

Table S1. ORs and 95% CIs of fixed effects in multilevel multivariable models and spatial multilevel models for HbA1c testing, eye examination and kidney function examination.

Characteristics	Biannual HbA1c testing		Annual eye examination		Annual kidney function examination	
	multilevel model	spatial multilevel model	multilevel model	spatial multilevel model	multilevel model	spatial multilevel model
Female gender	0.97 (0.92, 1.00)	0.97 (0.93, 1.01)	1.16 (1.12, 1.21)	1.17 (1.13, 1.22)	1.07 (1.04, 1.11)	1.07 (1.03, 1.11)
Urban residence	0.95 (0.89, 1.01)	0.98 (0.91, 1.04)	-	-	1.14 (1.09, 1.21)	1.12 (1.05, 1.19)
Purchasing power index	0.87 (0.79, 0.98)	0.91 (0.79, 1.06)	1.26 (1.09, 1.43)	1.19 (1.03, 1.39)	1.10 (1.00, 1.21)	1.05 (0.91, 1.21)
Language						
<i>German</i>	1	1	1	1	1	1
<i>French</i>	0.51 (0.47, 0.55)	0.54 (0.46, 0.65)	0.83 (0.77, 0.89)	0.98 (0.80, 1.21)	1.18 (1.10, 1.26)	1.13 (0.95, 1.34)
<i>Italian</i>	0.45 (0.40, 0.50)	0.51 (0.37, 0.72)	0.80 (0.69, 0.90)	1.03 (0.66, 1.61)	1.58 (1.43, 1.78)	1.54 (1.10, 2.16)
Deductible (CHF)						
300	1	1	1	1	1	1
500	0.94 (0.90, 0.98)	0.95 (0.90, 0.99)	0.88 (0.84, 0.92)	0.89 (0.85, 0.94)	0.94 (0.90, 0.98)	0.95 (0.90, 0.99)
1000	0.78 (0.68, 0.90)	0.78 (0.68, 0.91)	0.71 (0.61, 0.82)	0.72 (0.62, 0.83)	0.74 (0.65, 0.85)	0.75 (0.65, 0.86)
1500	0.75 (0.65, 0.86)	0.76 (0.66, 0.87)	0.75 (0.64, 0.86)	0.77 (0.67, 0.89)	0.68 (0.59, 0.78)	0.69 (0.60, 0.79)
2000	0.71 (0.49, 1.01)	0.70 (0.49, 1.00)	0.62 (0.40, 0.89)	0.64 (0.42, 0.93)	0.58 (0.40, 0.81)	0.59 (0.40, 0.85)
2500	0.61 (0.52, 0.70)	0.61 (0.53, 0.71)	0.56 (0.47, 0.65)	0.57 (0.48, 0.66)	0.69 (0.59, 0.80)	0.69 (0.59, 0.80)
Insurance coverage						
<i>Only mandatory</i>	1	1	1	1	1	1
<i>Mandatory and supplementary</i>	1.23 (1.18, 1.30)	1.22 (1.16, 1.28)	1.29 (1.23, 1.35)	1.28 (1.22, 1.34)	1.10 (1.05, 1.15)	1.08 (1.03, 1.13)
Mandatory insurance model						
<i>Standard</i>	1	1	1	1	1	1
<i>Managed care</i>	1.14 (1.09, 1.18)	1.13 (1.08, 1.18)	1.18 (1.13, 1.22)	1.17 (1.12, 1.22)	1.05 (1.01, 1.08)	1.04 (1.00, 1.08)
Supplementary hospital care insurance	-	-	1.32 (1.26, 1.39)	1.30 (1.24, 1.37)	1.10 (1.04, 1.15)	1.08 (1.03, 1.14)
Multimorbidity						
<i>none</i>	1	1	1	1	1	1
1	1.11 (1.03, 1.20)	1.12 (1.03, 1.21)	0.95 (0.88, 1.03)	0.97 (0.90, 1.06)	1.05 (0.97, 1.13)	1.06 (0.99, 1.15)
2	1.21 (1.13, 1.31)	1.21 (1.12, 1.32)	1.07 (0.99, 1.17)	1.09 (1.01, 1.18)	1.19 (1.11, 1.28)	1.21 (1.12, 1.30)
>2	1.25 (1.16, 1.35)	1.25 (1.16, 1.35)	1.23 (1.14, 1.34)	1.25 (1.16, 1.35)	1.36 (1.27, 1.46)	1.38 (1.28, 1.48)
Diabetes category						
<i>Incident</i>	1	1	1	1	1	1
<i>Oral drug only</i>	0.99 (0.93, 1.05)	0.98 (0.92, 1.04)	1.13 (1.07, 1.21)	1.13 (1.06, 1.20)	0.97 (0.91, 1.02)	0.96 (0.91, 1.02)
<i>Insulin</i>	1.83 (1.71, 1.97)	1.81 (1.69, 1.95)	1.86 (1.74, 2.00)	1.85 (1.73, 1.98)	1.08 (1.01, 1.15)	1.07 (1.00, 1.14)
Ophthalmologist density/10000 inhabitants	-	-	1.20 (1.02, 1.39)	1.13 (0.99, 1.30)	-	-

OR: odds ratio; CI: confidence/credible interval; HbA1c: glycated hemoglobin; CHF: Swiss franc; Multimorbidity: pharmaceutical cost groups (PCG) were used to deduce chronic morbidity based on drug use

Table S2. ORs and 95% CIs of fixed effects in multilevel multivariable models and spatial multilevel models for LDL testing.

Characteristics	Annual LDL testing	
	multilevel model	spatial multilevel model
Female gender	0.90 (0.86, 0.94)	0.89 (0.85, 0.93)
Urban residence	1.12 (1.06, 1.24)	1.12 (1.04, 1.21)
Language		
<i>German</i>	1	1
<i>French</i>	2.17 (1.98, 2.36)	1.69 (1.38, 2.07)
<i>Italian</i>	1.42 (1.25, 1.61)	1.49 (1.01, 2.21)
Deductible (CHF)		
300	1	1
500	0.97 (0.92, 1.03)	0.97 (0.92, 1.03)
1000	0.88 (0.76, 1.03)	0.88 (0.75, 1.03)
1500	0.73 (0.63, 0.85)	0.74 (0.63, 0.86)
2000	0.64 (0.41, 0.92)	0.63 (0.42, 0.94)
2500	0.64 (0.54, 0.74)	0.64 (0.55, 0.75)
Insurance coverage		
<i>Only mandatory</i>	1	1
<i>Mandatory and supplementary</i>	1.12 (1.07, 1.18)	1.12 (1.06, 1.18)
Mandatory insurance model		
<i>Standard</i>	1	1
<i>Managed care</i>	1.09 (1.04, 1.14)	1.08 (1.03, 1.13)
Supplementary hospital care insurance	1.05 (0.98, 1.12)	1.04 (0.98, 1.11)
Multimorbidity		
<i>none</i>	1	1
1	1.16 (1.06, 1.26)	1.16 (1.07, 1.26)
2	1.43 (1.32, 1.56)	1.44 (1.33, 1.57)
>2	1.56 (1.43, 1.68)	1.57 (1.45, 1.70)
Diabetes category		
<i>Incident</i>	1	1
<i>Oral drug only</i>	0.92 (0.86, 0.99)	0.91 (0.84, 0.98)
<i>Insulin</i>	0.92 (0.85, 0.99)	0.92 (0.86, 0.98)

OR: odds ratio; CI: confidence/credible interval; LDL: low-density lipoprotein; CHF: Swiss franc; Multimorbidity: pharmaceutical cost groups (PCG) were used to deduce chronic morbidity based on drug use