



# Standardized Recommendation Letters for Otolaryngology Residency

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## ABSTRACT

**Objectives:** To assess the advantages and disadvantages of standardized letters of recommendations (LOR) used in otolaryngology residency.

**Methods:** A retrospective review of otolaryngology residency applications spanning April 2013 to March 2015. LOR objective measures were extracted and compared to USMLE scores, number of research projects, and alpha omega alpha (AOA) membership.

**Results:** Seventy applications (22 female; 31%) were identified, with a mean age of  $27 \pm 1.3$  years. "Medical knowledge" assessment on the standardized LOR was not correlated with USMLE step 1 or step 2 scores ( $p = 0.83$  and  $p = 0.88$ , respectively). "Research ability" scores did not correlate the number of overall publications ( $p = 0.47$  and  $p = 0.65$ ). "Initiative" and "drive" assessment also did not correlate with the number of presentations or publications ( $p = 0.2$  and  $p = 0.37$ ). USMLE step 1 score showed a significant correlation with being a member of Alpha Omega Alpha ( $p = 0.001$ ).

**Conclusions:** The standardized LOR was developed to reduce the subjectivity of the traditional LOR. Our study found that the individual components of the standardized LOR did not correlate with objective measures. Standardized LORs may have the same degree of subjectivity as traditional LORs.

## INTRODUCTION

- Admission to Otolaryngology- Head & Neck Surgery residency is highly competitive. Due to the high number of applicants, the complexity of the application process has increased.<sup>1</sup>
- The objective of the residency selection process should evaluate the candidates' ability to appropriately discern the qualities needed to transition from medical school to residency successfully.<sup>2</sup>
- The residency match selection process is a multi-factorial process including the assessment of many variables such as medical school grades, publication record, personal statement, USMLE scores, and letters of recommendation (LORs).<sup>3,4</sup>
- The purpose of this study was to assess the validity and efficacy of LORs in the assessment of a residency applicant.

## METHODS AND MATERIALS

- A retrospective review of residency applicants who interviewed at our institution from April 2013 to March 2015.
- LORs were reviewed and key descriptors from each recommendation were extracted.
- Standardized LORs were assessed using a visual analog scale (VAS) and compared to objective measures within the application, including applicant USMLE score, number of published research projects, and alpha omega alpha (AOA) membership.
- Correlations were obtained for the two sets of measures using ANOVA statistical testing.

Objective Measure on application	Objective Measure on Application	P-value
Alpha Omega Alpha Member	USMLE Step 1 Score	0.001
	USMLE Step 2 Score	0.71
	Oral Presentation	0.04
	Grade in surgery rotation	0.39
	Grade in ENT rotation	0.69
Grade in ENT rotation	USMLE Step 1 Score	0.1
	USMLE Step 2 Score	0.68

**Table 1.** Correlation between Objective Measures on application Form

## RESULTS

- Seventy applicants interviewed for residency were included.
- In total, 48 male and 22 female applicants were described with a mean age of  $27 \pm 1.3$  years old.
- Table 1 demonstrates a higher correlation of USMLE step 1 score and number of oral abstracts accepted for those with AOA membership.
- Table 2 demonstrates the correlation between all descriptors on LOR and objective measures on the application.

**Table 2.** Correlation between objective measures on application and subjective candidate descriptors on LOR.

Objective Measure on application	Subjective Measures on Standardized Letter of Recommendation	P-value	
Alpha Omega Alpha Member	How well know applicant	0.49	
	Taking care of patients	0.34	
	Medical Knowledge	0.56	
	Professionalism	0.85	
	Interpersonal skills	0.49	
	Procedural skills	0.42	
	Research	0.73	
	Initiative/ drive	0.77	
	Commitment to Otolaryngology	0.54	
	Commitment to Academics	0.29	
	Match Potential	0.58	
	Oral Presentation	How well know applicant	0.86
		Taking care of patients	0.85
Medical Knowledge		0.94	
Professionalism		0.97	
Interpersonal skills		0.94	
Procedural skills		0.89	
Research		0.72	
Initiative/ drive		0.98	
Commitment to Otolaryngology		0.97	
Commitment to Academics		0.75	
Match Potential		0.98	
Poster Presentation		How well know applicant	0.30
		Taking care of patients	0.11
	Medical Knowledge	0.09	
	Professionalism	0.06	
	Interpersonal skills	0.1	
	Procedural skills	0.65	
	Research	0.1	
	Initiative/ drive	0.08	
	Commitment to Otolaryngology	0.15	
	Commitment to Academics	0.03	
	Match Potential	0.11	
	USMLE Step 1 Score	How well know applicant	0.81
		Taking care of patients	0.87
Medical Knowledge		0.83	
Professionalism		0.80	
Interpersonal skills		0.80	
Procedural skills		0.86	
Research		0.95	
Initiative/ drive		0.80	
Commitment to Otolaryngology		0.67	
Commitment to Academics		0.33	
Match Potential		0.75	
USMLE Step 2 Score		How well know applicant	0.68
		Taking care of patients	0.81
	Medical Knowledge	0.88	
	Professionalism	0.95	
	Interpersonal skills	0.92	
	Procedural skills	0.97	
	Research	0.77	
	Initiative/ drive	0.93	
	Commitment to Otolaryngology	0.91	
	Commitment to Academics	0.49	
	Match Potential	0.89	

## DISCUSSION

- Letter writers, know each applicant best, and tend to rate each applicant highly.<sup>5</sup>
- Although the new format of LORs use a scoring system, this score is not correlated to objective measures such as USMLE score. Instead, LORs use subjective scores as reported by the letter writers.
- In our small cohort, being a member of AOA correlated with number of oral presentations and a higher USMLE step 1 score.
- Only commitment to academics as described in the LOR correlated with number of oral abstracts presented. No other metric statistically correlated with the LOR metric.
- Our study is limited by the small number of subjects. Future studies will require a more larger evaluation of the influential factors currently used in the residency selection program.

## CONCLUSIONS

- The standardized LOR was developed to reduce the subjectivity of the traditional LOR.
- Our study found that other than commitment to academics, the individual components of the standardized LOR did not correlate with objective measures.
- As such, standardized LORs may have the same degree of subjectivity as traditional LORs

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