

Subspecialty Exposure during Primary Care Clerkship: Medical Student Experience, Satisfaction, and Outcomes

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Introduction

- The USF Primary Care Clerkship consists of 8 weeks of outpatient student rotations.
- Students participate in Family Medicine, Internal Medicine, Pediatrics, Women's Health, and often one or more subspecialty experience.
- Students take the NBME Family Medicine Exam ("shelf") with the Chronic Disease and Sports Medicine modules added.

	Monday am	Monday pm	Tuesday am	Tuesday pm	Wednesday am	Wednesday pm	Thursday am	Thursday pm	Friday am	Friday pm
Week 1	Orientation & Didactics	Orientation & Didactics	Family Medicine - Morsani Center	Internal Medicine - Endocrinology	General Pediatrics	Adolescent Medicine - Community Clinic	Internal Medicine - Sports Medicine	Orthopedic Surgery Clinic	Didactics	QBCE
Week 2	Family Medicine - Morsani Center	Family Medicine - Community Center	Family Medicine - Morsani Center	Internal Medicine - Endocrinology	General Pediatrics	Adolescent Medicine - Community Clinic	Internal Medicine - Sports Medicine	Orthopedic Surgery Clinic	Didactics	Didactics 1
Week 3	Family Medicine - Morsani Center	Family Medicine - Community Center	Family Medicine - Morsani Center	Internal Medicine - Endocrinology	General Pediatrics	Adolescent Medicine - Community Clinic	Internal Medicine - Sports Medicine	Orthopedic Surgery Clinic	Didactics	Didactics 2
Week 4	Family Medicine - Morsani Center	Family Medicine - Community Center	Family Medicine - Morsani Center	Internal Medicine - Endocrinology	General Pediatrics	Adolescent Medicine - Community Clinic	Internal Medicine - Sports Medicine	Orthopedic Surgery Clinic	Didactics	Didactics 3
Week 5	Women's Health - GYN	Women's Health - GYN	Women's Health - REI/IVF	Women's Health - REI/IVF	Women's Health - Breast Oncology Surgery Clinic	Women's Health - Breast Oncology Surgery Clinic	Women's Health - GYN	Women's Health - GYN	Didactics	Didactics 3
Week 6	Family Medicine - Morsani Center	Family Medicine - Community Center	Family Medicine - Morsani Center	Internal Medicine - Endocrinology	General Pediatrics	Adolescent Medicine - Community Clinic	Internal Medicine - Sports Medicine	Orthopedic Surgery Clinic	Didactics	Didactics 1
Week 7	Family Medicine - Morsani Center	Family Medicine - Community Center	Family Medicine - Morsani Center	Internal Medicine - Endocrinology	General Pediatrics	Adolescent Medicine - Community Clinic	Internal Medicine - Sports Medicine	Orthopedic Surgery Clinic	Didactics	Didactics 2
Week 8	Family Medicine - Morsani Center	Family Medicine - Community Center	Family Medicine - Morsani Center	Breaking Bad News	General Pediatrics	Adolescent Medicine - Community Clinic	Internal Medicine - Sports Medicine	Orthopedic Surgery Clinic	CPX	NBME

Figure 1: Example schedule for a student on the Primary Care Clerkship. White is Family Medicine, light green is Internal Medicine subspecialty, pink is Pediatrics, blue is subspecialty, orange is for Women's Health, and the remaining colors are required clerkship activities. This student experiences 4 blocks (half-days) of subspecialty per week.

Methods

- 90 students in the 2021 cohort of third year medical students at USF were asked to participate in the study.
- A survey with Likert-type questions was sent out via email. Items included:
 - Overall satisfaction with the primary care clerkship.
 - Exposure to and satisfaction with the three domains of the primary care clerkship.
 - Exposure to and satisfaction with subspecialties.
- Students could self-report their shelf exam percentile score and provide comments.
- Data were collected and analyzed fully de-identified and tested for normality before analysis.
- Nonparametric tests were used to compare student's responses on the Likert-type scale to their NBME exam scores using SPSS 25 for Macintosh.

Results

- The survey had a 34% response rate (31/90).
- No correlation in satisfaction with the clerkship and the average shelf score percentiles of students ($p = 0.426$).
- No significant difference in either clerkship satisfaction or NBME exam score percentiles between students who had <2 half-days of subspecialty exposure per week and students who had ≥ 2 half-days of subspecialty exposure per week ($p = 0.093$ and $p = 0.378$).
- No significant difference in the mean NBME exam score percentiles for students who had sports medicine or orthopedic surgery subspecialties compared to those who did not ($p = 0.078$). However, there was a significant difference in the median shelf exam score percentiles between these two groups ($p = 0.034$), with median higher in the group that did not experience sports medicine or orthopedic surgery.

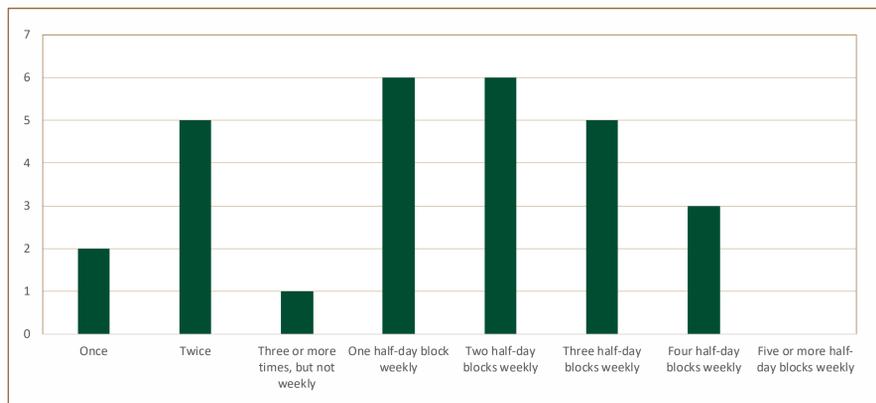


Figure 2: Student responses for the question "How many total blocks (half-days) were you in subspecialty?" The most frequently recurring responses were one half-day weekly and two half-days weekly. Four half-day blocks weekly corresponds to approximately half of clinical time on the primary care clerkship. No student respondents had more than five half-day blocks weekly.

Results, cont.

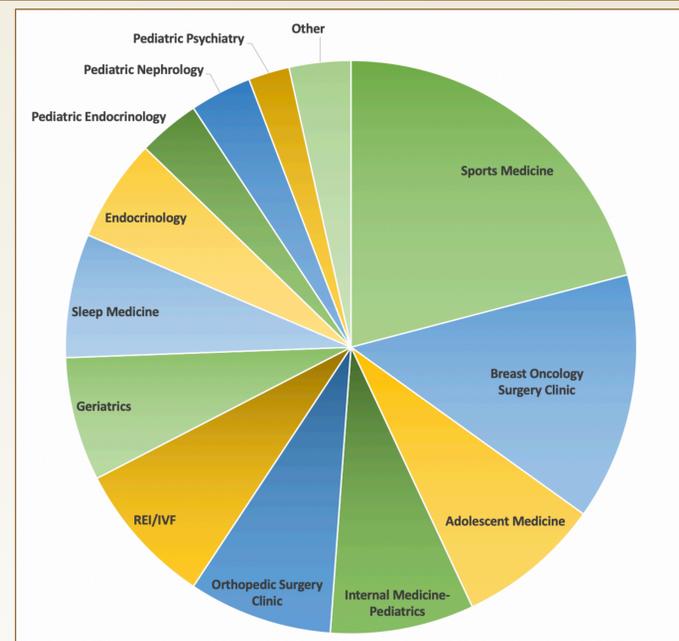


Figure 3: Subspecialties represented in the Primary Care Clerkship, arranged by frequency. Respondents marked all subspecialties to which they were exposed. Many students were exposed to multiple subspecialties. The most common were sports medicine as an internal medicine or family medicine subspecialty, and/or breast oncology surgery clinic, which was offered during women's health week. A free-response block for other subspecialties was used for single responses outside of these, including Allergy & Immunology, Dermatology, and more.

Survey Item (with Likert scale response options)	Marked Strongly Agree or Agree	Percent
The primary care clerkship influenced me towards a career in primary care	18/31	58.1%
The primary care clerkship exposed me to primary care practice in a variety of settings	24/31	77.4%
The primary care clerkship exposed me to the many different career paths within primary care	21/31	67.7%
The primary care clerkship was useful in preparation for my shelf (NBME Family Medicine) exam	23/31	74.2%
I am satisfied with my primary care clerkship experience	25/31	80.6%
Overall, I enjoyed my time in subspecialty clinic	25/27	92.6%
The time I spent in subspecialty interfered with my ability to get exposure to general primary care practice	8/28	28.6%

Table 1: Student responses to questions pertaining to satisfaction with the Primary Care Clerkship. Responses indicated a generally positive reception of the course and subspecialty exposure as part of the curriculum. Students enjoyed their subspecialty time and time in the primary care clerkship and did not feel that subspecialty time interfered with their ability to make the most of their primary care clerkship experience.

Conclusions

- Exposure of medical students to a variety of medical practice is completed most commonly in the third-year clerkships.
- Often this is the only opportunity before choosing a career path in fourth year.
- We found that exposure to subspecialty was important to students, and students were satisfied with their experience.
- Subspecialty exposure did not negatively impact student exam performance or satisfaction.
- Limitations include small sample size, self-reported data, and potential for bias.
- Ensuring students have a satisfactory experience during the primary care clerkship will influence students towards careers in primary care.

Acknowledgments

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