WFSOM Surgical Subspecialty Certificate Program: A Pilot Study

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Needs Assessment

Defining the Problem

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Surgical Specialties: Possible Gaps in Education?

Increasing in Competitiveness, Discrepancy in Number

- There is a recent trend in surgical residency applicants, there are relatively fewer but are considered more “competitive” (Hoffmann et al. 2014)
- With USMLE exams moving to a “Pass-Fail” scoring, many program directors are starting to look at participation and involvement as key components in their applicants (Assad et al. 2021)
- This can create a relative deficit in training, if not properly addressed by medical curricula (Glen & Kerin, 2010)

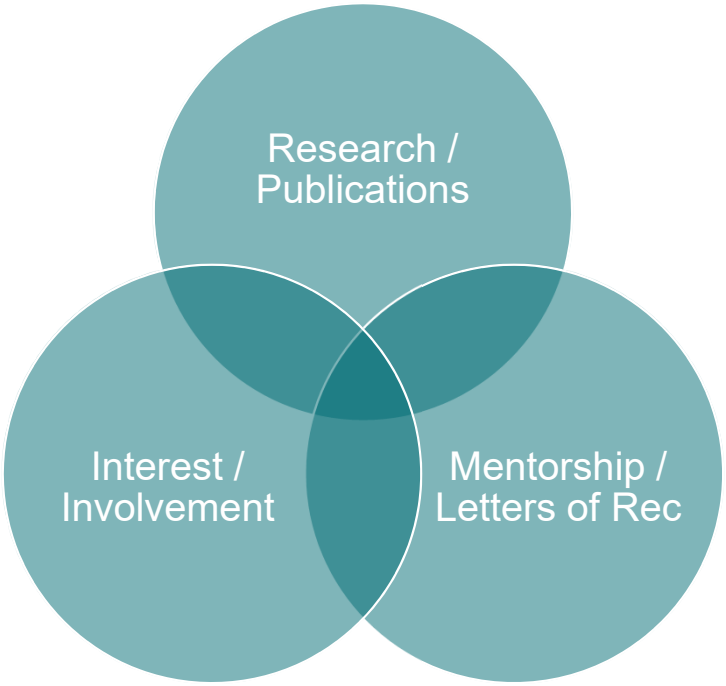
Plastic Surgery: Integrated	COMLEX Level 1 Score	0	-	-	-	-	-	-	-
	COMLEX Level 2-CE Score	0	-	-	-	-	-	-	-
	USMLE STEP 1 Score	177	247.0	12.5	230.0	242.0	249.0	255.0	259.4
	USMLE STEP 2 CK Score	179	253.1	12.6	237.0	246.0	255.0	262.0	268.0
	Number of research experiences	177	5.4	3.2	2.0	3.0	5.0	7.0	9.0
	Number of abstracts, presentations, and publications	177	20.0	17.9	5.0	8.0	15.0	27.0	44.4
	Number of work experiences	177	3.7	2.5	1.0	2.0	3.0	5.0	7.0
	Number of volunteer experiences	177	8.4	4.2	4.0	6.0	8.0	10.0	13.4

Table B1. AAMC

Surgical Specialties: Possible Gaps in Education?

Limited Pre-Clinical Exposure to Surgery and Subspecialties

- In order to achieve the desirable traits listed, mentorship and involvement need to start earlier (Drolet et al. 2014; Kassam et al. 2020)
- This is not considered a part of the accreditation process, such as LCME
- Thus, many medical schools do not have a formalized way for mentorship to begin



Certificate Program

Addressing the Need

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Objectives of the Certificate

1. Increase exposure to field of surgery, both operative and clinical, for junior medical students
    1. Improve surgical education primarily through frequency of early operative experiences
    2. Increase preclinical student exposure to surgical literature
2. Enhance frequency and quality of interaction between surgical residents/attendings and students
3. Improve medical student success in both third-year surgical clerkship as well as matching into surgical fields
    1. Increase access to potential research opportunities
    2. Establish long term academic relationships with attending surgeons to enhance letters of recommendation

Components of the Program

Objectives as Drivers of Design

Increase Exposure	Increase Frequency / Quality	Improve Success in Match
• Complete 8 cases in the OR • Attend at least two surgical conferences (e.g. grand rounds) • Attend all nine sessions led by resident course leader • Complete an oral case presentation	• Take one evening call with an intern, resident, or trauma resident • Round with the surgical team at least once • Attend surgical clinic for a half-day • Meet with appointed mentor at least twice	• Pave the pathway for research opportunities • Mentorship opportunities, to help with familiarity • Gain and sustain interest earlier in the medical career

Pilot Study: Results

Post-Pre Survey Analysis

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Participants in the Pilot Study

M1 Medical Students at Wake Forest School of Medicine

- A RedCap survey was sent out for interest and application
- Out of the 33 applications, 8 participants- 4 women and 4 men- were chosen for the first cohort

What is a Post-Pre Survey?

An analysis devised by Kanevsky to evaluate change in attitudes but collected at one time point

- This was done during the last session, and anonymously
- Data were largely reported rather than analyzed due to small numbers

Results of the Study

	Before Program (Average)	After Program (Average)	p-value
Participants, n	8	8	-
Post-Pre Ranking			
Interest	3.75	4.625	0.0938[1]
Time in OR	2	4	0.0156[1]*
Comfort with OR	2	3.75	0.0156[1]*
Locating Literature	2.875	4	0.0312[1]*
Digesting Literature	2.625	3.875	0.0156[1]*
Relationships with Physicians	1.75	3.875	0.0078[1]*
Interactions with Physicians	1.75	3.875	0.0078[1]*
Relationships with Residents	2	4.125	0.0078[1]*

Results of the Study

Reportable Outcomes	
Cases Observed, Average	6 1.8
Hours Spent, Average	23.5 5.9
Number of Meetings, Average	3.8 1.1
Qualitative Reports	
Mentorship	4 Good, 4 Excellent
Experience	8 Excellent
Recommendation	8 Definitely Would

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Questions?

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