

2016

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## Recommended Citation

Feimster, James, Graulein, Derrick C. and Sanfey, Hillary MB. BCh., FACS "The Role of Core Clerkship Procedural Experience in the Specialty Decision Making Process of Fourth Year Medical Students.." (Jan 2016).

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# The role of core clerkship procedural experience in the specialty decision making process of fourth year medical students

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## Introduction

- ◆ The 3<sup>rd</sup> year of medical school is the most influential year in a student's specialty decision making process.
- ◆ Increased exposure to a medical specialty has been shown to increase student interest in the specialty

## Objectives

- ◆ Identify the key features of 3<sup>rd</sup> Year Clerkships that influenced specialty decision making and compare between students choosing surgical-based residencies (SBR) and non-surgical-based residencies (NSBR).
- ◆ Compare the 3<sup>rd</sup> Year Clerkship procedural experiences between students choosing SBR and NSBR.

## Methods

- ◆ Single institution anonymous electronic survey consisting of Likert-rating questions.
- ◆ All ratings were ranked and then averaged.
- ◆ SBR and NSBR students were then compared using Wilcoxon-rank sum, with p-values being significant with values less than 0.05.

## Results

- ◆ 60 students responded to survey (response rate – 41%).
- ◆ 23 students interested in SBR, 36 students interested in NSBR, and one student undecided.

Table 1. Students interested in SBR and NSBR

Surgical-based Residency n = 23		Non-Surgical-based Residency n = 36	
Emergency Medicine	6	Internal Medicine	11
Obstetrics/Gynecology	6	Pediatrics	7
General Surgery	3	Family Medicine	6
Urology	3	Radiology	4
Anesthesia	2	Medicine/Pediatrics	2
ENT	1	Neurology	2
Neurosurgery	1	PM&R	2
Orthopedics	1	Medicine/Psychiatry	1
		Psychiatry	1

## Results (continued)

- ◆ SBR students felt types of cases and opportunities to perform procedures during 3<sup>rd</sup> Year Clerkships have more influence on career decision than NSBR students.
- ◆ NSBR students felt work hours during 3<sup>rd</sup> Year Clerkships had more influence on career decision than SBR students.

Table 2. Clerkship features and influence on career decision

Features	SBR		NSBR		P-value
	N	Mean	N	Mean	
Working in Teams	23	4.22	37	4.16	N.S.
Type of Cases	23	4.57	37	4.3	0.0347
Work Hours	23	3.48	37	4.14	0.0205
Opportunity for Procedures	23	4.52	37	3.57	0.0004
Attending Teachers	23	4.22	37	4.41	N.S.
Resident Teachers	23	4	37	3.89	N.S.
Knowledge Gained	23	4.09	36	4.22	N.S.

- ◆ There was no significant difference in the number of procedures performed during 3<sup>rd</sup> Year Clerkships between the SBR and NSBR students, except for intubations.

Table 3. Number of procedures performed by students

Procedures	SBR		NSBR		P-value
	N	Mean	N	Mean	
Suturing ED	23	0.7	37	0.54	N.S.
Foley Placement	23	1.57	37	1.38	N.S.
Minor Operations	23	1	37	0.97	N.S.
IV Placement	23	0.83	37	0.57	N.S.
Intubations	23	0.96	37	0.38	0.0303
Injections/Immunizations	23	1	37	0.78	N.S.
Arterial Catheterization	23	0.22	37	0.3	N.S.
Suturing OR	23	2.78	37	2.73	N.S.
Central Line Placement	23	0.13	37	0.08	N.S.
Venous Lab Draw	23	0.52	37	0.27	N.S.
Laparoscopic Camera Driving	23	1.65	37	1.32	N.S.
Endoscopies	23	0.39	37	0.3	N.S.
Newborn Deliveries	23	1.52	37	1.49	N.S.
Ultrasound	23	0.83	36	0.92	N.S.
Thoracentesis/Paracentesis	23	0.13	37	0.08	N.S.
OB/GYN Procedures	23	0.83	37	0.65	N.S.

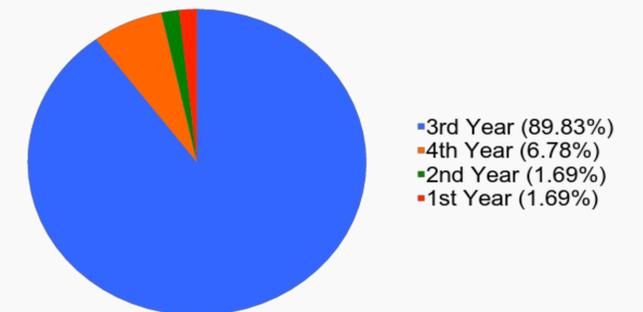
- ◆ The SBR students felt that procedural skill development was more important before starting residency.

Table 4. Procedural skill development before residency

Procedural Skill	SBR		NSBR		P-value
	N	Mean	N	Mean	
Procedural Skill	23	4.78	37	4.27	0.0048

- ◆ 70% of all students changed career choice during medical school.
- ◆ 73.33% of students decided on a career during the 3<sup>rd</sup> year of medical school.
- ◆ 89.83% of students ranked the 3<sup>rd</sup> year of medical school as most important year of training when choosing a medical specialty.

Figure 1. Years of medical school in terms of importance



## Limitations

- ◆ A single institution study.
- ◆ Not all features of clerkships were surveyed.
- ◆ Unclear whether students who did more procedures chose a SBR or if SBR students sought more procedures and cases due to personal interest.
- ◆ None of the students surveyed had completed their 4<sup>th</sup> year of medical school

## Conclusions

- ◆ The majority of medical students decided on their specialty during the 3<sup>rd</sup> year of medical school.
- ◆ There is notable differences between SBR and NSBR students in terms of what parts of the 3<sup>rd</sup> Year Clerkships influence their career decision (i.e., types of cases, work hours, and opportunity for procedures).
- ◆ The amount of procedures performed during clerkships did not correlate with students that choose a SBR or NSBR.