6.9	(8.3)	6.3	(7.5)	5.5	(7.4)
	Median (IQR)	3.0	(7.0)	4.5	(9.0)	4.0	(10.0)	4.6	(10.0)	4.0	(10.0)	2.4	(9.0)
HbA1c (% [mmol/mol])	<5 [<42]	804	6.9	25	4.2	42	6.3	48	5.5	88	6.6	601	7.4
	5-6 [42-52]	6,285	53.9	289	48.3	318	47.8	450	51.7	719	53.5	4,509	55.1
	>6 [>52]	4,570	39.2	284	47.5	306	46.0	372	42.8	536	39.9	3,072	37.6
	Mean (SD)	6.1	(2.1)	6.3	(2.2)	6.2	(2.1)	6.2	(2.2)	6.1	(2.1)	6.0	(2.0)
eGFR (ml/min/1.73 m ²)		[52.6]	[10.7])	[54.6]	[11.7])	[54.1]	[11.1])	[53.9]	[11.9])	[52.7]	[11.0])	[52.2]	[10.3])
	Median (IQR)	5.8	(2.2)	6.0	(2.2)	6.0	(2.2)	5.9	(2.2)	5.8	(2.1)	5.8	(2.0)
		[50.0]	[12.0])	[51.9]	[12.5])	[51.6]	[12.2])	[50.9]	[11.7])	[50.0]	[11.0])	[50.0]	[10.0])
	<60	1,650	14.2	94	15.7	80	12.0	131	15.1	175	13.0	1,170	14.3
BMI (kg/m ²)	≥60	10,009	85.9	504	84.3	586	88.0	739	84.9	1,168	87.0	7,012	85.7
	Mean (SD)	78.6	(19.2)	78.8	(18.5)	79.7	(21.0)	78.4	(18.8)	79.7	(19.1)	78.3	(19.1)
	Median (IQR)	78.5	(22.7)	79.5	(22.9)	78.4	(21.9)	78.8	(23.3)	78.9	(22.2)	78.3	(22.0)
	≤24.9	1,214	10.4	59	9.9	59	8.9	81	9.3	149	11.1	866	10.4
LDL cholesterol (mmol/L)	25.0-29.9	5,993	51.4	301	50.3	327	49.1	448	51.5	680	50.6	4,237	51.8
	≥30.0	4,452	38.2	238	39.8	280	42.0	341	39.2	514	38.3	3,079	37.6
	Mean (SD)	29.4	(4.0)	29.6	(4.0)	29.6	(3.9)	29.6	(4.1)	29.3	(3.9)	29.3	(4.0)
	Median (IQR)	29.0	(5.1)	29.2	(4.6)	29.2	(4.3)	29.3	(4.5)	29.2	(4.5)	29.0	(4.3)
HDL cholesterol	<2.5	756	6.5	28	4.7	45	6.8	60	6.9	101	7.5	522	6.4
	≥2.5	1093	93.5	570	95.3	621	93.2	810	93.1	1242	92.5	7660	93.6
HDL cholesterol	0												
	Mean (SD)	3.4	(0.6)	3.5	(0.6)	3.4	(0.6)	3.4	(0.6)	3.4	(0.6)	3.4	(0.6)
	Median (IQR)	3.5	(0.7)	3.5	(0.6)	3.4	(0.6)	3.5	(0.7)	3.5	(0.6)	3.5	(0.6)
	<1.0 (men)/1.3	2154	18.5	111	18.6	115	17.3	190	21.8	251	18.7	1,487	18.2

(mmol/L)	(women)												
	≥1.0 (men)/1.3 (women)	9505	81.5	487	81.4	551	82.7	680	78.2	1092	81.2	6,695	81.8
	Mean (SD)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.3/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)
	men/women	4											
	Median (IQR)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)	1.2/1.4	(0.2/0.3)
	men/women	4											
Triglycerides	<2.0	7529	64.6	365	61.0	424	63.7	514	59.1	885	65.9	5341	65.3
(mmol/L)	≥2.0	4130	35.4	233	39.0	242	36.3	356	40.9	458	34.1	2841	34.7
	Mean (SD)	1.9	(0.7)	2.0	(0.8)	2.0	(0.8)	2.0	(0.9)	1.9	(0.8)	1.9	(0.7)
	Median (IQR)	1.8	(0.8)	1.8	(0.8)	1.8	(0.7)	1.8	(0.9)	1.8	(0.7)	1.8	(0.7)
Systolic pressure	<130	2,451	21.0	104	17.4	143	21.5	166	19.1	265	19.7	1,773	21.7
(mmHg)	≥130	9,208	79.0	494	82.6	523	78.5	704	80.9	1,078	80.3	6,409	78.3
	Mean (SD)	138.2	(14.6)	140.0	(15.0)	138.9	(14.7)	139.3	(15.4)	138.5	(14.4)	137.9	(14.5)
	Median (IQR)	137.6	(15.0)	139.3	(17.3)	137.7	(17.1)	138.0	(16.0)	138.0	(15.0)	137.4	(15.0)
Diastolic pressure	<80	6,956	59.7	349	58.4	386	58.0	518	59.5	803	59.8	4,900	59.9
(mmHg)	≥80	4,703	40.3	249	41.6	280	42.0	352	40.5	540	40.2	3,282	40.1
	Mean (SD)	77.1	(8.2)	77.9	(7.8)	77.8	(8.6)	77.1	(8.0)	77.2	(8.3)	76.9	(8.1)
	Median (IQR)	78.0	(5.0)	78.2	(5.8)	78.0	(5.4)	77.9	(5.0)	77.7	(5.6)	78.0	(5.8)
Microalbuminuria	Yes	1,282	11.0	80	13.4	73	11.0	111	12.8	175	13.0	843	10.3
Macroalbuminuria	Yes	561	3.2	32	5.4	28	4.2	60	6.9	64	4.8	377	4.6
Physical activity [‡]	< once per week	2,780	23.8	155	25.9	172	25.8	212	24.4	320	23.8	1,921	23.5
	1-2 times/week	2,131	18.3	100	16.7	116	17.4	167	19.2	245	18.2	1,503	18.4
	3-5 times/week	2,370	20.3	114	19.1	141	21.2	172	19.8	268	20.0	1,675	20.5
	Daily	4,378	37.6	229	38.3	237	35.6	319	36.7	510	38.0	3,083	37.7
Smoking [§]	Yes	1,116	9.6	71	11.9	77	11.6	108	12.4	168	12.5	692	8.5

Abbreviations: eGFR, estimated glomerular filtration rate; HbA1c, glycated hemoglobin (A1c); HDL, high-density lipoprotein; IQR, inter quartile range; LDL, low-density lipoprotein; SD, standard deviation; TSEK, thousands of Swedish Krona).

* If age ≥65 years and unemployed

† One TSEK is equal to approximately 119 USD

‡ 30-minute walk or equivalent

§ At least one cigarette or pipe per day or stopped smoking within three month

Appendix 3. Adjusted* hazard ratios for CV events and mortality by level of refill adherence during implementation of lipid-lowering medications, for multiple imputation and complete case analysis.

	MPR (%)	Primary prevention						Secondary prevention					
		Multiple imputations <i>n</i> = 74,909			Complete cases <i>n</i> = 17,058			Multiple imputations <i>n</i> = 11,659			Complete cases <i>n</i> = 1,591		
		Hazard ratio			Hazard ratio			Hazard ratio			Hazard ratio		
		<i>n</i>	(95% CI)	p-value	<i>n</i>	(95% CI)	p-value	<i>n</i>	(95% CI)	p-value	<i>n</i>	(95% CI)	p-value
Any CV event	≤20	577	2.36 (2.29–2.42)	<0.0001	100	2.70 (2.17–2.36)	<0.0001	273	1.58 (1.52–1.64)	<0.0001	39	1.94 (1.37–2.74)	0.0002
	21-40	566	1.84 (1.79–1.90)	<0.0001	105	2.20 (1.77–2.72)	<0.0001	259	1.36 (1.30–1.41)	<0.0001	35	1.47 (1.03–2.10)	0.0364
	41-60	583	1.52 (1.48–1.57)	<0.0001	121	1.75 (1.43–1.4)	<0.0001	337	1.28 (1.23–1.32)	<0.0001	41	1.41 (1.01–1.98)	0.0460
	61-80	741	1.33 (1.29–1.36)	<0.0001	124	1.35 (1.11–1.65)	0.0033	479	1.19 (1.15–1.23)	<0.0001	64	1.20 (0.91–1.58)	0.2046
	>80	2,542	<i>ref</i>	<i>ref</i>	451	<i>ref</i>	<i>ref</i>	2,435	<i>ref</i>	<i>ref</i>	284	<i>ref</i>	<i>ref</i>
Unstable angina pectoris	≤20	197	2.23 (2.12–2.34)	<0.0001	36	2.86 (1.98–4.14)	<0.0001	97	1.69 (1.58–1.81)	<0.0001	10	1.35 (0.68–2.66)	0.3934
	21-40	210	1.91 (1.82–2.00)	<0.0001	40	2.52 (1.78–3.60)	<0.0001	85	1.38 (1.28–1.48)	<0.0001	12	1.56 (0.84–2.90)	0.1578
	41-60	198	1.47 (1.40–1.54)	<0.0001	31	1.35 (0.92–2.00)	0.1294	126	1.51 (1.42–1.60)	<0.0001	15	1.49 (0.84–2.63)	0.1747
	61-80	266	1.36 (1.30–1.42)	<0.0001	42	1.42 (1.00–2.00)	0.0482	177	1.44 (1.36–1.52)	<0.0001	25	1.26 (0.80–1.98)	0.3225
	>80	869	<i>ref</i>	<i>ref</i>	144	<i>ref</i>	<i>ref</i>	698	<i>ref</i>	<i>ref</i>	94	<i>ref</i>	<i>ref</i>
Myocardial infarction	≤20	257	3.37 (3.22–3.52)	<0.0001	44	3.74 (2.65–5.29)	<0.0001	92	2.62 (2.44–2.82)	<0.0001	15	3.20 (1.74–5.89)	<0.0001
	21-40	218	2.29 (2.19–2.41)	<0.0001	40	2.63 (1.84–3.76)	<0.0001	66	1.72 (1.59–1.87)	<0.0001	11	2.12 (1.07–4.18)	0.0307
	41-60	206	1.76 (1.68–1.85)	<0.0001	44	2.12 (1.50–2.99)	<0.0001	89	1.69 (1.57–1.82)	<0.0001	12	1.89 (0.98–3.64)	0.0570
	61-80	234	1.39 (1.32–1.45)	<0.0001	45	1.62 (1.15–2.28)	0.0054	112	1.40 (1.31–1.50)	<0.0001	15	1.42 (0.78–2.58)	0.2491
	>80	758	<i>ref</i>	<i>ref</i>	131	<i>ref</i>	<i>ref</i>	448	<i>ref</i>	<i>ref</i>	49	<i>ref</i>	<i>ref</i>
Ischemic heart disease	≤20	231	2.41 (2.30–2.52)	<0.0001	40	2.84 (2.00–4.02)	<0.0001	174	1.36 (1.29–1.43)	<0.0001	27	2.00 (1.32–3.04)	0.0012
	21-40	237	2.00 (1.90–2.08)	<0.0001	41	2.21 (1.57–3.12)	<0.0001	178	1.28 (1.21–1.34)	<0.0001	25	1.58 (1.03–2.42)	0.0381
	41-60	235	1.59 (1.52–1.67)	<0.0001	42	1.60 (1.14–2.25)	0.0067	235	1.23 (1.18–1.29)	<0.0001	28	1.45 (0.96–2.19)	0.0781
	61-80	294	1.37 (1.31–1.43)	<0.0001	55	1.59 (1.17–2.15)	0.0032	337	1.16 (1.12–1.21)	<0.0001	44	1.27 (0.91–1.78)	0.1643
	>80	953	<i>ref</i>	<i>ref</i>	168	<i>ref</i>	<i>ref</i>	1,746	<i>ref</i>	<i>ref</i>	185	<i>ref</i>	<i>ref</i>
Stroke	≤20	192	2.29 (2.18–2.40)	<0.0001	39	2.96 (2.07–4.22)	<0.0001	85	2.07 (1.92–2.23)	<0.0001	10	1.99 (0.98–4.01)	0.0553
	21-40	179	1.75 (1.66–1.84)	<0.0001	36	2.19 (1.52–3.15)	<0.0001	79	1.84 (1.71–1.99)	<0.0001	11	1.70 (0.88–3.26)	0.1120
	41-60	188	1.47 (1.40–1.54)	<0.0001	42	1.78 (1.27–2.51)	0.0010	86	1.40 (1.30–1.50)	<0.0001	14	2.23 (1.23–4.07)	0.0088
	61-80	252	1.37 (1.31–1.43)	<0.0001	35	1.10 (0.76–1.59)	0.6042	103	1.11 (1.03–1.18)	0.0032	14	1.09 (0.61–1.96)	0.7719
	>80	855	<i>ref</i>	<i>ref</i>	156	<i>ref</i>	<i>ref</i>	537	<i>ref</i>	<i>ref</i>	69	<i>ref</i>	<i>ref</i>
All-cause mortality	≤20	231	0.98 (0.94–1.02)	0.8547	26	0.66 (0.44–0.98)	0.0410	103	1.24 (1.16–1.32)	<0.0001	13	1.14 (0.62–2.07)	0.6776
	21-40	320	1.16 (1.12–1.20)	<0.0001	53	1.14 (0.85–1.51)	0.3860	104	1.25 (1.17–1.34)	<0.0001	11	0.83 (0.44–1.57)	0.5613
	41-60	381	1.10 (1.06–1.13)	<0.0001	75	1.10 (0.86–1.40)	0.4620	125	1.07 (1.01–1.14)	0.0266	13	0.86 (0.48–1.56)	0.6294
	61-80	577	1.14 (1.11–1.18)	<0.0001	113	1.27 (1.03–1.56)	0.0240	199	1.15 (1.09–1.21)	<0.0001	25	0.98 (0.62–1.53)	0.9104
	>80	2,391	<i>ref</i>	<i>ref</i>	445	<i>ref</i>	<i>ref</i>	990	<i>ref</i>	<i>ref</i>	120	<i>ref</i>	<i>ref</i>
CV	≤20	84	1.18 (1.10–1.27)	<0.0001	9	0.82 (0.41–1.61)	0.5581	64	1.48 (1.36–1.61)	<0.0001	9	1.89 (0.89–4.02)	0.0999

mortality	21-40	105	1.26 (1.18–1.34)	<0.0001	15	1.19 (0.69–2.05)	0.5275	59	1.35 (1.24–1.47)	<0.0001	10	1.74 (0.85–3.58)	0.1307
	41-60	109	1.03 (0.97–1.10)	0.3506	25	1.25 (0.81–1.94)	0.3171	75	1.23 (1.14–1.33)	<0.0001	8	1.38 (0.64–3.01)	0.4115
	61-80	183	1.18 (1.12–1.25)	<0.0001	33	1.31 (0.89–1.93)	0.1751	108	1.19 (1.12–1.28)	<0.0001	13	1.21 (0.64–2.30)	0.5604
	>80	723	<i>ref</i>	<i>ref</i>	119	<i>ref</i>	<i>ref</i>	518	<i>ref</i>	<i>ref</i>	54	<i>ref</i>	<i>ref</i>

Abbreviations: CI, confidence interval; CV, cardiovascular; MPR, medication possession ratio; ref, reference.

*Adjusted for all baseline covariates.

Appendix 4. Adjusted* hazard ratios for CV events and mortality in relation to 18-months persistence to lipid-lowering medications, for multiple imputations and complete case analysis.

		Primary prevention						Secondary prevention					
		Multiple imputations <i>n</i> = 74,909			Complete cases <i>n</i> = 17,058			Multiple imputations <i>n</i> = 11,659			Complete cases <i>n</i> = 1,591		
		Hazard ratio (95% CI)			Hazard ratio (95% CI)			Hazard ratio (95% CI)			Hazard ratio (95% CI)		
Persistent		<i>n</i>		p-value	<i>n</i>		p-value	<i>n</i>		p-value	<i>n</i>		p-value
Any CV event	No	1,568	1.65 (1.62–1.68)	<0.0001	290	1.96 (1.70–2.26)	<0.0001	779	1.22 (1.19–1.25)	<0.0001	98	1.36 (1.08–1.72)	0.0090
	Yes	3,441	<i>ref</i>	<i>ref</i>	611	<i>ref</i>	<i>ref</i>	3,004	<i>ref</i>	<i>ref</i>	365	<i>ref</i>	<i>ref</i>
Unstable angina pectoris	No	554	1.71 (1.66–1.77)	<0.0001	102	2.11 (1.66–2.69)	<0.0001	268	1.34 (1.28–1.40)	<0.0001	29	1.15 (0.75–1.75)	0.5274
	Yes	1,186	<i>ref</i>	<i>ref</i>	191	<i>ref</i>	<i>ref</i>	915	<i>ref</i>	<i>ref</i>	127	<i>ref</i>	<i>ref</i>
Myocardial infarction	No	624	2.20 (2.13–2.27)	<0.0001	115	2.38 (1.88–3.00)	<0.0001	227	1.88 (1.79–1.97)	<0.0001	35	2.19 (1.42–3.37)	0.0004
	Yes	1,049	<i>ref</i>	<i>ref</i>	189	<i>ref</i>	<i>ref</i>	580	<i>ref</i>	<i>ref</i>	67	<i>ref</i>	<i>ref</i>
Ischemic heart disease	No	637	1.79 (1.74–1.85)	<0.0001	114	1.99 (1.58–2.49)	<0.0001	529	1.25 (1.22–1.29)	<0.0001	70	1.48 (1.12–1.95)	0.0058
	Yes	1,313	<i>ref</i>	<i>ref</i>	232	<i>ref</i>	<i>ref</i>	2,141	<i>ref</i>	<i>ref</i>	239	<i>ref</i>	<i>ref</i>
Stroke	No	513	1.69 (1.63–1.75)	<0.0001	102	2.03 (1.60–2.50)	<0.0001	221	1.61 (1.53–1.69)	<0.0001	27	1.43 (0.91–2.25)	0.1181
	Yes	1,153	<i>ref</i>	<i>ref</i>	206	<i>ref</i>	<i>ref</i>	669	<i>ref</i>	<i>ref</i>	91	<i>ref</i>	<i>ref</i>
All-cause mortality	No	842	1.06 (1.04–1.09)	<0.0001	133	0.98 (0.77–1.12)	0.4454	308	1.18 (1.13–1.23)	<0.0001	34	0.92 (0.62–1.37)	0.6867
	Yes	3,058	<i>ref</i>	<i>ref</i>	579	<i>ref</i>	<i>ref</i>	1,213	<i>ref</i>	<i>ref</i>	148	<i>ref</i>	<i>ref</i>
CV mortality	No	276	1.15 (1.10–1.20)	<0.0001	42	1.03 (0.93–1.46)	0.8469	179	1.29 (1.22–1.36)	<0.0001	25	1.57 (0.96–2.58)	0.0714
	Yes	928	<i>ref</i>	<i>ref</i>	159	<i>ref</i>	<i>ref</i>	645	<i>ref</i>	<i>ref</i>	69	<i>ref</i>	<i>ref</i>

Abbreviations: CI, confidence interval; CV, cardiovascular; MPR, medication possession ratio; ref, reference.

*Adjusted for all baseline covariates.