Title

PD30-07 THE USE OF USMLE STEP 1 AND USMLE STEP 2 REQUIRED MINIMUM SCORES IN SCREENING UROLOGY RESIDENCY APPLICANTS FOR INTERVIEW OFFERS

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Country/Region of Origin	# of IMGs	%
Caribbean	11	18.33%
Iran	8	13.33%
Colombia	8	13.33%
India	5	8.33%
Venezuela	4	6.67%
Egypt	3	5.00%
Lebanon	3	5.00%
Brazil	3	5.00%
Lebanon	3	5.00%
Ecuador	1	1.67%
United Arab Emirates	1	1.67%
Greece	1	1.67%
Israel	1	1.67%
Ireland	1	1.67%
UK	1	1.67%
Jordan	1	1.67%
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PD30-06

TRENDS IN PUBMED-INDEXED RESEARCH IN MATCHED UROLOGY APPLICANTS: YEARLY ANALYSIS OF THE 2017-2021 MATCH CYCLES

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INTRODUCTION AND OBJECTIVE: Research experience and authorship of peer-reviewed publications are important components of the residency application. This study aims to determine indexed research output of matched urology applicants and examine yearly trends between match-cycles.

METHODS: The resident rosters of 145 urology programs were screened for matched applicants. PubMed-indexed publications prior to starting residency were recorded and further analyzed to determine authorship role, relation to urology and journal ranking. Journal ranking was extracted from scimagojr, with the top 25% journals of the index considered Q1. Gathered data was analyzed in RStudio.

RESULTS: Data was successfully extracted from 131 out of 145 urology residency programs (90%) for a total of 1,655 matched applicants spanning the 2017-2021 match cycles. Mean and median total publications were 2.39 and 1 respectively (range 0-60). Mean and median first-authored publications were 0.75 and 0 (range 0-19), while mean and median urology publications were 1.57 and 0 (range 0-52). First-authored urology research had a mean of 0.57 and a median of 0 (0-18). There has been a significant trend of increased publications among matched urology applicants from 2017 to 2021. Linear regression modelling of research productivity and match years revealed a significant increase in publications per year (adjusted β 0.019, p=0.043). Mean and median total publications for 2017 were 1.82 and 1 (0-36) respectively, 2.22 and 1 (0-52) for 2018, 2.19 and 1 (0-38) for 2019, 2.98 and 1 (0-40) for 2020 and 2.70 and 2 (0-32) for 2021 (p=<.001). Findings are summarized in Table 1.

CONCLUSIONS: Research productivity has increased from 2017 to 2021. However, there is still a wide range of urology research productivity amongst successful urology applicants.

	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	P value	Unadjusted β and p value		Adjusted β and p value	
Total Research	1.82 1(0-2)	2.22 1(0-2.5)	2.19 1(0-3)	2.98 1(0-4)	2.70 1(0-3.25)	<.001	0.024	0.001	0.019	0.043
First-Author Research	0.60 0(0-1)	0.65 0(0-1)	0.65 0(0-1)	0.99 0(0-1)	0.82 0(0-1)	0.015	0.057	0.006	0.028	0.677
Urology Research	1.19 0(0-1)	1.46 0(0-1)	1.43 0(0-1)	1.9 0(0-2)	1.85 0(0-2)	<.001	0.021	0.012	0.022	0.955
First-Author Urology Research	0.46 0(0)	0.50 0(0)	0.48 0(0-1)	0.72 0(0-1)	0.68 0(0-1)	0.018	0.058	0.014	0.01	0.999

Source of Funding: No funding was received

PD30-07

THE USE OF USMLE STEP 1 AND USMLE STEP 2 REQUIRED MINIMUM SCORES IN SCREENING UROLOGY RESIDENCY APPLICANTS FOR INTERVIEW OFFERS

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INTRODUCTION AND OBJECTIVE: Originally created for the purpose of demonstrating medical student proficiency—the United States Medical Licensing Examination (USMLE) Step 1 examination has gained prominence as a tool to screen for urology residency applicants, significantly impacting residency prospects for medical students. Due to the COVID-19 pandemic and pause on in-person interviews, many urology programs have cited significant increases in residency applications overwhelming their institutions. In January 2022, the Step 1 score will transitioned to a pass-fail outcome. In this study, we aim to describe how urology program directors (PDs) use Step 1 and Step 2 scores in light of the upcoming change.

METHODS: A survey was developed and distributed to the PDs of all 144 accredited urology programs via the Society of Academic Urology list-serve. Responses regarding Step 1 and Step 2 score minimum requirements for the 2020-2021 urology residency match were evaluated with descriptive statistics.

RESULTS: Of those who responded to the survey, 112 identified as PDs, representing 78% of residency programs. For Step 1 and Step 2, there was no cut-off score for 29% and 41% of programs, respectively. Of institutions with Step 2 cut-off scores, 55% had cut-off scores above 236 as compared to 42% of institutions having the same cut-off for Step 1.

CONCLUSIONS: In this study we demonstrated that although Urology programs are more likely to have a required minimum score for USMLE Step 1 than for Step 2, a higher proportion of programs have a higher Step 2 cut-off score than they do for Step 1. Given the upcoming transition to pass-fail for Step1, there may be increasing importance placed on Step 2 and higher threshold scores required to be screened in. Institutions should consider transparency regarding Step 2 score cut-offs to enable applicants to apply judiciously to programs and to decrease the overall application review burden on PDs.

Attention should be paid to the downstream effects of these changes to the diversity of the available pool of urology applicants.

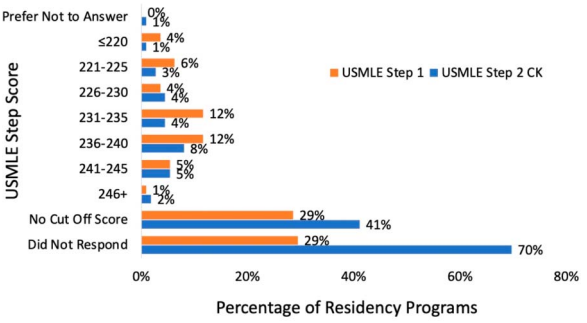

Figure 1: Bar chart demonstrating preferred minimum USMLE Step Score (i.e. Cut-off score) among urology residency programs during 2020-2021 application cycle (n = 112)

Source of Funding: None

PD30-08

UROLOGIC TRAINEE SURGICAL ASSESSMENT TOOLS: SEEKING STANDARDIZATION

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INTRODUCTION AND OBJECTIVE: Assessing a urology trainees' performance is critical to evaluating longitudinal progress toward surgical autonomy. Presently, there is wide variability in surgical assessment tools used by training programs. We aim to critically analyze the available tools in urologic surgery and assess their validity, reliability, and feasibility in an effort to identify features that may lead to a more standardized assessment pathway.

METHODS: The primary literature was reviewed to identify published surgical assessment tools within the past 20 years. Assessments specific to urologic training were included for final review. Each tool was assessed based on its ability to identify performance differences between participants with varying experience (construct validity), its ability to measure the behavior of which it intended to (content validity), if there was agreement amongst rater's scores (interrater reliability), if there was correlation between individual rater's scores and overall scores (internal consistency), and if it had been externally validated.

RESULTS: Thirty surgical assessment tools were identified, 15 were specific to Urology, Table 1. Of these, six (40.0%) assessed surgical simulations (e.g. robotic trainer) and nine (60.0%) were designed to provide real-time feedback in the operating room. Twelve (80.0%) had some form of validity; eight (53.3%) had construct validity, nine (60.0%) had content validity, and five (33.3%) had both construct and content validity. Six (40.0%) of the tools were significantly reliable, with six (40.0%) demonstrating at least moderate interrater reliability for all of the tool's components and one showing at least acceptable internal consistency. No tool was externally validated.

CONCLUSIONS: There is high variability between available urologic trainee assessment tools. While 15 tools were identified, each had varying degrees of internal validity, and none had been externally validated. This lack of external validity creates the possibility of large inter-assessment variability between tools and invites evaluation discordance between training programs. There is an unmet need for a standardized surgical assessment tool to be incorporated into AUA training programs that is both internally consistent, reliable, and externally valid.

Table 1. Assessment Tools Used in Urologic Residency Training

Assessment	Study	Domain	Construct Validity	Content Validity	Interrater Reliability	Internal Consistency	External Validation
Global Rating Scale (GRS)	Matsumoto et al. 2001	Endourology	yes	no	yes	yes	no
Davis Tool	Davis et al. 2010	RALP	no	no	no	no	no
Laparoscopic Nephrectomy Scoring System	Kommu et al. 2011	Laparoscopic Nephrectomy	yes	no	yes	no	no
Imperial College Surgical Assessment Device (ICSAD)	Salvado et al. 2015	Endourology	yes	no	no	no	no
Robotic Anastomosis Competency Evaluation (RACE)	Raza et al. 2015	Urethrovesical Anastomosis	yes	yes	yes	no	no
RARP Assessment Score	Lovegrove et al. 2016	RALP	yes	yes	no	no	no
Scoring Adherence to Prostatic Surgical Aims (ScAPSA)	Dal Moro et al. 2016	RALP	no	no	no	no	no
Prostatectomy Assessment and Competency Evaluation (PACE)	Hussein et al. 2017	RALP	yes	yes	no	no	no
Pelvic Lymphadenectomy Assessment and Completion Evaluation (PLACE)	Hussein et al. 2017	PLND	no	yes	no	no	no
Cystectomy Assessment and Surgical Evaluation (CASE)	Hussein et al. 2018	Robot-Assisted Radical Cystectomy	no	yes	yes	no	no
Test Objective Competence - Transurethral Resection of Bladder Tumor (TOCO-TURBT)	de Vries et al. 2018	TURBT	yes	yes	yes	no	no
Laparoscopic Radical Nephrectomy Assessment Tool	Lovegrove et al. 2018	Laparoscopic Radical Nephrectomy	no	yes	no	no	no
Simulation Based Training (SBT)	Kim et al. 2019	Endourology	no	no	no	no	no
Urethroplasty Training and Assessment Tool (UTAT)	Jasionowska et al. 2019	Urethroplasty	no	yes	no	no	no
Global Assessment of Urological Endoscopic Skills (GAUES)	Biyani et al. 2020	Endourology	yes	yes	yes	no	no

Abbreviations: RALP, Robot Assisted Laparoscopic Prostatectomy; PLND, Pelvic Lymph Node Dissection; TURBT, Transurethral Resection of Bladder Tumor.

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PD30-09

IMPACT AND IMPLICATIONS OF THE COVID-19 PANDEMIC ON UROLOGIC TRAINING

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INTRODUCTION AND OBJECTIVE: The COVID-19 pandemic has impacted many facets of healthcare in the United States. Changes in public health and hospital policies led to changes in the surgical care of patients and caused disruptions in medical training. Currently, there is limited understanding of how significantly the pandemic impacted urology resident education across the U.S.. The aim of this project is to examine the trends in urologic procedures, as captured by the Accreditation Council for Graduate Medical Education (ACGME) performed by residents before, during and after the peak of the COVID-19 pandemic.

METHODS: A retrospective review was performed of publicly available urology resident case logs between July 1 2016 and June 30 2021. Cases were divided into subcategories defined by ACGME and analyzed with linear regression models using year and category as predictors. Statistical calculations were conducted using R (version 4.0.2).

RESULTS: Statistical analysis of the national average number of procedures performed by urology residents indicate an upward trend of urology cases. Starting in 2016, the national average of general urology procedures performed by residents has increased by 4-5 each year except for 2020, which saw a drop in case volume. However, in 2021 the case volume dramatically increased to the same rate as projected had there not been a disruption in 2020. The same analysis applied to other categories of urology procedures resulted in the same findings of a decrease in 2020 followed by a quick rebound in 2021.

CONCLUSIONS: Trends in ACGME urologic resident case logs suggest that despite widespread pandemic-related disruptions in surgical case volume, there has been minimal detriment to urologic resident training over time. Urologic care is essential and in high demand as evidenced by the uptick in volume across training programs within the U.S.