

Supplementary Table 2 Influence of characteristics of general medical practices (GMPs) (Odds Ratio, 95% confidence intervals, robust standard errors) on the primary health care indicators according to multilevel logistic regression analysis in Hungary in 2016

	Influenza immunization		Screening mammography		Beta-blocker application		Management of COPD		Composite indicator	
	OR (95%CI)	SE	OR (95%CI)	SE	OR (95%CI)	SE	OR (95%CI)	SE	OR (95%CI)	SE
Gender of GPs										
male	Reference		Reference		Reference		Reference		Reference	
female	1.03 [0.98-1.09]	0.028	1.05 [1.03-1.08]	0.014	0.98 [0.96-1.01]	0.013	1.05 [1.01-1.09]	0.019	1.08 [1.07-1.10]	0.008
Age of GPs	0.98 [0.99-0.99]	0.001	0.99 [0.99-1.00]	0.001	0.99 [0.99-0.99]	0.001	0.99 [0.99-0.99]	0.001	0.99 [0.99-0.99]	0.001
Gender of patients										
male	Reference		Reference		Reference		Reference		Reference	
female	0.80 [0.79-0.80]	0.004			1.13 [1.11-1.15]	0.012	0.94 [0.92-0.96]	0.011	0.90 [0.90-0.91]	0.002
Age group of patients										
18-19					0.01 [0.00-0.10]	0.014	0.31 [0.28-0.34]	0.015	1.62 [1.54-1.71]	0.043
20-24					0.07 [0.03-0.15]	0.027	0.51 [0.46-0.57]	0.028	1.36 [1.31-1.42]	0.026
25-29					0.12 [0.08-0.2]	0.029	0.58 [0.51-0.66]	0.039	1.26 [1.22-1.30]	0.02
30-34					0.28 [0.21-0.36]	0.038	0.55 [0.49-0.63]	0.036	1.22 [1.19-1.25]	0.015
35-39					0.48 [0.42-0.55]	0.034	0.80 [0.72-0.89]	0.042	1.26 [1.24-1.28]	0.011
40-44					0.57 [0.52-0.62]	0.025	0.83 [0.77-0.90]	0.034	1.32 [1.30-1.34]	0.009
45-49			0.69 [0.69-0.71]	0.004	0.7 [0.66-0.75]	0.022	0.90 [0.84-0.96]	0.031	1.04 [1.03-1.05]	0.005
50-54			0.80 [0.79-0.81]	0.005	0.84 [0.80-0.88]	0.021	0.98 [0.93-1.04]	0.029	1.26 [1.24-1.27]	0.006
55-59			0.90 [0.89-0.91]	0.005	0.94 [0.91-0.98]	0.019	1.04 [0.99-1.09]	0.026	1.49 [1.48-1.50]	0.007
60-64			Reference		1.00 [0.97-1.04]	0.017	0.99 [0.95-1.04]	0.022	1.65 [1.64-1.67]	0.007
65-69	Reference		Reference		Reference		Reference		Reference	
70-74	1.49 [1.47-1.5]	0.009			1.00 [0.97-1.03]	0.017	0.92 [0.88-0.96]	0.021	1.18 [1.17-1.18]	0.004
75-79	1.9 [1.88-1.93]	0.013			0.97 [0.94-1.01]	0.017	0.72 [0.69-0.76]	0.017	1.24 [1.23-1.25]	0.004
80-84	2.16 [2.12-2.19]	0.017			0.87 [0.84-0.90]	0.017	0.45 [0.43-0.48]	0.011	1.15 [1.14-1.16]	0.005
85-89	2.12 [2.07-2.16]	0.022			0.81 [0.77-0.85]	0.02	0.27 [0.25-0.28]	0.008	0.96 [0.95-0.97]	0.006
>90	1.91 [1.85-1.97]	0.029			0.72 [0.66-0.77]	0.028	0.12 [0.11-0.13]	0.006	0.71 [0.70-0.73]	0.007
Relative education of patients	1.76 [1.2-2.58]	0.343	3.11 [2.59-3.74]	0.29	0.73 [0.6-0.89]	0.074	4.6 [3.52-6.00]	0.625	1.78 [1.60-1.98]	0.096
County of GMP										
Budapest	Reference		Reference		Reference		Reference		Reference	
Baranya	1.08 [0.93-1.26]	0.086	1.16 [1.09-1.23]	0.037	1.23 [1.15-1.31]	0.042	1.01 [0.9-1.13]	0.059	1.04 [1.00-1.08]	0.021
Bács-Kiskun	1.13 [0.99-1.28]	0.074	1.88 [1.77-1.99]	0.058	0.98 [0.91-1.06]	0.038	1.15 [1.05-1.26]	0.054	1.12 [1.07-1.17]	0.024
Békés	0.88 [0.76-1.01]	0.064	1.14 [1.06-1.22]	0.041	1.27 [1.18-1.38]	0.05	1.05 [0.94-1.17]	0.058	0.93 [0.89-0.98]	0.021
Borsod-Abaúj-Zemplén	0.96 [0.85-1.08]	0.059	1.66 [1.57-1.75]	0.045	1.5 [1.41-1.60]	0.049	0.83 [0.76-0.90]	0.035	1.05 [1.01-1.08]	0.018
Csongrád	0.88 [0.77-1.01]	0.062	2.06 [1.94-2.19]	0.063	1.05 [0.98-1.12]	0.036	1.07 [0.96-1.18]	0.054	1.11 [1.06-1.15]	0.024
Fejér	0.98 [0.85-1.15]	0.076	1.57 [1.46-1.68]	0.056	1.09 [1.01-1.16]	0.038	1.11 [1.01-1.23]	0.058	1.02 [0.98-1.06]	0.021
Győr-Moson-Sopron	0.69 [0.59-0.81]	0.058	1.38 [1.3-1.47]	0.041	1.77 [1.65-1.9]	0.062	1.03 [0.94-1.14]	0.052	0.97 [0.92-1.01]	0.022
Hajdú-Héves	0.86 [0.77-0.97]	0.053	1.55 [1.46-1.63]	0.044	1.26 [1.17-1.35]	0.045	1.17 [1.07-1.28]	0.054	1.07 [1.03-1.11]	0.02
Komárom-Esztergom	0.93 [0.79-1.08]	0.074	0.91 [0.85-0.98]	0.032	1.52 [1.39-1.66]	0.07	1.18 [1.07-1.30]	0.058	0.92 [0.88-0.96]	0.021
Nógrád	0.88 [0.7-1.1]	0.101	1.44 [1.33-1.56]	0.056	0.91 [0.83-1.00]	0.044	1.34 [1.20-1.49]	0.076	0.88 [0.84-0.93]	0.022
Pest	1.11 [0.92-1.34]	0.106	0.86 [0.76-0.98]	0.056	1.12 [1.01-1.25]	0.063	1.02 [0.9-1.16]	0.065	0.86 [0.81-0.92]	0.026
Somogy	0.95 [0.85-1.06]	0.053	1.11 [1.05-1.18]	0.034	1.20 [1.13-1.27]	0.035	0.97 [0.89-1.05]	0.04	1.01 [0.98-1.04]	0.016
Szabolcs-Szatmár-Bereg	1.63 [1.39-1.91]	0.133	0.73 [0.67-0.79]	0.029	1.20 [1.10-1.31]	0.052	0.92 [0.83-1.01]	0.046	0.96 [0.91-1.01]	0.027
Jász-Nagykun-Szolnok	0.93 [0.81-1.08]	0.069	1.7 [1.58-1.84]	0.065	2.04 [1.9-2.19]	0.073	0.99 [0.91-1.08]	0.043	1.09 [1.05-1.14]	0.022
Tolna	0.87 [0.74-1.01]	0.068	1.47 [1.37-1.59]	0.055	1.12 [1.04-1.21]	0.045	1.00 [0.91-1.11]	0.05	0.96 [0.92-1.01]	0.023
Vas	1.37 [1.13-1.66]	0.133	2.13 [1.99-2.28]	0.073	1.67 [1.51-1.85]	0.086	0.87 [0.77-0.98]	0.055	1.14 [1.09-1.20]	0.028
Veszprém	0.71 [0.58-0.88]	0.074	1.34 [1.17-1.54]	0.094	1.64 [1.51-1.79]	0.072	0.86 [0.78-0.95]	0.043	1.01 [0.96-1.06]	0.027
Zala	1.23 [1.05-1.43]	0.097	1.18 [1.07-1.30]	0.059	1.15 [1.06-1.24]	0.044	1.74 [1.57-1.93]	0.091	0.98 [0.94-1.03]	0.023
Types of settlement										
rural	Reference		Reference		Reference		Reference		Reference	
urban	0.93 [0.87-0.99]	0.033	1.01 [0.98-1.05]	0.019	0.96 [0.93-1]	0.018	1.04 [1.00-1.09]	0.024	1.09 [1.08-1.12]	0.011
Size of practice										
<800	0.95 [0.80-1.13]	0.083	0.94 [0.85-1.04]	0.048	1.00 [0.88-1.13]	0.063	1.08 [0.93-1.25]	0.082	0.99 [0.95-1.05]	0.027
801-1200	0.99 [0.92-1.08]	0.042	1.01 [0.97-1.05]	0.022	0.97 [0.93-1.02]	0.024	0.98 [0.92-1.04]	0.03	0.99 [0.97-1.02]	0.013
1201-1600	Reference		Reference		Reference		Reference		Reference	
1601-2000	1.03 [0.97-1.10]	0.033	1.07 [1.04-1.10]	0.017	0.98 [0.95-1.02]	0.016	0.99 [0.96-1.04]	0.022	1.02 [1.00-1.04]	0.01
>2000	1.04 [0.97-1.11]	0.038	1.06 [1.02-1.10]	0.019	0.99 [0.96-1.03]	0.019	0.97 [0.92-1.01]	0.024	1.01 [0.99-1.03]	0.011

The male gender of GP, male gender of adults, 60-64 or 65-69 years old patients, Budapest, rural settlement type and 1201-1600 GMP's size were considered as reference. Significant results are shown in bold.