BRIEF REPORT

Factors Influencing Changing Scopes of Practice Among Contemporary Graduates of the Nation's Largest Family Medicine Residency

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Background: **John Peter Smith (JPS) Hospital Family Medicine Residency participated in both the P4 (Preparing the Personal Physician for Practice) and LOT (Length of Training) projects, and is known for its emphasis on preparing physicians for full-scope practice. Scope of practice outcomes among graduates of these programs are previously described, but how and why the scope of practice of these physicians change in their early career merits further exploration.**

Methods: **A structured questionnaire was sent to all JPS graduates who matriculated as interns in the years 2007 to 2016 with information on cognitive and procedural scope of practice. Graduates were asked about their scope of practice both in their initial jobs out of residency and their current jobs. They were also asked about the forces affecting their scope of practice with both structured and open-ended questions. Responses were analyzed quantitatively and through qualitative thematic analysis.**

Results: **A total 184 graduates provided information about practice scope. Graduates stopped providing inpatient care for children (9.2%), prenatal care (8.8%), long-acting reversible contraception (7.8%), ICU care of adults (7.8%), joint injections (7.4%), and inpatient care of adults (6.9%) at the highest rates between initial and current jobs. Scope of practice changes over time found to be statistically significant included inpatient care of children, ICU care of adults, inpatient care of adults, nursing home, substance use disorder including medication assisted therapy, and obstetric deliveries. The most common reasons for change were personal preference and work-life balance, rather than institutional and related systematic barriers.**

Conclusion: **In the graduates of one institution, it is common for the scope of practice to change over time, both by discontinuing and adding services. Changes seem most driven by choice and work-life balance, rather than outside pressures or a feeling of inadequate preparation for practice. (J Am Board Fam Med 2025;38:133–138.)**

Keywords: **Academic Training, Family Medicine, Health Services, Occupational Burnout, Physicians, Residency, Scope of Practice, Surveys and Questionnaires**

The John Peter Smith Hospital Family Medicine Residency program (JPS), located within the Tarrant County Hospital District in Fort Worth, Texas, is the largest family medicine training program in the country. The program has long had a focus on preparing graduates for full-scope practice in rural, global, and urban underserved environments. JPS has participated in 2 national family medicine training projects, the P4 (preparing the personal physician for practice)[1] and the ACMGE Length of training (LOT) study.[2] As part of both of these projects, JPS developed and implemented optional 4-year training tracks with unique areas of emphasis (AOEs) intended to

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build expanded skill sets. The results of these innovations on the scope of practice of graduates of the program has been previously described, with 4-year AOE graduates demonstrating a broader range of actively practiced cognitive and procedural skills and a higher propensity to practice among vulnerable populations.[3] This is consistent with the experience of other P4 programs.[4]

Comprehensiveness and a broad scope of practice among family physicians is important both to individuals and to the health care system. An understanding of the forces affecting scope of practice among contemporary graduates is important, with implications for workforce development, training, and advocacy. Numerous forces may be contributing to temporal changes in scope of practice including insurance regulation, healthcare system consolidation, credentialing barriers, burnout, personal choice, or inadequacy of training preparation. JPS, with its large cohort of residents typically matriculating with full-scope practice as a goal and its targeted program innovations focused on training for that goal represents an opportunistic lens through which to explore these themes, helping to determine which may be having the most effect.

Methods

We designed a mixed-methods study using a structured questionnaire surveying all JPS family medicine graduates who matriculated as interns in the years 2007 to 2016, encompassing both the P4 and LOT projects. 220 individuals received the Qualtrics survey, sent via e-mail in July of 2021. Those for whom contact information was available received text message reminders for completion. Graduates were asked about practice location and about their scope of practice in both their initial job out of residency as well as their current job. A range of cognitive (ie, substance use disorder, prenatal care, HIV or Hepatitis C management) and procedural skills were explored as well as settings of care (inpatient, outpatient, ICU, nursing home). Respondents were asked to rate the forces contributing most to their scope of practice on a Likert scale of 1 to 5 with 1 being little to no effect and 5 being a large effect. The cognitive and procedural services surveyed were chosen based on existing literature in family medicine workforce evaluation and on author experience in residency education. Respondents were then given the opportunity to provide open-ended responses to the question "what else would you like to tell us about your scope of practice?" Before thematic content analysis, survey data were deidentified, and the authors were blinded to participant identity. Using a qualitative content analysis method, consistent themes to the open-ended responses were determined by consensus (Table 3) and then each response was coded to these themes independently by each investigator (RY, NL) who were initially blinded to one another's coding. Discordant answers were then reconciled by consensus. The portion of respondent answers coded to each theme was calculated (Table 3) and key illustrative comments extracted (Table 4).

To examine the change over time in scope of practice among graduates, initial reported scope of practice and current scope of practice were compared quantitatively using SPSS version 23 (IBM, Inc, Armonk, NY) using χ^2 tests and a P value of <0.05 to define statistical significance. Various quantitative exploratory analyses were also performed to see if changes in scope of practice over time were different among graduates with various differing characteristics including gender, a fourth year of training, or location of practice. The Fort Worth Community Institutional Review Board determined that this was nonhuman subjects research and was exempt from further review.

Results

Among 220 JPS graduates who were sent the structured questionnaire, 84.8% (184) responded. Demographics of this cohort were previously prescribed,[3] but importantly were 78.6% white and 50.2% female. A total of 54.2% were currently practicing in a health profession shortage area or medically underserved area (HPSA/MUA), 20.4% as residency faculty, 31.3% in a rural area, and 6.5% overseas. A prior published analysis of another portion of this data compared 3- and 4-year residency graduates in regards to various cognitive and procedural services.[3] This preplanned analysis explored both change over time and a separate, qualitative portion of the survey.

A quantitative look at changes of scope of practice over time among this cohort is described in Table 1. This table includes the portion of survey respondents whose first job out of residency included the cognitive or procedural service in

Table 1. Changing Scopes of Practice over Time

Practice Scope	Initially Provided	Stopped over Time	Added over Time	Did Not Change
	Scope of Practice Change over Time (Initial Job out of Residency to Current Job (% of whole cohort, number of residents) *Organized by highest rate of attrition over time*			
Inpatient care of children	34.4 (63)	10.8 (20)	7.6 (14)	81.6 (151)
Prenatal care	41.5 (76)	10.3 (19)	3.8 (7)	85.9 (159)
ICU care of adults	23.9 (44)	9.2 (17)	6.5 (12)	84.3 (156)
Inpatient care of adults	52.7 (97)	8.1 (15)	8.1 (15)	83.8 (155)
Long-acting reversible contraception (ie, IUD, Nexplanon)	48.9 (90)	7.8 (17)	5.5 (12)	86.6 (156)
Outpatient care of children	76.6 (141)	7.6 (14)	7.0 (13)	85.4 (158)
Nursing home	16.9 (31)	7.6 (14)	3.2 (6)	89.2 (165)
Joint injections	80.9 (148)	7.4 (16)	3.7 (8)	94.5 (161)
Inpatient procedures[a]	43.5 (80)	6.5 (12)	7.0 (13)	86.5 (160)
Outpatient dermatological procedures[b]	77.2 (142)	6.5 (12)	5.9 (11)	87.6 (162)
Point of care ultrasound	44.6 (82)	4.9 (9)	6.5 (12)	88.6 (164)
Substance use disorder including medication assisted therapy	27.7 (51)	3.8 (7)	7.6 (14)	88.6 (164)
Team sideline coverage	14.7 (27)	3.8 (7)	2.7 (5)	93.5 (173)
Colposcopy	24.5 (45)	3.8 (7)	2.2 (4)	94.1 (174)
Deliveries (Vaginal or cesarean)	31.5 (58)	2.7 (5)	5.9 (11)	91.4 (169)
HIV care including cART	19.0 (35)	2.2 (4)	3.8 (7)	94.1 (174)
Endoscopy (upper or lower)	9.8 (18)	1.6 (3)	1.1 (2)	97.3 (180)
Hepatitis C treatment	13.1 (24)	1.1 (2)	4.9 (9)	94.1 (174)

Abbreviations: cART, Combination Antiretroviral Therapy; IUD, intrauterine device; ICU, Intensive care unit.
[a]Any of the following: paracentesis, thoracentesis, lumbar puncture, or central venous catheterization.
[b]Any of the following: skin biopsy, excision, cauterization, or cryotherapy.

question. It is then organized by the largest percentage of graduates who initially included that service in their practice but had stopped including it at the time the survey was administered. Graduates stopped providing inpatient care for children (10.2% of survey respondents), prenatal care (8.8%), long-acting reversible contraception (7.8%), ICU care of adults (7.8%), joint injections (7.4%), and inpatient care of adults (6.9%) at the highest rates between initial and current jobs. Put in relative terms for context, 20 of 63 residents who initially offered inpatient care of children stopped providing that service (31.7%), 19 of 76 stopped providing prenatal care (25%), and 17 of 90 stopped providing long-acting reversible contraception (18.9%). Scope of practice changes over time found to be statistically significant in analysis included inpatient care of children, ICU care of adults, inpatient care of adults, nursing home, substance use disorder including medication assisted therapy, and obstetric deliveries. These significant changes encompassed both those practice scope services added and those discontinued over time. Of respondents who reported a change in practice (n = 135), there was no difference between 3-year and 4-year graduates on the reason(s) for the change (Table 2).

Open ended responses coded thematically are summarized in Table 3. Respondents' answers indicated

Table 2. Self-Reported Factors Influencing Scopes of Practice

	3-Year (n = 50)	4-Year (n = 85)	p
Personal preference	4.0	4.04	0.87
Lifestyle considerations	3.42	3.2	0.45
Organizational/ Administrative support	2.84	2.48	0.15
Lack of comfort with service	1.96	2.27	0.14
Credentialing	1.94	1.95	0.95
Malpractice insurance issues	1.69	1.63	0.73

1 – Least Important; 5 – Most Important.

Table 3. Themes Among Comments About Forces Influencing Scope of Practice

Emerging Themes Among Comments Regarding Factors Influencing Scope of Practice	
Qualitative Coding Theme	Percentage of Comments with Elements of This Theme
Personal preference for choosing a scope of practice with those things you most enjoy	48.3%
Work-life balance concerns	33.1%
Location of practice and local patient needs	31.0%
Institutional Pressure for Narrower Scope of Practice	25.2%
Lack of training or preparation	8.3%
Insurance, reimbursement, or income concerns	5.5%
Burn out/ moral injury	1.4%

the 2 largest contributors to limitations in their current scope of practice were "personal preference for choosing a scope of practice with the things you most enjoy" (48.3%) and "work-life balance" (33.1%). Practice location and local patient needs (31.0%) and institutional pressures for a narrower scope of practice (25.2%) were cited at slightly lesser rates. Lack of training (8.3%), burnout (1.4%), and insurance or reimbursement concerns (5.5%) were cited relatively infrequently.

Several exploratory subgroup analyses were performed to generate further hypotheses (data not shown). Among 4 versus 3 year graduates of the program, there were no significant differences in rates of practice scope change over time. When female graduates were compared with male graduates, only colposcopy emerged as a procedure with differing rates of practice over time with male graduates more likely to maintain or add the service ($P = .018$). Significant differences in practice change over time were also noted among rural physicians when compared with nonrural including inpatient pediatrics ($P = .007$), inpatient care of adults ($P = .047$), and nursing home care ($P = .003$). As mentioned before, these changes included both adding and discontinuing the listed services. Looking broadly at services in a vulnerable patient population, changes were significant among inpatient hospital care of adults ($P = .015$), ICU care ($P = .019$), and nursing home care ($P = .044$).

Discussion

With P4 and LOT program innovations at JPS demonstrating effects on expanded scopes of practice, we had expected that graduates would cite burnout or system forces including institutional pressures for a narrower scope as the largest impacts on limitations in their scope of practice. Few graduates cited training adequacy or burnout as primary limiting forces. The more common reasons for scope change were personal choice and work-life balance, followed by institutional forces. This implies an important distinction – that graduates are choosing, rather than being forced into narrower scopes of practice. We acknowledge that the location the graduates choose also has an impact on their practice scope. This would potentially minimize the effect of institutional forces on practice change in a data set like this (eg, graduates who want to do C-sections intentionally search for jobs in supportive institutions).

Other literature looking at impacts on graduates looking for jobs inclusive of maternity care had hypothesized that finding a job with inclusion of maternity care was a large barrier explanatory of a portion of the gap in intention versus actual practice of this skillset.[5] Recent American Board of Family Medicine (ABFM) data has suggested that generational forces may not be to blame for declines in scope of practice, as recent graduates cite intentions to practice a broader scope than that seen among current practicing family physicians.[6] Our findings were also notable in that for most individual services, graduates were similarly likely to add a service as they were to discontinue one. Viewed another way, this supports the concept that broad training still provides flexibility to graduates who may later add services that are not part of their scope in their first job out of residency.

More comprehensive scope of practice among family physicians has been associated with decreased costs to the health care system, reduced hospitalizations, and a reduction in rates of burnout.[7–9] Scope of practice also influences workforce recruitment.

Table 4. Illustrative Comments on Scope of Practice Influences

Emerging Themes Among Comments Regarding Factors Influencing Scope of Practice	
Theme	Percentage of Comments with Elements of This Theme
Personal preference for choosing a scope of practice with those things you most enjoy	"Any limitations in my scope of practice are by my choice."
	"My main driver of my scope of practice has been personal preference/desire to build a sports medicine ONLY practice within an orthopedic group."
Work-life balance concerns	"To truly do full scope medicine it requires a team who are all comfortable with the same level of medicine otherwise you never get time with family."
	"My desire to deliver babies diminished after the birth of my son, and we decided to prioritize living near family. This decision limited my scope of practice, as this took us to (large metropolitan area), where very few family medicine doctors have delivery privileges."
	"The biggest driver for me has been lifestyle. As a single mother, it is imperative that my practice be flexible, and limited to Monday-Friday 8-5."
	"It is really hard in rural practice to maintain work life balance with any additional responsibilities outside of clinic."
Location of practice and local patient needs	"In the small community we found ourselves, endoscopy was needed by our surgeon to maintain volume, so it was not desirable to the hospital to seek to provide that service. Similarly, ED coverage was provided by a dedicated, contracted group which served the hospital administration's goals."
	"Unanticipated external factors like the closure of L&D/inpatient after hospital sale and restructuring."
	"The community typically embraces the increased scope of practice from family medicine providers, yet other specialists and hospitals are resistant to embracing the increased scope of practice."
Institutional pressure for narrower scope of practice	"My residency trained me to be a doctor above and beyond what my coworkers can handle and procedures they can do."
	"After some years of practice (I had) less drive/energy to struggle against administrative set up for how (the) practice is run."
	"I have seen how much I love the full scope of Family Medicine and also the underestimate employers have of my abilities along with how markets effect this. Family medicine is the best specialty in the world, but unfortunately, times are changing (and) not in our favor."
	"Credentialing and lack of administrative support. We have to prove our ability beyond what I consider expected training."
Lack of training or preparation	"(Medication assisted treatment) would have been nice to gain more experience with as it's a huge issue everywhere."
	"(I) wouldn't be comfortable to do obstetrics or prenatal care with my level of training."
Insurance, reimbursement, or income concerns	"Private practice is easy - what does this service cost me versus how much am I reimbursed? It does not make financial sense in private practice to round on inpatients or do OB without an FQHC or employment model."
	"(The balance of) financial reward to risk and lifestyle. Obstetrics pays well, but not insanely well, and you have to do a lot to make it worthwhile."
Burn out/moral injury	"Lifestyle (was the) biggest issue because I was on call every M-F and every 3rd weekend, giving 6 actual days off per month. My patients valued how accessible I was, but it took a toll on (my) marriage and relationship with my kids, not to mention being burned out quickly."
	"Unfortunately, there are a LOT of bad doctors out there. A LOT. And a lot of bad administrators. I saw time and again how these providers harmed patients in every town in which I traveled to. And I saw the administrators back them up because they were making money."

Medical students exposed to more limited scope family medicine practices during their education have been shown to choose family medicine at lower rates.[10] Despite the apparent benefits of a broad scope of practice, comprehensiveness among family physicians has generally been declining over time with fewer practicing hospital medicine,[11] pediatric care,[12] and maternity care.[13] Prior literature has shown a gap in the rates of residents intending to practice maternity care and graduates providing the service.[14] One large ABFM cohort of 2013 graduates showed a relatively large gap across a range of services in perceived preparation and ultimate practice,[6] while another showed a declining scope of practice among graduates despite a perceived increase in the quality of preparation and training

over time.[15] Similar trends have been seen among Canadian family physicians, where self-reported definitions of "comprehensive practice" vary significantly among generations.[16] To these broad themes, we add this data on the forces seemingly most affecting a generation of contemporary graduates.

This study has important limitations, first of all being a single institution cohort. Though response rate was high, it is unknown given relatively small numbers if nonrespondents would have had a large impact on its conclusions. This was also a single temporal cross-sectional survey of graduates in the cohort, and as such the amount of time in post residency practice among individuals was variable (with the earliest graduates in practice nearly 12 years and the most recent graduates in practice 1 to 2 years). It is possible that graduates changed elements of their scope of practice multiple times in this time frame, but this survey was only designed to capture their initial job setting and that at the time of survey administration.

If scope of practice is important both to individual physicians and health systems, it is important to engage stakeholders in appropriately targeted advocacy efforts. Those targeted at enhancing the quality of residency training, reducing physician burnout, or supporting those physicians fighting credentialing barriers at individual institutions may have more limited effects on maintenance of comprehensiveness of scope than hoped. Instead, organizations of influence may need to explore means of improving and protecting work-life balance and the general palatability of a full-scope family medicine practice if newer generations are going to reverse the trends.

Conclusion

Among contemporary graduates of a single large family medicine residency program with an emphasis on full-scope training, personal-preference and work-life balance were more important factors contributing to limitations in scope of practice than burnout, institutional pressure, reimbursement, or preparation. Individual services were both added and discontinued after graduation. These themes have important implications for efforts to expand or protect family medicine's comprehensiveness of practice.

To see this article online, please go to: http://jabfm.org/content/38/1/133.full.

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