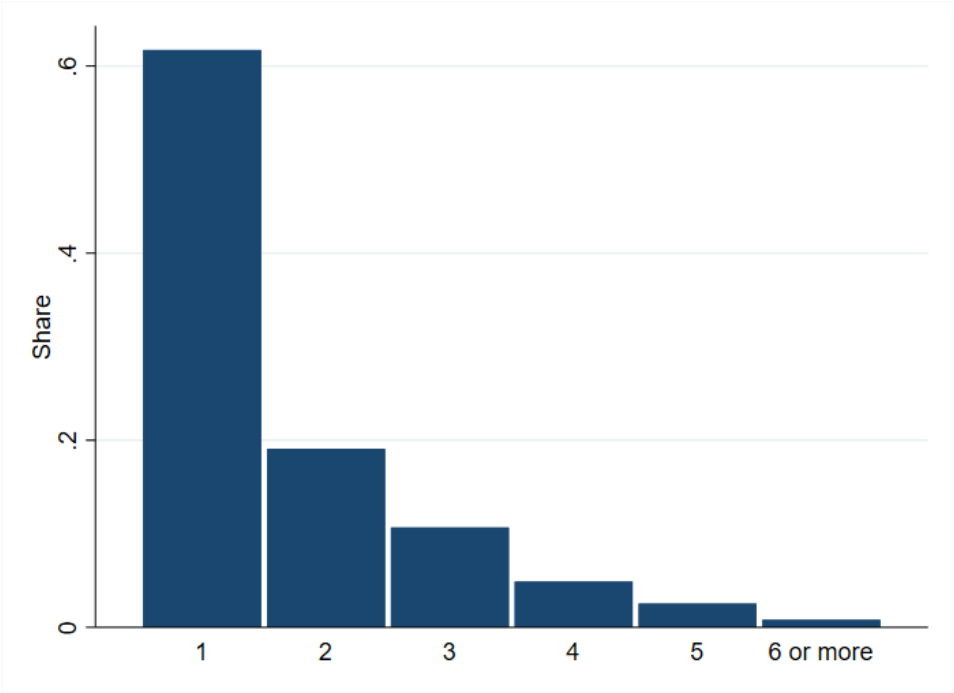
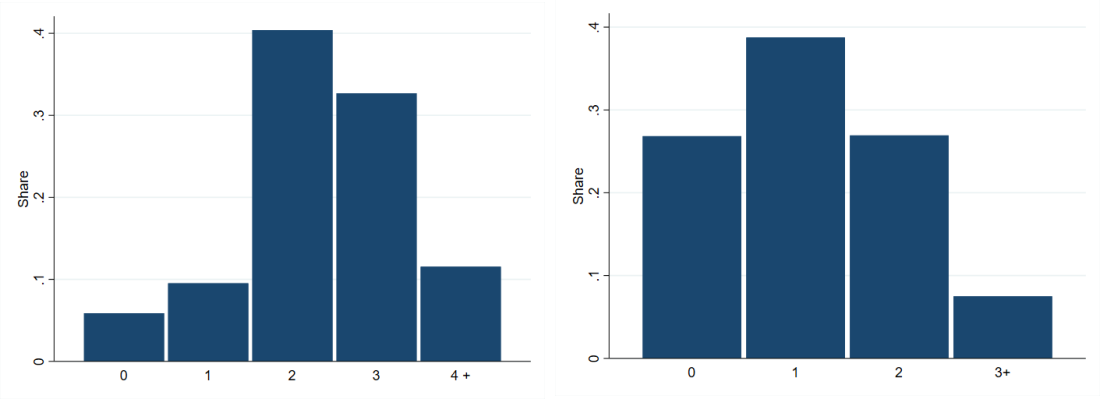
8 Appendix

Figure A.1: Number of Physicians per Primary Care Clinic



Notes: The figure shows the distribution (%) of primary care clinics in Denmark based on the number of physicians working in each clinic over the period 2007-2016.

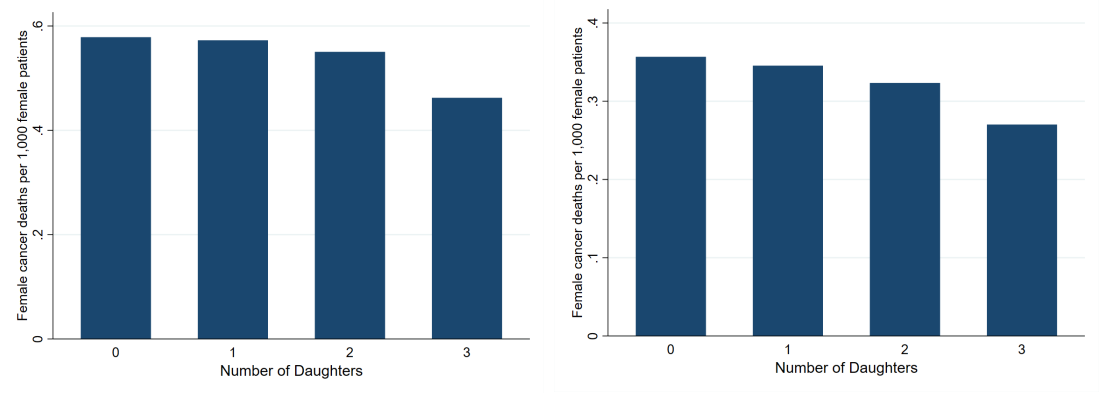
Figure A.2: Number of Children and Daughters Among Baseline Physicians



A: Number of children **B:** Number of daughters

Notes: The figures show the distribution (%) of male physicians in our baseline sample based on the number of children and daughters they have for the period 2007-2016.

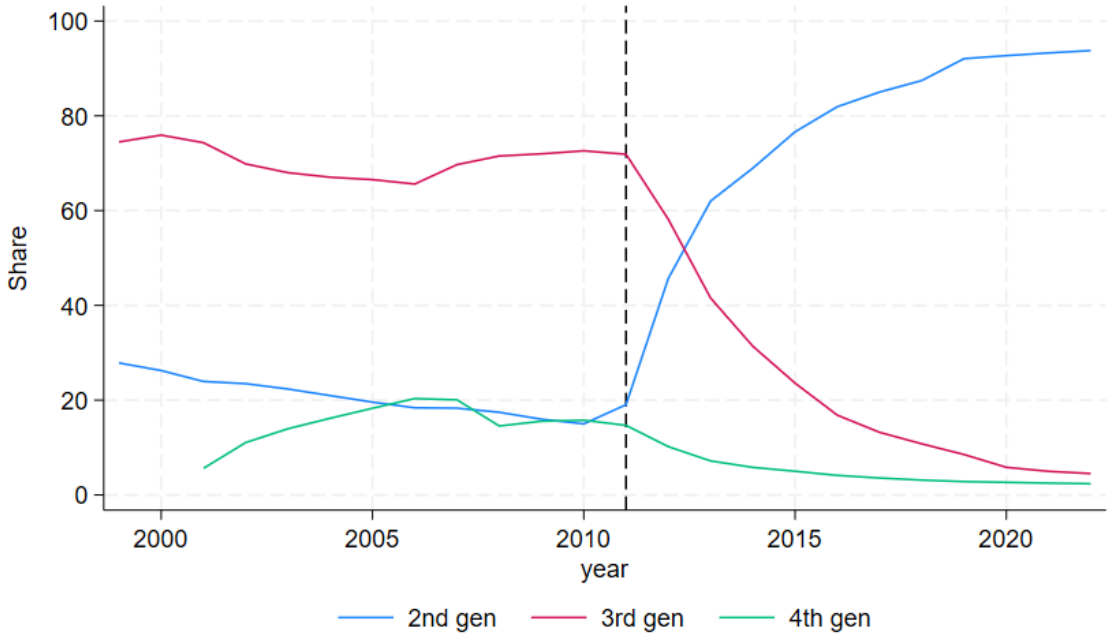
Figure A.3: Breast and Gynecologic Cancer Deaths by Physician Number of Daughters



A: Breast cancer **B:** Gynecologic cancer

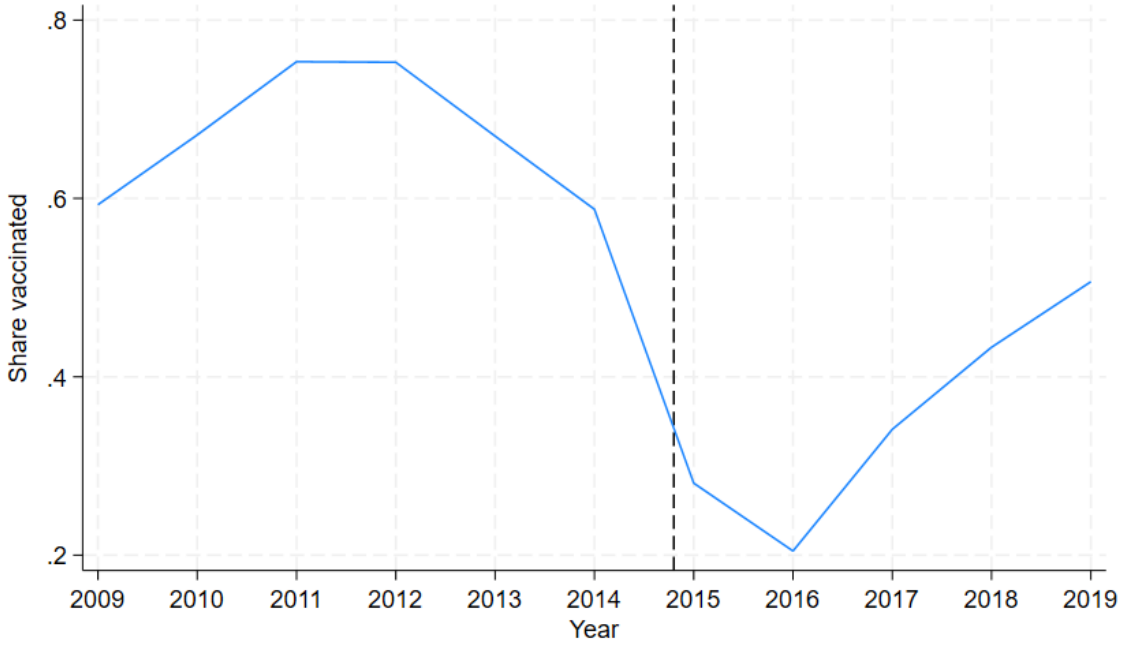
Notes: The figure shows the raw mortality rates of breast and gynecologic cancers among female patients of baseline male physicians, by the number of daughters the physician has. Mortality rates are calculated as the number of deaths from breast or gynecologic cancers per thousand female patients. The figures are based on raw data averaged across the years 2007-2016 without any controls.

Figure A.4: Use of Oral Contraceptive Pills by Generation of the Pill



Notes: The figure shows the proportion of oral contraceptive pills in use in Denmark by pill generation during 1999-2022. The dashed line indicates the year 2011, when greater side effects of the 3rd and 4th generation pills were discovered. The data include pills used by all women and are obtained from medstat.dk.

Figure A.5: HPV Vaccination Rates Among 12-Year-Old Girls



Notes: The figure shows the share of 12-year-old girls receiving the HPV vaccine in Denmark each year during 2009-2019. The dashed line marks the onset of negative media coverage.

Table A.1: Summary Statistics

	(1) All physicians	(2) All solo physicians	(3) Analysis sample	(4) Analysis sample: Female	(5) Analysis sample: Male (Baseline)
Physician characteristics					
Solo clinic	0.594	1.000	1.000	1.000	1.000
	(0.491)	(0.000)	(0.000)	(0.000)	(0.000)
Male	0.612	0.683	0.688	0.000	1.000
	(0.410)	(0.465)	(0.463)	(0.000)	(0.000)
Native	0.941	0.934	1.000	1.000	1.000
	(0.210)	(0.248)	(0.000)	(0.000)	(0.000)
Age	54.36	56.32	56.41	53.56	57.71
	(7.46)	(7.78)	(7.43)	(7.50)	(7.03)
Any child	0.961	0.936	0.941	0.921	0.950
	(0.194)	(0.245)	(0.235)	(0.270)	(0.217)
Number of children	2.36	2.33	2.35	2.16	2.43
	(0.94)	(1.10)	(1.09)	(1.06)	(1.09)
First born girl	0.492	0.492	0.503	0.520	0.495
	(0.500)	(0.500)	(0.500)	(0.500)	(0.500)
Number of daughters	1.14	1.134	1.15	1.01	1.17
	(0.80)	(0.92)	(0.91)	(0.88)	(0.93)
No daughter	0.183	0.270	0.259	0.258	0.260
	(0.387)	(0.444)	(0.438)	(0.438)	(0.439)
One daughter	0.287	0.404	0.413	0.458	0.393
	(0.453)	(0.491)	(0.492)	(0.498)	(0.488)
Two daughters	0.245	0.259	0.259	0.220	0.277
	(0.430)	(0.438)	(0.438)	(0.414)	(0.448)
Three or more daughters	0.284	0.067	0.069	0.064	0.071
	(0.451)	(0.249)	(0.253)	(0.245)	(0.256)
Patient characteristics					
Number of patients	2356.78	1439.25	1509.59	1490.53	1518.25
	(1561.37)	(488.22)	(398.45)	(376.55)	(407.74)
Share female patients	0.502	0.492	0.496	0.591	0.453
	(0.077)	(0.091)	(0.083)	(0.060)	(0.049)
Age	44.79	45.15	45.13	42.87	46.16
	(4.24)	(4.57)	(4.10)	(4.07)	(3.68)
Months of education	155.94	156.00	156.20	158.76	155.04
	(8.68)	(9.02)	(8.73)	(8.65)	(8.51)
Married	0.428	0.415	0.419	0.398	0.429
	(0.089)	(0.094)	(0.088)	(0.088)	(0.086)
Number of clinics	3,358	2,230	1,724	582	1,142
Number of clinics × year	20,244	12,015	10,647	3,325	7,322

Notes: The table provides summary statistics for various samples of physicians and their patients, averaged over the period 2007-2016. The physician characteristics were averaged across physician-years, and the patient characteristics were averaged across clinic-years. For each variable, both the mean and the standard deviation (in parentheses) are reported. Column 1 includes all primary care physicians in Denmark. Column 2 includes only solo physicians. Column 3 narrows the sample down to solo physicians from Column 2 who are ethnically Danish and have at least 750 patients. Column 4 includes only the female physicians from Column 3. Lastly, Column 5 consists of the male physicians from Column 3, forming the sample for our baseline analysis. All statistics are calculated based on active practice years between 2007 and 2016.

Table A.2: Cause of Death and ICD-10 Codes

Cause of Death	ICD-10
Cancer	C
Female specific cancers	C50 -C58
Malignant neoplasm of breast	C50
Malignant neoplasms of female genital organs	C51-C58
Vulva	C51
Vagina	C52
Uterus and cervix	C53-C55
Cervix uteri	C53
Corpus uteri	C54
Uterus, part unspecified	C55
Ovary	C56
Other and unspecified female genital organs	C57
Malignant neoplasms of male genital organs	C60-C63
Diseases in the circulatory system	I

Notes: This table shows the list of diseases considered in the mortality analysis along with their ICD-10 codes.

Table A.3: Balance Tests

	(1) Physician age	(2) Physician experience	(3) Physician married	(4) ln(Patients)	(5) ln(Female patients)	(6) % Female patients	(7) % Fem. pat. age<18
Girls	-0.249	-0.040	0.013	-0.002	-0.003	-0.000	-0.000
	(0.277)	(0.189)	(0.013)	(0.009)	(0.011)	(0.002)	(0.000)
Observations	7,322	7,322	7,322	7,322	7,322	7,322	7,322
Mean of Dep. Var.	57.71	12.90	0.838	7.295	6.497	0.453	0.0466
Std.Dev. of Dep. Var.	7.031	5.192	0.369	0.247	0.298	0.0494	0.0153

	(8) % Fem. pat. age 18-64	(9) % Fem. pat. age> 65	(10) Fem. pat. age	(11) Fem. pat. education	(12) Fem. pat. ln(income)	(13) % Fem. pat. minority	(14) % Fem. pat. married
Girls	0.000	0.000	0.020	-0.192	-0.005	0.003	-0.003
	(0.001)	(0.001)	(0.106)	(0.282)	(0.003)	(0.002)	(0.002)
Observations	7,322	7,322	7,322	7,322	7,322	7,322	7,322
Mean of Dep. Var.	0.292	0.115	56.76	154.8	12.50	0.0927	0.536
Std.Dev. of Dep. Var.	0.0373	0.0367	3.127	9.842	0.141	0.0749	0.0944

Notes: The table shows the results of a balance test examining whether physicians with more daughters (compared to more sons) differ in terms of physician and patient characteristics. The sample consists of all male physicians in our baseline sample during 2007-2016. Each column shows the results from a separate OLS regression similar to equation (1), where each observation is a clinic-year. The outcome variables, measuring physician and patient characteristics, are listed at the top of each column. The explanatory variable is the number of daughters the physician has. Each regression controls for physician number of children fixed effects, year fixed effects, and municipality fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.4: Physicians' Number of Daughters and Patients' Selection Into or Out of the Clinics

	(1)	(2)	(3)	(4)
	Women aged 22+		Women aged 40+	
	Selecting out	Selecting in	Selecting out	Selecting in
Girls	0.00224	0.00352	0.00228	0.00289
	(0.00332)	(0.00245)	(0.00346)	(0.00250)
Observations	4,099,514	4,098,930	3,035,867	3,035,401

Notes: The table tests whether female patients select into or out of clinics based on the physicians' number of daughters. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of all female patients above 22 years old (columns 1-2) or above 40 years old (columns 3-4) under the care of the baseline male physicians during 2007-2016. In columns 1 and 3, the outcome is a binary variable that equals 1 if the patient leaves for another clinic in the given year, and 0 otherwise. The explanatory variable is the number of daughters her original physician has. In columns 2 and 4, the outcome is a binary variable that equals 1 if the patient joins a new clinic from another clinic in the given year, and 0 otherwise. The explanatory variable is the number of daughters her new physician has. We exclude physician switches due to clinic closures. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.5: Testing for Fertility Stopping Rules

	(1)	(2)
	Total number of children	
First-born girl	-0.089	
	(0.072)	
First and second child same gender		0.030
		(0.072)
Observations	808	719
Mean of Dep. Var.	2.530	2.719
Std.Dev. of Dep. Var.	0.986	0.876

Notes: The table presents the results from an exercise testing whether physicians follow fertility stopping rules. The sample consists of male physicians in our baseline sample. Each column shows the results from a separate OLS regression, where each observation is a physician. The outcome variable for each column is the total number of children the physician has. We measure total number of children in the last year observed, which is either 2016 or at the year of clinic closure. In column 1, the explanatory variable is a dummy variable that equals 1 if the physician's first-born child is a girl, and 0 otherwise. The sample includes only baseline physicians with at least one child. In column 2, the explanatory variable is a dummy variable that equals 1 if the physician's first- and second-born children have the same gender, and 0 otherwise. The sample includes only baseline physicians with at least two children. Each regression controls for physician age and municipality fixed effects. *** p <0.01, ** p <0.05, * p <0.1.

Table A.6: Baseline Estimates by Patients' Educational Level and Ethnicity

	(1)	(2)	(3)	(4)
	Education		Ethnicity	
	Low	High	Majority	Minority
Girls	-0.000130***	-0.000045	-0.000080***	-0.000075
	(0.000048)	(0.000030)	(0.000026)	(0.000081)
Observations	1,235,853	1,873,788	2,915,782	194,135
Mean of Dep. Var.	0.00192	0.00107	0.00144	0.00100
Std.Dev. of Dep. Var.	0.0438	0.0327	0.0379	0.0317

Notes: This table presents the estimated effects of physician daughters on female-specific cancer mortality by patients' educational level and ethnicity. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of all female patients above 40 years old under the care of the baseline male physicians during 2007-2016, which is then split by patients' educational level (low vs. high) in columns 1-2 and by patients' ethnicity (majority vs. minority) in columns 3-4. Low education is defined as having a high school degree or less, while high education includes any level of education above high school. The outcome is a binary variable that equals 1 if the patient dies from female-specific cancer (breast or gynecologic) in the given year, and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.7: Baseline Estimates with Controls Gradually Added

	(1)	(2)	(3)	(4)
	Death from Female-Specific Cancers			
Girls	-0.000062**	-0.000063**	-0.000064**	-0.000077***
	(0.000027)	(0.000027)	(0.000027)	(0.000026)
Observations	3,250,770	3,250,770	3,250,770	3,109,917
Mean of Dep. Var.	0.00145	0.00145	0.00145	0.00141
Std.Dev. of Dep. Var.	0.0381	0.0381	0.0381	0.0375
Year FE		X	X	X
Municipality FE		X	X	X
Physician controls			X	X
Patient controls				X

Notes: This table shows the baseline estimates on female-specific cancer mortality with control variables gradually added. Each column shows the results from a separate OLS regression and follows a similar sample and specification as in column 3 of Table 2. Column 1 includes only physician number of children fixed effects and no other controls. In column 2, we add year fixed effects and municipality fixed effects. In column 3 and 4, we further control for the physician and patient characteristics in the baseline specification. Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.8: Baseline Estimates with Physician Sample Restrictions Relaxed

	(1) Drop ethnicity restriction	(2) Drop number of patient restriction	(3) (1) + (2)	(4) Extend years to 2007-2019
Girls	-0.000069***	-0.000070***	-0.000061**	-0.000064***
	(0.000025)	(0.000025)	(0.000025)	(0.000023)
Observations	3,255,357	3,143,721	3,292,520	3,703,780
Mean of Dep. Var.	0.00138	0.00142	0.00139	0.00138
Std.Dev. of Dep. Var.	0.0371	0.0377	0.0372	0.0371

Notes: This table presents the estimated effects of physician daughters on female-specific cancer mortality, when the baseline physician sample restrictions are relaxed. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. In Column 1, we drop the restriction that physicians must be Danish. Column 2 drops the requirement for physicians to have at least 750 patients. Column 3 removes both restrictions from columns 1-2. In column 4, we extend the baseline sample to the year 2019. The outcome is a binary variable that equals 1 if the patient dies from female-specific cancer (breast or gynecologic) in the given year, and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.9: Baseline Estimates for Only Physicians with Children

	(1)	(2)	(3)
	Death from Female-Specific Cancers		
	Overall	Breast	Gynecologic
Girls	-0.000074***	-0.000043**	-0.000031*
	(0.000026)	(0.000020)	(0.000016)
Observations	2,955,522	2,955,522	2,955,522
R-squared	0.001	0.001	0.000
Mean of Dep. Var.	0.00137	0.000847	0.000526
Std.Dev. of Dep. Var.	0.0370	0.0291	0.0229

Notes: This table presents the estimated effects of physician daughters on female-specific cancer mortality, after removing physicians without any child. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The table follows the same specification as Table 3, except that here the sample includes only patients whose physicians have at least one child. *** p <0.01, ** p <0.05, * p <0.1.

Table A.10: Baseline Estimates Using Dummy Variables for Number of Daughters

	(1)	(2)	(3)
	Death from Female-Specific Cancers		
	Overall	Breast	Gynecologic
1 Daughter	-0.000062	-0.000044	-0.000018
	(0.000060)	(0.000047)	(0.000038)
2 Daughters	-0.000163**	-0.000093*	-0.000070*
	(0.000064)	(0.000051)	(0.000041)
3 or more Daughters	-0.000214**	-0.000109	-0.000105*
	(0.000097)	(0.000076)	(0.000057)
Observations	3,109,917	3,109,917	3,109,917

Notes: This table presents the estimated effects of physician daughters on female-specific cancer mortality, when using dummy variables to measure number of daughters. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of all female patients above 40 years old under the care of the baseline male physicians during 2007-2016. The outcomes are binary variables that equal 1 if the patient dies from any female-specific cancers (column 1), breast cancer (column 2), or gynecologic cancer (column 3) in the given year, and 0 otherwise. The explanatory variable is the number of daughters the physician has, measured as dummy variables instead of a continuous variable. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.11: Baseline Estimates Using Alternative Treatment Variables

	(1)	(2)	(3)	(4)	(5)
	Treatment Defined as				
	Any daughter	Share of daughters	Most daughters	Only daughters	First-born daughter
Treatment	-0.000104*	-0.000150**	-0.000085*	-0.000088	-0.000027
	(0.000056)	(0.000063)	(0.000044)	(0.000055)	(0.000044)
Observations	3,109,917	3,109,917	3,109,917	3,109,917	3,109,917
Mean of Dep. Var.	0.00141	0.00141	0.00134	0.00132	0.00134
Std.Dev. of Dep. Var.	0.0375	0.0375	0.0366	0.0363	0.0366
Mean of treatment var.	0.743	0.464	0.354	0.236	0.467

Notes: This table presents the estimated effects of physician daughters on female-specific cancer mortality, when using alternatively defined treatment variables. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of all female patients above 40 years old under the care of the baseline male physicians during 2007-2016. The outcome is a binary variable that equals 1 if the patient dies from female-specific cancer (breast or gynecologic) in the given year, and 0 otherwise. The regression uses different treatment variables specified in the column headers to measure physician daughters, including having any daughters (column 1), the share of daughters among all children (column 2), having most daughters (column 3), having only daughters (column 4), and having a first-born daughter (column 5). Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects.Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.12: Baseline Estimates Using Logit Regressions

	(1)	(2)	(3)
	Death from Female-Specific Cancers		
	Overall	Breast	Gynecologic
Girls	-0.060638***	-0.053867**	-0.073120**
	(0.019798)	(0.024939)	(0.032351)
Observations	3,109,152	3,100,560	3,094,341
Mean of Dep. Var.	0.001411	0.000878	0.000537
Std.Dev. of Dep. Var.	0.037539	0.0296	0.0232
Marginal effects	-0.000051	-0.000027	-0.000023

Notes: This table presents the estimated effects of physician daughters on female-specific cancer mortality using a logit function. Each column shows the results from a separate logit regression following equation (1), where each observation is a patient-year. The sample consists of all female patients above 40 years old under the care of the baseline male physicians during 2007-2016. The outcomes are binary variables that equal 1 if the patient dies from any female-specific cancers (column 1), breast cancer (column 2), or gynecologic cancer (column 3) in the given year, and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. The marginal effects, estimated at the average of the covariates, are reported in the last row of the table. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.13: Effects on Female Cancer Deaths at the Clinic Level

	(1)	(2)	(3)	(4)
		Number of Deaths (per 1,000 Female Patients)		
	Any death	Overall	Breast	Gynecologic
Girls	-0.015028*	-0.047079***	-0.028085**	-0.018994*
	(0.008182)	(0.018062)	(0.014096)	(0.010892)
Observations	7,322	7,322	7,322	7,322
Mean of Dep. Var.	0.456	0.947	0.593	0.354
Std.Dev. of Dep. Var.	0.498	1.241	0.992	0.756

Notes: This table presents the estimated effects of physician daughters on female-specific cancer mortality, with baseline patient data aggregated to the clinic-year level. Each column shows the results from a separate OLS regression, where each observation is a clinic-year. The sample consists of all male physicians in our baseline sample during 2007-2016. In column 1, the outcome is a binary variable that equals 1 if the clinic has any female patient dying from breast or gynecologic cancer in the given year, and 0 otherwise. For columns 2-4, the outcomes are the number of deaths per 1,000 female patients in the given year from any female-specific cancers (column 2), breast cancer (column 3), or gynecologic cancer (column 4). Each regression controls for physicians' age, physician number of children fixed effects, patients' average education in months, average patient age, share of ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.14: Physicians' Number of Daughters and Female Cancer Diagnoses by Age

	(1)	(2)	(3)	(4)
	Diagnosed for the First Time			
	Ages 22+	Ages 22-49	Ages 50-70	Ages 71+
Panel A: Breast cancer				
Girls	-0.000010	0.000093***	-0.000032	-0.000278**
	(0.000051)	(0.000036)	(0.000093)	(0.000129)
Observations	4,099,989	1,781,576	1,574,246	744,167
Mean of Dep. Var.	0.00438	0.00127	0.00663	0.00715
Std.Dev. of Dep. Var.	0.0661	0.0356	0.0812	0.0843
Panel B: Gynecologic cancer				
Girls	-0.000045**	-0.000013	-0.000090**	-0.000048
	(0.000021)	(0.000020)	(0.000037)	(0.000065)
Observations	4,099,989	1,781,576	1,574,246	744,167
Mean of Dep. Var.	0.00104	0.000415	0.00134	0.00192
Std.Dev. of Dep. Var.	0.0322	0.0204	0.0366	0.0438

Notes: This table presents the estimated effects of physician daughters on female cancer diagnoses by age. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of female patients above 22 years old under the care of the baseline male physicians during 2007-2016 and is divided into different age groups for each column, as specified at the top of each column. The outcomes in each panel are binary variables that equal 1 if the patient is diagnosed with breast cancer (Panel A) or gynecologic cancer (Panel B) for the first time in the given year, and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.15: Physicians' Number of Daughters and Female Cancer Testing by Age

	(1)	(2)	(3)	(4)
	Receiving the Screening or Diagnostic Test			
	Ages 22+	Ages 22-49	Ages 50-70	Ages 71+
Panel A: Mammography				
Girls	0.000464	0.001399**	-0.000944	0.001623
	(0.000856)	(0.000553)	(0.001568)	(0.001342)
Observations	4,099,989	1,701,884	1,653,938	744,167
Mean of Dep. Var.	0.221	0.0604	0.393	0.208
Std.Dev. of Dep. Var.	0.415	0.238	0.488	0.406
Panel B: Pap smear				
Girls	-0.000591	-0.000597	-0.000940	0.000094
	(0.001001)	(0.001355)	(0.001070)	(0.000853)
Observations	4,099,989	1,781,576	1,230,777	1,087,636
Mean of Dep. Var.	0.193	0.290	0.173	0.0543
Std.Dev. of Dep. Var.	0.394	0.454	0.378	0.227
Panel C: Cone biopsy				
Girls	0.000051	0.000125*	-0.000038	0.000036
	(0.000038)	(0.000072)	(0.000045)	(0.000039)
Observations	4,099,989	1,781,576	1,230,777	1,087,636
Mean of Dep. Var.	0.00233	0.00381	0.00153	0.000846
Std.Dev. of Dep. Var.	0.0482	0.0616	0.0391	0.0291

Notes: This table presents the estimated effects of physician daughters on female cancer screening and diagnostic tests by age. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of female patients above 22 years old under the care of the baseline male physicians during 2007-2016 and is divided into different age groups for each column, as specified at the top of each column. The outcomes in each panel are binary variables that equal 1 if the patient receives a mammogram (Panel A), Pap test (Panel B), or cone biopsy (Panel C) in the given year, and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.16: Physicians' Number of Daughters and Female Cancer Stage at Diagnosis

	(1)	(2)	(3)	(4)
	Cancer Has Spread to Surrounding Tissue			
	Ages 22+	Ages 22-49	Ages 50-70	Ages 71+
Panel A: Breast cancer				
Girls	-0.009833**	-0.003557	-0.013697**	-0.002790
	(0.004768)	(0.011643)	(0.005975)	(0.008421)
Observations	17,430	2,256	10,165	5,009
Mean of Dep. Var.	0.757	0.797	0.771	0.710
Std.Dev. of Dep. Var.	0.429	0.402	0.420	0.454
Panel B: Gynecologic cancer				
Girls	-0.005679*	-0.003085	-0.005163	-0.020436*
	(0.002950)	(0.002297)	(0.009266)	(0.010963)
Observations	21,833	14,690	4,219	2,924
Mean of Dep. Var.	0.186	0.0457	0.325	0.688
Std.Dev. of Dep. Var.	0.389	0.209	0.469	0.463

Notes: This table presents the estimated effects of physician daughters on female cancer stage upon diagnosis. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample includes all female patients under the care of the baseline male physicians who are diagnosed with breast cancer (Panel A) or gynecologic cancer (Panel B) for the first time during 2007-2016. The outcomes in each panel are binary variables that equal 1 if the patient's cancer tumor has spread to surrounding tissue, and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.17: Physicians' Number of Daughters and Detection of Cervical Cell Changes

	(1)	(2)	(3)	(4)
	Pre-Cancerous Cervical Cell Changes Detected			
	Ages 22+	Ages 22-49	Ages 50-70	Ages 71+
Girls	0.004880*	0.002181	0.008354	0.011742
	(0.002816)	(0.002143)	(0.008841)	(0.011883)
Observations	21,833	14,690	4,219	2,924
Mean of Dep. Var.	0.840	0.959	0.721	0.417
Std.Dev. of Dep. Var.	0.366	0.198	0.449	0.493

Notes: This table presents the estimated effects of physician daughters on the detection of cervical cell changes. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample includes all female patients under the care of the baseline male physicians who are diagnosed with gynecologic cancer for the first time during 2007-2016. The outcomes in each panel are binary variables that equal 1 if the patient is diagnosed with cervical cell changes, and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.18: Balance Tests on Baseline Physicians' Male Patient Characteristics

	(1) % Male patients	(2) % Male pat. age<18	(3) % Male pat. age 18-64	(4) % Male pat. age> 65	(5) Male pat. age	(6) % Male pat. education	(7) % Male pat. ln(income)	(8) Male pat. minority	(9) % Male pat. married
Girls	0.000	-0.000	0.001	-0.001	-0.054	-0.255	-0.006	0.003	-0.004*
	(0.002)	(0.000)	(0.002)	(0.001)	(0.095)	(0.229)	(0.004)	(0.002)	(0.002)
Observations	7,322	7,322	7,322	7,322	7,322	7,322	7,322	7,322	7,322
Mean of Dep. Var.	57.71	0.0517	0.397	0.0990	53.49	162.7	12.77	0.0927	0.573
Std.Dev. of Dep. Var.	7.031	0.0166	0.0733	0.0335	3.448	9.739	0.205	0.0777	0.104

Notes: The table shows the results of a balance test examining whether physicians with more daughters (compared to more sons) differ in terms of their male patient characteristics. The sample consists of all male physicians in our baseline sample during 2007-2016. Each column shows the results from a separate OLS regression similar to equation (1), where each observation is a clinic-year. The outcome variables, measuring male patient characteristics, are listed at the top of each column. The explanatory variable is the number of daughters the physician has. Each regression controls for physician number of children fixed effects, year fixed effects, and municipality fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.19: Physicians' Number of Daughters and Male Patient Mortality

	Death by Cause			
	Any	Cancer	Male-specific cancer	CV
	(1)	(2)	(3)	(4)
Girls	0.000182	0.000069	-0.000006	-0.000024
	(0.000122)	(0.000059)	(0.000018)	(0.000060)
Observations	3,219,989	3,219,989	3,219,989	3,219,989
Mean of Dep. Var.	0.0181	0.00576	0.000811	0.00478
Std.Dev. of Dep. Var.	0.133	0.0757	0.0285	0.0690

Notes: This table presents the estimated effects of physician daughters on male patient mortality by cause. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of all male patients above 40 years old under the care of the baseline male physicians during 2007-2016. The outcomes are binary variables that equal 1 if the patient dies in a given year from any cause (column 1), any type of cancer (column 2), male-specific cancers (i.e., male reproductive organs) (column 3), or cardiovascular diseases (column 4), and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.20: Balance Tests for Female Physicians

	(1) Physician age	(2) Physician experience	(3) Physician married	(4) ln(Patients)	(5) ln(Female patients)	(6) % Female patients	(7) % Fem. pat. age<18
Girls	0.261	-0.083	0.078**	-0.008	0.003	0.007**	0.001
	(0.465)	(0.351)	(0.030)	(0.012)	(0.012)	(0.003)	(0.001)
Observations	3,325	3,325	3,325	3,325	3,325	3,325	3,325
Mean of Dep. Var.	53.56	10.65	0.661	7.283	6.752	0.591	0.0593
Std.Dev. of Dep. Var.	7.499	6.136	0.473	0.213	0.230	0.0598	0.0201

	(8) % Fem. pat. age 18-64	(9) % Fem. pat. age> 65	(10) Fem. pat. age	(11) Fem. pat. education	(12) Fem. pat. ln(income)	(13) % Fem. pat. minority	(14) % Fem. pat. married
Girls	0.007*	-0.001	-0.080	-0.605	-0.011*	0.008*	-0.003
	(0.004)	(0.002)	(0.235)	(0.478)	(0.006)	(0.004)	(0.003)
Observations	3,325	3,325	3,325	3,325	3,325	3,325	3,325
Mean of Dep. Var.	0.426	0.105	53.39	163.5	12.60	0.124	0.517
Std.Dev. of Dep. Var.	0.0785	0.0385	3.807	10.74	0.146	0.0847	0.0998

Notes: The table shows the results of a balance test examining whether female physicians with more daughters (compared to more sons) differ in terms of physician and patient characteristics. The sample consists of all female physicians in our analysis sample (i.e., Danish solo physicians with at least 750 patients) during 2007-2016. Each column shows the results from a separate OLS regression similar to equation (1), where each observation is a clinic-year. The outcome variables, measuring physician and patient characteristics, are listed at the top of each column. The explanatory variable is the number of daughters the physician has. Each regression controls for physician number of children fixed effects, year fixed effects, and municipality fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.21: Female Physicians' Number of Daughters and Patient Mortality

	Female Mortality			Male Mortality	
	Female cancer	Breast	Gynecologic	Overall	Male cancer
	(1)	(2)	(3)	(4)	(5)
Girls	0.000033	0.000022	0.000010	0.000078	0.000036
	(0.000034)	(0.000029)	(0.000022)	(0.000218)	(0.000039)
Observations	1,498,169	1,498,169	1,498,169	1,056,577	1,056,577
Mean of Dep. Var.	0.00109	0.000661	0.000429	0.0165	0.000762
Std.Dev. of Dep. Var.	0.0330	0.0257	0.0207	0.127	0.0276

Notes: This table presents the estimated effects of physician daughters on patient mortality by cause among female physicians. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of patients above 40 years old under the care of the female physicians in our analysis sample (i.e., Danish solo physicians with at least 750 patients) during 2007-2016. The sample is divided by gender across the columns, with columns 1-3 for female patients and columns 4-5 for male patients. For columns 1-3, the outcomes are binary variables that equal 1 if the female patient dies in a given year from any female-specific cancer (breast or gynecologic) (column 1), breast cancer (column 2), gynecologic cancer (3), and 0 otherwise. For columns 4-5, the outcomes are binary variables that equal 1 if the male patient dies in a given year from any cause (column 4) or male-specific cancer (i.e., cancers of the male reproductive organs) (column 5), and 0 otherwise. The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.22: Baseline Estimates Based on the Age of the Oldest Daughter

	(1)	(2)	(3)
	Age Range of the Physician's Oldest Daughter		
	≤11	≥26	≥40
Girls	-0.000077***	-0.000089**	-0.000081***
	(0.000026)	(0.000036)	(0.000026)
Age range	-0.000411*	0.000067	0.000372
	(0.000224)	(0.000093)	(0.000277)
Girls × Age range	0.000168	-0.000007	-0.000063
	(0.000147)	(0.000054)	(0.000138)
Observations	3,109,917	3,109,917	3,109,917
Mean of Dep. Var.	0.00132	0.00135	0.00131
Std.Dev. of Dep. Var.	0.0364	0.0367	0.0362

Notes: This table presents the estimated effects of physician daughters on female-specific cancer mortality by the age of the physician's oldest daughter. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of all female patients above 40 years old under the care of the baseline male physicians during 2007-2016. The outcome is a binary variable equal to 1 if the patient dies from any female-specific cancers (breast or gynecologic) in the given year, and 0 otherwise. The explanatory variables include the number of daughters the physician has as well as its interaction with an indicator for the age range of the physician's oldest daughter, as specified in the column headers. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.23: Physicians' Number of Daughters and Oral Contraceptive Pill Prescription

	(1)	(2)	(3)	(4)
	Ages 13-55		Ages 20-55	
	Any	2nd generation	Any	2nd generation
Girls × Post	-0.000328	0.004909*	-0.000423	0.004297*
	(0.001)	(0.003)	(0.001)	(0.002)
Observations	1,736,412	1,736,412	1,499,245	1,499,245
Mean of Dep. Var.	0.270	0.0468	0.236	0.0436
Std.Dev. of Dep. Var.	0.444	0.211	0.425	0.204

Notes: This table presents the estimated effects of physician daughters on the likelihood of female patients being prescribed any or the second-generation oral contraceptive pills during 2008-2017. The estimates in each column come from a single OLS regression similar to equation (2), where the dummy variable *Post* indicate years from 2012 onwards. The sample consists of all female patients aged 13-55 (columns 1-2) and those aged 20-55 (columns 3-4) under the care of the baseline male physicians. The outcome is a binary variable that equals 1 if the female patient in a given year is prescribed any oral contraceptive pill (columns 1 and 3) or the second-generation pill (columns 2 and 4), and 0 otherwise. The explanatory variables are the physician's number of daughters in 2011 interacted with the *Post* dummy for years after 2011. The regression controls for physician fixed effects, physician number of children fixed effects interacted with year dummies, physicians' age, patients' education in months, patient age fixed effects, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors are clustered at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.24: Physicians' Number of Daughters and HPV Vaccinations

	(1)	(2)
	HPV Vaccination by Age 13	
	Any	Number
Girls × Post	0.019894**	0.028384
	(0.008701)	(0.020198)
Observations	22,122	21,015
Mean of Dep. Var.	0.677	1.313
Std.Dev. of Dep. Var.	0.468	1.114

Notes: The table presents the effect of physician female socialization estimated using a modified version of equation 1 on young female patients' HPV vaccinations during 2011-2018. The estimates in each column come from a single OLS regression similar to equation (2), where the dummy variable *Post* indicate years from 2015 onwards. The sample consists of all the 13-year-old girls under the care of the baseline male physicians in each year. In column 1, the outcome is a binary variable that equals 1 if the female patient has received any HPV vaccination by age 13, and 0 otherwise. In column 2, the outcome is the total number of HPV vaccinations the female patient has received by age 13. The explanatory variable is the physician's number of daughters in 2014 interacted with the *Post* dummy for years after 2014. The regression controls for physician fixed effects, physician number of children fixed effects interacted with year dummies, physicians' age, patients' education in months, patient age fixed effects, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.25: Physicians' Number of Daughters and Patients' Healthcare Utilization

	(1)	(2)	(3)
	Any contact	Number of visits	Services per visit
Girls	-0.000029	0.026798	-0.009788
	(0.000746)	(0.044937)	(0.009050)
Observations	3,841,524	3,841,524	3,841,524
Mean of Dep. Var.	0.919	7.025	1.597
Std.Dev. of Dep. Var.	0.272	6.150	0.884

Notes: This table presents the estimated effects of physician daughters on female patients' health care utilization. Each column shows the results from a separate OLS regression following equation (1), where each observation is a patient-year. The sample consists of all female patients above 22 years old under the care of the baseline male physicians during 2007-2016. The outcomes are a binary variable that equals 1 if the patient has any contact with her physician in the given year (column 1), the total number of times she visited the physician in the year (column 2), and the average number of services the physician provided per visit (column 3). The explanatory variable is the number of daughters the physician has. Each regression controls for physicians' age, physician number of children fixed effects, patients' education in months, patient age dummies, an indicator for ethnic minority patients, municipality fixed effects, and year fixed effects. Standard errors, in parentheses, are corrected for clustering at the physician level. *** p <0.01, ** p <0.05, * p <0.1.

Table A.26: Correlation Matrix of the Agreement Variables

	(1)	(2)	(3)	(4)	(5)
(1) Collaboration	1.000				
(2) Communication clarity	0.434*	1.000			
(3) Time attention	0.377*	0.455*	1.000		
(4) Empathy	0.447*	0.508*	0.588*	1.000	
(5) Trust	0.451*	0.507*	0.522*	0.700*	1.000

Notes: The table shows the correlation matrix between the survey items used to measure physician satisfaction. The correlation is based on all people responding to the survey, which is 20,906 individuals. $*$ shows significance at the 5 percent level.

Table A.27: Factor Loadings and Uniqueness of the Agreement Variables

	Factor1	Uniqueness
(1) Collaboration	0.572	0.673
(2) Communication clarity	0.646	0.583
(3) Time attention	0.673	0.548
(4) Empathy	0.809	0.345
(5) Trust	0.783	0.387

Notes: The table shows the factor loading pattern matrix and unique variance from the different survey items used to create the composite measure of overall physician satisfaction. The values are based on all people responding to the survey, which is 20,906 individuals.

Table A.28: Effects on Patient Experiences and Physician-Patient Relationships – Male Patients

	(1) Overall satisfaction	(2) Collaboration	(3) Communication clarity	(4) Time attention	(5) Empathy	(6) Trust
Panel A.						
Any male GP with a daughter	-0.007	-0.007	0.004	0.015	-0.003	-0.012
	(0.031)	(0.016)	(0.012)	(0.016)	(0.013)	(0.012)
Panel B.						
Share of male physicians with at least one daughter	-0.009	-0.001	-0.000	0.017	-0.006	-0.013
	(0.030)	(0.015)	(0.011)	(0.015)	(0.012)	(0.012)
Observations	6,791	6,829	6,826	6,829	6,833	6,829
Mean of Dep. Var.	0.0612	0.780	0.897	0.808	0.864	0.880
Std.Dev. of Dep. Var.	0.845	0.414	0.305	0.394	0.343	0.325

Notes: This table presents the estimated effects of physician daughters on measures of patient experience and physician-patient relationships, based on patient survey data collected in 2019. Each column shows the results from a separate OLS regression following equation (3), where each observation is a patient. The sample consists of all male patients in the patient survey connected to a primary care clinic with at least one male physician. For column 2-6, the outcome is a binary variable that equals 1 if the patient agrees with the given statement about their experience and relationship with the physician, and 0 otherwise. The explanatory variable in panel A is an indicator that equals 1 if any male physician in the clinic has a daughter, and 0 otherwise. The explanatory variable in panel B is the share of male physicians in the clinic with at least one daughter. Each regression controls for patients' education in months, patient age dummies, an indicator for ethnic minority patients, region fixed effects, number of physicians in the clinic fixed effects, physicians' average age, share of male physicians in the clinic, share of ethnic majority physicians in the clinic, and average number of children among physicians fixed effects, where the average number of children has been rounded to the nearest whole number. Standard errors, in parentheses, are corrected for clustering at the physician level. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.