

**Summary of Findings and Exploration of Data**  
**Analysis of Relationship between Tiered vs. Pass/Fail Clerkship Grading for UIM vs. Not UIM Students and**  
**Acting Internship Grades**  
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**Primary Evaluation Question:** Were changes to the grading policy in the clerkship year from tiered to pass/fail (P/F) grading related to greater equity for UIM students in grades received during the acting internship (Honors, Pass, Fail) in year 4 of medical school?

**Hypothesis:** The P/F grading policy changes (compared to the tiered grading policy) in the clerkship year were related to equity in acting internship grades received by UIM students.

**Executive Summary**

Not UIM students who completed their clerkships when the P/F grading policy was in place were more likely to receive **acting internship honors** compared to UIM students whereas there were no differences in acting internship honors received for UIM and not UIM students who complete their clerkship with the tiered grading policy in place (tiered = 2016-2017, 2017-2018, 2018 and P/F=2019, 2020, and 2021). Significant differences were no longer existent when we included **Step 2 CK scores** in the model as a covariate indicating, similar to, the Amplification Cascade project that assessment of medical knowledge is one of the factors accountable for these differences.

Since these findings in acting internship grades were not aligned with our hypothesis, we explored additional data to explore if there were factors influencing these results. We learned that there were differences in assessed outcomes between the tiered and P/F grading groups favoring not UIM learners in the following assessments: **MCAT percentile, Essential Core/Medical Knowledge Examination, Step 1 and Step 2 CK Examination scores. Step 1 and Step 2 CK** pass rates were equivalent for UIM and not UIM learners in the tiered group. However, **Step 1 and Step 2 CK pass rates** were significantly higher for not UIM students in the P/F group.

In the tiered clerkship grading group, there were **clerkship exam differences** favoring not UIM students in all except Neurology and ObGyn 110. In the P/F clerkship grading group, there were clerkship exam differences favoring not UIM students in all except Pediatrics and ObGyn 110.

The lack of significant differences in the acting internship grades between UIM and not UIM students in the tiered grading group was an unexpected finding that we needed to explore further. In our original research on the Amplification Cascade we observed significant differences in acting internship grades between UIM and not UIM students when the clerkship grading policy was tiered. We then asked whether there were differences in the tiered grading group we were using in this analysis compared to prior cohorts of tiered grading. To answer this question we examined data from 3 earlier student cohorts who completed the clerkship between 2013 and 2015. Comparison of acting internship grades with inclusion of 3 earlier cohorts who also completed tiered graded clerkship cohorts (2013-2014, 2014-2015, 2015-2016) showed that acting internship honors grades favored not UIM learners. These findings were similar to what we observed in the cohorts who completed the P/F clerkship model. We then asked the following questions?

1. **Was there a change in how acting internship grades were awarded for the students who completed the clerkships in the tiered grading model between 2016-2018?** Acting internship leadership was transitioned to a new course leader in 2018. While we do not know if there were differences in how grades were awarded, the number of honors awarded in the acting internship were at approximately 70-79% in all years of the study.

2. **Was there a difference in the profile of UIM or not UIM students who completed the clerkships in the tiered grading model between 2016-2018?** Given the lack of differences between UIM and not UIM student Step 1 and Step 2 CK pass rates in the tiered grading group (in contrast to observed differences in the P/F clerkship grading policy group) this is the most plausible explanation. Closer analysis indicated that in this tiered grading group, there were no differences in acting internship and almost all clerkship grades between UIM and not UIM students who completed the clerkships in 2017-2018 and 2018.

**In summary:** The students who completed clerkships when tiered grading clerkships were completed in 2016 through 2018 (primarily the two cohorts between 2017 and 2018) were different from prior cohorts who completed the clerkships in that grading model. Given this unexpected finding, we cannot determine if the clerkship grading policy was related to acting internship grades. Based on grades received from earlier cohorts of students who had the tiered grading policy, our hypothesis is that it likely that the clerkship grading policy did not influence the acting internship grades to create greater equity.

Detailed findings and tables below provide detailed information.

## Detailed Findings

### Demographic summary

A total 974 students in the UCSF School of Medicine were included in the analysis (*note total student numbers vary by available outcome data*). Student data were selected to be included based on two criteria (1) when students completed their clerkship year 2016-2017 (tiered), 2017-2018 (tiered), 2018 (tiered), 2019 (P/F), 2020 (P/F), and 2021 (P/F) (Table 1) and (2) if students completed some clerkships in the tiered and some in the P/F model students were based in the grouping in which they completed most of their clerkships in (5 or more clerkships in one grading model). Most students N=712 (73.1%) included in the analysis have graduated (Table 2). 527 (54.2%) of the students in the participants identify as women and 317 (24.4%) as UIM (Table 3).

### Analysis of Data to Answer Primary Evaluation Question

In the tiered grading model (N=461), 223 (71.0%) of not UIM students received an Honors grade and 96 (65.3%) UIM students received an Honors grade which was not significantly different ( $p=.2$ ) (Table 4). In the P/F clerkship grading model (N=421), 219 (79.1%) of not UIM students received an Honors grade and 98 (68.1%) UIM students received an Honors grade which was significantly different ( $p=.01$ ) (Table 5). Closer analysis indicated that in tiered grading group, there were no differences in acting internship and almost all clerkship grades between UIM and not UIM students who completed the clerkships in two of the three cohorts: 2017-2018 and 2018 (data not displayed).

Acting internship clerkship director ratings favoring not UIM students were seen for students who completed the tiered grading model in history taking, record keeping, and self-improvement (Table 6) and the P/F grading model in attributes and responsibilities, fund of knowledge, history taking, problem solving, record keeping, and self improvement (Table 7). When Step 2 CK score is entered into the model for both groups of students, significant differences between UIM and not UIM students are no longer present.

### Further Exploration

We explored a series of other assessed outcomes for the tiered and P/F clerkship grading models to provide context for these findings. We saw differences in outcomes between the tiered and P/F grading groups favoring not UIM learners in the following assessments: MCAT percentile, Essential Core/Medical Knowledge Examination, Step 1 and Step 2 CK Examination scores (Appendix A).

Step 1 and Step 2 CK pass rates were equivalent for UIM and not UIM learners in the tiered grading group but were significantly higher for not UIM students in the P/F grading group. (Appendix A)

In the tiered clerkship grading group, there were clerkship exam differences favoring not UIM students in all except Neurology and ObGyn 110. In the P/F clerkship grading group, there were clerkship exam differences favoring not UIM students in all except Pediatrics and ObGyn 110 (Appendix A).

Comparison of acting internship grades with inclusion of 3 earlier cohorts who also completed tiered graded clerkship cohorts (2013-2014, 2014-2015, 2015-2016) showed that acting internship honors grades favored not UIM students (N=222, 78.2%) (Total N=418; UIM students honors received N=62, 55.5%;  $p=.001$ ).

**Table 1 - Core Year in Which Clerkship were Completed**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2016-2017	158	16.2	16.2	16.2
	2017-2018	117	12.0	12.0	28.2
	2018	194	19.9	19.9	48.2
	2019	161	16.5	16.5	64.7
	2020	168	17.2	17.2	81.9
	2021	176	18.1	18.1	100.0
	Total	974	100.0	100.0	

**Table 2 – Students Graduated in Cohorts Included in the Analysis**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not graduated	262	26.9	26.9	26.9
	Graduated	712	73.1	73.1	100.0
	Total	974	100.0	100.0	

**Table 3 - UIM and not UIM Students**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not UIM	604	62.0	65.6	65.6
	UIM	317	32.5	34.4	100.0
	Total	921	94.6	100.0	
Missing	System	53	5.4		
Total		974	100.0		

**Table 4 - Sub Internship grades for UIM and not UIM students who completed the Tiered Graded Clerkship**

			UIM / URM		Total
			Not UIM	UIM	
Subl 110 Grade Recoded for Analysis	Pass	Count	91	51	142
		% within Subl 110 Grade Recoded for Analysis	64.1%	35.9%	100.0%
		% within UIM / URM	29.0%	34.7%	30.8%
		% of Total	19.7%	11.1%	30.8%
	Honors	Count	223	96	319
		% within Subl 110 Grade Recoded for Analysis	69.9%	30.1%	100.0%
		% within UIM / URM	71.0%	65.3%	69.2%
		% of Total	48.4%	20.8%	69.2%
	Total	Count	314	147	461
		% within Subl 110 Grade Recoded for Analysis	68.1%	31.9%	100.0%
		% within UIM / URM	100.0%	100.0%	100.0%
		% of Total	68.1%	31.9%	100.0%

P=.2

**Table 5 - Sub Internship grades for UIM and not UIM students who completed the P/F Graded Clerkships**

			UIM / URM		Total
			Not UIM	UIM	
Subl 110 Grade Recoded for Analysis	Pass	Count	58	46	104
		% within Subl 110 Grade Recoded for Analysis	55.8%	44.2%	100.0%
		% within UIM / URM	20.9%	31.9%	24.7%
		% of Total	13.8%	10.9%	24.7%
	Honors	Count	219	98	317
		% within Subl 110 Grade Recoded for Analysis	69.1%	30.9%	100.0%
		% within UIM / URM	79.1%	68.1%	75.3%
		% of Total	52.0%	23.3%	75.3%
Total	Count		277	144	421
	% within Subl 110 Grade Recoded for Analysis		65.8%	34.2%	100.0%
	% within UIM / URM		100.0%	100.0%	100.0%
	% of Total		65.8%	34.2%	100.0%

P=.01

**Table 6 - Acting internship Clerkship Director Ratings for UIM and not UIM students who completed the Tiered Graded Clerkship**

		N	Mean	Std. Deviation	Std. Error
SUB-I Attributes and Responsibility	Not UIM	316	3.870	.2562	.0144
	UIM	149	3.815	.3599	.0295
	Total	465	3.853	.2942	.0136
SUB-I Comm Patients and Families	Not UIM	316	3.769	.3041	.0171
	UIM	149	3.752	.3269	.0268
	Total	465	3.763	.3113	.0144
SUB-I Fund of Knowledge	Not UIM	316	3.511	.3892	.0219
	UIM	149	3.436	.4203	.0344
	Total	465	3.487	.4005	.0186
SUB-I History Taking*	Not UIM	316	3.623	.3413	.0192
	UIM	149	3.537	.4314	.0353
	Total	465	3.596	.3743	.0174
SUB-I Oral Presentation	Not UIM	316	3.641	.4101	.0231
	UIM	149	3.564	.4361	.0357
	Total	465	3.616	.4197	.0195

SUB-I Physical/Mental Status Exam	Not UIM	316	3.527	.3520	.0198
	UIM	149	3.463	.3634	.0298
	Total	465	3.506	.3565	.0165
SUB-I Problem Solving	Not UIM	316	3.598	.3922	.0221
	UIM	149	3.527	.4263	.0349
	Total	465	3.575	.4044	.0188
SUB-I Record Keeping*	Not UIM	316	3.653	.3643	.0205
	UIM	149	3.581	.4030	.0330
	Total	465	3.630	.3782	.0175
SUB-I Self-Improvement*	Not UIM	316	3.775	.3089	.0174
	UIM	149	3.701	.3763	.0308
	Total	465	3.752	.3334	.0155
SUB-I Relationship w/Team Members	Not UIM	316	3.843	.2760	.0155
	UIM	149	3.792	.3293	.0270
	Total	465	3.827	.2948	.0137

\*P<.05

**Table 7 - Acting internship Clerkship Director Ratings for UIM and not UIM students who completed the P/F Graded Clerkship**

		N	Mean	Std. Deviation	Std. Error
SUB-I Attributes and Responsibility	Not UIM	278	3.903	.2278	.0137
	UIM	144	3.851	.2902	.0242
	Total	422	3.885	.2517	.0123
SUB-I Comm Patients and Families	Not UIM	278	3.838	.2735	.0164
	UIM	144	3.799	.3091	.0258
	Total	422	3.825	.2864	.0139
SUB-I Fund of Knowledge*	Not UIM	278	3.610	.3524	.0211
	UIM	144	3.514	.3920	.0327
	Total	422	3.577	.3688	.0180
SUB-I History Taking*	Not UIM	278	3.691	.3230	.0194
	UIM	144	3.604	.3917	.0326
	Total	422	3.661	.3499	.0170
SUB-I Oral Presentation	Not UIM	278	3.691	.3575	.0214
	UIM	144	3.622	.3889	.0324
	Total	422	3.667	.3695	.0180

SUB-I Physical/Mental Status Exam	Not UIM	278	3.586	.3551	.0213
	UIM	144	3.542	.3669	.0306
	Total	422	3.571	.3594	.0175
SUB-I Problem Solving*	Not UIM	278	3.701	.3463	.0208
	UIM	144	3.597	.4109	.0342
	Total	422	3.666	.3724	.0181
SUB-I Record Keeping*	Not UIM	278	3.723	.3217	.0193
	UIM	144	3.639	.3666	.0306
	Total	422	3.694	.3396	.0165
SUB-I Self-Improvement*	Not UIM	278	3.831	.2757	.0165
	UIM	144	3.764	.3012	.0251
	Total	422	3.808	.2861	.0139
SUB-I Relationship w/Team Members	Not UIM	278	3.871	.2538	.0152
	UIM	144	3.844	.2675	.0223
	Total	422	3.861	.2585	.0126

\*P<.05

**Table 3 - Sub Internship grades for UIM and not UIM students in earlier cohorts (2013-2016) who completed Clerkships with Tiered Grading Policy**

			UIM / URM		Total
			Not UIM	UIM	
Subl 110 Grade Recoded for Analysis	Pass	Count	84	50	134
		% within Subl 110 Grade Recoded for Analysis	62.7%	37.3%	100.0%
		% within UIM / URM	27.5%	44.6%	32.1%
		% of Total	20.1%	12.0%	32.1%
	Honors	Count	222	62	284
		% within Subl 110 Grade Recoded for Analysis	78.2%	21.8%	100.0%
		% within UIM / URM	72.5%	55.4%	67.9%
		% of Total	53.1%	14.8%	67.9%
Total	Count		306	112	418
	% within Subl 110 Grade Recoded for Analysis		73.2%	26.8%	100.0%
	% within UIM / URM		100.0%	100.0%	100.0%
	% of Total		73.2%	26.8%	100.0%

\*p=.001



## Appendix A - Assessed Outcomes

### MCAT Percentile Score

Tiered & P/F - difference favoring not UIM

	MCAT Scores			
	Tiered Grading*		P/F Grading*	
	N	Percentile	N	Percentile
Non-UIM	288	93.4	304	94.4
UIM	145	85.4	166	87.6
<b>Total</b>	<b>433</b>	<b>90.7</b>	<b>470</b>	<b>92.0</b>

\* p<.001

### Essential Core/Medical Knowledge Exam

Tiered & P/F- difference favoring not UIM

	EC/MK Exam			
	Tiered Grading*		P/F Grading*	
	N	Mean score	N	Mean score
Non-UIM	86	.843	251	.865
UIM	50	.824	153	.835
<b>Total</b>	<b>136</b>	<b>.836</b>	<b>404</b>	<b>.853</b>

\* p<.001

### Step 1 Pass Rates

Tiered - No difference

P/F – difference favoring not UIM

	Step 1 Grade			
	Tiered Grading		P/F Grading*	
	N	Percent Pass	N	Percent Pass
Non-UIM	299	99.0%	305	99.0%
UIM	149	97.3%	168	94.6%
<b>Total</b>	<b>448</b>	<b>98.4%</b>	<b>473</b>	<b>97.5%</b>

\* p=.014

### Step 1 Scores

Tiered and P/F - difference favoring not UIM

	Step 1 score			
	Tiered Grading*		P/F Grading*	
	N	Mean score	N	Mean score
Non-UIM	298	236.7	205	240.26
UIM	147	229.4	114	232.15
<b>Total</b>	<b>445</b>	<b>234.3</b>	<b>319</b>	<b>237.36</b>

\* p<.001

### Clerkship Final Grade (when available) (N and % of honors)

Tiered – differences favoring not UIM for Anes, Med, Peds, Psych

P/F – no analysis, UIM students no fails

	Clerkship Grading		
	Tiered Grading		
	N	Percent Honors	p-value*
<b>ANES</b>			<b>.029</b>

- Non-UIM	299	51.8%	
- UIM	149	38.3%	
<b>TOTAL</b>			
<b>FCM</b>			.189
- Non-UIM	299	47.5%	
- UIM	149	38.9%	
- <b>TOTAL</b>			
<b>MED</b>			.008
- Non-UIM	299	48.5%	
- UIM	149	34.2%	
- <b>TOTAL</b>			
<b>NEURO</b>			.128
- Non-UIM	299	45.8%	
- UIM	149	40.3%	
- <b>TOTAL</b>			
<b>OBGYN</b>			.067
- Non-UIM	299	55.5%	
- UIM	149	43.0%	
- <b>TOTAL</b>			
<b>PEDS</b>			.026
- Non-UIM	299	52.5%	
- UIM	149	48.2%	
- <b>TOTAL</b>			
<b>PSYCH</b>			.056
- Non-UIM	299	49.5%	
- UIM	149	45.5%	
- <b>TOTAL</b>			
<b>SURG</b>			.067
- Non-UIM	299	49.2%	
- UIM	149	38.9%	
- <b>TOTAL</b>			

\* p< .05 considered significant

### **Clerkship Exam Scores**

Tiered - difference favoring not UIM in all except Neuro and Ob

P/F – difference favoring not UIM in all except Ob and Peds

	Tiered Grading			P/F Grading		
	N	Mean score	p-value*	N	Mean score	p-value*
<b>MED</b>			.033			.005
- Non-UIM	299	73.5		305	72.5	
- UIM	148	71.6		168	69.6	
- <b>TOTAL</b>	<b>447</b>	<b>72.9</b>		<b>473</b>	<b>71.5</b>	
<b>NEURO</b>			.101			.005
- Non-UIM	298	78.6		304	76.74	
- UIM	147	77.3		168	74.11	
- <b>TOTAL</b>	<b>445</b>	<b>78.1</b>		<b>472</b>	<b>75.80</b>	
<b>OBGYN</b>			.062			.237

- Non-UIIM	298	78.0		305	75.9	
- UIM	148	76.7		168	74.8	
- <b>TOTAL</b>	<b>446</b>	<b>77.6</b>		<b>473</b>	<b>75.5</b>	
<b>PEDS</b>			<b>.008</b>			.457
- Non-UIIM	298	82.7		305	76.8	
- UIM	149	81.0		168	76.1	
- <b>TOTAL</b>	<b>447</b>	<b>82.2</b>		<b>473</b>	<b>76.6</b>	
<b>PSYCH</b>			<b>&lt;.001</b>			<b>.006</b>
- Non-UIIM	298	80.5		305	80.6	
- UIM	148	78.2		168	78.5	
- <b>TOTAL</b>	<b>446</b>	<b>79.7</b>		<b>473</b>	<b>79.9</b>	
<b>SURG</b>			<b>.002</b>			<b>.012</b>
- Non-UIIM	298	73.9		304	73.1	
- UIM	147	71.5		168	70.8	
- <b>TOTAL</b>	<b>445</b>	<b>73.1</b>		<b>472</b>	<b>72.3</b>	

\* p< .05 considered significant

#### **Clerkship Director Ratings**

Tiered Grading Policy		N	Mean	Std. Deviation	Std. Error
Medical Knowledge*	Not UIM	319	3.5481	.15747	.00882
	UIM	152	3.4734	.19073	.01547
	Total	471	3.5240	.17229	.00794
Patient Care*	Not UIM	319	3.5754	.13781	.00772
	UIM	152	3.5076	.19198	.01557
	Total	471	3.5535	.16031	.00739
Interpersonal Skills*	Not UIM	319	3.7620	.13707	.00767
	UIM	152	3.7229	.16777	.01361
	Total	471	3.7494	.14863	.00685
Professionalism*	Not UIM	319	3.7650	.13439	.00752
	UIM	152	3.7061	.17903	.01452
	Total	471	3.7460	.15258	.00703

\*p<.001

#### **P/F Grading Policy**

		N	Mean	Std. Deviation	Std. Error
Medical Knowledge*	Not UIM	311	3.4590	.15434	.00875
	UIM	170	3.3912	.18298	.01403
	Total	481	3.4351	.16801	.00766
Patient Care*	Not UIM	311	3.5035	.13639	.00773
	UIM	170	3.4368	.16335	.01253

	Total	481	3.4799	.14976	.00683
Interpersonal Skills*	Not UIM	311	3.6861	.13835	.00785
	UIM	170	3.6427	.18205	.01396
	Total	481	3.6708	.15641	.00713
Professionalism*	Not UIM	311	3.7091	.13544	.00768
	UIM	170	3.6458	.18269	.01401
	Total	481	3.6867	.15657	.00714

\*p<.001

### **Step 2 Pass Rates**

Tiered - No difference

P/F – difference favoring not UIM

	Step 2 Grade			
	Tiered Grading		P/F Grading*	
	N	Percent Passing	N	Percent Passing
Non-UIM	297	99.3%	294	100.0%
UIM	146	97.3%	151	96.7%
<b>Total</b>	<b>443</b>	<b>98.7%</b>	<b>445</b>	<b>98.9%</b>

\* p<.001

### **Step 2 Exam Score**

Tiered & P/F - difference favoring not UIM

	Step 2 exam score			
	Tiered Grading*		P/F Grading*	
	N	Mean	N	Mean
Non-UIM	297	246.5	294	250.2
UIM	146	240.3	151	241.7
<b>TOTAL</b>	<b>443</b>	<b>244.5</b>	<b>445</b>	<b>247.3</b>

\* p<.001

## **Summary of Secondary Analysis and Findings from Exploration of Data**

### **Analysis of Relationship between Tiered vs. Pass/Fail Clerkship Grading for UIM vs. Not UIM Students and Acting Internship Grades**

**In this secondary analysis we explored the following:** What were, if any, notable quantitative differences in demographics or assessed outcomes between UIM and not UIM students who completed their clerkships in the P/F clerkship grading model that would explain differences seen in our earlier findings (see report [here](#)).

**Demographic summary:** A total 974 students in the UCSF School of Medicine were included in the analysis (*note total student numbers vary by available outcome data*). Student data were selected to be included based on two criteria (1) when students completed their clerkship year 2016-2017 (tiered), 2017-2018 (tiered), 2018 (tiered), 2019 (P/F), 2020 (P/F), and 2021 (P/F) (and (2) if students completed some clerkships in the tiered and some in the P/F model students were based in the grouping in which they completed most of their clerkships in (5 or more clerkships in one grading model). Most students N=712 (73.1%) included in the analysis have graduated. 527 (54.2%) of the students in the participants identify as women and 317 (24.4%) as UIM.

**Note:** Primary focus of this analysis are students who completed the clerkships in the P/F grading model. Comparison to students who completed in the tiered clerkship grading model is included only if explicating a difference that helps us understand findings.

#### **Demographics**

- **Not UIM women** (which are in the group with slightly higher numbers in the larger population of students in this analysis) received highest percentage of honors grade in Sub Internships followed by UIM women receiving honors (Tables 1 and 2)
  - The percentage of **not UIM women** receiving honors in the P/F graded clerkships was higher than the tiered clerkship graded group
- **UIM men** received the highest percentage of pass grades (slightly higher than not UIM men) in the Sub Internship regardless of clerkship grading model they completed (Tables 1 and 2)
  - The group receiving the smallest percentage of honors grades who completed the P/F clerkship grading model were **not UIM men**
- A vast majority of **UIM and not UIM students** who received a pass grade in the Acting internship had parents who completed a college education (Tables 3 and 4)

#### **Assessed Outcomes**

- In comparison to UIM students receiving pass grades in the Acting internship, not UIM students who received pass grades had significantly higher scores in **F1 medical knowledge exam scores, Step 1 and Step 2 Exam scores, and medicine, psychiatry, and surgery 110 clerkship exam scores, FCM and Med 110 clerkship director ratings, and clerkship medical knowledge, patient care and professionalism director ratings**. There were also differences in Acting internship director ratings on **history taking and record keeping** which favored not UIM students (Table 5).
  - **F1 medical knowledge exam scores, Step 1 and Step 2 exam scores, Med 110 clerkship director ratings, and clerkship medical knowledge, patient care and professionalism director ratings** were significantly higher for not UIM students who received honors in the Acting internship. Clerkship exam scores and all other clerkship director ratings were not different between groups. There are differences one area of Acting internship director ratings on self-improvement that favored not UIM students (Table 6).
- UIM students who received honors in the Acting internship received higher scores/ratings on **almost all assessed outcomes (except 1)** compared to UIM students who received passes (Table 7).
  - While there were many significant differences in assessed outcomes for not UIM students who received honors in the Sub Internship compared to those who received pass grades, there were some outcomes where there were no differences including in Med, Peds, and Surg 110 clerkship exams, Step 1 exam score, Surg 110 clerkship director means

**Table 1 - Pass Grades in the Acting internship (Sub I) based on Demographics (Gender and UIM status) and the clerkship grading model (tiered or pass/fail) complete**

	Received <b>Pass</b> Grade in Sub I – Completed <b>P/F Clerkship</b> Grading N (%)		Received <b>Pass</b> Grade in Sub I – Completed <b>Tiered Clerkship</b> Grading N (%)	
	UIM	Not UIM	UIM	Not UIM
Women	17 (38.6)	24 (41.4)	22 (43.1)	44 (48.4)
Men	27 (61.4)	34 (58.6)	29 (56.9)	47 (51.6)

**Table 2 - Honors Grades in the Acting internship (Sub I) based on Demographics (Gender and UIM status) and the clerkship grading model (tiered or pass/fail) complete**

	Received <b>Honors</b> Grade in Sub I – Completed <b>P/F Clerkship</b> Grading N (%)		Received <b>Honors</b> Grade in Sub I – Completed <b>Tiered Clerkship</b> Grading N (%)	
	UIM	Not UIM	UIM	Not UIM
Women	54 (55.7)	143 (66.5)	45 (46.9)	130 (58.6)
Men	43 (44.3)	72 (33.5)	51 (53.1)	92 (41.4)

**Table 3 - Pass Grades in the Acting internship (Sub I) based on parental education level and the clerkship grading model (tiered or pass/fail) complete**

	Received <b>Pass</b> Grade in Sub I – <b>P/F Clerkship</b> Grading N (%)		Received <b>Pass</b> Grade in Sub I – <b>Tiered</b> Grading N (%)	
	UIM	Not UIM	UIM	Not UIM
Parents completed college education	30 (65.2)	46 (79.3)	31 (60.8)*	76 (83.5)
Parent not completed college education	16 (34.8)	12 (20.7)	20 (39.2)	15 (16.5)

\*p<.03

**Table 4 - Honors Grades in the Acting internship (Sub I) based on parental education level and the clerkship grading model (tiered or pass/fail) complete**

	Received <b>Honors</b> Grade in Sub I – <b>P/F Clerkship</b> Grading N (%)		Received <b>Honors</b> Grade in Sub I – <b>Tiered Clerkship</b> Grading N (%)	
	UIM	Not UIM	UIM	Not UIM
Parents completed college education	73 (74.5)*	201 (92.2)	67 (69.8)*	203 (91.0)
Parent not completed college education	25 (25.5)	17 (7.8)	29 (30.2)	20 (9.0)

\*p>.001

**Table 5 - Comparison of Assessed Outcomes for UIM and Not UIM Students who Received *Pass Grade* in the Acting internship (Sub I) who completed their clerkships in the *P/F clerkship grading model***

		N	Mean	SD
F1 Overall medical knowledge exam score*	Not UIM	44	.8441	.04484
	UIM	42	.8176	.04797
	Total	86	.8312	.04801
MED110 Clerkship exam score*	Not UIM	58	71.22	10.000
	UIM	46	66.41	9.916
	Total	104	69.10	10.201
NEURO110 Clerkship exam score	Not UIM	58	74.24	8.568
	UIM	46	72.15	8.451
	Total	104	73.32	8.539
OBGYN110 Clerkship exam score	Not UIM	58	73.16	8.987
	UIM	46	72.52	8.044
	Total	104	72.88	8.548
PEDS110 Clerkship exam score	Not UIM	58	76.60	9.954
	UIM	46	77.48	9.201
	Total	104	76.99	9.592
PSYCH 110 Clerkship exam score*	Not UIM	58	78.78	6.996
	UIM	46	75.04	9.975
	Total	104	77.13	8.604
SURG 110 Clerkship exam score*	Not UIM	58	72.14	9.021
	UIM	46	68.09	10.950
	Total	104	70.35	10.075
SUB-I clerkship director ratings - Attributes and Responsibility	Not UIM	58	3.690	.3354
	UIM	46	3.598	.3745
	Total	104	3.649	.3544
SUB-I clerkship director ratings - Comm Patients and Families	Not UIM	58	3.595	.3306
	UIM	46	3.522	.3489
	Total	104	3.563	.3391
SUB-I clerkship director ratings - Fund of Knowledge	Not UIM	58	3.198	.2639
	UIM	46	3.109	.2771
	Total	104	3.159	.2722
SUB-I clerkship director ratings - History Taking*	Not UIM	58	3.362	.3077
	UIM	46	3.217	.2916
	Total	104	3.298	.3078
SUB-I clerkship director ratings - Oral Presentation	Not UIM	58	3.293	.3381
	UIM	46	3.207	.2901
	Total	104	3.255	.3192
	Not UIM	58	3.259	.2847

SUB-I clerkship director ratings - Physical/Mental Status Exam	UIM	46	3.185	.2440
	Total	104	3.226	.2688
SUB-I clerkship director ratings - Problem Solving	Not UIM	58	3.241	.2689
	UIM	46	3.141	.3103
	Total	104	3.197	.2908
SUB-I clerkship director ratings - Record Keeping*	Not UIM	58	3.371	.2896
	UIM	46	3.250	.2528
	Total	104	3.317	.2792
SUB-I clerkship director ratings - Self-Improvement	Not UIM	58	3.526	.3165
	UIM	46	3.554	.3202
	Total	104	3.538	.3169
SUB-I clerkship director ratings - Relationship w/Team Members	Not UIM	58	3.629	.3449
	UIM	46	3.609	.3147
	Total	104	3.620	.3305
Step1 exam score*	Not UIM	41	236.51	15.260
	UIM	38	227.76	16.581
	Total	79	232.30	16.407
Step2 exam Score*	Not UIM	57	244.63	11.661
	UIM	44	234.82	13.989
	Total	101	240.36	13.572
Anes 110 Clerkship Director Ratings Mean	Not UIM	58	3.5442	.26231
	UIM	46	3.4524	.31213
	Total	104	3.5036	.28764
FCM 110 Clerkship Director Ratings Mean*	Not UIM	58	3.5636	.27343
	UIM	46	3.4592	.25726
	Total	104	3.5174	.27019
Med 110 Clerkship Director Ratings Mean*	Not UIM	58	3.5463	.27694
	UIM	46	3.4117	.28522
	Total	104	3.4868	.28723
Neuro 110 Clerkship Director Ratings Mean	Not UIM	58	3.4770	.22441
	UIM	46	3.4505	.27473
	Total	104	3.4653	.24702
Obgyn 110 Clerkship Director Ratings Mean	Not UIM	58	3.4418	.29077
	UIM	46	3.3793	.34050
	Total	104	3.4141	.31372
Peds 110 Clerkship Director Ratings Mean	Not UIM	58	3.4537	.29023
	UIM	46	3.4321	.25848
	Total	104	3.4441	.27553
Psych 110 Clerkship Director Ratings Mean	Not UIM	58	3.5496	.21611
	UIM	46	3.5448	.19661



	Total	104	3.5475	.20674
Surg 110 110 Clerkship Director Ratings Mean	Not UIM	58	3.5496	.25401
	UIM	46	3.4565	.31811
	Total	104	3.5084	.28648
Clerkship Medical Knowledge Clerkship Director Rating*	Not UIM	58	3.3836	.14967
	UIM	46	3.2935	.17223
	Total	104	3.3438	.16547
Clerkship Patient Care Clerkship Director Rating*	Not UIM	58	3.4231	.13947
	UIM	46	3.3437	.15916
	Total	104	3.3880	.15299
Clerkship Interpersonal Skills Clerkship Director Rating	Not UIM	58	3.5975	.15299
	UIM	46	3.5601	.18315
	Total	104	3.5810	.16720
Clerkship Professionalism Clerkship Director Rating*	Not UIM	58	3.6379	.15631
	UIM	46	3.5673	.18446
	Total	104	3.6067	.17214

p<.05

**Table 6 - Comparison of Assessed Outcomes for UIM and Not UIM Students who Received Honors Grade in the Acting internship (Sub I) who completed their clerkships in the P/F clerkship grading model**

		N	Mean	SD
F1 Overall medical knowledge exam score*	Not UIM	175	.8702	.04017
	UIM	87	.8471	.04425
	Total	262	.8626	.04289
MED110 Clerkship exam score	Not UIM	219	73.26	10.539
	UIM	98	71.33	10.733
	Total	317	72.66	10.620
NEURO110 Clerkship exam score	Not UIM	219	77.55	9.363
	UIM	98	75.88	9.547
	Total	317	77.03	9.437
OBGYN110 Clerkship exam score	Not UIM	219	76.68	9.125
	UIM	98	75.88	8.576
	Total	317	76.43	8.953
PEDS110 Clerkship exam score	Not UIM	219	77.59	10.196
	UIM	98	76.80	9.944
	Total	317	77.35	10.110
PSYCH 110 Clerkship exam score	Not UIM	219	81.24	6.628
	UIM	98	79.90	8.672
	Total	317	80.83	7.334
SURG 110 Clerkship exam score	Not UIM	219	73.30	9.273

	UIM	98	71.79	10.032
	Total	317	72.83	9.524
SUB-I clerkship director ratings - Attributes and Responsibility	Not UIM	219	3.963	.1304
	UIM	98	3.969	.1205
	Total	317	3.965	.1273
SUB-I clerkship director ratings - Comm Patients and Families	Not UIM	219	3.906	.2069
	UIM	98	3.929	.1759
	Total	317	3.913	.1978
SUB-I clerkship director ratings - Fund of Knowledge	Not UIM	219	3.724	.2754
	UIM	98	3.704	.2765
	Total	317	3.718	.2755
SUB-I clerkship director ratings - History Taking	Not UIM	219	3.781	.2621
	UIM	98	3.786	.2872
	Total	317	3.782	.2697
SUB-I clerkship director ratings - Oral Presentation	Not UIM	219	3.801	.2676
	UIM	98	3.816	.2527
	Total	317	3.806	.2628
SUB-I clerkship director ratings - Physical/Mental Status Exam	Not UIM	219	3.676	.3175
	UIM	98	3.709	.2865
	Total	317	3.686	.3082
SUB-I clerkship director ratings - Problem Solving	Not UIM	219	3.826	.2433
	UIM	98	3.811	.2436
	Total	317	3.822	.2431
SUB-I clerkship director ratings - Record Keeping	Not UIM	219	3.820	.2546
	UIM	98	3.821	.2513
	Total	317	3.820	.2531
SUB-I clerkship director ratings - Self-Improvement*	Not UIM	219	3.913	.1957
	UIM	98	3.862	.2357
	Total	317	3.897	.2099
SUB-I clerkship director ratings - Relationship w/Team Members	Not UIM	219	3.938	.1648
	UIM	98	3.954	.1451
	Total	317	3.943	.1589
Step1 exam score*	Not UIM	165	241.29	16.982
	UIM	75	235.11	18.636
	Total	240	239.36	17.711
Step2 exam Score*	Not UIM	219	251.13	11.948
	UIM	98	244.89	15.341
	Total	317	249.20	13.382
Anes 110 Clerkship Director Ratings Mean	Not UIM	219	3.5979	.24892
	UIM	98	3.5644	.28187

	Total	317	3.5875	.25956
FCM 110 Clerkship Director Ratings Mean	Not UIM	219	3.6741	.28063
	UIM	98	3.6173	.29250
	Total	317	3.6565	.28510
Med 110 Clerkship Director Ratings Mean*	Not UIM	219	3.6875	.20677
	UIM	98	3.5867	.25330
	Total	317	3.6563	.22664
Neuro 110 Clerkship Director Ratings Mean	Not UIM	219	3.5702	.19872
	UIM	98	3.5477	.23801
	Total	317	3.5633	.21152
Obgyn 110 Clerkship Director Ratings Mean	Not UIM	219	3.5984	.31812
	UIM	98	3.5816	.31684
	Total	317	3.5932	.31732
Peds 110 Clerkship Director Ratings Mean	Not UIM	219	3.5915	.20720
	UIM	98	3.5568	.27604
	Total	317	3.5808	.23080
Psych 110 Clerkship Director Ratings Mean	Not UIM	219	3.6230	.21712
	UIM	98	3.5918	.23024
	Total	317	3.6134	.22136
Surg 110 110 Clerkship Director Ratings Mean	Not UIM	219	3.6124	.23785
	UIM	98	3.6052	.26962
	Total	317	3.6102	.24770
Clerkship Medical Knowledge Clerkship Director Rating*	Not UIM	219	3.4823	.15382
	UIM	98	3.4452	.16796
	Total	317	3.4708	.15899
Clerkship Patient Care Clerkship Director Rating*	Not UIM	219	3.5257	.13163
	UIM	98	3.4821	.14846
	Total	317	3.5122	.13830
Clerkship Interpersonal Skills Clerkship Director Rating	Not UIM	219	3.7111	.12770
	UIM	98	3.6845	.17202
	Total	317	3.7029	.14312
Clerkship Professionalism Clerkship Director Rating*	Not UIM	219	3.7288	.12581
	UIM	98	3.6907	.17231
	Total	317	3.7170	.14264

p<.05

**Table 7 - Comparison of UIM Students Assessed Outcomes for UIM students based on Acting internship (Sub I) Grade received (students who completed their clerkships in the P/F clerkship grading model)**

	N	Mean	SD
Pass	42	.8176	.04797

F1 Overall medical knowledge exam score*	Honors	87	.8471	.04425
	Total	129	.8375	.04739
MED110 Clerkship exam score*	Pass	46	66.41	9.916
	Honors	98	71.33	10.733
	Total	144	69.76	10.694
NEURO110 Clerkship exam score*	Pass	46	72.15	8.451
	Honors	98	75.88	9.547
	Total	144	74.69	9.345
OBGYN110 Clerkship exam score*	Pass	46	72.52	8.044
	Honors	98	75.88	8.576
	Total	144	74.81	8.527
PEDS110 Clerkship exam score	Pass	46	77.48	9.201
	Honors	98	76.80	9.944
	Total	144	77.01	9.686
PSYCH 110 Clerkship exam score*	Pass	46	75.04	9.975
	Honors	98	79.90	8.672
	Total	144	78.35	9.353
SURG 110 Clerkship exam score*	Pass	46	68.09	10.950
	Honors	98	71.79	10.032
	Total	144	70.60	10.440
SUB-I clerkship director ratings - Attributes and Responsibility*	Pass	46	3.598	.3745
	Honors	98	3.969	.1205
	Total	144	3.851	.2902
SUB-I clerkship director ratings - Comm Patients and Families*	Pass	46	3.522	.3489
	Honors	98	3.929	.1759
	Total	144	3.799	.3091
SUB-I clerkship director ratings - Fund of Knowledge*	Pass	46	3.109	.2771
	Honors	98	3.704	.2765
	Total	144	3.514	.3920
SUB-I clerkship director ratings - History Taking*	Pass	46	3.217	.2916
	Honors	98	3.786	.2872
	Total	144	3.604	.3917
SUB-I clerkship director ratings - Oral Presentation*	Pass	46	3.207	.2901
	Honors	98	3.816	.2527
	Total	144	3.622	.3889
SUB-I clerkship director ratings - Physical/Mental Status Exam*	Pass	46	3.185	.2440
	Honors	98	3.709	.2865
	Total	144	3.542	.3669
SUB-I clerkship director ratings - Problem Solving*	Pass	46	3.141	.3103
	Honors	98	3.811	.2436

	Total	144	3.597	.4109
SUB-I clerkship director	Pass	46	3.250	.2528
ratings - Record Keeping*	Honors	98	3.821	.2513
	Total	144	3.639	.3666
SUB-I clerkship director	Pass	46	3.554	.3202
ratings - Self-Improvement*	Honors	98	3.862	.2357
	Total	144	3.764	.3012
SUB-I clerkship director	Pass	46	3.609	.3147
ratings - Relationship w/Team	Honors	98	3.954	.1451
Members*	Total	144	3.844	.2675
Step1 exam score*	Pass	38	227.76	16.581
	Honors	75	235.11	18.636
	Total	113	232.64	18.233
Step2 exam Score*	Pass	44	234.82	13.989
	Honors	98	244.89	15.341
	Total	142	241.77	15.602
Anes 110 Clerkship Director	Pass	46	3.4524	.31213
Ratings Mean*	Honors	98	3.5644	.28187
	Total	144	3.5286	.29546
FCM 110 Clerkship Director	Pass	46	3.4592	.25726
Ratings Mean*	Honors	98	3.6173	.29250
	Total	144	3.5668	.29040
Med 110 Clerkship Director	Pass	46	3.4117	.28522
Ratings Mean*	Honors	98	3.5867	.25330
	Total	144	3.5308	.27537
Neuro 110 Clerkship Director	Pass	46	3.4505	.27473
Ratings Mean*	Honors	98	3.5477	.23801
	Total	144	3.5167	.25347
Obgyn 110 Clerkship Director	Pass	46	3.3793	.34050
Ratings Mean*	Honors	98	3.5816	.31684
	Total	144	3.5170	.33696
Peds 110 Clerkship Director	Pass	46	3.4321	.25848
Ratings Mean*	Honors	98	3.5568	.27604
	Total	144	3.5169	.27589
Psych 110 Clerkship Director	Pass	46	3.5448	.19661
Ratings Mean	Honors	98	3.5918	.23024
	Total	144	3.5768	.22047
Surg 110 110 Clerkship	Pass	46	3.4565	.31811
Director Ratings Mean*	Honors	98	3.6052	.26962
	Total	144	3.5577	.29325

Clerkship Medical Knowledge	Pass	46	3.2935	.17223
Clerkship Director Rating*	Honors	98	3.4452	.16796
	Total	144	3.3967	.18305
Clerkship Patient Care	Pass	46	3.3437	.15916
Clerkship Director Rating*	Honors	98	3.4821	.14846
	Total	144	3.4379	.16468
Clerkship Interpersonal Skills	Pass	46	3.5601	.18315
Clerkship Director Rating*	Honors	98	3.6845	.17202
	Total	144	3.6448	.18443
Clerkship Professionalism	Pass	46	3.5673	.18446
Clerkship Director Rating*	Honors	98	3.6907	.17231
	Total	144	3.6513	.18488

**Table 8 – Comparison of Not UIM Students Assessed Outcomes for UIM students based on Acting internship (Sub I) Grade received (students who completed their clerkships in the P/F clerkship grading model)**

		N	Mean	Std. Deviation
F1 Overall medical knowledge exam score*	Pass	44	.8441	.04484
	Honors	175	.8702	.04017
	Total	219	.8650	.04237
MED110 Clerkship exam score	Pass	58	71.22	10.000
	Honors	219	73.26	10.539
	Total	277	72.83	10.444
NEURO110 Clerkship exam score*	Pass	58	74.24	8.568
	Honors	219	77.55	9.363
	Total	277	76.86	9.286
OBGYN110 Clerkship exam score*	Pass	58	73.16	8.987
	Honors	219	76.68	9.125
	Total	277	75.94	9.193
PEDS110 Clerkship exam score	Pass	58	76.60	9.954
	Honors	219	77.59	10.196
	Total	277	77.39	10.136
PSYCH 110 Clerkship exam score*	Pass	58	78.78	6.996
	Honors	219	81.24	6.628
	Total	277	80.73	6.769
SURG 110 Clerkship exam score	Pass	58	72.14	9.021
	Honors	219	73.30	9.273
	Total	277	73.05	9.216
SUB-I clerkship director ratings - Attributes and Responsibility*	Pass	58	3.690	.3354
	Honors	219	3.963	.1304
	Total	277	3.906	.2217
SUB-I clerkship director ratings - Comm Patients and Families*	Pass	58	3.595	.3306
	Honors	219	3.906	.2069
	Total	277	3.841	.2693
SUB-I clerkship director ratings - Fund of Knowledge*	Pass	58	3.198	.2639
	Honors	219	3.724	.2754
	Total	277	3.614	.3467
SUB-I clerkship director ratings - History Taking*	Pass	58	3.362	.3077
	Honors	219	3.781	.2621
	Total	277	3.693	.3209
SUB-I clerkship director ratings - Oral Presentation*	Pass	58	3.293	.3381
	Honors	219	3.801	.2676
	Total	277	3.695	.3508
	Pass	58	3.259	.2847

SUB-I clerkship director	Honors	219	3.676	.3175
ratings - Physical/Mental	Total	277	3.588	.3540
Status Exam*				
SUB-I clerkship director	Pass	58	3.241	.2689
ratings - Problem Solving*	Honors	219	3.826	.2433
	Total	277	3.704	.3443
SUB-I clerkship director	Pass	58	3.371	.2896
ratings - Record Keeping*	Honors	219	3.820	.2546
	Total	277	3.726	.3194
SUB-I clerkship director	Pass	58	3.526	.3165
ratings - Self-Improvement*	Honors	219	3.913	.1957
	Total	277	3.832	.2755
SUB-I clerkship director	Pass	58	3.629	.3449
ratings - Relationship w/Team	Honors	219	3.938	.1648
Members*	Total	277	3.874	.2487
Step1 exam score	Pass	41	236.51	15.260
	Honors	165	241.29	16.982
	Total	206	240.34	16.727
Step2 exam Score*	Pass	57	244.63	11.661
	Honors	219	251.13	11.948
	Total	276	249.79	12.158
Anes 110 Clerkship Director	Pass	58	3.5442	.26231
Ratings Mean	Honors	219	3.5979	.24892
	Total	277	3.5866	.25225
FCM 110 Clerkship Director	Pass	58	3.5636	.27343
Ratings Mean*	Honors	219	3.6741	.28063
	Total	277	3.6509	.28226
Med 110 Clerkship Director	Pass	58	3.5463	.27694
Ratings Mean*	Honors	219	3.6875	.20677
	Total	277	3.6579	.23004
Neuro 110 Clerkship Director	Pass	58	3.4770	.22441
Ratings Mean*	Honors	219	3.5702	.19872
	Total	277	3.5507	.20745
Obgyn 110 Clerkship Director	Pass	58	3.4418	.29077
Ratings Mean*	Honors	219	3.5984	.31812
	Total	277	3.5656	.31854
Peds 110 Clerkship Director	Pass	58	3.4537	.29023
Ratings Mean*	Honors	219	3.5915	.20720
	Total	277	3.5627	.23338
	Pass	58	3.5496	.21611



Psych 110 Clerkship Director	Honors	219	3.6230	.21712
Ratings Mean*	Total	277	3.6076	.21858
Surg 110 Clerkship Director	Pass	58	3.5496	.25401
Ratings Mean	Honors	219	3.6124	.23785
	Total	277	3.5993	.24221
Clerkship Medical Knowledge	Pass	58	3.3836	.14967
Clerkship Director Rating*	Honors	219	3.4823	.15382
	Total	277	3.4616	.15790
Clerkship Patient Care	Pass	58	3.4231	.13947
Clerkship Director Rating*	Honors	219	3.5257	.13163
	Total	277	3.5042	.13947
Clerkship Interpersonal Skills	Pass	58	3.5975	.15299
Clerkship Director Rating*	Honors	219	3.7111	.12770
	Total	277	3.6873	.14091
Clerkship Professionalism	Pass	58	3.6379	.15631
Clerkship Director Rating*	Honors	219	3.7288	.12581
	Total	277	3.7098	.13755

# Appendix Tables

**Table A - Comparison of Assessed Outcomes for Students who Received Pass and Honors Acting internship (Sub I) grades who completed their clerkships in the P/F clerkship grading model**

		Received <u>Pass</u> Grade in Sub I			Received <u>Honors</u> Grade in Sub I		
		N	Mean	SD	N	Mean	SD
F1 Overall medical knowledge exam score	Not UIM	44*	.8441	.04484	175*	.8702	.04017
	UIM	42	.8176	.04797	87	.8471	.04425
	Total	86	.8312	.04801	262	.8626	.04289
MED110 Clerkship exam score	Not UIM	58*	71.22	10.000	219	73.26	10.539
	UIM	46	66.41	9.916	98	71.33	10.733
	Total	104	69.10	10.201	317	72.66	10.620
NEURO110 Clerkship exam score	Not UIM	58	74.24	8.568	219	77.55	9.363
	UIM	46	72.15	8.451	98	75.88	9.547
	Total	104	73.32	8.539	317	77.03	9.437
OBGYN110 Clerkship exam score	Not UIM	58	73.16	8.987	219	76.68	9.125
	UIM	46	72.52	8.044	98	75.88	8.576
	Total	104	72.88	8.548	317	76.43	8.953
PEDS110 Clerkship exam score	Not UIM	58	76.60	9.954	219	77.59	10.196
	UIM	46	77.48	9.201	98	76.80	9.944
	Total	104	76.99	9.592	317	77.35	10.110
PSYCH 110 Clerkship exam score	Not UIM	58*	78.78	6.996	219	81.24	6.628
	UIM	46	75.04	9.975	98	79.90	8.672
	Total	104	77.13	8.604	317	80.83	7.334
SURG 110 Clerkship exam score	Not UIM	58*	72.14	9.021	219	73.30	9.273
	UIM	46	68.09	10.950	98	71.79	10.032
	Total	104	70.35	10.075	317	72.83	9.524
SUB-I clerkship director ratings - Attributes and Responsibility	Not UIM	58	3.690	.3354	219	3.963	.1304
	UIM	46	3.598	.3745	98	3.969	.1205
	Total	104	3.649	.3544	317	3.965	.1273
SUB-I clerkship director ratings - Comm Patients and Families	Not UIM	58	3.595	.3306	219	3.906	.2069
	UIM	46	3.522	.3489	98	3.929	.1759
	Total	104	3.563	.3391	317	3.913	.1978
SUB-I clerkship director ratings - Fund of Knowledge	Not UIM	58	3.198	.2639	219	3.724	.2754
	UIM	46	3.109	.2771	98	3.704	.2765
	Total	104	3.159	.2722	317	3.718	.2755
SUB-I clerkship director ratings - History Taking	Not UIM	58*	3.362	.3077	219	3.781	.2621
	UIM	46	3.217	.2916	98	3.786	.2872
	Total	104	3.298	.3078	317	3.782	.2697
SUB-I clerkship director ratings - Oral Presentation	Not UIM	58	3.293	.3381	219	3.801	.2676
	UIM	46	3.207	.2901	98	3.816	.2527

	Total	104	3.255	.3192	317	3.806	.2628
SUB-I clerkship director ratings - Physical/Mental Status Exam	Not UIM	58	3.259	.2847	219	3.676	.3175
	UIM	46	3.185	.2440	98	3.709	.2865
	Total	104	3.226	.2688	317	3.686	.3082
SUB-I clerkship director ratings - Problem Solving	Not UIM	58	3.241	.2689	219	3.826	.2433
	UIM	46	3.141	.3103	98	3.811	.2436
	Total	104	3.197	.2908	317	3.822	.2431
SUB-I clerkship director ratings - Record Keeping	Not UIM	58*	3.371	.2896	219	3.820	.2546
	UIM	46	3.250	.2528	98	3.821	.2513
	Total	104	3.317	.2792	317	3.820	.2531
SUB-I clerkship director ratings - Self-Improvement	Not UIM	58	3.526	.3165	219*	3.913	.1957
	UIM	46	3.554	.3202	98	3.862	.2357
	Total	104	3.538	.3169	317	3.897	.2099
SUB-I clerkship director ratings - Relationship w/Team Members	Not UIM	58	3.629	.3449	219	3.938	.1648
	UIM	46	3.609	.3147	98	3.954	.1451
	Total	104	3.620	.3305	317	3.943	.1589

\*p<.05

**Table B - Comparison of Assessed Outcomes for Students who Received Pass and Honors Acting internship (Sub I) grades who completed their clerkships in the tiered clerkship grading model**

		Received <u>Pass</u> Grade in Sub I			Received <u>Honors</u> Grade in Sub I		
		N	Mean	SD	N	Mean	SD
Overall medical knowledge exam score	Not UIM	21	.8243	.04190	63	.8492	.04202
	UIM	10	.7930	.03917	37	.8319	.04824
	Total	31	.8142	.04303	100	.8428	.04497
MED110 Clerkship exam score	Not UIM	91	71.11	9.244	223	74.65	8.665
	UIM	51	68.82	8.708	96	73.32	8.971
	Total	142	70.29	9.091	319	74.25	8.765
NEURO110 Clerkship exam score	Not UIM	91	77.67	6.915	223	79.07	7.556
	UIM	51	75.35	6.805	96	78.14	8.247
	Total	142	76.84	6.942	319	78.79	7.769
OBGYN110 Clerkship exam score	Not UIM	91*	76.60	7.251	223	78.66	6.336
	UIM	51	73.75	8.646	96	78.16	6.580
	Total	142	75.58	7.872	319	78.51	6.404
PEDS110 Clerkship exam score	Not UIM	91	80.48	7.555	223	83.52	5.954
	UIM	51	78.18	6.455	96	82.59	5.453
	Total	142	79.65	7.242	319	83.24	5.815
PSYCH 110 Clerkship exam score	Not UIM	91	78.87	6.004	223*	81.13	6.107
	UIM	51	77.00	6.693	96	78.96	6.603
	Total	142	78.20	6.301	319	80.47	6.329
SURG 110 Clerkship exam score	Not UIM	91	72.63	7.906	223*	74.57	7.748
	UIM	51	70.90	7.281	96	72.07	7.775
	Total	142	72.01	7.706	319	73.82	7.828
SUB-I clerkship director ratings - Attributes and Responsibility	Not UIM	91	3.643	.3273	223	3.966	.1255
	UIM	51	3.588	.4208	96	3.964	.1307
	Total	142	3.623	.3631	319	3.966	.1269
SUB-I clerkship director ratings - Comm Patients and Families	Not UIM	91	3.538	.3182	223	3.865	.2369
	UIM	51	3.539	.3721	96	3.875	.2176
	Total	142	3.539	.3372	319	3.868	.2310
SUB-I clerkship director ratings - Fund of Knowledge	Not UIM	91	3.132	.3235	223	3.668	.2959
	UIM	51	3.059	.2941	96	3.661	.2665
	Total	142	3.106	.3142	319	3.666	.2870
SUB-I clerkship director ratings - History Taking	Not UIM	91	3.275	.2715	223	3.769	.2498
	UIM	51	3.216	.3355	96	3.734	.3158
	Total	142	3.254	.2962	319	3.759	.2713
	Not UIM	91	3.181	.3537	223	3.832	.2506

SUB-I clerkship director ratings - Oral Presentation	UIM	51	3.186	.2821	96	3.797	.2673
	Total	142	3.183	.3288	319	3.821	.2558
SUB-I clerkship director ratings - Physical/Mental Status Exam	Not UIM	91	3.203	.2787	223	3.661	.2862
	UIM	51	3.176	.3134	96	3.625	.2810
	Total	142	3.194	.2908	319	3.650	.2847
SUB-I clerkship director ratings - Problem Solving	Not UIM	91	3.170	.3182	223	3.776	.2624
	UIM	51	3.137	.2842	96	3.760	.2614
	Total	142	3.158	.3058	319	3.771	.2618
SUB-I clerkship director ratings - Record Keeping	Not UIM	91	3.264	.2919	223	3.816	.2508
	UIM	51	3.245	.3221	96	3.781	.2597
	Total	142	3.257	.3021	319	3.806	.2536
SUB-I clerkship director ratings - Self- Improvement	Not UIM	91	3.500	.3333	223	3.890	.2075
	UIM	51	3.431	.4002	96	3.865	.2234
	Total	142	3.475	.3589	319	3.882	.2124
SUB-I clerkship director ratings - Relationship w/Team Members	Not UIM	91	3.604	.3376	223	3.944	.1581
	UIM	51	3.549	.3501	96	3.943	.1601
	Total	142	3.585	.3419	319	3.944	.1585

