

NASPGHAN Pediatric Gastroenterology Workforce Survey

Table 1. Basic demographics by Country

		USA Region				Country		1996	
		North east	Mid west	South	West	USA	Canada	USA	Canada
Number of identified pediatric gastroenterologists*		200	146	183	119	650	46	624	48
Gender	Male	63%	73%	81%	76%	73%	54%	76%	77%
	Female	37%	27%	19%	24%	27%	46%	24%	23%
Racial Category	Asian	11%	13%	12%	13%	12%	5%		
	Black	2%	4%	3%	2%	3%	0%		
	White	85%	80%	79%	85%	82%	89%		
	"Other"	1%	4%	5%	0%	3%	5%		
Hispanic	Hispanic or Latino	7%	10%	12%	11%	9%	3%		
	Not Hispanic	93%	90%	88%	89%	91%	97%		
Age (Years)	<=40	17%	18%	18%	18%	18%	41%		
	41-55	64%	65%	65%	57%	63%	41%		
	56+	19%	17%	17%	25%	19%	19%		
American Board of Pediatrics certification	Board Eligible	10%	5%	8%	12%	9%	53%		
	Board Certified	90%	86%	90%	84%	88%	13%		
	Neither	0%	9%	2%	3%	3%	34%		
Royal College of Physicians of Canada certification	Board Eligible	2%	1%	5%	1%	2%	58%		
	Board Certified	1%	6%	6%	1%	3%	26%		
	Neither	96%	94%	90%	98%	94%	16%		
Either American Board or Royal College certification	Board Certified	90%	87%	90%	84%	88%	37%	76%**	86%**
Member of NASPGHAN	Yes	96%	95%	93%	94%	95%	100%		
	No	4%	5%	7%	6%	5%	0%		
Country where Medical Degree obtained	USA	83%	80%	80%	88%	82%	6%		
	Canada	2%	0%	2%	0%	1%	91%		
	Mexico	1%	2%	1%	1%	1%	0%		
	Other	15%	18%	17%	11%	15%	3%		
Citizenship	USA	95%	92%	95%	96%	95%	9%	90%**	
	Canada	0%	0%	2%	0%	1%	91%		91%
	Other	5%	8%	2%	4%	5%	0%		

\*Region not identified for two USA respondents

\*\* p<0.01

NASPGHAN Pediatric Gastroenterology Workforce Survey

Table 2. Summary of employment

		USA Region				Country			1996	
		Northeast	Mid west	South	West	USA	Canada	Total	USA	Canada
Employment status	University/Academic	59%	68%	47%	50%	56%	87%	58%	55%	82%
	Private practice	11%	14%	39%	32%	23%	5%	22%	21%	9%
	Hospital or Clinic	25%	15%	13%	9%	16%	8%	16%	11%	9%
	HMO	0%	1%	0%	8%	2%	0%	2%	3%	0%
	Pharmaceutical or formula company	3%	1%	0%	1%	1%	0%	1%		
	Other	1%	1%	0%	1%	1%	0%	1%	8%	0%
	Government	1%	0%	1%	0%	1%	0%	1%	2%	1%
Academic appointment	Yes	92%	88%	71%	79%	83%	97%	84%		
	No	8%	12%	29%	21%	17%	3%	16%		
Academic rank	Instructor	7%	6%	3%	7%	6%	8%	6%		
	Assistant Professor	41%	37%	39%	30%	38%	47%	39%		
	Associate Professor	27%	33%	26%	30%	29%	14%	27%		
	Full Professor	24%	24%	32%	33%	27%	31%	28%		
Academic track	Adjunct	6%	5%	8%	10%	7%	12%	7%		
	Clinical	65%	61%	56%	61%	61%	55%	61%		
	Tenure	29%	34%	36%	29%	32%	33%	32%		
Practice type	General	3%	2%	1%	6%	3%	0%	2%		
	Multispecialty Group									
	Pediatric	27%	31%	33%	26%	29%	14%	28%		
	Multispecialty Group									
	Pediatric GI Group	66%	57%	47%	54%	57%	78%	58%		
Solo Practice	5%	10%	20%	15%	12%	8%	11%			
Years practiced since fellowship	0-5 years	17%	18%	16%	19%	17%	32%	19%		
	6-10 years	20%	22%	22%	13%	20%	16%	19%		
	11-15 years	22%	19%	25%	18%	21%	16%	21%		
	16-20 years	17%	16%	14%	16%	16%	13%	16%		
	>20 years	24%	25%	23%	34%	26%	24%	26%		
Work hours	Full time (>= 40 hours/wk)	91%	95%	93%	92%	92%	84%	92%	97%**	95%
	Part time	9%	5%	7%	8%	8%	16%	8%		

\*\* p<0.01

Table 3. Mean proportion of time spent in various activities

		USA Region 2004				2004			1996	
		North east	Mid west	South	West	USA	Canada	Total	USA	Canada
Proportion Effort	Outpatient GI Clinic	.37	.34	.43	.37	.38	.26	.37	.32*	.21
	Procedure	.11	.14	.15	.13	.13	.09	.13	.14	.09
	Inpt Rounds	.14	.15	.16	.14	.15	.18	.15	.14	.13
	Outpt non-GI	.02	.01	.03	.04	.03	.01	.02	.07**	.08
	Research	.14	.17	.06	.12	.12	.19	.13	.14	.20
	Teaching	.06	.05	.04	.06	.05	.07	.05	.06	.06
	Admin	.08	.07	.06	.08	.07	.10	.07	.08	.16
	Misc	.10	.09	.09	.07	.09	.10	.09	.04**	.08
Time for new patient visit (minutes)		38	38	34	43	38	42	38		
Time for follow up visit (minutes)		20	20	18	21	20	21	20		
Hours worked per week		59	60	59	60	59	57	59	62	61
Call Weekday nights/year		81	85	109	105	95	62	92		
Call Weekend days/year		27	32	43	43	36	18	34		

\* Comparing USA 1996 to USA 2004,  $p < 0.05$ ; \*\* Comparing USA 1996 to USA 2004,  $p < 0.01$   
 Sample size for Canada was too small to detect any differences.

NASPGHAN Pediatric Gastroenterology Workforce Survey

Table 4. Estimated workforce needs and recruitment.

		USA Region				Country		1996	
		North east	Mid west	South	West	USA	Canada	USA	Canada
Number of Pediatric GIs in area	Too few	59%	50%	49%	54%	53%	76%	12%**	57%
	Approximately the right number	34%	45%	43%	38%	40%	24%	58%	40%
	Too many	8%	6%	8%	8%	7%	0%	30%**	3%
Age plan to retire	<=55	5%	5%	8%	3%	5%	11%		
	56-60	14%	16%	15%	10%	14%	27%		
	61-65	49%	45%	52%	56%	50%	46%		
	66-70	22%	26%	19%	27%	23%	14%		
	70+	10%	8%	5%	4%	7%	3%		
Anticipate career change in next 5 yrs	Yes	17%	13%	13%	14%	14%	18%		
	No	83%	87%	87%	86%	86%	82%		
If yes, plan to change career to	Private Practice	30%	6%	21%	25%	21%	0%		
	HMO	0%	0%	0%	0%	0%	0%		
	University/Academic	30%	12%	29%	25%	24%	50%		
	Hospital Or Clinic	15%	29%	14%	17%	19%	0%		
	Government	0%	6%	0%	0%	2%	0%		
	Pharmaceutical Or Formula Company	10%	6%	7%	0%	6%	0%		
	Retire	5%	35%	21%	33%	22%	50%		
	Other	10%	6%	7%	0%	6%	0%		
Percent of practices currently recruiting GI physicians		63%	61%	49%	46%	55%	50%		
Of those recruiting, number of physicians being recruited		2.0	1.8	1.6	1.4	1.7	1.5		

\*\* p<0.01

Table 5. Total annual income and proportion of income from addition sources.

		Annual Income (including "additional income")						Portion from "additional income"					
		Male		Female		Total		Male		Female		Total	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Practice Location	Northeast	218	79	169	50	203	75	12	17	16	39	14	26
	Midwest	194	53	163	35	188	51	7	19	1	2	6	18
	South	211	83	140	53	195	83	21	32	4	14	17	30
	West	196	90	173	19	193	84	29	59	5	8	25	55
	Canada	167	22	134	66	153	47	7	14	2	3	5	11
Employment	Academic-Asst Prof	136	24	143	56	139	44	8	23	14	40	11	32
	Academic-Assoc Prof	175	45	148	29	168	43	11	17	4	8	10	15
	Academic-Full Prof	205	60	171	34	200	58	15	20	4	7	13	19
	Hospital or Clinic	216	39	185	26	212	39	14	19	4	5	13	18
	Private practice	241	102	166	56	226	99	27	56	4	15	22	51
Practice	Solo practice	250	137	155	58	228	129	11	26	9	21	10	25
	Pediatric GI group	199	66	162	44	188	63	18	43	7	24	15	39
	Pediatric multispecialty group	195	51	132	67	188	56	17	23	14	38	17	25
	General multispecialty group	213	67	150		208	67	27	41	3	4	23	39
Years since Fellowship	0-5 years	167	67	134	64	155	67	28	64	3	5	19	53
	6-10 years	181	55	165	48	175	53	21	52	18	44	20	49
	11-15 years	213	72	155	39	198	70	10	20	1	3	8	18
	16-20 years	222	87	162	38	211	84	18	29	7	9	16	26
	>20 years	209	81	163	54	203	80	16	25	4	7	14	24
Total		204	77	157	48	193	74	17	36	7	25	15	34

Table S1. Distribution of time spent in various activities in half days

Number of Half Days		USA Region				Country	
		North east	Midwest	South	West	USA	Canada
Outpatient GI Clinic	75 <sup>th</sup> %	6	5	6	6	6	3
	Median	4	4	5	4	4	2
	25 <sup>th</sup> %	3	2	3	2	3	2
Procedure	75 <sup>th</sup> %	2	2	2	2	2	1
	Median	1	1	2	1	1	1
	25 <sup>th</sup> %	1	1	1	1	1	1
Inpatient rounds	75 <sup>th</sup> %	2	2	3	2	2	3
	Median	1	2	2	1	1	2
	25 <sup>th</sup> %	1	1	1	1	1	1
Outpatient non-GI	75 <sup>th</sup> %	0	0	0	0	0	0
	Median	0	0	0	0	0	0
	25 <sup>th</sup> %	0	0	0	0	0	0
Research	75 <sup>th</sup> %	2	2	1	2	2	4
	Median	1	1	0	0	1	2
	25 <sup>th</sup> %	0	0	0	0	0	1
Teaching	75 <sup>th</sup> %	1	1	1	1	1	1
	Median	1	1	0	1	1	1
	25 <sup>th</sup> %	0	0	0	0	0	0
Administrative activities	75 <sup>th</sup> %	1	1	1	1	1	2
	Median	0	1	0	1	0	1
	25 <sup>th</sup> %	0	0	0	0	0	0
Miscellaneous	75 <sup>th</sup> %	1	1	1	1	1	1
	Median	0	0	0	0	0	1
	25 <sup>th</sup> %	0	0	0	0	0	0
Time for new patient visit (minutes)	75 <sup>th</sup> %	45	45	40	60	45	45
	Median	40	40	30	40	35	45
	25 <sup>th</sup> %	30	30	30	30	30	30
Time for follow up visit (minutes)	75 <sup>th</sup> %	30	20	20	30	25	25
	Median	20	20	15	20	20	20
	25 <sup>th</sup> %	15	15	15	15	15	15
Hours worked per week	75 <sup>th</sup> %	70	70	65	70	68	70
	Median	60	60	60	60	60	60
	25 <sup>th</sup> %	50	55	50	50	50	50
Call Weekday nights worked per year	75 <sup>th</sup> %	120	120	146	137	130	85
	Median	58	60	86	79	65	60
	25 <sup>th</sup> %	20	38	40	45	35	24
Call Weekend days worked per year	75 <sup>th</sup> %	34	36	52	51	47	26
	Median	24	24	34	26	26	14
	25 <sup>th</sup> %	10	15	22	19	16	10

Table S2. Specific types of services

		USA Region				Country		1996	
		North east	Mid west	South	West	USA	Canada	USA	Canada
Perform more than 50 endoscopies/yr	Yes	81%	86%	90%	78%	84%	77%	78%**	57%*
	No	19%	14%	10%	22%	16%	23%	22%	43%
Perform ERCP without supervision	Yes	2%	4%	5%	10%	5%	6%		
	No	98%	96%	95%	90%	95%	94%		
Involved with transplants	Yes	23%	45%	27%	38%	32%	43%		
	No	77%	55%	73%	62%	68%	57%		
If yes, type of program	Liver	87%	84%	88%	75%	83%	50%		
	Small Bowel	0%	8%	3%	3%	4%	21%		
	Both	13%	8%	9%	22%	13%	29%		
Half days involved with transplants for those in transplant centers	Mean	1.12	1.22	1.18	1.47	1.25	1.54		
	Median	0.5	0.5	1	1	1	1.5		
	25 <sup>th</sup> %	0.1	0.2	0.5	0.5	0.2	1		
	75 <sup>th</sup> %	1	1.7	1	1	1	2		
Practice >50% Pediatric Hepatology	Yes	4%	12%	4%	13%	8%	11%		
	No	96%	88%	96%	88%	92%	89%		
Practice >50% Pediatric Nutrition	Yes	7%	8%	3%	7%	6%	6%		
	No	93%	92%	97%	93%	94%	94%		
If yes, then also trained in Pediatric GI	Yes	100%	88%	100%	83%	93%	50%		
	No	0%	13%	0%	17%	7%	50%		

\*\* p<0.01; \* p<0.05

Table S3. Grant funding

	USA Region				Country	
	Northeast	Midwest	South	West	USA	Canada
Percent of physicians who receive a portion of salary from grants	22%	30%	16%	30%	24%	11%
Of those who have grants, source of grant funds						
Federal	56%	40%	21%	73%	48%	25%
State	3%	0%	0%	4%	3%	0%
Local	3%	3%	5%	4%	4%	0%
Institutional	9%	10%	11%	8%	10%	25%
Other or unstated*	59%	60%	84%	42%	61%	50%
Percentage of salary from grants for recipients of grant funding	50%	54%	21%	49%	45%	47%
Of those with grant funding, percent of salary paid by source.						
Federal	25%	20%	6%	34%	22%	25%
State	2%	0%	0%	0%	1%	0%
Local	1%	0%	0%	0%	1%	0%
Institutional	1%	3%	3%	1%	2%	8%
Other or unstated	21%	30%	17%	14%	20%	14%

\* Note: Columns do not add to 100% because individuals can receive funds from various sources.



Table S4. Practice heads report of the use of nurse practitioners and physician assistants.

	USA Region				Country		1996*	
	North east	Mid west	South	West	USA	Canada	USA	Canada
Practice Heads responding (n)	51	31	64	42	189	12		
Practices that include PA/nurse practitioners	60%	65%	44%	62%	55%	17%	16%**	27%
Number of PA/nurse practitioner per practice	1.7	2.4	2.7	1.7	2.1	3.0		
Mean half days per each PA/nurse practitioner	4.9	4.5	5.8	6.3	5.4	6.0		

\*In 1996 the number of nurse practitioners was asked of all GI physicians. In 2004, it was only asked of department heads

\*\* p<0.01

NASPGHAN Pediatric Gastroenterology Workforce Survey

Table S5. Rate of pediatric gastroenterologists per one million children. Maximum is computed by assigning the non-respondents as pediatric gastroenterologists at the same rate as the respondents.

	Population 0-17 <sup>2,3</sup>	Pediatric GI		Pediatric GI per Million Children		
		Actual Respondents	Maximum	Actual Respondents	Maximum	1996
Northeast	16,677,581	200	227	12.0	13.6	12.7
Midwest	16,486,817	146	165	8.9	10.0	8.1
South	25,154,102	183	208	7.3	8.3	9.1
West	22,190,254	119	135	5.4	6.1	6.9
USA Total	80,508,754	650	738	8.1	9.2	9.1
Canada	6,966,145	46	52	6.6	8.2	6.8

NASPGHAN Pediatric Gastroenterology Workforce Survey

Table S6. Further distributional characteristics of annual income.

		Total Annual Income (excluding benefits)														
		Male					Female					Total				
		n	25th	Median	75th	Mean	n	25th	Median	75th	Mean	n	25th	Median	75th	Mean
Practice Location	Northeast	56	166	200	250	218	21	123	180	200	169	77	151	195	238	203
	Midwest	51	150	190	220	194	12	130	162	190	163	63	150	183	215	188
	South	69	163	200	230	211	19	110	133	160	140	88	150	180	220	195
	West	51	150	175	225	196	10	153	180	185	173	61	150	180	220	193
	Canada	10	154	160	187	167	6	120	150	176	134	16	136	160	180	153
Employment	Academic-Asst Prof	21	115	140	151	136	21	110	128	172	143	42	113	135	161	139
	Academic-Assoc Prof	38	148	170	190	175	14	127	138	171	148	52	140	160	190	168
	Academic-Full Prof	64	165	193	220	205	11	150	175	190	171	75	162	188	215	200
	Hospital or Clinic	31	190	220	240	216	4	165	180	205	185	35	180	210	237	212
	Private practice	73	175	225	279	241	18	150	180	200	166	91	165	207	250	226
Practice	Solo practice	34	160	210	300	250	9	138	178	190	155	43	155	200	287	228
	Pediatric GI group	116	155	184	225	199	46	128	158	190	162	162	150	180	220	188
	Pediatric multispecialty group	65	158	180	220	195	9	100	120	190	132	74	153	180	220	188
	General multispecialty group	15	159	223	270	213	2	150	150	150	150	17	150	220	250	208
Years since Fellowship	0-5 years	20	110	150	200	167	10	110	123	176	134	30	110	138	200	155
	6-10 years	41	145	170	205	181	18	125	158	200	165	59	135	168	200	175
	11-15 years	44	160	202	250	213	17	132	155	190	155	61	153	190	230	198
	16-20 years	45	175	208	258	222	9	130	152	170	162	54	165	200	240	211
	>20 years	86	165	190	225	209	13	150	180	190	163	99	165	186	220	203
Total		236	155	190	230	204	67	125	155	190	157	303	150	180	220	193

Table S7. Income by Location.

Income in 1000's		Practice Location									
		Northeast		Midwest		South		West		Canada	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Employment	Academic-Asst Prof	158	52	140	22	118	25	131	27	165	74
	Academic-Assoc Prof	178	39	176	59	159	32	146	19	214	40
	Academic-Full Prof	227	86	197	28	188	50	192	46	219	24
	Hospital or Clinic	198	66	197	36	212	59	202	86	98	105
	Private practice	245	100	222	62	227	109	211	110	220	
Years in practice	0-5 years	132	44	186	111	162	52	179	53	130	79
	6-10 years	168	42	179	42	177	58	180	69	245	
	11-15 years	218	55	207	63	199	93	177	46	200	12
	16-20 years	226	66	186	44	214	55	219	140	234	12
	>20 years	227	95	190	30	215	102	195	82	225	35

Figure S1. Income by gender and Academic Rank or Private Practice

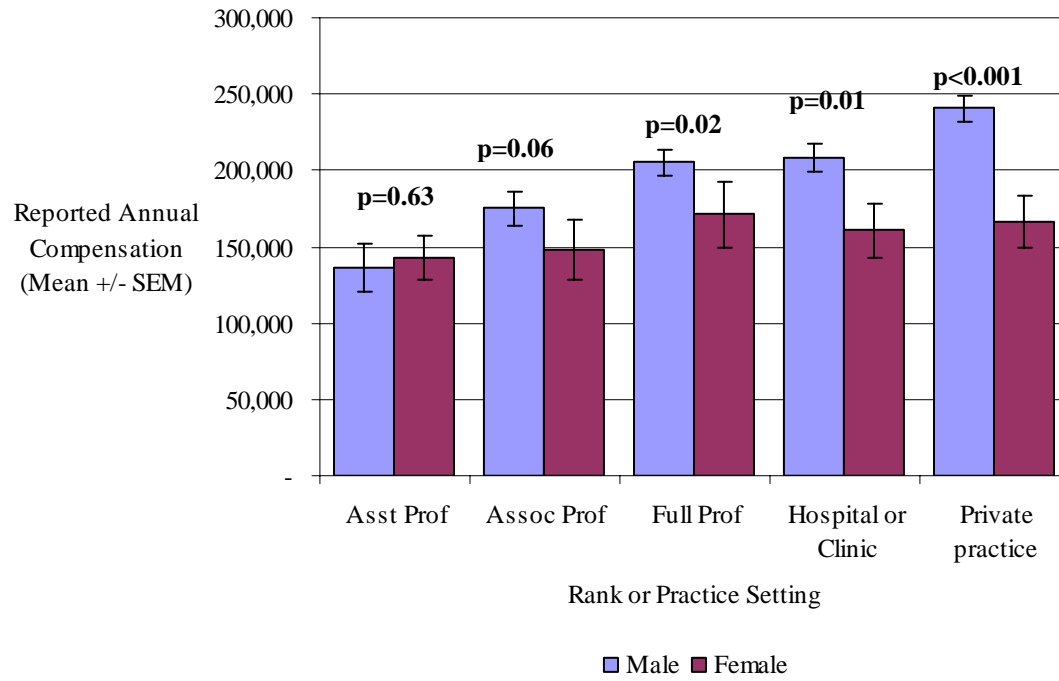


Figure S2. Income by gender and years since leaving Fellowship.

