

Online appendix 1. Socio-demographic differences in reports of doctor patient communication (scale 0-100), by patient experience measure

Question 4. Helpfulness of receptionists

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	-0.2	0.033	-0.1	0.032	-0.1	30%
Age group						
18-24	-10.7	0.082	-10.4	0.080	-0.2	2%
25-34	-9.0	0.062	-8.7	0.060	-0.3	4%
35-44	-5.8	0.055	-5.6	0.053	-0.1	2%
45-54	-3.8	0.052	-3.8	0.050	0.0	1%
55-64 (reference)						
65-74	5.0	0.053	5.0	0.051	0.0	0%
75-84	8.3	0.062	8.3	0.060	0.0	0%
85+	8.7	0.102	8.7	0.098	0.0	0%
Ethnic Group						
White						
British White (reference)						
Irish	0.0	0.142	1.1	0.138	-1.0	> +/-100%
AO White	-1.6	0.097	-0.7	0.095	-0.8	53%
Mixed						
White & Black Caribbean	-0.1	0.358	0.8	0.345	-0.9	> +/-100%
White & Black African	-0.1	0.459	1.2	0.444	-1.3	> +/-100%
White & Black Asian	-2.5	0.368	-1.4	0.355	-1.1	45%
Any other Mixed	-1.8	0.411	-0.5	0.397	-1.3	73%
South-Asian						
Indian	-7.1	0.105	-3.9	0.113	-3.2	45%
Pakistani	-9.5	0.137	-5.0	0.149	-4.5	48%
Bangladeshi	-10.6	0.239	-6.1	0.247	-4.5	43%
Any other Asian	-3.2	0.201	-1.2	0.197	-2.0	63%
Black						
Black Caribbean	0.0	0.156	2.1	0.155	-2.0	> +/-100%
Black African	2.1	0.145	3.6	0.146	-1.5	-72%
Any other Black	1.5	0.402	2.9	0.389	-1.4	-94%
Chinese						
Chinese	-5.0	0.234	-4.1	0.228	-1.0	19%
Other ethnic group						
Other ethnic	-2.3	0.082	-0.8	0.083	-1.5	65%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	0.5	0.050	0.4	0.054	0.1	21%
'3'	0.3	0.051	0.6	0.058	-0.3	-92%
'4'	0.2	0.052	1.1	0.063	-0.9	> +/-100%
'5' (most deprived)	1.0	0.053	2.1	0.069	-1.1	> +/-100%
Self-rated health status						
Excellent (reference)						
Very good	-3.3	0.061	-3.0	0.059	-0.3	8%
Good	-5.5	0.061	-5.0	0.059	-0.5	9%
Fair	-6.6	0.067	-5.9	0.065	-0.6	10%
Poor	-7.2	0.088	-6.5	0.085	-0.7	9%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	2.2	0.073	2.2	0.071	0.0	2%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 5a: Getting through on the phone

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	-1.0	0.047	-0.8	0.042	-0.2	17%
Age group						
18-24	-7.9	0.121	-7.4	0.108	-0.6	7%
25-34	-5.8	0.089	-5.4	0.079	-0.4	8%
35-44	-4.2	0.078	-4.0	0.070	-0.3	6%
45-54	-3.1	0.074	-3.0	0.066	-0.1	4%
55-64 (reference)						
65-74	3.5	0.076	3.4	0.068	0.1	4%
75-84	5.9	0.088	5.8	0.079	0.1	2%
85+	6.7	0.145	6.5	0.129	0.2	3%
Ethnic Group						
White						
British White (reference)						
Irish	0.7	0.202	1.3	0.182	-0.6	-89%
AO White	-0.5	0.142	-0.4	0.129	-0.1	20%
Mixed						
White & Black Caribbean	0.0	0.509	0.6	0.454	-0.6	> +/-100%
White & Black African	0.7	0.657	1.2	0.587	-0.5	-73%
White & Black Asian	-0.6	0.527	-0.3	0.470	-0.3	50%
Any other Mixed	-0.6	0.590	-0.6	0.527	0.0	-6%
South-Asian						
Indian	-5.9	0.148	-3.2	0.149	-2.7	46%
Pakistani	-9.1	0.193	-3.7	0.196	-5.4	60%
Bangladeshi	-8.8	0.338	-4.8	0.324	-4.0	45%
Any other Asian	-0.9	0.289	0.3	0.263	-1.2	> +/-100%
Black						
Black Caribbean	-2.1	0.222	-0.5	0.206	-1.7	78%
Black African	2.1	0.210	2.6	0.195	-0.5	-22%
Any other Black	0.7	0.581	1.5	0.519	-0.8	> +/-100%
Chinese						
Chinese	-3.0	0.348	-3.3	0.313	0.3	-10%
Other ethnic group						
Other ethnic	-0.8	0.119	-0.2	0.111	-0.6	72%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	0.5	0.072	0.5	0.072	0.0	5%
'3'	0.3	0.072	0.8	0.077	-0.4	> +/-100%
'4'	-0.1	0.073	1.4	0.083	-1.5	> +/-100%
'5' (most deprived)	1.0	0.076	2.5	0.093	-1.5	> +/-100%
Self-rated health status						
Excellent (reference)						
Very good	-5.1	0.091	-4.3	0.081	-0.8	15%
Good	-8.9	0.090	-7.7	0.080	-1.3	14%
Fair	-11.3	0.098	-9.7	0.088	-1.6	14%
Poor	-11.6	0.126	-10.0	0.112	-1.6	14%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	1.5	0.102	1.5	0.091	0.1	5%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 7. Ability to get urgent appointment

	Overall difference	<i>Standard error</i>	Difference attributable to different evaluation of care within the same practice	<i>Standard error</i>	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	0.7	0.070	0.8	0.068	-0.1	-13%
Age group						
18-24	-8.4	0.176	-7.6	0.171	-0.8	9%
25-34	-5.0	0.129	-4.1	0.125	-0.9	18%
35-44	-3.0	0.114	-2.5	0.110	-0.5	18%
45-54	-3.5	0.110	-3.2	0.107	-0.3	8%
55-64 (reference)						
65-74	3.9	0.114	3.7	0.111	0.2	5%
75-84	6.0	0.134	5.6	0.130	0.3	6%
85+	6.5	0.227	6.1	0.220	0.4	6%
Ethnic Group						
White						
British White (reference)						
Irish	-1.1	0.298	0.4	0.290	-1.5	> +/-100%
AO White	-3.2	0.205	-2.0	0.201	-1.2	38%
Mixed						
White & Black Caribbean	-4.3	0.729	-3.1	0.706	-1.2	27%
White & Black African	-4.5	0.940	-2.4	0.911	-2.1	46%
White & Black Asian	-3.6	0.763	-2.0	0.740	-1.7	46%
Any other Mixed	-4.3	0.858	-2.4	0.832	-1.9	44%
South-Asian						
Indian	-7.1	0.215	-4.5	0.232	-2.5	36%
Pakistani	-8.8	0.280	-4.0	0.305	-4.8	55%
Bangladeshi	-11.4	0.499	-7.9	0.516	-3.5	31%
Any other Asian	-1.8	0.427	0.2	0.421	-1.9	> +/-100%
Black						
Black Caribbean	-4.8	0.324	-1.7	0.324	-3.2	66%
Black African	-3.1	0.303	-0.6	0.304	-2.5	80%
Any other Black	-4.7	0.855	-2.7	0.831	-2.0	42%
Chinese						
Chinese	-1.7	0.535	-0.9	0.522	-0.8	46%
Other ethnic group						
Other ethnic	-3.4	0.173	-1.7	0.173	-1.7	51%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	-0.4	0.106	-0.2	0.114	-0.2	54%
'3'	-1.6	0.107	-0.6	0.122	-1.1	66%
'4'	-3.3	0.108	-0.8	0.131	-2.5	75%
'5' (most deprived)	-3.7	0.112	-0.6	0.144	-3.1	83%
Self-rated health status						
Excellent (reference)						
Very good	-2.6	0.138	-2.2	0.134	-0.4	16%
Good	-5.3	0.136	-4.5	0.132	-0.8	15%
Fair	-7.1	0.148	-6.0	0.143	-1.1	15%
Poor	-7.6	0.183	-6.4	0.178	-1.3	17%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	0.2	0.143	0.1	0.139	0.1	53%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 10. Ability to book ahead

	Overall difference	<i>Standard error</i>	Difference attributable to different evaluation of care within the same practice	<i>Standard error</i>	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	-2.8	0.090	-2.7	0.085	-0.1	4%
Age group						
18-24	-7.9	0.238	-7.4	0.225	-0.5	6%
25-34	-4.7	0.168	-4.3	0.159	-0.4	8%
35-44	-4.0	0.147	-3.6	0.139	-0.4	9%
45-54	-3.5	0.139	-3.2	0.131	-0.3	9%
55-64 (reference)						
65-74	3.7	0.141	3.3	0.133	0.4	11%
75-84	6.7	0.167	6.1	0.158	0.6	9%
85+	8.0	0.291	7.3	0.275	0.7	9%
Ethnic Group						
White						
British White (reference)						
Irish	-0.8	0.380	-0.8	0.361	0.0	3%
AO White	-1.0	0.263	-1.3	0.251	0.4	-38%
Mixed						
White & Black Caribbean	0.9	0.961	-0.2	0.907	1.1	> +/-100%
White & Black African	-1.0	1.231	-1.4	1.161	0.4	-37%
White & Black Asian	0.2	0.986	-0.3	0.930	0.6	> +/-100%
Any other Mixed	-1.4	1.082	-1.9	1.021	0.5	-34%
South-Asian						
Indian	-6.7	0.278	-5.7	0.294	-1.1	16%
Pakistani	-9.5	0.371	-6.2	0.395	-3.3	35%
Bangladeshi	-11.6	0.651	-10.8	0.657	-0.8	7%
Any other Asian	-2.6	0.555	-2.7	0.533	0.1	-2%
Black						
Black Caribbean	-2.2	0.432	-1.5	0.421	-0.7	34%
Black African	-0.1	0.397	-0.6	0.388	0.6	> +/-100%
Any other Black	-1.7	1.140	-1.9	1.077	0.3	-15%
Chinese						
Chinese	1.7	0.666	0.2	0.632	1.6	91%
Other ethnic group						
Other ethnic	-1.0	0.222	-1.4	0.217	0.4	-41%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	-1.0	0.133	-0.5	0.141	-0.5	48%
'3'	-1.9	0.135	-0.7	0.152	-1.2	63%
'4'	-3.8	0.138	-1.1	0.164	-2.6	70%
'5' (most deprived)	-4.8	0.144	-1.4	0.182	-3.4	72%
Self-rated health status						
Excellent (reference)						
Very good	-3.5	0.182	-2.6	0.172	-0.9	24%
Good	-7.0	0.179	-5.5	0.169	-1.5	21%
Fair	-9.7	0.193	-7.7	0.182	-1.9	20%
Poor	-10.5	0.238	-8.5	0.225	-2.0	19%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	1.9	0.178	1.9	0.168	0.0	1%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 14. Evaluation of surgery waiting time

	Overall difference	<i>Standard error</i>	Difference attributable to different evaluation of care within the same practice	<i>Standard error</i>	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	-1.7	0.047	-1.6	0.045	0.0	2%
Age group						
18-24	-12.3	0.118	-12.1	0.113	-0.3	2%
25-34	-10.3	0.088	-10.0	0.085	-0.4	3%
35-44	-8.1	0.077	-7.9	0.074	-0.2	2%
45-54	-4.2	0.074	-4.2	0.071	-0.1	1%
55-64 (reference)						
65-74	4.0	0.076	3.9	0.072	0.1	2%
75-84	6.3	0.089	6.3	0.085	0.1	1%
85+	6.1	0.150	6.1	0.143	0.0	1%
Ethnic Group						
White						
British White (reference)						
Irish	0.6	0.202	2.6	0.195	-2.1	> +/-100%
AO White	-2.7	0.140	-1.1	0.135	-1.6	61%
Mixed						
White & Black Caribbean	-3.8	0.505	-1.5	0.483	-2.3	60%
White & Black African	-3.0	0.655	-0.2	0.627	-2.8	93%
White & Black Asian	-4.2	0.522	-2.2	0.499	-2.0	47%
Any other Mixed	-5.2	0.588	-2.6	0.563	-2.6	49%
South-Asian						
Indian	-11.2	0.149	-6.3	0.159	-4.9	44%
Pakistani	-15.1	0.193	-8.5	0.209	-6.6	44%
Bangladeshi	-19.9	0.340	-13.7	0.349	-6.2	31%
Any other Asian	-9.2	0.288	-4.9	0.281	-4.3	47%
Black						
Black Caribbean	-5.8	0.221	-0.8	0.219	-4.9	86%
Black African	-4.5	0.208	-0.4	0.207	-4.1	91%
Any other Black	-5.0	0.581	-1.3	0.557	-3.8	75%
Chinese						
Chinese	-8.5	0.340	-6.6	0.328	-1.8	22%
Other ethnic group						
Other ethnic	-5.4	0.118	-2.5	0.117	-2.9	54%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	0.0	0.071	0.1	0.076	-0.2	> +/-100%
'3'	-0.5	0.072	0.1	0.082	-0.6	> +/-100%
'4'	-1.4	0.073	0.2	0.088	-1.5	> +/-100%
'5' (most deprived)	-1.7	0.076	0.3	0.098	-1.9	> +/-100%
Self-rated health status						
Excellent (reference)						
Very good	-2.7	0.088	-2.4	0.084	-0.3	10%
Good	-5.4	0.087	-5.0	0.083	-0.5	9%
Fair	-8.0	0.096	-7.4	0.092	-0.7	8%
Poor	-10.5	0.126	-9.7	0.121	-0.8	7%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	0.1	0.104	0.2	0.099	-0.1	-79%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 16. Seeing the doctor you prefer

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	-2.6	0.059	-2.1	0.055	-0.6	22%
Age group						
18-24	-15.3	0.157	-15.3	0.149	0.1	0%
25-34	-13.7	0.117	-13.5	0.110	-0.2	1%
35-44	-11.0	0.099	-10.9	0.094	0.0	0%
45-54	-6.1	0.092	-6.1	0.087	0.0	0%
55-64 (reference)						
65-74	5.1	0.090	5.2	0.085	0.0	-1%
75-84	7.5	0.104	7.6	0.098	-0.1	-1%
85+	7.1	0.171	7.0	0.161	0.1	2%
Ethnic Group						
White						
British White (reference)						
Irish	-0.8	0.251	-0.4	0.238	-0.3	44%
AO White	-1.8	0.175	-1.5	0.167	-0.3	18%
Mixed						
White & Black Caribbean	-0.9	0.657	-0.9	0.620	0.1	-7%
White & Black African	-3.5	0.862	-3.2	0.813	-0.4	11%
White & Black Asian	-4.5	0.679	-3.9	0.640	-0.6	13%
Any other Mixed	-4.5	0.742	-4.2	0.701	-0.3	6%
South-Asian						
Indian	-5.9	0.186	-4.4	0.196	-1.5	25%
Pakistani	-8.7	0.248	-6.1	0.264	-2.6	30%
Bangladeshi	-10.0	0.425	-8.1	0.432	-1.9	19%
Any other Asian	-7.6	0.364	-6.5	0.350	-1.1	14%
Black						
Black Caribbean	-2.9	0.277	-2.0	0.271	-0.9	31%
Black African	-9.1	0.294	-8.3	0.287	-0.8	9%
Any other Black	-6.3	0.737	-6.1	0.697	-0.1	2%
Chinese						
Chinese	-8.0	0.458	-8.5	0.437	0.5	-6%
Other ethnic group						
Other ethnic	-4.6	0.151	-3.9	0.148	-0.7	14%

	Overall difference	<i>Standard error</i>	Difference attributable to different evaluation of care within the same practice	<i>Standard error</i>	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	0.6	0.087	0.4	0.092	0.3	41%
'3'	0.4	0.088	0.2	0.099	0.2	57%
'4'	-0.2	0.091	0.1	0.107	-0.3	> +/-100%
'5' (most deprived)	-0.5	0.095	-0.2	0.120	-0.3	56%
Self-rated health status						
Excellent (reference)						
Very good	-3.8	0.120	-3.1	0.113	-0.6	16%
Good	-6.2	0.117	-5.0	0.111	-1.2	19%
Fair	-7.2	0.126	-5.6	0.119	-1.6	22%
Poor	-6.8	0.155	-5.1	0.147	-1.6	24%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	4.4	0.118	4.7	0.112	-0.3	-7%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 17. Satisfaction with opening hours

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	1.4	0.036	1.4	0.035	0.0	-3%
Age group						
18-24	-8.9	0.091	-8.8	0.090	-0.1	1%
25-34	-8.3	0.068	-8.2	0.067	-0.2	2%
35-44	-6.0	0.060	-6.0	0.059	-0.1	1%
45-54	-4.8	0.057	-4.8	0.056	0.0	0%
55-64 (reference)						
65-74	6.0	0.058	6.0	0.057	0.0	0%
75-84	7.4	0.068	7.4	0.067	0.0	-1%
85+	5.8	0.112	5.8	0.110	-0.1	-1%
Ethnic Group						
White						
British White (reference)						
Irish	-0.3	0.155	1.0	0.153	-1.2	> +/-100%
AO White	-2.4	0.107	-1.4	0.107	-1.0	42%
Mixed						
White & Black Caribbean	-0.5	0.392	0.6	0.384	-1.2	> +/-100%
White & Black African	0.5	0.501	2.0	0.491	-1.5	> +/-100%
White & Black Asian	-3.6	0.403	-2.3	0.395	-1.3	35%
Any other Mixed	-2.3	0.451	-0.8	0.443	-1.6	67%
South-Asian						
Indian	-6.3	0.114	-3.8	0.125	-2.6	41%
Pakistani	-6.1	0.149	-3.2	0.164	-2.9	47%
Bangladeshi	-4.6	0.261	-2.2	0.273	-2.4	51%
Any other Asian	-1.3	0.220	0.6	0.219	-1.9	> +/-100%
Black						
Black Caribbean	-0.9	0.170	1.4	0.172	-2.3	> +/-100%
Black African	1.5	0.160	3.4	0.162	-1.9	> +/-100%
Any other Black	1.8	0.442	3.4	0.435	-1.6	-89%
Chinese						
Chinese	-7.6	0.260	-6.5	0.257	-1.1	15%
Other ethnic group						
Other ethnic	-2.2	0.091	-0.7	0.092	-1.5	69%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	0.7	0.055	0.7	0.060	0.0	2%
'3'	1.0	0.055	1.2	0.064	-0.2	-16%
'4'	1.5	0.056	2.1	0.069	-0.6	-36%
'5' (most deprived)	3.2	0.058	3.6	0.075	-0.4	-11%
Self-rated health status						
Excellent (reference)						
Very good	-3.9	0.068	-3.7	0.066	-0.2	5%
Good	-6.7	0.067	-6.4	0.066	-0.3	5%
Fair	-7.5	0.074	-7.1	0.073	-0.4	6%
Poor	-7.2	0.096	-6.8	0.095	-0.4	6%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	3.1	0.079	3.0	0.078	0.1	3%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 20. Doctor communication

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	0.6	0.032	0.5	0.031	0.1	21%
Age group						
18-24	-9.4	0.082	-9.2	0.080	-0.2	2%
25-34	-8.4	0.061	-8.1	0.060	-0.3	3%
35-44	-5.0	0.054	-4.9	0.052	-0.1	2%
45-54	-2.8	0.050	-2.8	0.049	0.0	1%
55-64 (reference)						
65-74	3.0	0.052	2.9	0.050	0.0	1%
75-84	4.0	0.062	3.9	0.060	0.1	2%
85+	3.4	0.106	3.2	0.103	0.2	5%
Ethnic Group						
White						
British White (reference)						
Irish	-0.2	0.141	0.6	0.138	-0.8	> +/-100%
AO White	-4.1	0.096	-3.2	0.094	-0.9	22%
Mixed						
White & Black Caribbean	-1.9	0.355	-0.8	0.346	-1.1	56%
White & Black African	-3.5	0.447	-1.9	0.435	-1.6	46%
White & Black Asian	-3.4	0.358	-2.2	0.348	-1.1	33%
Any other Mixed	-4.7	0.405	-3.3	0.394	-1.4	31%
South-Asian						
Indian	-6.1	0.101	-3.2	0.109	-3.0	48%
Pakistani	-7.2	0.132	-3.8	0.145	-3.4	48%
Bangladeshi	-8.6	0.233	-5.3	0.242	-3.4	39%
Any other Asian	-4.3	0.194	-2.1	0.192	-2.2	51%
Black						
Black Caribbean	-2.7	0.155	-0.5	0.156	-2.2	82%
Black African	-2.6	0.143	-0.2	0.144	-2.4	94%
Any other Black	-2.0	0.405	-0.2	0.394	-1.8	89%
Chinese						
Chinese	-8.3	0.230	-7.2	0.225	-1.1	14%
Other ethnic group						
Other ethnic	-4.7	0.081	-3.2	0.081	-1.5	32%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	0.0	0.050	0.1	0.054	-0.2	> +/-100%
'3'	-0.5	0.050	0.1	0.058	-0.6	> +/-100%
'4'	-1.2	0.051	0.3	0.062	-1.4	> +/-100%
'5' (most deprived)	-0.9	0.052	0.6	0.068	-1.6	> +/-100%
Self-rated health status						
Excellent (reference)						
Very good	-4.0	0.062	-3.8	0.060	-0.2	5%
Good	-7.6	0.061	-7.2	0.060	-0.4	6%
Fair	-9.4	0.067	-8.8	0.065	-0.6	7%
Poor	-10.0	0.086	-9.3	0.084	-0.7	7%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	2.0	0.070	1.7	0.068	0.3	14%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 21. Confidence and trust in doctor

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	-0.7	0.041	-0.8	0.040	0.1	-16%
Age group						
18-24	-10.6	0.104	-10.5	0.102	-0.2	1%
25-34	-9.8	0.078	-9.5	0.077	-0.3	3%
35-44	-5.0	0.068	-4.9	0.067	-0.1	2%
45-54	-2.8	0.065	-2.8	0.063	0.0	0%
55-64 (reference)						
65-74	3.5	0.066	3.5	0.065	0.0	0%
75-84	5.1	0.078	5.1	0.076	0.0	1%
85+	4.9	0.129	4.7	0.126	0.1	3%
Ethnic Group						
White						
British White (reference)						
Irish	-0.2	0.177	0.5	0.175	-0.7	> +/-100%
AO White	-6.1	0.123	-5.3	0.122	-0.8	13%
Mixed						
White & Black Caribbean	-2.7	0.448	-1.7	0.440	-1.1	39%
White & Black African	-4.4	0.580	-2.9	0.570	-1.5	34%
White & Black Asian	-3.2	0.462	-2.2	0.454	-0.9	30%
Any other Mixed	-5.1	0.522	-3.7	0.512	-1.3	26%
South-Asian						
Indian	-5.3	0.132	-2.5	0.144	-2.7	52%
Pakistani	-5.2	0.173	-2.2	0.190	-3.0	57%
Bangladeshi	-6.4	0.304	-3.2	0.318	-3.2	50%
Any other Asian	-3.8	0.256	-1.8	0.255	-2.0	52%
Black						
Black Caribbean	-3.4	0.196	-1.2	0.199	-2.1	64%
Black African	-3.2	0.185	-0.8	0.188	-2.5	77%
Any other Black	-3.2	0.512	-1.5	0.504	-1.6	52%
Chinese						
Chinese	-10.0	0.302	-8.9	0.299	-1.1	11%
Other ethnic group						
Other ethnic	-5.9	0.105	-4.5	0.106	-1.4	24%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	-0.3	0.063	-0.1	0.068	-0.3	82%
'3'	-1.0	0.063	-0.2	0.073	-0.8	83%
'4'	-1.8	0.064	0.0	0.078	-1.7	99%
'5' (most deprived)	-1.7	0.066	0.4	0.086	-2.1	> +/-100%
Self-rated health status						
Excellent (reference)						
Very good	-4.2	0.076	-4.0	0.075	-0.2	5%
Good	-8.3	0.076	-7.8	0.075	-0.5	5%
Fair	-10.8	0.084	-10.2	0.083	-0.6	6%
Poor	-12.0	0.110	-11.3	0.108	-0.7	6%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	1.7	0.091	1.4	0.089	0.3	17%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 24. Nurse communication

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	0.2	0.039	0.2	0.039	0.0	4%
Age group						
18-24	-5.2	0.113	-5.0	0.111	-0.2	3%
25-34	-4.2	0.077	-3.9	0.076	-0.3	7%
35-44	-2.4	0.068	-2.3	0.067	-0.1	6%
45-54	-1.7	0.063	-1.6	0.061	0.0	3%
55-64 (reference)						
65-74	1.9	0.058	1.9	0.057	0.0	0%
75-84	2.8	0.068	2.9	0.067	0.0	-1%
85+	2.7	0.117	2.7	0.115	-0.1	-2%
Ethnic Group						
White						
British White (reference)						
Irish	-0.5	0.168	0.4	0.166	-0.9	> +/-100%
AO White	-3.2	0.118	-2.4	0.117	-0.8	25%
Mixed						
White & Black Caribbean	-1.7	0.446	-0.8	0.439	-0.9	51%
White & Black African	-4.0	0.570	-2.5	0.561	-1.5	38%
White & Black Asian	-4.2	0.459	-3.3	0.452	-0.9	22%
Any other Mixed	-4.1	0.507	-2.6	0.499	-1.5	37%
South-Asian						
Indian	-7.2	0.123	-5.1	0.134	-2.1	29%
Pakistani	-7.8	0.165	-5.9	0.179	-1.9	24%
Bangladeshi	-9.6	0.309	-7.3	0.319	-2.3	24%
Any other Asian	-6.2	0.244	-4.3	0.244	-1.9	30%
Black						
Black Caribbean	-3.4	0.192	-1.4	0.195	-2.0	60%
Black African	-4.0	0.181	-1.8	0.184	-2.2	55%
Any other Black	-3.6	0.492	-1.9	0.485	-1.7	47%
Chinese						
Chinese	-9.4	0.314	-8.3	0.311	-1.2	12%
Other ethnic group						
Other ethnic	-4.7	0.101	-3.3	0.102	-1.4	29%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	0.3	0.060	0.2	0.064	0.1	43%
'3'	0.2	0.060	0.3	0.068	-0.1	-25%
'4'	0.0	0.061	0.5	0.072	-0.5	> +/-100%
'5' (most deprived)	0.6	0.062	1.0	0.077	-0.5	-81%
Self-rated health status						
Excellent (reference)						
Very good	-3.4	0.083	-3.3	0.082	-0.1	2%
Good	-6.5	0.081	-6.4	0.080	-0.2	2%
Fair	-7.7	0.086	-7.5	0.084	-0.2	3%
Poor	-7.7	0.103	-7.5	0.102	-0.2	3%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	0.4	0.082	0.4	0.081	0.0	-2%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 1, continued

Question 25. Overall care satisfaction

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Gender						
Men (reference)						
Women	0.2	0.029	0.2	0.028	0.0	19%
Age group						
18-24	-10.2	0.073	-10.0	0.071	-0.2	2%
25-34	-9.1	0.055	-8.8	0.054	-0.3	4%
35-44	-5.5	0.048	-5.4	0.047	-0.1	2%
45-54	-3.4	0.046	-3.4	0.045	0.0	1%
55-64 (reference)						
65-74	3.9	0.047	3.9	0.046	0.0	0%
75-84	5.4	0.055	5.3	0.054	0.0	0%
85+	4.5	0.091	4.4	0.088	0.1	2%
Ethnic Group						
White						
British White (reference)						
Irish	-0.7	0.126	0.4	0.123	-1.1	> +/-100%
AO White	-4.8	0.086	-3.7	0.085	-1.1	23%
Mixed						
White & Black Caribbean	-2.0	0.315	-0.7	0.307	-1.3	65%
White & Black African	-2.2	0.407	-0.3	0.396	-1.9	87%
White & Black Asian	-3.5	0.325	-2.1	0.317	-1.3	38%
Any other Mixed	-4.4	0.365	-2.7	0.355	-1.7	39%
South-Asian						
Indian	-8.1	0.093	-4.7	0.101	-3.4	42%
Pakistani	-9.2	0.121	-5.0	0.133	-4.2	46%
Bangladeshi	-10.2	0.212	-6.3	0.220	-3.9	38%
Any other Asian	-5.1	0.178	-2.5	0.176	-2.6	50%
Black						
Black Caribbean	-2.3	0.138	0.3	0.139	-2.7	> +/-100%
Black African	-1.5	0.129	1.1	0.130	-2.6	> +/-100%
Any other Black	-1.4	0.358	0.7	0.349	-2.1	> +/-100%
Chinese						
Chinese	-8.9	0.208	-7.7	0.205	-1.3	14%
Other ethnic group						
Other ethnic	-5.4	0.073	-3.6	0.074	-1.8	34%

	Overall difference	Standard error	Difference attributable to different evaluation of care within the same practice	Standard error	Difference attributable to concentration of different patient groups in practices with different mean scores	Percentage of overall difference attributable to patient group concentration in practices with different mean scores*
Deprivation group						
'1' (least deprived) [reference]						
'2'	0.0	0.044	0.3	0.048	-0.2	> +/-100%
'3'	-0.4	0.045	0.4	0.052	-0.8	> +/-100%
'4'	-1.0	0.046	0.7	0.056	-1.7	> +/-100%
'5' (most deprived)	-0.5	0.047	1.4	0.061	-1.9	> +/-100%
Self-rated health status						
Excellent (reference)						
Very good	-3.5	0.054	-3.3	0.052	-0.2	6%
Good	-7.0	0.053	-6.5	0.052	-0.5	7%
Fair	-9.1	0.059	-8.4	0.058	-0.6	7%
Poor	-10.7	0.078	-10.0	0.076	-0.7	7%
Long-standing psychological or emotional condition						
"No" (reference)						
"Yes"	1.7	0.064	1.5	0.063	0.2	11%

*Proportions >100% reflect situations where differences attributable to different evaluation of care within the same practice, and differences attributable to concentration of different patient groups in practices with different mean scores are opposite in direction.

Online appendix 2. Mean socio-demographic group difference (percentile points) and degree of consistency in socio-demographic differences across practices (indicated by the respective 95% midrange), by patient experience measure

	Ethnic group ^a														
	Mixed			South-Asian			Black			Chinese			Other		
	Mean difference _b	95% midrange of practice differences		Mean difference _b	95% midrange of practice differences		Mean difference _b	95% midrange of practice differences		Mean difference _b	95% midrange of practice differences		Mean difference _b	95% midrange of practice differences	
		Lower limit	Upper limit		Lower limit	Upper limit		Lower limit	Upper limit		Lower limit	Upper limit		Lower limit	Upper limit
4. Helpfulness of receptionists	-2.9	-14.5	8.6	-5.6	-15.6	4.4	1.0	-4.2	6.2	-6.5	-15.6	2.7	-2.7	-9.7	4.3
5a. Getting through on the phone	-1.8	-10.3	6.7	-4.1	-13.5	5.3	-0.1	-7.6	7.5	-5.0	-16.8	6.8	-1.5	-7.5	4.5
7. Ability to get urgent appointment	-4.0	-30.4	22.4	-4.7	-20.3	11.0	-2.1	-15.2	11.0	-1.9	-26.2	22.4	-2.5	-14.6	9.6
10. Ability to book ahead	-2.5	-20.5	15.5	-6.9	-23.0	9.3	-2.1	-13.1	8.9	-1.2	-22.2	19.9	-2.4	-12.0	7.3
14. Evaluation of surgery waiting time	-4.9	-22.3	12.5	-9.2	-23.4	4.9	-2.7	-12.2	6.8	-9.1	-32.9	14.7	-4.5	-15.0	5.9
16. Seeing the doctor you prefer	-7.2	-26.3	12.0	-8.9	-20.2	2.4	-7.9	-20.4	4.5	-11.7	-30.2	6.7	-6.5	-16.1	3.1
17. Satisfaction with opening hours	-3.1	-16.0	9.8	-4.7	-12.9	3.4	0.7	-6.0	7.4	-8.9	-24.4	6.6	-2.6	-9.1	4.0
20. Doctor communication	-3.9	-16.1	8.2	-4.3	-12.6	4.0	-1.4	-7.9	5.0	-8.5	-18.3	1.3	-4.3	-11.7	3.1
21. Confidence and trust in doctor	-4.9	-21.7	11.9	-4.0	-13.7	5.8	-2.2	-11.3	6.9	-10.8	-30.7	9.0	-5.8	-16.4	4.8
24. Nurse communication	-3.4	-18.2	11.5	-5.9	-14.0	2.1	-2.2	-8.3	3.8	-9.2	-23.6	5.2	-3.9	-12.0	4.3
25. Overall care satisfaction	-3.9	-17.4	9.7	-6.1	-14.9	2.8	-0.8	-8.0	6.5	-9.5	-22.5	3.4	-5.1	-12.8	2.7

Online appendix 2 – continued

	Gender (women vs. men) ^a			Age group (18-25 vs. 75-84) ^a			Deprivation [group 1 (least deprived) vs. group 5 (most deprived)] ^a			Self-rated health status (self-rated health 'poor' vs. 'excellent') ^a			Long-standing psychological or emotional condition ['Yes' (vs. 'no')] ^a		
	Mean difference _b	95% midrange of practice differences		Mean difference _b	95% midrange of practice differences		Mean difference _b	95% midrange of practice differences		Mean difference _b	95% midrange of practice differences		Mean difference _b	95% midrange of practice differences	
		Lower limit	Upper limit		Lower limit	Upper limit		Lower limit	Upper limit		Lower limit	Upper limit		Lower limit	Upper limit
4. Helpfulness of receptionists	-0.7	-3.2	1.7	8.1	8.1	8.1	1.0	-2.3	4.4	1.2	-4.4	6.8	0.6	-4.0	5.2
5a. Getting through on the phone	-1.4	-4.4	1.6	2.6	2.6	8.5	1.8	-4.1	7.7	6.9	-1.1	14.8	0.5	-3.6	4.5
7. Ability to get urgent appointment	0.2	-1.9	2.2	5.3	5.3	5.3	-1.4	-8.6	5.8	3.8	-2.5	10.0	-0.9	-10.0	8.2
10. Ability to book ahead	-3.5	-11.4	4.3	5.2	5.2	5.2	-1.9	-7.1	3.3	5.8	-3.9	15.6	0.6	-6.2	7.4
14. Evaluation of surgery waiting time	-2.4	-7.1	2.3	6.6	6.6	6.6	-1.0	-5.5	3.5	4.0	-4.1	12.1	-1.6	-8.9	5.7
16. Seeing the doctor you prefer	-3.3	-7.9	1.3	8.3	8.3	8.3	-1.7	-6.2	2.8	-1.7	-3.9	0.5	2.1	-1.7	5.9
17. Satisfaction with opening hours	0.7	-0.7	2.1	7.2	7.2	7.2	2.5	-0.2	5.3	2.2	-2.1	6.5	1.5	-2.4	5.4
20. Doctor communication	-0.4	-2.6	1.9	4.6	4.6	4.6	-0.3	-3.9	3.3	6.1	-0.3	12.5	0.7	-5.4	6.8
21. Confidence and trust in doctor	-1.4	-4.2	1.4	5.9	5.9	5.9	-0.8	-5.4	3.9	7.7	0.6	14.7	0.3	-5.9	6.6
24. Nurse communication	-0.5	-2.8	1.7	3.2	3.2	3.2	0.6	-2.2	3.4	5.9	1.6	10.2	0.0	-5.9	5.9
25. Overall care satisfaction	-0.4	-2.4	1.6	5.9	5.9	5.9	0.3	-3.0	3.5	5.9	-0.4	12.1	0.2	-5.8	6.2

^a All interaction (*case mix adjuster * practice*) variance components were significant <0.0001 except for Mixed: question 5a, p=0.0004; Deprivation: question 10, p=0.0001; Self-rated health status: question 16, **p=0.1149**; Long-standing psychological or emotional condition: question 10, p=0.0002; question 16, p=0.0065.

^b All differences <0.0001 except for Black: question 5a, **p=0.7168**; Chinese: question 7, p=0.0018 and question 10, **p=0.0871**; Women: question 7, p=0.0201; Long-standing psychological or emotional condition: question 10, p=0.0002; question 21, p=0.0015; question 24, **p=0.9603**; question 25, p=0.0013

Online Appendix 3. Additional references of studies providing evidence about socio-demographic variation in patient experience

- i. Potiriadis M, Chondros P, Gilchrist G, Hegarty K, Blashki G, Gunn JM. How do Australian patients rate their general practitioner? A descriptive study using the General Practice Assessment Questionnaire. *Med J Aust.* 2008;189(4):215-9.
- ii. Bikker AP, Thompson AG. Predicting and comparing patient satisfaction in four different modes of health care across a nation. *Soc Sci Med.* 2006;63(6):1671-83.
- iii. DeVoe JE, Wallace LS, Fryer GE Jr. Measuring patients' perceptions of communication with healthcare providers: do differences in demographic and socioeconomic characteristics matter? *Health Expect.* 2009;12(1):70-80.
- iv. Ogden J, Jain A. Patients' experiences and expectations of general practice: a questionnaire study of differences by ethnic group. *Br J Gen Pract.* 2005;55(514):351-6.
- v. Elliott MN, Zaslavsky AM, Goldstein E, et al. Effect of survey mode, patient mix and non-response on CAHPS hospital survey scores. *Health Services Research* 2009;44:501-518.
- vi. O'Malley AJ, Zaslavsky AM, Elliott MN, Zaborski L, Cleary PD. Case-mix adjustment of the CAHPS Hospital Survey. *Health Serv Res.* 2005;40(6 Pt 2):2162-81.