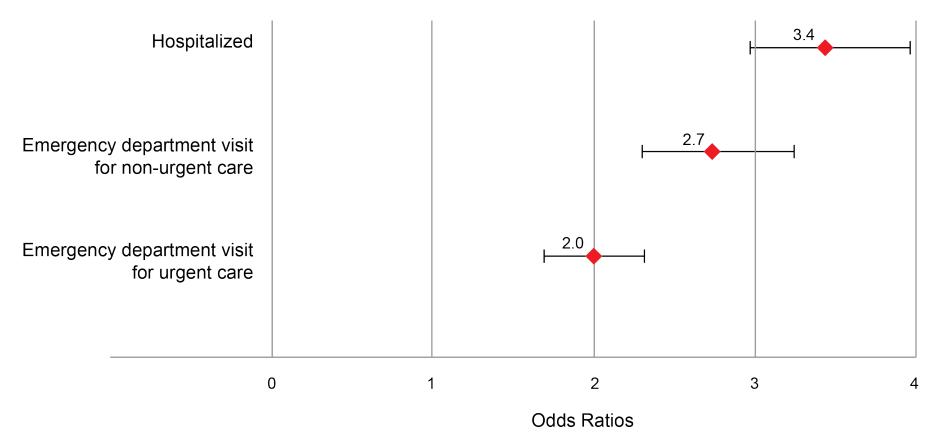
Supplemental materials for:

Penm J, MacKinnon N, Strakowski S, Ying J, Doty M. Minding the gap: perceived factors associated with primary care coordination of adults in 11 countries. *Ann Fam Med*. 2017;15(2):113-119.

Appendices

Appendix 1. Odds ratio of poor primary care coordination with patient outcomes.*



^{*}Poor primary care coordination was defined as having at least three gaps from five questions.

Appendix 2. Distribution of respondents by country, social-economic demographics, and health related characteristics*

Characteristics	Total number of responses (%)	Number of respondents with poor primary care coordination (%)†	Number of US respondents with poor primary care coordination (%)†	
	N=13,958	N=724	N=137	
Country				
Australia	1623 (11.6)	68 (9.4)	NA	
Canada	3787 (27.1)	174 (24.0)	NA	
France	984 (7.0)	61 (8.4)	NA	
Germany	777 (5.6)	60 (8.3)	NA	
Netherlands	774 (5.5)	18 (2.5)	NA	
New Zealand	715 (5.1)	27 (3.7)	NA	

Norway	683 (4.9)	33 (4.6)	NA
Sweden	1215 (8.7)	57 (7.9)	NA
Switzerland	1229 (8.8)	71 (9.8)	NA
United Kingdom	776 (5.6)	18 (2.5)	NA
US	1395 (10.0)	137 (18.9)	137 (100.0)
Age			
18-24	1123 (8.0)	48 (6.6)	7 (5.1)
25-34	1735 (12.4)	84 (11.6)	19 (13.9)
35-49	3339 (23.9)	202 (27.9)	33 (24.1)
50-64	4107 (29.4)	231 (31.9)	45 (32.8)
65+	3654 (26.2)	159 (22.0)	33 (24.1)
Gender			

6242 (44.7)	276 (38.1)	40 (29.2)
7716 (55.3)	448 (61.9)	97 (70.8)
3944 (28.3)	154 (21.3)	22 (16.1)
3195 (22.9)	132 (18.2)	21 (15.3)
5328 (38.2)	373 (51.5)	84 (61.3)
1491 (10.7)	65 (9.0)	10 (7.3)
1994 (14.3)	30 (4.1)	4 (2.9)
4109 (29.4)	77 (10.6)	12 (8.8)
5872 (42.1)	347 (47.9)	59 (43.1)
1677 (12.0)	249 (34.4)	59 (43.1)
	7716 (55.3) 3944 (28.3) 3195 (22.9) 5328 (38.2) 1491 (10.7) 1994 (14.3) 4109 (29.4) 5872 (42.1)	7716 (55.3) 448 (61.9) 3944 (28.3) 154 (21.3) 3195 (22.9) 132 (18.2) 5328 (38.2) 373 (51.5) 1491 (10.7) 65 (9.0) 1994 (14.3) 30 (4.1) 4109 (29.4) 77 (10.6) 5872 (42.1) 347 (47.9)

Missing	306 (2.2)	21 (2.9)	3 (2.2)
Health status			
Fair or poor	2184 (15.6)	272 (37.6)	60 (43.8)
Good, very good or excellent	11743 (84.1)	452 (62.4)	77 (56.2)
Missing	31 (0.2)	0 (0.0)	0 (0.0)
Number of medications			
No medicine	5638 (40.4)	189 (26.1)	21 (15.3)
1 to 4 medicines	5984 (42.9)	320 (44.2)	54 (39.4)
5 or more medicines	1939 (13.9)	194 (26.8)	59 (43.1)
Missing	397 (2.8)	21 (2.9)	3 (2.2)
Number of chronic conditions			
No chronic conditions	5479 (39.3)	144 (19.9)	10 (7.3)

1 chronic condition	3383 (24.2)	158 (21.8)	25 (18.2)
2 to 4 chronic conditions	4220 (30.2)	319 (44.1)	66 (48.2)
5 or more chronic conditions	474 (3.4)	73 (10.1)	30 (21.9)
Missing	402 (2.9)	30 (4.1)	6 (4.4)
Regular doctor experiences			
Regular doctor often or always knows your medical history	11332 (81.2)	488 (67.4)	93 (67.9)
Regular doctor often or always spends enough time with you	11338 (81.2)	473 (65.3)	83 (60.6)
Regular doctor often or always involves you as much as you want	11355 (81.4)	494 (68.2)	91 (66.4)
Regular doctor often or always explains things well	12165 (87.2)	511 (70.6)	86 (62.8)

US respondents only – Insurance	N=1,395	N=137	
No insurance	141 (10.1)	14 (10.2)	14 (10.2)
Private	634 (45.4)	57 (41.6)	57 (41.6)
Medicare	433 (31.0)	32 (23.4)	32 (23.4)
Medicaid	180 (12.9)	34 (24.8)	34 (24.8)
Missing	7 (0.5)	0 (0.0)	0 (0.0)
Non- US respondents only – Insurance	N=12,563	N=587	
Public insurance only	6144 (48.9)	295 (50.3)	NA
Public insurance + additional insurance	6218 (49.5)	283 (48.2)	NA
Missing	201 (1.6)	9 (1.5)	NA

^{*}NA = Not applicable, US=United States

[†]Poor primary care coordination was defined as having at least three gaps from five questions.

Appendix 3. Odds ratio of poor primary care coordination and individual care coordination gaps*

Characteristics (n=13,958)	Poor primary care coordination†	Test/records not available at scheduled appointment	information received for medical care	Unnecessary test ordered as it had already been done	Specialist not informed by PCP	PCP not informed by specialist
			OR (95% CI)		
Country						
Australia	0.5 (0.4 – 0.7)‡	0.5 (0.4 – 0.6)‡	0.9 (0.7 – 1.1)	0.6 (0.5 – 0.7)‡	0.6 (0.5 – 0.8)‡	0.6 (0.5 – 0.8)‡
Canada	0.5 (0.4 – 0.6)‡	0.6 (0.5 – 0.8)‡	0.7 (0.6 – 0.9)‡	0.4 (0.3 – 0.5)‡	0.8 (0.6 – 1.0)	0.9 (0.7 – 1.1)
France	0.6 (0.4 – 0.8)‡	0.6 (0.4 – 0.7)‡	0.7 (0.5 – 0.8)‡	0.8 (0.6 – 1.0)	0.9 (0.7 – 1.2)	1.2 (1.0 – 1.5)
Germany	0.5 (0.4 – 0.8)‡	0.4 (0.3 – 0.5)‡	0.9 (0.7 – 1.2)	1.0 (0.8 – 1.3)	1.0 (0.8 – 1.4)	2.6 (2.0 – 3.3)‡
Netherlands	0.3 (0.2 – 0.5)‡	0.8 (0.6 – 1.1)	1.6 (1.2 – 2.0)‡	1.3 (1.0 – 1.7)	0.4 (0.2 – 0.5)‡	0.3 (0.2 – 0.4)‡
New Zealand	0.5 (0.3 – 0.8)‡	0.5 (0.4 – 0.7)‡	1.0 (0.8 – 1.3)	0.5 (0.3 – 0.6)‡	0.6 (0.4 – 0.8)‡	0.7 (0.5 – 1.0)

0.5 (0.3 – 0.7)‡	0.3 (0.3 – 0.5)‡	0.9 (0.7 – 1.2)	0.5 (0.4 – 0.7)‡	0.7 (0.5 – 1.0)	1.3 (1.0 – 1.6)
0.5 (0.3 – 0.6)‡	0.6 (0.5 – 0.7)‡	0.8 (0.6 – 1.0)	0.2 (0.2 – 0.3)‡	0.8 (0.7 – 1.1)	1.3 (1.0 – 1.6)
0.8 (0.6 – 1.1)	0.6 (0.5 – 0.8)‡	0.8 (0.6 – 1.0)	1.7 (1.3 – 2.1)‡	1.3 (1.0 – 1.7)	0.9 (0.7 – 1.1)
0.3 (0.2 – 0.5)‡	0.5 (0.4 – 0.7)‡	0.4 (0.3 – 0.5)‡	0.5 (0.3 – 0.7)‡	0.6 (0.4 – 1.0)	0.5 (0.3 – 0.7)‡
Reference	Reference	Reference	Reference	Reference	Reference
1.9 (1.4 – 2.7)‡	1.9 (1.5 – 2.4)‡	3.1 (2.5 – 3.8)‡	2.4 (1.8 – 3.0)‡	1.1 (0.8 – 1.4)	1.3 (1.0 – 1.5)
2.3 (1.7 – 3.0)‡	2.2 (1.8 – 2.8)‡	3.0 (2.4 – 3.6)‡	2.0 (1.6 – 2.5)‡	1.3 (1.0 – 1.6)	1.2 (1.0 – 1.5)
2.2 (1.7 – 2.7)‡	2.3 (1.9 – 2.8)‡	2.6 (2.2 – 3.1)‡	1.9 (1.6 – 2.3)‡	1.2 (1.0 – 1.4)	1.2 (1.1 – 1.5)‡
1.6 (1.2 – 2.0)‡	1.9 (1.6 – 2.3)‡	1.8 (1.6 – 2.1)‡	1.5 (1.3 – 1.8)‡	1.2 (1.0 – 1.4)	1.0 (0.9 – 1.2)
Reference	Reference	Reference	Reference	Reference	Reference
	0.5 (0.3 – 0.6)‡ 0.8 (0.6 – 1.1) 0.3 (0.2 – 0.5)‡ Reference 1.9 (1.4 – 2.7)‡ 2.3 (1.7 – 3.0)‡ 2.2 (1.7 – 2.7)‡ 1.6 (1.2 – 2.0)‡	0.5 $(0.3 - 0.6)$ ‡ 0.6 $(0.5 - 0.7)$ ‡ 0.8 $(0.6 - 1.1)$ 0.6 $(0.5 - 0.8)$ ‡ 0.3 $(0.2 - 0.5)$ ‡ 0.5 $(0.4 - 0.7)$ ‡ Reference Reference 1.9 $(1.4 - 2.7)$ ‡ 1.9 $(1.5 - 2.4)$ ‡ 2.3 $(1.7 - 3.0)$ ‡ 2.2 $(1.8 - 2.8)$ ‡ 2.2 $(1.7 - 2.7)$ ‡ 2.3 $(1.9 - 2.8)$ ‡ 1.6 $(1.2 - 2.0)$ ‡ 1.9 $(1.6 - 2.3)$ ‡	$0.5 (0.3 - 0.6) \ddagger 0.6 (0.5 - 0.7) \ddagger 0.8 (0.6 - 1.0)$ $0.8 (0.6 - 1.1) 0.6 (0.5 - 0.8) \ddagger 0.8 (0.6 - 1.0)$ $0.3 (0.2 - 0.5) \ddagger 0.5 (0.4 - 0.7) \ddagger 0.4 (0.3 - 0.5) \ddagger$ $Reference Reference Reference$ $1.9 (1.4 - 2.7) \ddagger 1.9 (1.5 - 2.4) \ddagger 3.1 (2.5 - 3.8) \ddagger$ $2.3 (1.7 - 3.0) \ddagger 2.2 (1.8 - 2.8) \ddagger 3.0 (2.4 - 3.6) \ddagger$ $2.2 (1.7 - 2.7) \ddagger 2.3 (1.9 - 2.8) \ddagger 2.6 (2.2 - 3.1) \ddagger$ $1.6 (1.2 - 2.0) \ddagger 1.9 (1.6 - 2.3) \ddagger 1.8 (1.6 - 2.1) \ddagger$	$0.5 (0.3 - 0.6) \ddagger 0.6 (0.5 - 0.7) \ddagger 0.8 (0.6 - 1.0) 0.2 (0.2 - 0.3) \ddagger 0.8 (0.6 - 1.1) 0.6 (0.5 - 0.8) \ddagger 0.8 (0.6 - 1.0) 1.7 (1.3 - 2.1) \ddagger 0.3 (0.2 - 0.5) \ddagger 0.5 (0.4 - 0.7) \ddagger 0.4 (0.3 - 0.5) \ddagger 0.5 (0.3 - 0.7) \ddagger 0.4 (0.3 - 0.5) \ddagger 0.5 (0.3 - 0.7) \ddagger 0.9 (1.4 - 2.7) \ddagger 1.9 (1.5 - 2.4) \ddagger 3.1 (2.5 - 3.8) \ddagger 2.4 (1.8 - 3.0) \ddagger 2.3 (1.7 - 3.0) \ddagger 2.2 (1.8 - 2.8) \ddagger 3.0 (2.4 - 3.6) \ddagger 2.0 (1.6 - 2.5) \ddagger 2.2 (1.7 - 2.7) \ddagger 2.3 (1.9 - 2.8) \ddagger 2.6 (2.2 - 3.1) \ddagger 1.9 (1.6 - 2.3) \ddagger 1.6 (1.2 - 2.0) \ddagger 1.9 (1.6 - 2.3) \ddagger 1.8 (1.6 - 2.1) \ddagger 1.5 (1.3 - 1.8) \ddagger$	$0.5 (0.3 - 0.6) \ddagger 0.6 (0.5 - 0.7) \ddagger 0.8 (0.6 - 1.0) 0.2 (0.2 - 0.3) \ddagger 0.8 (0.7 - 1.1)$ $0.8 (0.6 - 1.1) 0.6 (0.5 - 0.8) \ddagger 0.8 (0.6 - 1.0) 1.7 (1.3 - 2.1) \ddagger 1.3 (1.0 - 1.7)$ $0.3 (0.2 - 0.5) \ddagger 0.5 (0.4 - 0.7) \ddagger 0.4 (0.3 - 0.5) \ddagger 0.5 (0.3 - 0.7) \ddagger 0.6 (0.4 - 1.0)$ $Reference Reference Reference Reference Reference Reference$ $1.9 (1.4 - 2.7) \ddagger 1.9 (1.5 - 2.4) \ddagger 3.1 (2.5 - 3.8) \ddagger 2.4 (1.8 - 3.0) \ddagger 1.1 (0.8 - 1.4)$ $2.3 (1.7 - 3.0) \ddagger 2.2 (1.8 - 2.8) \ddagger 3.0 (2.4 - 3.6) \ddagger 2.0 (1.6 - 2.5) \ddagger 1.3 (1.0 - 1.6)$ $2.2 (1.7 - 2.7) \ddagger 2.3 (1.9 - 2.8) \ddagger 2.6 (2.2 - 3.1) \ddagger 1.9 (1.6 - 2.3) \ddagger 1.2 (1.0 - 1.4)$ $1.6 (1.2 - 2.0) \ddagger 1.9 (1.6 - 2.3) \ddagger 1.8 (1.6 - 2.1) \ddagger 1.5 (1.3 - 1.8) \ddagger 1.2 (1.0 - 1.4)$

	Male	1.0 (0.8 – 1.1)	0.8 (0.7 – 0.9)‡	0.9 (0.8 – 0.9)‡	1.2 (1.1 – 1.4)‡	0.9 (0.8 – 1.1)	0.9 (0.8 – 0.9)‡
	Female	Reference	Reference	Reference	Reference	Reference	Reference
Н	ousehold income						
	Below average	1.5 (1.2 – 1.9)‡	1.3 (1.1 – 1.5)‡	1.1 (1.0 – 1.2)	1.3 (1.1 – 1.5)‡	1.1 (0.9 – 1.3)	0.9 (0.8 – 1.0)
	Average	1.2 (0.9 – 1.5)	1.3 (1.1 – 1.5)‡	0.9 (0.8 – 1.1)	1.0 (0.8 – 1.2)	0.9 (0.7 – 1.1)	0.7 (0.6 – 0.8)‡
	Above average	Reference	Reference	Reference	Reference	Reference	Reference
	umber of doctors						
	No doctor	Reference	Reference	Reference	Reference	Reference	Reference
	1 doctor	1.0 (0.7 – 1.5)	0.9 (0.7 – 1.1)	1.0 (0.8 – 1.2)	1.0 (0.8 – 1.2)	0.9 (0.7 – 1.2)	1.0 (0.8 – 1.3)
	2 to 3 doctors	3.0 (2.1 – 4.3)‡	1.5 (1.2 – 1.8)‡	2.0 (1.7 – 2.4)‡	1.8 (1.5 – 2.3)‡	2.7 (2.1 – 3.4)‡	2.6 (2.1 – 3.3)‡
	4 or more doctors	7.4 (5.1 – 10.7)‡	2.3 (1.8 – 2.9)‡	3.6 (3.0 – 4.4)‡	3.2 (2.5 – 4.1)‡	3.8 (2.9 – 5.0)‡	4.1 (3.2 – 5.1)‡

Health status						
Fair or poor	1.8 (1.5 – 2.2)‡	1.6 (1.4 – 1.8)‡	1.7 (1.5 – 1.9)‡	1.4 (1.2 – 1.6)‡	1.6 (1.4 – 1.8)‡	1.4 (1.2 – 1.6)‡
Good, very good or excellent	Reference	Reference	Reference	Reference	Reference	Reference
Number of medications						
No medicine	Reference	Reference	Reference	Reference	Reference	Reference
1 to 4 medicines	1.2 (1.0 – 1.4)	1.2 (1.0 – 1.3)	1.1 (1.0 – 1.3)‡	1.0 (0.9 – 1.2)	1.1 (1.0 – 1.3)	1.3 (1.1 – 1.5)‡
5 or more medicines	1.2 (0.9 – 1.6)	1.1 (0.9 – 1.4)	1.1 (0.9 – 1.3)	1.0 (0.8 – 1.3)	1.3 (1.1 – 1.6)‡	1.4 (1.1 – 1.7)‡
Number of chronic conditions						
No chronic	Reference	Reference	Reference	Reference	Reference	Reference

	conditions						
1	L chronic condition	1.4 (1.1 – 1.7)‡	1.2 (1.1 – 1.4)‡	1.4 (1.2 – 1.6)‡	1.3 (1.1 – 1.5)‡	1.2 (1.1 – 1.5)‡	1.2 (1.1 – 1.4)‡
	2 to 4 chronic	2.1 (1.7 – 2.7)‡	1.6 (1.4 – 1.9)‡	1.9 (1.6 – 2.2)‡	1.9 (1.6 – 2.2)‡	1.3 (1.1 – 1.6)‡	1.4 (1.2 – 1.7)‡
	or more chronic	2.1 (1.4 – 3.2)‡	2.5 (1.8 – 3.4)‡	1.8 (1.3 – 2.4)‡	3.0 (2.2 – 4.3)‡	1.6 (1.1 – 2.2)‡	1.7 (1.2 – 2.3)‡
	ular doctor knows r medical history						
C	Often or always	0.6 (0.5 – 0.7)‡	0.7 (0.6 – 0.8)‡	0.7 (0.6 – 0.8)‡	0.6 (0.5 – 0.7)‡	0.8 (0.7 – 0.9)‡	0.8 (0.7 – 0.9)‡
	Never, rarely or sometimes	Reference	Reference	Reference	Reference	Reference	Reference
	ular doctor spends ugh time with you						

Often or always	0.6 (0.5 – 0.8)‡	0.7 (0.6 – 0.8)‡	0.6 (0.5 – 0.6)‡	0.7 (0.6 – 0.8)‡	0.8 (0.7 – 0.9)‡	0.8 (0.7 – 0.9)‡
Never, rarely or sometimes	Reference	Reference	Reference	Reference	Reference	Reference
Regular doctor						
involves you as much						
as you want						
Often or always	0.6 (0.5 – 0.8)‡	0.8 (0.6 – 0.9)‡	0.7 (0.6 – 0.8)‡	0.8 (0.6 – 0.9)‡	0.9 (0.7 – 1.1)	0.8 (0.7 – 0.9)‡
Never, rarely or sometimes	Reference	Reference	Reference	Reference	Reference	Reference
Regular doctor explains things well						
Often or always	0.6 (0.5 – 0.7)‡	0.7 (0.6 – 0.9)‡	0.8 (0.7 – 0.9)‡	0.6 (0.5 – 0.7)‡	0.8 (0.7 – 0.9)‡	0.8 (0.6 – 0.9)‡
Never, rarely or sometimes	Reference	Reference	Reference	Reference	Reference	Reference

*PCP=Primary Care Physician, OR=Odds Ratio, CI=Confidence Interval

†Poor primary care coordination was defined as having at least three gaps from five questions.

‡P<0.05 after adjusting for multiple comparisons using Bonferroni's method