

Supplemental materials for

Cohidon C, Wild P, Senn N. Practice organization characteristics related to job satisfaction among general practitioners in 11 countries. *Ann Fam Med.* 2019;17(6):510-517.

Supplemental Table 1: Detailed description of the respondents in the 11 countries

	AU 747	CA 2284	FR 502	DE 559	NL 618	NZ 503	NO 864	SE 2905	CH 106 5	UK 1001	US 1001
Sex Female (%)	37.0	43.8	35.0	44.3	45.3	45.0	40.0	51.5	32.9	49.1	39.9
Age (%)											
<35	11.3	9.5	7.8	1.0	4.5	9.0	13.1	9.1	0.8	13.8	5.5
35-44	28.8	22.1	15.8	35.7	28.1	29.0	31.7	26.6	18.1	30.9	20.3
45-54	32.1	27.5	28.1	27.6	31.3	40.0	22.0	24.3	31.3	30.0	30.1
55-64	17.3	26.3	39.0	28.6	33.3	18.0	27.0	28.1	36.4	19.2	28.8
>=65	10.5	14.5	9.3	7.1	2.7	4.0	6.2	11.8	13.5	6.2	16.1
Urban area (%)	71.8	66.7	70.4	52.9	46.6	69.7	37.7	52.4	51.5	68.0	72.1
Weekly workload (hours)											
<40	65.3	54.5	26.6	35.6	44.2	69.2	59.2	67.1	35.5	48.4	42.4
41-50	25.7	25.5	30.0	31.6	29.9	19.2	36.7	28.5	31.9	30.6	26.4
>50	8.9	19.9	43.4	32.8	25.9	11.5	11.1	4.4	32.6	21.0	31.2
Administrative tasks (% of activities)											
<=10	66.3	48.5	45.4	24.0	16.0	31.4	31.5	17.2	25.2	38.5	51.4
11-20	26.2	31.3	38.3	34.7	40.4	34.8	38.7	31.1	46.6	31.0	21.5
>20	7.5	20.1	16.3	41.3	43.6	33.8	29.8	51.7	28.2	30.4	27.1
GPs FTE in the practice (median)											
1	7.8	21.2	61.9	48.6	18.4	8.3	2.9	10.9	44.4	3.8	28.3
2	12.9	16.1	27.0	33.8	47.4	14.4	11.5	12.4	31.9	11.5	14.6
3-5	38.7	29.7	10.7	16.5	30.2	45.6	60.1	38.1	17.0	48.9	26.7
6-10	33.3	20.4	0.2	1.2	3.0	28.7	23.4	29.7	3.4	32.7	14.7
>10	7.4	12.5	0.2	0.0	1.0	2.9	2.1	8.9	3.2	3.1	15.8
Same-day appointment (%)											
>50	73.6	55.3	79.1	85.7	82.0	84.6	72.4	45.7	85.8	71.2	76.7
40-50	14.1	16.4	9.1	5.8	11.7	8.9	11.9	17.8	7.9	18.8	11.3
20-40	5.6	15.2	4.6	5.6	5.1	4.0	11.3	18.9	4.5	6.4	6.3
<20	6.7	13.1	7.2	2.9	1.2	2.5	4.4	17.6	1.7	3.6	5.7
Offering home visit (%)	25.1	19.5	56.1	57.1	88.3	20.6	20.3	24.7	42.8	84.0	6.0
Information on clinical targets (%)	34.9	23.0	46.6	44.3	90.2	65.1	32.0	80.2	8.7	86.2	52.8
Inter-consultation patient contacts (%)	89.0	82.2	81.1	81.1	87.3	96.4	88.0	90.0	82.7	92.5	88.8
Patient satisfaction surveys (%)	46.3	17.1	3.7	25.1	62.8	60.5	9.3	89.2	15.7	87.9	64.1
Information about hospital admissions (%)	32.0	33.0	22.7	22.5	30.7	47.2	33.6	25.9	30.3	85.8	58.9
Preventive care targets (%)	41.8	37.4	30.7	11.6	42.6	88.0	6.1	10.3	7.2	82.6	57.8
Performance comparisons (%)	47.5	41.8	65.5	40.5	48.2	83.8	22.7	53.0	33.5	83.4	74.9
Coordinated care with social workers (%)											
Yes	45.0	50.2	35.3	63.5	42.5	58.9	51.7	41.9	60.6	65.6	43.8
Occasionally	48.8	42.9	54.2	29.8	48.8	39.2	44.4	51.2	36.1	32.3	37.2

Never	6.3	6.9	10.5	6.7	8.7	1.9	3.9	6.9	3.3	2.1	9.0
Contacts with home care providers (%)											
Yes	29.2	32.4	36.5	51.0	56.2	28.0	63.0	53.4	55.7	34.0	53.0
Occasionally	67.1	62.1	57.7	47.4	43.5	67.0	36.7	43.9	43.4	62.0	44.2
Never	3.7	5.4	5.8	1.6	0.3	5.0	0.4	2.6	0.9	4.0	2.8
Working with a case manager (%)											
Yes, in-practice	75.4	42.9	12.9	20.6	83.0	83.0	31.8	75.8	8.4	87.4	43.9
Yes, external	6.2	21.5	83.3	6.8	14.9	7.4	33.9	9.8	52.2	8.3	22.8
No	18.4	35.6	3.8	72.2	2.1	9.6	34.3	14.4	39.3	4.3	33.3
Information on changes in patient health (%)											
Yes	43.3	48.8	42.9	65.5	61.4	40.1	53.4	50.7	73.1	47.5	64.1
Occasionally	52.5	46.9	50.7	33.4	38.0	56.6	45.5	46.1	26.3	50.0	33.4
Never	4.1	4.3	6.4	1.1	0.6	3.3	1.1	3.2	0.6	2.5	2.5
Delayed discharge (%)											
< 2 days	32.4	22.5	14.9	70.4	43.3	62.3	22.5	19.7	40.0	33.7	53.1
2 days-2 weeks	56.6	55.4	50.8	23.0	50.2	35.3	73.2	67.6	50.1	57.7	38.3
3-4 weeks	7.8	12.7	25.1	4.5	5.8	2.4	4.1	7.7	6.9	7.1	2.8
> 1 month /never	3.2	9.4	9.2	2.1	0.7	0.0	0.2	5.1	3.0	1.5	5.8
Coordinated care with hospital (%)	82.2	79.8	89.6	92.2	92.2	87.3	83.3	81.2	87.5	95.0	88.7
Electronic Health Record (%)	92.4	72.9	75.6	85.5	99.3	99.8	99.5	99.3	54.3	98.4	84.5
Electronic drug alert (%)											
Yes	89.5	41.7	46.8	31.5	96.4	94.8	82.3	81.6	29.8	86.5	77.3
Occasionally	4.9	14.3	20.0	16.6	2.8	4.0	10.6	11.4	15.2	11.8	6.6
Never	5.6	44.0	33.2	52.2	0.8	1.2	7.1	7.0	55.0	1.7	16.0

AU = Australia; CA = Canada; CH = Switzerland; DE = Germany; FR = France; NL = Netherlands; NO = Norway; NZ = New Zealand; SE = Sweden; UK = United Kingdom; US = United States.

FTE: GPs Full-time equivalent in the practice. Urbanity was self-reported.

Supplemental Table 2: Multivariate analysis of associations between dissatisfaction and practices characteristics in each country (Odds ratio and confidence interval)

	AU 747	CA 2284	FR 502	DE 559	NL 618	NZ 503	NO 864	SE 2905	CH 1065	UK 1001	US 1001
Sex – ref Male											
Female	1.0 [0.67-1.51]	1.01 [0.79-1.30]	1.00 [0.57-1.75]	1.77 [1.12-2.82]	1.29 [0.80-2.07]	1.10 [0.72-1.67]	0.52 [0.27-0.73]	1.20 [1.01-1.43]	1.11 [0.77-1.61]	1.03 [0.75-1.41]	1.00 [0.73-1.38]
Age- ref <35 yrs.											
35-44	1.18 [0.67-2.09]	0.92 [0.65-1.29]	0.62 [0.24-1.57]	0.35 [0.07-1.74]	1.51 [0.72-3.16]	1.10 [0.55-2.18]	0.96 [0.55-1.50]	0.99 [0.72-1.37]	1.36 [0.35-5.25]	1.06 [0.66-1.72]	1.69 [0.87-3.29]
45-54	0.95 [0.54-1.69]	1.28 [0.89-1.85]	0.94 [0.39-2.30]	0.37 [0.07-1.86]	1.94 [0.90-4.16]	1.61 [0.84-3.07]	1.25 [0.72-2.18]	1.28 [0.91-1.79]	1.78 [0.46-6.85]	1.51 [0.95-2.41]	1.82 [0.94-3.51]
55-64	0.82 [0.44-1.54]	1.35 [0.92-1.97]	0.98 [0.40-2.38]	0.34 [0.07-1.73]	1.90 [0.87-4.16]	1.20 [0.57-2.52]	0.94 [0.56-1.58]	1.25 [0.89-1.76]	1.79 [0.47-6.85]	1.18 [0.72-1.92]	1.82 [0.91-3.64]
>=65	0.66 [0.22-2.01]	0.50 [0.32-0.79]	0.97 [0.25-3.70]	0.70 [0.13-3.87]	2.82 [0.60-13.33]	1.14 [0.34-3.84]	0.72 [0.35-1.49]	0.54 [0.37-0.80]	0.84 [0.21-3.44]	0.72 [0.29-1.82]	1.22 [0.57-2.61]
Area – ref Rural											
Urban	0.95 [0.63-1.43]	1.11 [0.87-1.42]	1.64 [0.97-2.80]	0.70 [0.43-1.14]	1.17 [0.76-1.81]	0.98 [0.60-1.58]	1.12 [0.80-1.58]	1.16 [0.97-1.40]	1.12 [0.84-1.50]	1.23 [0.90-1.68]	1.10 [0.78-1.54]
Weekly workload- ref <=40 hours											
41-50	1.18 [0.76-1.83]	0.95 [0.72-1.24]	2.22 [1.13-4.34]	1.85 [1.08-3.17]	1.17 [0.67-2.02]	1.04 [0.65-1.65]	1.08 [0.77-1.50]	1.25 [1.03-1.51]	1.24 [0.85-1.82]	0.88 [0.62-1.24]	1.12 [0.77-1.63]
>50	1.29 [0.59-2.84]	1.37 [1.00-1.88]	2.07 [1.00-4.24]	2.16 [1.26-3.70]	1.62 [0.87-3.04]	0.86 [0.37-2.03]	1.07 [0.60-1.90]	1.55 [0.91-2.63]	1.27 [0.82-1.96]	1.05 [0.70-1.56]	1.04 [0.71-1.53]
% Admin task - ref <=10%											
11-20	1.00 [0.66-1.51]	1.21 [0.94-1.57]	1.73 [0.97-3.07]	1.53 [0.83-2.82]	1.08 [0.60-1.96]	0.89 [0.53-1.50]	1.14 [0.79-1.65]	0.96 [0.74-1.24]	1.30 [0.90-1.88]	0.95 [0.65-1.39]	1.47 [1.03-2.11]
>20	1.59 [0.74-3.45]	1.40 [1.03-1.90]	2.51 [1.10-5.71]	1.95 [1.02-3.72]	2.05 [1.11-3.77]	1.45 [0.85-2.48]	2.17 [1.41-3.32]	1.28 [0.99-1.64]	1.58 [1.04-2.40]	1.18 [0.82-1.71]	2.48 [1.70-3.71]
GP FTE in the practice – ref =1											
2	1.11 [0.42-2.88]	0.94 [0.64-1.38]	1.50 [0.86-2.61]	0.77 [0.44-1.35]	1.05 [0.62-1.80]	1.81 [0.66-4.97]	1.54 [0.46-5.10]	0.60 [0.41-0.85]	0.89 [0.62-1.27]	0.61 [0.25-1.51]	1.41 [0.85-2.36]
3-5	0.92 [0.43-2.00]	0.67 [0.47-0.95]	0.86 [0.29-2.59]	0.75 [0.39-1.44]	1.32 [0.73-2.39]	1.47 [0.60-3.61]	1.32 [0.44-3.96]	0.61 [0.45-0.83]	0.84 [0.55-1.29]	0.45 [0.20-1.02]	1.30 [0.82-2.06]
6-10	0.65 [0.30-1.42]	0.70 [0.48-1.03]	8.17 [1.49-44.85]	1.00 [0.24-4.04]	2.07 [0.41-10.4]	1.73 [0.68-4.36]	1.11 [0.37-3.37]	0.47 [0.34-0.65]	0.92 [0.44-1.92]	0.45 [0.19-1.07]	1.02 [0.63-1.65]
>10	0.58 [0.21-1.63]	0.79 [0.50-1.27]	-	-	3.13 [1.19-8.20]	2.06 [0.50-8.57]	2.47 [0.68-9.01]	0.50 [0.33-0.75]	1.29 [0.57-2.91]	0.59 [0.16-2.13]	1.07 [0.62-1.86]
Consultation duration – ref <10 min											
10-15	1.36 [0.80-2.30]	0.96 [0.72-1.29]	0.44 [0.16-1.24]	1.54 [0.88-2.67]	1.33 [0.87-2.02]	1.34 [0.31-5.82]	0.46 [0.15-1.40]	0.56 [0.29-1.12]	0.94 [0.55-1.62]	0.94 [0.63-1.41]	1.50 [0.89-2.53]
15-20	0.89 [0.44-1.80]	1.23 [0.86-1.76]	0.44 [0.16-1.19]	0.25 [0.05-1.33]	2.58 [0.62-10.71]	1.15 [0.24-5.48]	0.45 [0.15-1.36]	0.38 [0.20-0.71]	0.99 [0.57-1.74]	1.07 [0.10-11.37]	1.27 [0.73-2.21]
>20	0.35 [0.11-1.10]	1.83 [1.22-2.74]	0.16 [0.05-0.47]	0.74 [0.06-9.41]	-	1.75 [0.22-13.68]	0.56 [0.17-1.83]	0.32 [0.17-0.61]	1.04 [0.57-1.90]	0.10 [0.02-0.47]	1.07 [0.60-1.90]
% same-day appointment– ref >=60 %											
40-50	0.67 [0.41-1.11]	1.12 [0.83-1.51]	1.87 [0.85-4.11]	2.68 [0.88-8.15]	0.85 [0.42-1.71]	0.70 [0.31-1.57]	1.64 [0.99-2.73]	1.63 [1.28-2.06]	1.62 [0.94-2.78]	0.96 [0.67-1.39]	1.19 [0.73-1.93]
20-40	2.28	1.72	0.92	1.42	0.83	3.30	1.26	1.56	1.23	0.84	2.26

<20	[0.82-6.36] 0.81 [0.35-1.87]	[1.28-2.32] 1.63 [1.12-2.39]	[0.34-2.48] 2.09 [0.62-6.97]	[0.44-4.56] 3.41 [0.85-13.70]	[0.35-1.97] 1.85 [0.50-6.80]	[1.39-7.81] 0.38 [0.07-2.02]	[0.76-2.07] 1.51 [0.63-3.60]	[1.24-1.97] 2.68 [2.03-3.55]	[0.73-2.06] 1.42 [0.55-3.67]	[0.41-1.70] 1.75 [0.71-4.29]	[1.24-4.13] 0.98 [0.42-2.28]
Home visits – ref No											
Yes	0.86 [0.55-1.36]	0.88 [0.66-1.16]	0.61 [0.37-1.01]	0.38 [0.20-0.70]	0.82 [0.46-1.49]	0.91 [0.55-1.49]	0.81 [0.55-1.18]	0.93 [0.76-1.14]	0.99 [0.74-1.34]	0.92 [0.60-1.41]	0.96 [0.52-1.80]
Information on clinical results targets – ref No											
Yes	1.02 [0.64-1.64]	0.73 [0.54-0.98]	1.08 [0.59-1.99]	1.70 [1.08-2.68]	1.17 [0.51-2.66]	0.97 [0.58-1.61]	1.01 [0.70-1.44]	0.67 [0.53-0.85]	1.09 [0.59-2.05]	0.74 [0.47-1.16]	0.81 [0.52-1.25]
Inter-consultation patient contacts – ref No											
Yes	0.67 [0.35-1.30]	0.76 [0.55-1.07]	0.33 [0.16-0.70]	0.75 [0.32-1.75]	1.06 [0.60-1.88]	0.56 [0.23-1.40]	1.87 [1.10-3.18]	0.73 [0.53-0.99]	0.89 [0.60-1.28]	1.14 [0.63-2.08]	0.72 [0.41-1.26]
Patient satisfaction surveys– ref No											
Yes	1.12 [0.72-1.72]	0.85 [0.61-1.18]	7.60 [1.78-32.52]	0.66 [0.35-1.21]	0.99 [0.63-1.57]	0.87 [0.56-1.36]	1.03 [0.58-1.83]	0.78 [0.57-1.06]	1.00 [0.66-1.51]	1.56 [0.94-2.58]	1.06 [0.71-1.58]
Information about hospital admissions– ref No											
Yes	1.17 [0.78-1.78]	0.86 [0.64-1.12]	0.70 [0.37-1.34]	0.59 [0.31-1.13]	0.90 [0.57-1.42]	1.37 [0.89-2.11]	1.01 [0.70-1.45]	0.83 [0.67-1.02]	1.02 [0.73-1.43]	0.95 [0.60-1.50]	0.81 [0.55-1.19]
Preventive care target – ref No											
Yes	0.95 [0.61-1.49]	1.07 [0.80-1.43]	0.99 [0.54-1.80]	0.64 [0.21-1.43]	0.93 [0.60-1.46]	0.96 [0.48-1.92]	1.13 [0.53-2.40]	1.53 [1.11-2.13]	0.51 [0.27-0.95]	0.88 [0.59-1.56]	0.83 [0.52-1.32]
Performance comparisons– ref No											
Yes	1.29 [0.87-1.91]	1.02 [0.79-1.33]	1.19 [0.63-2.26]	1.12 [0.70-1.79]	0.75 [0.48-1.15]	0.66 [0.34-1.27]	1.26 [0.82-1.94]	0.93 [0.78-1.12]	0.96 [0.70-1.32]	0.72 [0.50-1.05]	1.78 [1.13-2.78]
Involved in coordinated care with social workers - ref No											
Occasionally	1.37 [0.47-4.00]	1.31 [0.74-2.30]	0.86 [0.30-2.46]	0.56 [1.14-2.21]	0.98 [0.45-2.11]	0.55 [0.18-1.65]	0.63 [0.32-1.25]	1.12 [0.74-1.70]	0.89 [0.23-3.39]	1.27 [0.65-2.50]	0.80 [0.37-1.73]
Frequently	1.08 [0.37-3.16]	0.99 [0.55-1.79]	0.74 [0.23-2.33]	1.09 [0.31-3.78]	0.98 [0.42-2.25]	0.55 [0.19-1.58]	0.61 [0.31-1.21]	1.00 [0.65-1.55]	0.85 [0.22-3.28]	1.28 [0.66-2.49]	0.53 [0.25-1.13]
Home care contacts - ref Never											
Occasionally	0.93 [0.34-2.54]	0.98 [0.59-1.62]	0.87 [0.29-2.61]	2.27 [0.71-7.21]	1.18 [0.23-6.09]	0.88 [0.33-2.34]	0.22 [0.10-0.47]	1.12 [0.61-2.06]	6.99 [0.37-13.3]	0.80 [0.35-1.81]	1.47 [0.55-3.94]
Frequently	0.94 [0.31-2.82]	1.01 [0.56-1.80]	0.82 [0.23-2.87]	1.17 [0.48-6.16]	1.13 [1.19-6.77]	0.91 [0.30-2.72]	0.20 [0.09-0.43]	1.18 [0.64-2.19]	7.78 [0.41-14.7]	0.59 [0.25-1.40]	1.33 [0.49-3.62]
Working with Case Manager –ref No											
Yes, outside practice	0.89 [0.39-2.06]	0.85 [0.61-1.18]	0.98 [0.19-5.01]	1.18 [0.52-2.67]	1.20 [0.57-2.52]	4.74 [1.60-14.06]	1.03 [0.71-1.52]	0.88 [0.61-1.27]	1.64 [1.18-2.26]	1.21 [0.41-3.52]	0.99 [0.64-1.53]
Yes, in practice	1.04 [0.59-1.81]	0.83 [0.62-1.11]	0.89 [0.15-5.14]	1.68 [0.94-3.00]	0.58 [0.33-1.01]	1.80 [0.78-4.19]	0.94 [0.63-1.40]	0.82 [0.63-1.06]	1.06 [0.58-1.94]	1.03 [0.42-2.50]	0.59 [0.40-0.86]
Information on changes in patient health – ref Never											
Occasionally	1.43 [0.44-4.70]	0.98 [0.57-1.69]	1.24 [0.43-3.60]	1.10 [0.17-7.12]	0.54 [0.18-1.61]	0.26 [0.06-1.09]	1.00 [0.27-3.80]	1.05 [0.55-2.03]	0.01 [0.01-0.71]	2.46 [1.03-5.87]	1.34 [0.58-3.10]
Frequently	1.15 [0.34-3.90]	0.69 [0.39-1.22]	1.65 [0.49-5.50]	0.95 [0.14-6.31]	0.56 [0.18-1.80]	0.31 [0.07-1.33]	0.70 [0.18-2.71]	0.83 [0.43-1.62]	0.01 [0.01-0.56]	0.41 [0.17-0.97]	1.64 [0.68-3.96]
Delayed discharge –ref > 2days											
2 days-2 weeks	1.11 [0.72-1.71]	1.25 [0.95-1.63]	0.91 [0.46-1.77]	1.11 [0.63-1.96]	0.61 [0.39-0.96]	1.18 [0.75-1.85]	0.94 [0.63-1.38]	1.03 [0.82-1.29]	1.64 [1.21-2.23]	1.27 [0.90-1.80]	1.48 [1.05-2.08]
3-4 weeks	0.94 [0.34-2.62]	1.42 [0.95-2.11]	1.34 [0.54-3.30]	2.45 [0.56-10.70]	0.47 [0.22-1.01]	10.36 [1.31-81.79]	1.60 [0.73-3.49]	1.31 [0.89-1.92]	1.96 [1.02-3.78]	2.20 [1.17-4.12]	2.12 [0.98-4.58]

> 1 month /never	3.50 [1.19-10.27]	1.41 [0.86-2.29]	1.41 [0.52-3.78]	17.81 [3.98-79.60]	0.43 [0.12-1.47]	-	20.32 [0.65- 636.14]	1.61 [0.98-2.65]	1.72 [0.57-5.14]	1.27 [0.38-4.19]	3.09 [1.39-6.87]
Involved in coordinated care with hospitals-ref No											
Yes	0.95 [0.55-1.63]	0.95 [0.67-1.34]	1.84 [0.78-4.36]	1.70 [0.57-5.13]	0.97 [0.43-2.23]	1.13 [0.58-2.22]	0.87 [0.58-1.31]	0.88 [0.70-1.11]	0.75 [0.45-1.25]	0.71 [0.38-1.32]	0.92 [0.47-1.82]
Electronic Health Record - ref No											
Yes	1.21 [0.56-2.61]	0.73 [0.52-1.02]	0.73 [0.36-1.48]	0.75 [0.40-1.39]	0.77 [0.34-1.51]	0.90 [0.18-4.40]	-	0.97 [0.31-3.05]	0.62 [0.43-0.87]	0.63 [0.18-2.17]	0.96 [0.50-1.85]
Drug alerts –ref No											
Occasionally	0.83 [0.19-3.64]	1.54 [1.07-2.23]	0.44 [0.20-0.98]	1.23 [0.70-2.16]	1.49 [0.29-7.62]	2.08 [0.25-17.18]	0.69 [0.33-1.45]	0.99 [0.63-1.54]	1.48 [1.02-2.14]	2.66 [1.11-6.35]	1.21 [0.52-2.79]
Frequently	0.51 [0.16-1.64]	1.36 [0.99-1.87]	1.04 [0.50-2.14]	1.91 [1.07-3.41]	1.83 [0.51-6.60]	0.86 [0.15-4.82]	0.48 [0.28-0.84]	0.70 [0.50-0.99]	1.55 [1.06-2.27]	1.54 [0.72-3.29]	1.17 [0.63-2.16]

AU = Australia; CA = Canada; CH = Switzerland; DE = Germany; FR = France; NL = Netherlands; NO = Norway; NZ = New Zealand; SE = Sweden; UK = United Kingdom; US = United States.

FTE: GPs Full-time equivalent in the practice. Urbanity was self-reported.

For each country, the multivariate model includes all the same independent variables listed in the Table.