

## Supplementary Online Content

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**eFigure.** Type of Forgone Care and Income-Related Disparities in Forgoing Health Care

**eTable 1.** Missing Data Details

**eTable 2.** Association Between Deductible Level and Forgoing Health Care (Survey-Weighted)

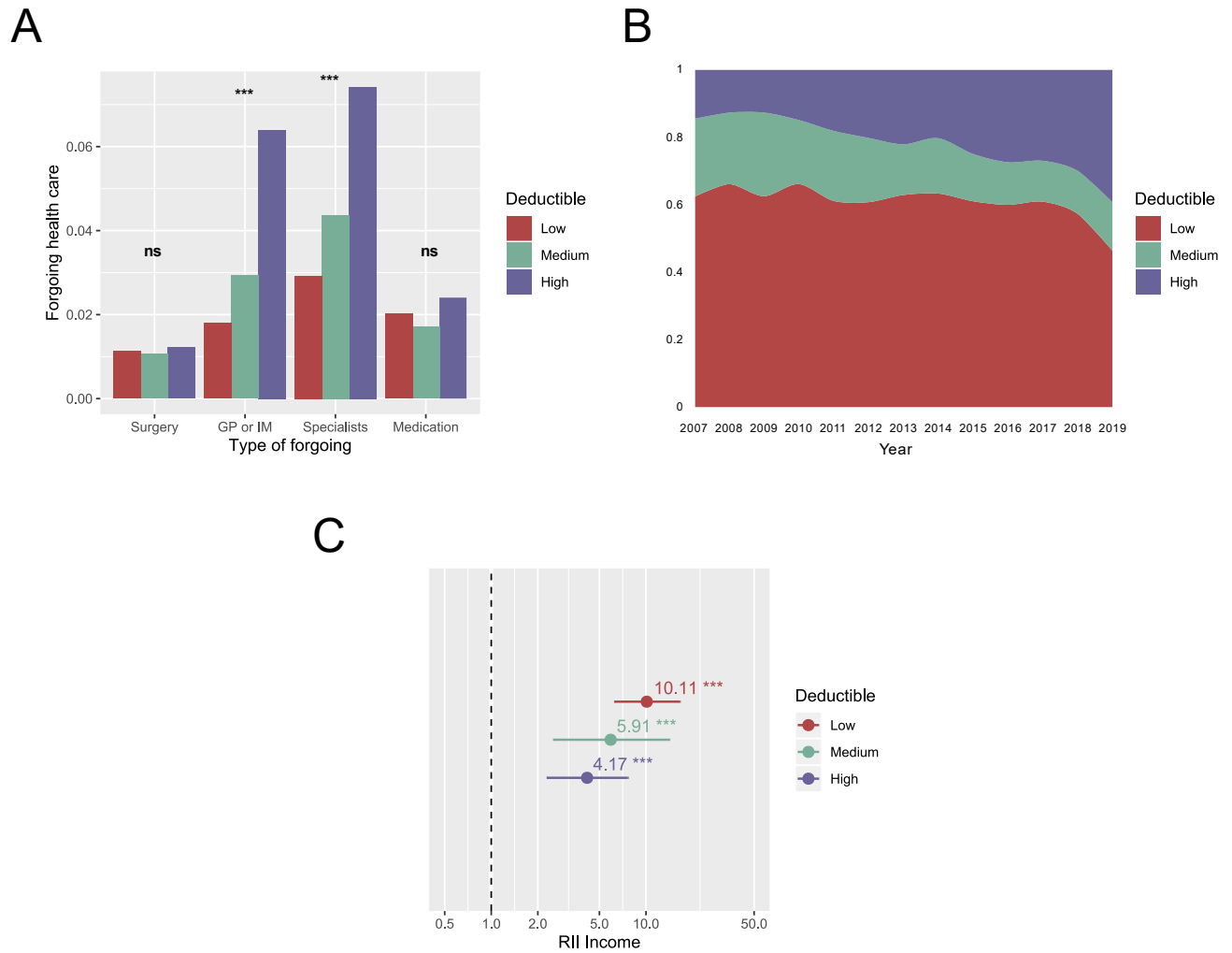
**eTable 3.** Association Between Deductible Level and Forgoing Dental Health Care (Survey-Weighted)

**eTable 4.** Association Between Deductible Level and Forgoing Health Care in Specific Groups (Survey-Weighted)

**eTable 5.** Association Between Deductible Level and Forgoing Dental Health Care

This supplementary material has been provided by the authors to give readers additional information about their work.

**eFigure – Type of forgone care and income-related disparities in forgoing health care**



A) proportion of participants forgoing different types of insured care according to deductible level. B) proportion of participants with low, medium or high deductible over time. C) Quantification of income-related health care forgoing according to deductible level. Bars represent 95% CI. RII: relative index of inequality. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

**eTable 1 – Missing data details**

Variable	Missing data, n (%)			
	Overall	Low deductibles	Medium deductibles	High deductibles
<b>Insurance deductibles</b>	702 (5.91%)	-	-	-
<b>Sex</b>	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Age</b>	0 (0%)	0 (0%)	0 (0%)	0 (0%)
<b>Adjusted household income</b>	2977 (25.08%)	1455 (21.27%)	508 (27.09%)	702 (28.61%)
<b>Educational attainment</b>	146 (1.23%)	83 (1.21%)	21 (1.12%)	35 (1.43%)
<b>Swiss Nationality</b>	22 (0.19%)	11 (0.16%)	4 (0.21%)	3 (0.12%)
<b>Known comorbidities</b>	10 (0.08%)	4 (0.06%)	0 (0%)	3 (0.12%)
<b>Known cardiovascular risk factors</b>	4 (0.03%)	0 (0%)	0 (0%)	0 (0%)
<b>Additional non-mandatory insurance plans</b>	561 (4.73%)	237 (3.46%)	69 (3.68%)	101 (4.12%)
<b>Subsidized insurance premiums</b>	390 (3.29%)	152 (2.22%)	31 (1.65%)	51 (2.08%)
<b>Forgoing health care (non-dental)</b>	31 (0.26%)	13 (0.19%)	4 (0.21%)	5 (0.2%)
<b>Forgoing dental care</b>	3 (0.03%)	0 (0%)	0 (0%)	0 (0%)

**eTable 2 – Association between deductible level and forgoing health care (survey-weighted)**

	Unadjusted		Adjusted (n=7946)	
	Estimate [95% CI]	p-value	Estimate <sup>a</sup> [95% CI]	p-value
<b>RII deductible (lowest to highest deductible level)</b>	2.4 [1.5;3.9]	0.006	2.5 [1.3;4.6]	0.014
<b>Household adjusted income</b>	0.8 [0.8;0.9]	<0.001	0.9 [0.8;0.9]	0.001
<b>RII of educational attainment (lowest to highest)</b>	0.8 [0.6;1.1]	0.17	1.2 [0.8;1.8]	0.31
<b>Swiss nationality (vs foreigners)</b>	0.8 [0.7;0.9]	0.011	1 [0.9;1.1]	0.86
<b>Sex (vs male)</b>	1.2 [0.7;2.1]	0.37	1.3 [1.1;1.5]	0.011
<b>Age (per 10 years)</b>	0.9 [0.8;0.9]	0.002	0.9 [0.8;0.9]	<0.001
<b>Known comorbidities (vs without)</b>	1.1 [0.9;1.2]	0.40	1.2 [0.8;1.6]	0.32
<b>Cardiovascular risk factors (vs without)</b>	0.9 [0.8;1.1]	0.30	1.1 [0.9;1.3]	0.2
<b>Additional non-mandatory insurance plans (vs without)</b>	0.5 [0.4;0.5]	<0.001	0.6 [0.5;0.8]	0.002
<b>Subsidized insurance premiums (vs without)</b>	2.0 [1.9;2.1]	<0.001	1.5 [1.4;1.6]	<0.001
<b>Year of survey (per 5 years)</b>	1.2 [1.0;1.4]	0.048	1.1 [0.9;1.3]	0.21
<b>Interactions</b>	<b>Estimate<sup>b</sup> [95% CI]</b>	<b>p-value</b>		
<b>Known comorbidities (vs without)</b>	2.6 [0.9;7.1]	0.07		
<b>Cardiovascular risk factors (vs without)</b>	0.8 [0.4;1.3]	0.23		
<b>Sex (vs male)</b>	0.6 [0.2;2.6]	0.43		
<b>Household adjusted income</b>	1.3 [1.1;1.6]	0.013		
<b>Age (per 10 years)</b>	0.7 [0.6;0.9]	0.016		
<b>Deductibles RII according to age categories</b>	<b>Estimate [95% CI]</b>	<b>p-value</b>	<b>Estimate<sup>c</sup> [95% CI]</b>	<b>p-value</b>
<b>&lt;40 years</b>	2.9 [0.7;12.8]	0.09	2.8 [0.4;18.2]	0.14
<b>40-64 years</b>	1.3 [0.7;2.2]	0.34	1.9 [1.0;3.6]	0.04
<b>&gt;65 years</b>	1.4 [0.1;30.5]	0.41	2.9 [0.1;99.7]	0.16

<sup>a</sup> results from multivariable Poisson regression determining the association between insurance plan deductibles and forgoing health care. RII- relative index of inequality, CI – confidence interval

<sup>b</sup> results from interaction tests between insurance deductibles and the variable of interest in predicting forgoing health care

<sup>c</sup> results from multivariable Poisson regression determining the association between insurance plan deductibles and forgoing health care, by age category and including the same covariates as in <sup>a</sup>.

**eTable 3 – Association between deductible level and forgoing dental health care (survey-weighted)**

	Unadjusted		Adjusted (n=7962)	
	Estimate [95% CI]	p-value	Estimate <sup>a</sup> [95% CI]	p-value
<b>RII deductible (lowest to highest deductible category)</b>	1.2 [0.8;1.7]	0.24	1.2 [0.9;1.7]	0.13
<b>Household adjusted income</b>	0.8 [0.8;0.9]	<0.001	0.9 [0.8;0.9]	<0.001
<b>RII of educational attainment (lowest to highest)</b>	0.6 [0.5;0.8]	0.001	1.1 [0.9;1.3]	0.47
<b>Swiss nationality (vs foreigners)</b>	0.8 [0.8;1.0]	0.05	1 [0.9;1.2]	0.83
<b>Sex (vs male)</b>	1.1 [0.7;1.7]	0.64	1.1 [0.8;1.4]	0.50
<b>Age (per 10 years)</b>	0.9 [0.8;0.9]	0.002	0.9 [0.9;0.9]	0.001
<b>Known comorbidities (vs without)</b>	1.1 [0.7;1.6]	0.55	1.2 [0.7;2]	0.41
<b>Cardiovascular risk factors (vs without)</b>	1.0 [0.9;1.1]	0.44	1 [0.9;1.1]	0.99
<b>Additional non-mandatory insurance plans (vs without)</b>	0.4 [0.3;0.5]	<0.001	0.6 [0.4;0.7]	0.003
<b>Subsidized insurance premiums (vs without)</b>	1.9 [1.7;2.2]	<0.001	1.3 [1.1;1.5]	0.011
<b>Year of survey (per 5 years)</b>	1.2 [1.0;1.4]	0.063	1.1 [1;1.3]	0.12

<sup>a</sup> results from multivariable Poisson regression determining the association between insurance plan deductibles and forgoing dental health care. RII- relative index of inequality, CI – confidence interval

**eTable 4 – Association between deductible level and forgoing health care in specific groups (survey-weighted)**

	<b>Estimate<sup>a</sup> [95% CI]</b>	<b>p-value</b>
<b>RII<sub>Deductibles</sub> in 1<sup>st</sup> tertile of income</b>	2.10 [1.1;4.2]	0.04
<b>RII<sub>Deductibles</sub> in 2<sup>nd</sup> tertile of income</b>	2.0 [1.3;3.1]	0.008
<b>RII<sub>Deductibles</sub> in 3<sup>rd</sup> tertile of income</b>	4.7 [1.0;21.5]	0.051
<b>RII<sub>income</sub> low deductibles</b>	4.7 [1.6;14.0]	0.015
<b>RII<sub>income</sub> medium deductibles</b>	3.0 [0.9;9.7]	0.061
<b>RII<sub>income</sub> high deductibles</b>	2.3 [0.8;6.7]	0.10
<b>RII<sub>Deductibles</sub> in participants with subsidized premiums</b>	2.5 [1.4;4.8]	0.013
<b>RII<sub>Deductibles</sub> in participants without subsidized premiums</b>	2.3 [1.0;5.4]	0.057
<b>RII<sub>Deductibles</sub> in participants with subsidized premiums and low income</b>	2.5 [0.9;6.8]	0.061
<b>RII<sub>Deductibles</sub> in participants without subsidized premiums and low income</b>	1.9 [0.9;3.9]	0.08

<sup>a</sup> results from multivariable Poisson regression determining the association between insurance plan deductibles and forgoing health care. RII- relative index of inequality, CI – confidence interval

**eTable 5 – Association between deductible level and forgoing dental health care**

	Unadjusted		Adjusted (n=7962)	
	Estimate [95% CI]	p-value	Estimate <sup>a</sup> [95% CI]	p-value
<b>RII deductible (lowest to highest deductible category)</b>	1.1 [0.9;1.3]	0.60	1.1 [0.8;1.4]	0.50
<b>Household adjusted income</b>	0.8 [0.8;0.8]	<0.001	0.8 [0.8;0.9]	<0.001
<b>RII of educational attainment (lowest to highest)</b>	0.6 [0.5;0.7]	<0.001	1.1 [0.9;1.4]	0.49
<b>Swiss nationality (vs foreigners)</b>	0.8 [0.8;0.9]	0.001	1.0 [0.9;1.2]	0.57
<b>Sex (vs male)</b>	1.1 [1.0;1.3]	0.03	1.1 [1.0;1.2]	0.22
<b>Age (per 10 years)</b>	0.9 [0.8;0.9]	<0.001	0.9 [0.8;0.9]	<0.001
<b>Known comorbidities (vs without)</b>	1.1 [0.9;1.4]	0.27	1.2 [1.0;1.6]	0.11
<b>Cardiovascular risk factors (vs without)</b>	0.9 [0.8;1.0]	0.19	1.0 [0.9;1.1]	0.96
<b>Additional non-mandatory insurance plans (vs without)</b>	0.4 [0.4;0.5]	<0.001	0.6 [0.5;0.7]	<0.001
<b>Subsidized insurance premiums (vs without)</b>	2.1 [1.8;2.3]	<0.001	1.3 [1.1;1.5]	<0.001
<b>Year of survey (per 5 years)</b>	1.2 [1.1;1.3]	<0.001	1.1 [1.0;1.2]	0.008

<sup>a</sup> results from multivariable Poisson regression determining the association between insurance plan deductibles and forgoing dental health care. RII- relative index of inequality, CI – confidence interval