

Readability Metrics of Provider Post-Operative Handouts in Urology

Fei Lian, Jennifer Lu, Mark D White, Barry A Kogan
 Department of Surgery, Division of Urology, Albany Medical College, Albany, NY

Introduction

- The NIH recommends writing handouts at a sixth-grade reading level.
- No research has focused on written education in the urology post-operative setting.
- We hypothesize that the majority of provider handouts exceed the NIH target.

	N	Median Reading Grade Level	Interquartile Range	P value	Median Word Count	Interquartile Range	P value
Handout Origin				Compared to "others"			
AUA	18	9.25	8.77-9.57	0.382	3693	2704-4575	<0.001
AMC	19	9.1	8.40-10.00	0.456	479	382-742	0.003
Others	201	9.3	8.50-10.00	N/A	517	356-738	N/A
Handout Specialty				Compared to "general"			
Endourology	24	8.45	7-9.57	0.358	544	311-733	1
General Adult	68	9.1	8.4-9.87	N/A	453	346-712	N/A
Infertility/Andrology	24	9.8	9.4-10.27	0.092	628	363-744	1
Oncology	59	9.4	8.8-9.9	0.499	538	363-1325	0.04
Pediatrics	29	9	8.65-10.2	0.77	612	395-890	0.964
Female/Reconstruction	34	9.55	8.6-10.35	0.324	678	406-850	0.883
All Handouts	238	9.3	8.60-9.92	N/A	553	370-778	NA

Methods

- 238 post-operative patient handouts in the public domain representing US academic and private practices were reviewed.
- Reading grade level was calculated with commonly used assessment algorithms.
- Statistical significance was set at $p < 0.05$.

Results

- Provider post-operative handouts were written at a median 9.3 grade reading level (range 5.8-14, interquartile range [IQR] 8.6-9.9).
- 15 (6.8%) handouts were written at a sixth-grade reading level.
- There was no correlation between word count and median reading grade (pairwise Pearson correlation = 0.015, 95% CI -0.113-0.142, $p=0.822$).

Conclusions

- **Over 93% of analyzed post-operative urology handouts failed to meet the recommended NIH target for reading level. Handouts from the AUA are likely too verbose.**