

A Statistical Anatomy of Ontario Family Physicians' Practices

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Economic Analysis of Recent Changes in Ontario
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Ontario's Primary Care landscape has changed since 2000

- ▶ new payment and delivery models
- ▶ more emphasis on rostering and team based care

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Primary Care Model (PCM)	Year Intro.	% of FPs		Avg. Group Size (2010-11)
		2000-01	2010-11	
Traditional fee-for-service (FFS)	-	98.4%	35.1%	1

Non-Capitated

Family Health Groups (FHG)	2003	-	23.8%	12
Comprehensive Care Management (CCM)	2005	-	2.4%	1

Capitated

Family Health Organizations (FHOs)	2006	-	23.7%	9
Family Health Networks (FHNs)	2002	-	2.7%	8

Source: authors' calculations. 2010-11 distribution accounts for 87.7% of FPs.

What do we know about the basic characteristics of primary care models (PCM)?

Specifically

1. What are some physician and practice characteristics, by PCM?
 - ▶ The number of patients by enrolment status
 - ▶ The average number of visits per patient
2. What are some basic patient visit patterns?
 - ▶ The percentage of patients who see only their rostering family physician/group
 - ▶ Which patients see more than one physician in their rostering group
3. What about the distribution of practice sizes?
4. What about the number and type of visits?

Administrative Data Sources

Years: April 1, 2010 to March 31, 2011

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Data Sources

1. Corporate Provider Database (CPDB)
 - ▶ age, sex, specialty, years since licensing, country of medical graduation (IMG), locum status, PCM, rurality of practice location
2. Ontario Health Insurance Plan (OHIP) Claims History Database
 - ▶ claims submitted by MDs
3. Client Agency Program Enrolment (CAPE)
 - ▶ patient enrolments

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4. Registered Persons Database (RPDB)
 - ▶ eligible OHIP beneficiaries demographic data (age / sex)
5. Family Health Team (FHT) and general practice specialists data
 - ▶ MDs who are part of a FHT or who sub-specialize

Selecting Family Physicians (FP)

Family Physicians (FP)

- ▶ “General Practitioners” or “Family Physician” specialty (CPDB)
- ▶ “Active”
 - ▶ billed at least \$1 for common fee codes (OHIP)
 - ▶ A007 (intermediate assessment), A001 (minor assessment) and A003 (general assessment)
 - ▶ enrolled at least one patient in a PCM during the year
- ▶ Deleted outliers
 - ▶ practice size exceeds 10,000, while % of total billing represented by A007, A001, A003 was under 20%

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of FPs = 11,626

of Patients = 13.9 million (approximately)

Variable Definitions: Physician Characteristics

Primary Care Model

- ▶ not affiliated with any PCM all year are assigned as FFS
- ▶ affiliated with the same PCM all year are assigned the PCM
 - ▶ Rural Models: the Rural and Northern Physician Group Agreement (RNPGA), Group Health Centre (GHC), Community Sponsored Agreements, and the Weeneebayko Area Health Authority (WAHA)
- ▶ switched PCMs during the year, are assigned as:
 - ▶ CCM and FHG
 - ▶ FHN and FHO
 - ▶ all else are assigned to “other”

International Medical Graduates (IMGs)

- ▶ FP with medical degree outside of Canada and the United States

Practice Rurality

- ▶ Based on Rurality Index of Ontario (RIO)
- ▶ values between 0 (urban) and 100 (very rural)

Variable Definitions: Patient Visits

Patient Visit

- ▶ All claims by the same physician for the same patient on the same day
- ▶ Excluded:
 - ▶ laboratory services (“L” fee codes)
 - ▶ walk-in services (fee code A888A)
 - ▶ Emergency Department services (“H” fee codes)

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Service Type

1. Primary care
 - ▶ services included in the FHO basket of capitated services
2. Walk-in and emergency
 - ▶ services with a Fee Schedule Code of A888A, or “H” codes
3. Other services
 - ▶ All other non-laboratory services provided by FPs

What are some basic physician and practice characteristics, by primary care model?

Family Physician Characteristics by PCM

Primary Care Model	Family Physician Characteristics				
	# (col. %)	Mean Age	% Female	% IMG	Mean RIO
1. FFS	4,087 (35.1 %)	51.5	36	23	8.2
2. Non-Capitated					
FHG	2,768 (23.8 %)	52.6	39	33	4
CCM	279 (2.4 %)	56.0	30	41	11.2
Rural models	179 (1.5 %)	49.9	33	12	63.3
CCM and FHG	99 (1.0 %)	50.1	42	38	3.5
Sub-Total	3,325 (28.6 %)	52.7	38	33	7.8
3. Capitated					
FHO	2,757 (23.7 %)	50.9	40	15	16
FHN	312 (2.7 %)	49.2	37	12	49.1
FHN and FHO	124 (1.1 %)	49.3	48	11	14.8
Sub-Total	3,193 (27.5 %)	50.6	40	15	19.2
4. Other	1,021 (8.8 %)	47.7	48	30	13.1
Total	11,626 (100 %)	51.3	38	24	11.5

Distribution of FPs

- ▶ FFS is the single largest PCM (35.1%)
- ▶ FHG and FHO are the next largest PCMs, approximately the same size (~24%)

Family Physician Characteristics by PCM

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Age / sex of FPs

- ▶ Older (56.0) and less female (30%) in CCMs
- ▶ Younger (47.7) and more female (48%) transitioning between PCMs

Mean Patients Seen or Rostered (row %)

Primary Care Model	Not Rostered (seen)	Rostered (not seen) (seen)		Total
1. FFS	1,332 (100.0)	-	-	1,332
2. Non-Capitated				
FHG	1,277 (48.3)	372 (14.1)	994 (37.6)	2,643
CCM	704 (32.9)	364 (17.0)	1,073 (50.1)	2,142
Rural models	450 (30.6)	376 (25.6)	644 (43.8)	1,470
CCM and FHG	1,117 (47.7)	436 (18.6)	788 (33.7)	2,342
Sub-Total	1,179 (46.6)	373 (14.8)	976 (38.6)	2,528
3. Capitated				
FHO	595 (28.5)	441 (21.2)	1,048 (50.3)	2,085
FHN	627 (35.1)	364 (20.4)	794 (44.5)	1,785
FHN and FHO	402 (21.6)	673 (36.2)	785 (42.2)	1,860
Sub-Total	591 (28.9)	443 (21.6)	1,013 (49.5)	2,046
4. Other	723 (47.2)	297 (19.4)	512 (33.4)	1,532
Total	1,031 (54.6)	254 (13.5)	602 (31.9)	1,888

Practice Size

- ▶ The average practice size 1,888 patients
- ▶ Approximately the same for capitated models (2,046)
- ▶ Much higher for non-capitated models (2,528)

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Rostering

- ▶ Majority of patients are rostered in all PCMs (except FFS)
- ▶ Capitated models have lower share (28.9%) of not rostered patients than non-capitated models (46.6%)

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Rostering but not seen

- ▶ Majority of rostered patients make at least one visit
- ▶ Approximately 28% of rostered patients in non-capitated models are not seen, and 30% in capitated models

Mean Visits per patient

Primary Care Model	Roster Status			Total
	Not	Part year	All Year	
1. FFS	3.2	-	-	3.2
2. Non-Capitated				
FHG	2.5	3.1	3.4	3.0
CCM	3.0	3.2	3.9	3.6
Rural models	2.4	2.4	2.5	2.4
CCM and FHG	2.1	3.2	3.4	2.7
Sub-Total	2.5	3.0	3.4	3.0
3. Capitated				
FHO	2.1	2.8	2.6	2.4
FHN	2.0	3.3	2.8	2.5
FHN and FHO	2.1	2.7	2.4	2.2
Sub-Total	2.1	2.8	2.6	2.4
4. Other	1.9	2.6	2.8	2.2
Total	2.6	2.9	3.0	2.8

Visits

- ▶ The average patient makes 2.8 visits
- ▶ Higher in FFS (3.2) and non-capitated models (3.0)
- ▶ Lower in capitated models (2.4)

Mean Visits per patient

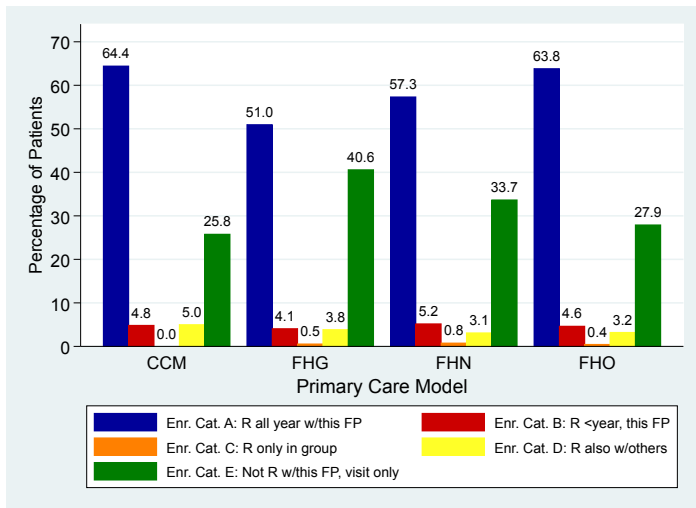
Primary Care Model	Roster Status			Total
	Not	Part year	All Year	
1. FFS	3.2	-	-	3.2
2. Non-Capitated				
FHG	2.5	3.1	3.4	3.0
CCM	3.0	3.2	3.9	3.6
Rural models	2.4	2.4	2.5	2.4
CCM and FHG	2.1	3.2	3.4	2.7
Sub-Total	2.5	3.0	3.4	3.0
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Total	2.6	2.9	3.0	2.8

Rostering and visits

- ▶ not rostered patients visit less (2.6) than patients rostered all year (3.0)
- ▶ not rostered FHG patients make 0.9 fewer visits than rostered FHG patients
- ▶ not rostered FHO patients make 0.5 fewer visits than rostered FHO patients

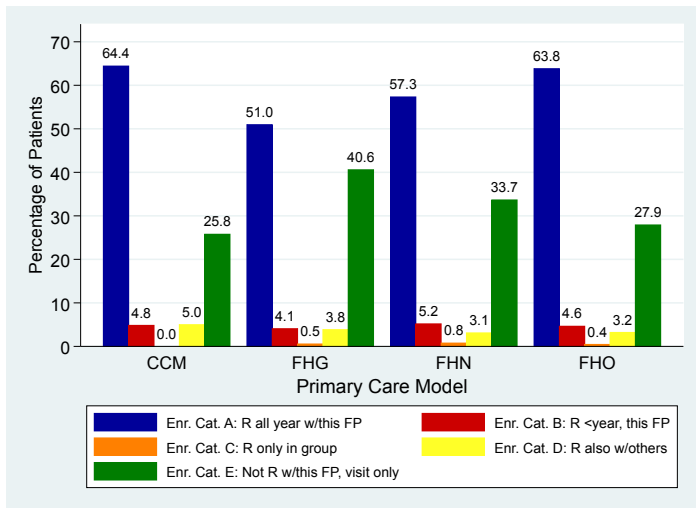
What are some basic patient visit patterns?

% of Patients by Enrolment Category, Selected PCM



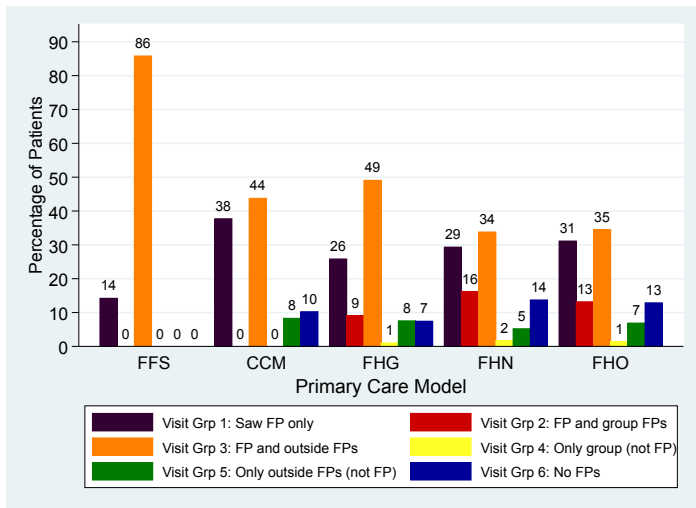
- ▶ Most patients are:
 - ▶ Rostered all year with FP (Cat. A)
 - ▶ Not Rostered with FP, visit only (Cat. E)

% of Patients by Enrolment Category, Selected PCM



- ▶ Small % (3% to 5%) are also rostered with other FPs (Cat. D)

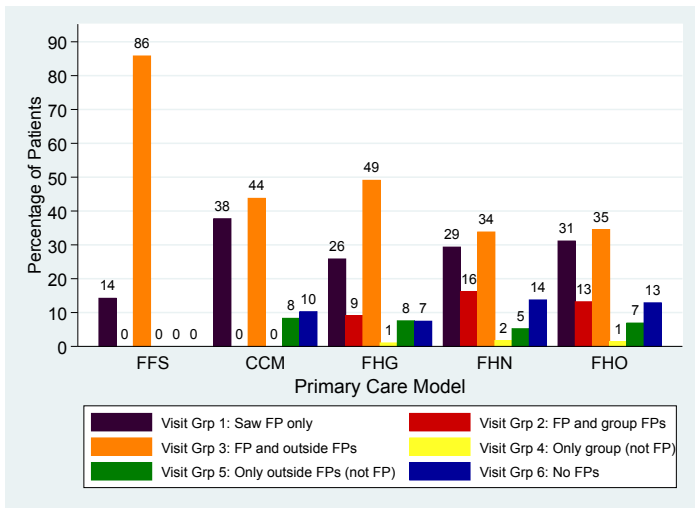
% of Patients by Visit Group, Selected PCM



► Most patients:

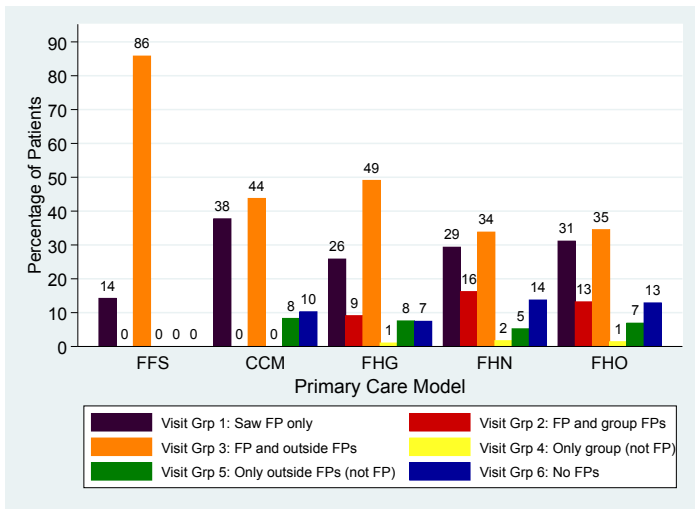
- Saw FP only (Grp. 1)
- Saw FP and outside FPs (Grp. 3)

% of Patients by Visit Group, Selected PCM



- ▶ More patients “saw FP only” in newer PCMs
 - ▶ FHO (31%) & FHG (26%)
 - ▶ FFS (14%)

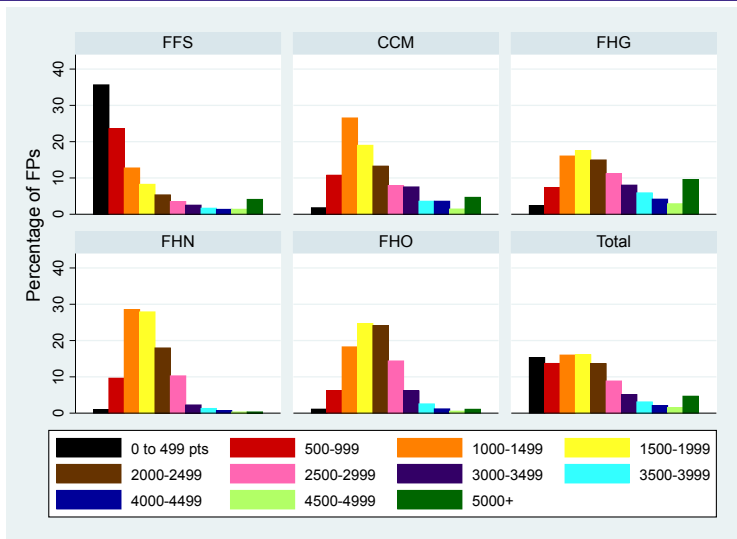
% of Patients by Visit Group, Selected PCM



- ▶ PCMs display limited within-group coverage
 - ▶ a low % of FP and group FP (Grp. 2)
 - ▶ high % of FP and outside FP (Grp. 3)
 - ▶ recall: walk-in and emergency services have been excluded

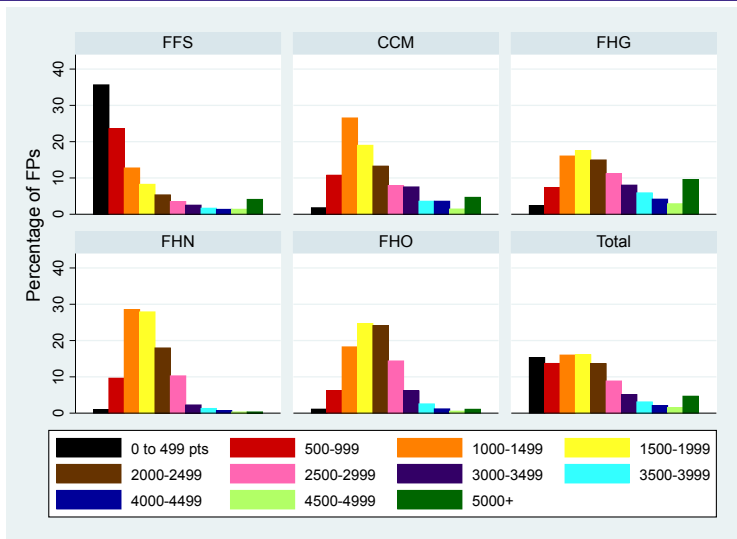
What about the distribution of practice sizes?

% of FPs by Practice Size, Selected PCMs



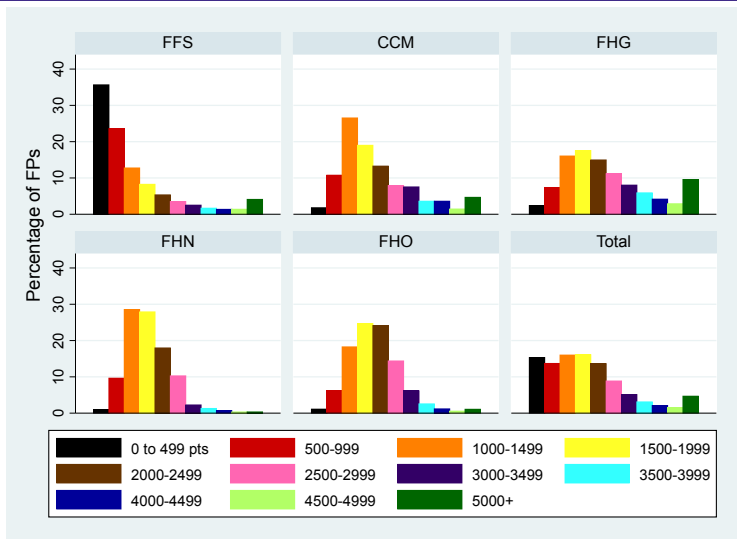
► most common practice size between 1,000 and 2,500 patients

% of FPs by Practice Size, Selected PCMs



► 60% of FPs in FFS have practices of less than 1,000 patients

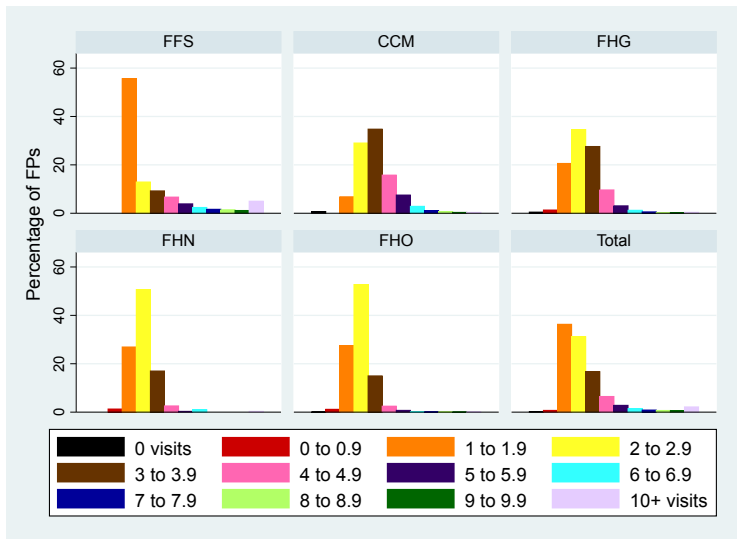
% of FPs by Practice Size, Selected PCMs



- ▶ a sizeable percentage (4.7%) of FPs with practice sizes exceeding 5,000
 - ▶ 91% of them are in FFS or FHGs

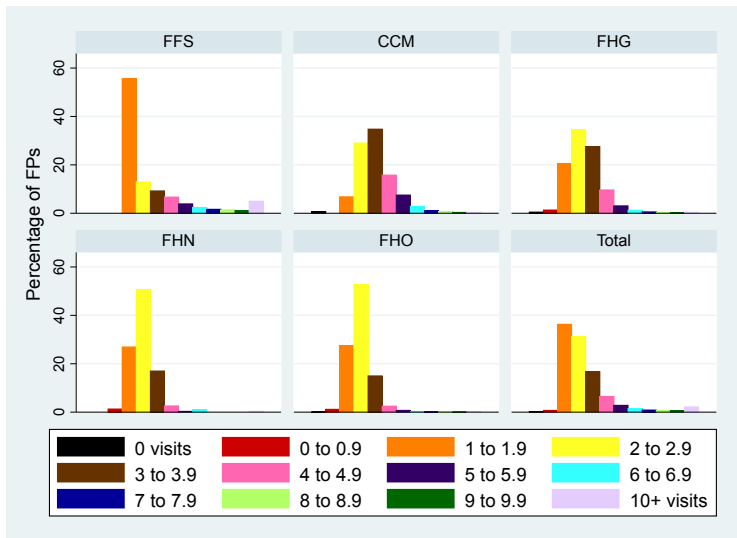
What about the number and type of visits?

% of FPs by Mean Number of Visits per Patient, Selected PCMs



- ▶ 71% to 87% of FPs in newer PCMs see their patients an between 2 and 5.9 times
 - ▶ only 33% of FFS FPs are in this group

% of FPs by Mean Number of Visits per Patient, Selected PCMs



- ▶ FFS group is somewhat polarized
 - ▶ high concentration (56%) in the “1 to 1.9” visits category
 - ▶ relatively large % seeing their patients 6 or more times

Percentage of Total Visits by Service Type

Primary Care Model	Primary care	Walk-in or Emerg.	Other
1. FFS	54.8	14.6	30.6
2. Non-Capitated			
FHG	75.1	3.0	21.9
CCM	76.4	2.0	21.5
Rural models	63.3	5.0	31.7
CCM and FHG	77.0	2.6	20.4
Sub-Total	74.6	3.1	22.3
3. Capitated			
FHO	67.8	3.4	28.8
FHN	56.7	9.6	33.7
FHN and FHO	64.5	4.8	30.7
Sub-Total	66.6	4.1	29.3
4. Other	68.8	5.1	26.1
Total	64.9	7.6	27.5

Summary of Findings

Interpretation of Results

New PCMs have successfully attracted the majority of FPs

- ▶ although traditional FFS remains the single largest PCM (35.1%)

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Some marked differences across PCMs

- ▶ FFS outlier with respect to practice size and mean number of visits per patient
 - ▶ FFS FPs work sporadically in the year, with small practices, seeing patients more or less often than other PCMs
- ▶ FHGs and CCMs attract FPs with the largest practices
- ▶ Majority of patients in most popular PCMs enrolled with one FP all year
- ▶ Little within-group coverage of visits, especially among FHGs

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