Slide 1

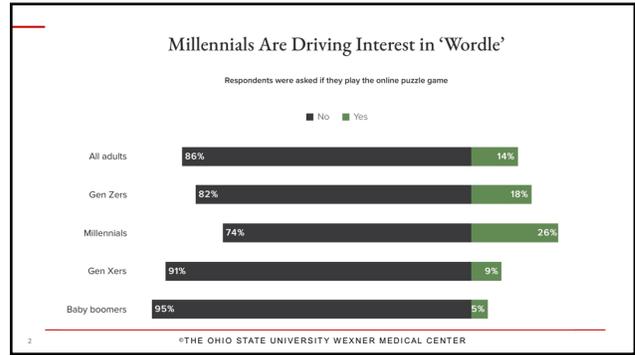SOCIETY FOR AMBULATORY ANESTHESIA
www.SAMBAhq.org

Aspiration and Propofol for Colonoscopy

Russell P. Woda, DO, MA, FCCP
Associate Professor of Anesthesiology, Clinical Director, Anesthesia Endoscopy Services
The Ohio State University Wexner Medical Center
Columbus, Ohio

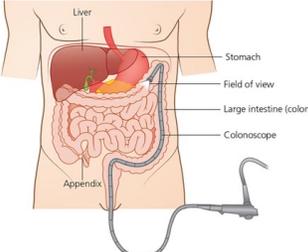SAMBA 2023 Annual Meeting • May 18 - 20, 2023   @samba_hq

Slide 2

Millennials Are Driving Interest in 'Wordle'

Respondents were asked if they play the online puzzle game

	No	Yes
All adults	86%	14%
Gen Zers	82%	18%
Millennials	74%	26%
Gen Xers	91%	9%
Baby boomers	95%	5%

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Slide 3

Colonoscopy and Colon Cancer Screening

An exam using a tube-like instrument to look inside the rectum and colon for polyps, abnormal areas or cancer. Tissue samples can be collected (biopsy) and abnormal growths can be removed.

Labels: Liver, Stomach, Field of view, Large intestine (colon), Colonoscope, Appendix

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Slide 4

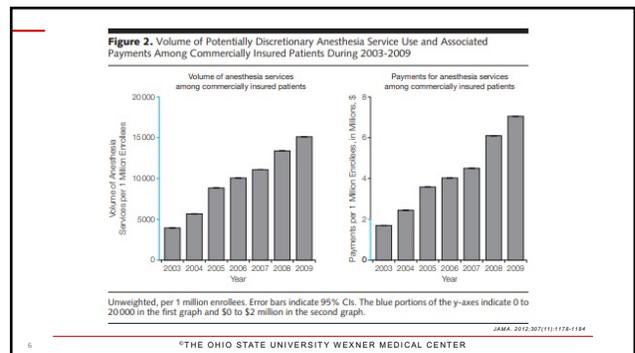| Frequency Rank	Location	2010 %	2011 %	2012 %	2013 %	2014 %	Total n	%ᵃ
1	Colonoscopy	43.3	42.7	45.0	47.3	50.8	1,351,987	22.8
2	Esophagogastroduodenoscopy	35.2	36.1	36.6	36.4	37.6	1,166,442	19.7
3	Electroconvulsive therapy	12.0	12.1	10.2	8.8	6.4	256,165	4.3
4	Endoscopic retrograde cholangiopancreatography	5.8	5.8	5.4	4.9	3.2	145,015	2.4
5	Elective cardioversion	3.7	3.4	2.8	2.6	2.0	77,130	1.3
Total number		266,585	350,736	541,553	713,011	996,445	2,868,330	

ᵃPercent of all nonoperating room anesthesia cases included in this study.
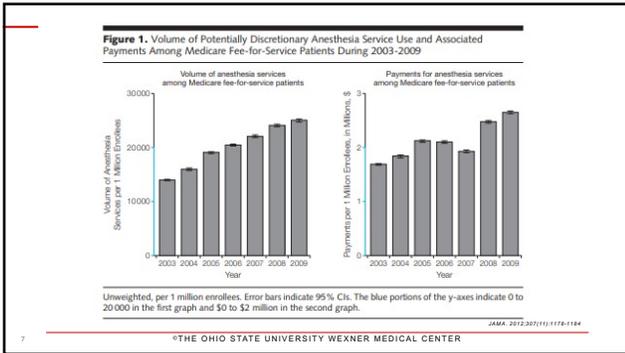
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Slide 5

NORA vs OR

—■— NORA   —▲— OR   —●— All included cases

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Slide 6

Figure 2. Volume of Potentially Discretionary Anesthesia Service Use and Associated Payments Among Commercially Insured Patients During 2003-2009

Unweighted, per 1 million enrollees. Error bars indicate 95% CIs. The blue portions of the y-axes indicate 0 to 20 000 in the first graph and $0 to $2 million in the second graph.

JAMA. 2012;307(11):1178-1184

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Slide 7

Figure 1. Volume of Potentially Discretionary Anesthesia Service Use and Associated Payments Among Medicare Fee-for-Service Patients During 2003-2009

Volume of anesthesia services among Medicare fee-for-service patients

Payments for anesthesia services among Medicare fee-for-service patients

Unweighted, per 1 million enrollees. Error bars indicate 95% CIs. The blue portions of the y-axes indicate 0 to 20 000 in the first graph and $0 to $2 million in the second graph.

JAMA. 2012;307(11):1178-1184

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Slide 8

A Population-based Analysis of Outpatient Colonoscopy in Adults Assisted by an Anesthesiologist

Anesthesiology October 2009, Vol. 111, 734–740.

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Slide 9

Prevalence of Anesthesia Services in the US

2008-2009

2010-2011

Percent use
- <5
- 5-10
- 10-15
- 15-20
- 20-30
- 30-40
- 40-50
- >50

Gastroenterology 2016;150:888–894

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Slide 10
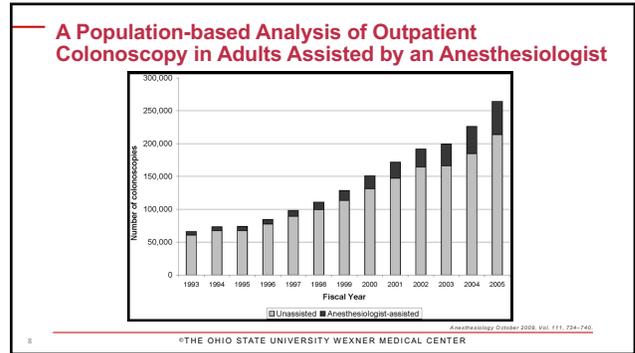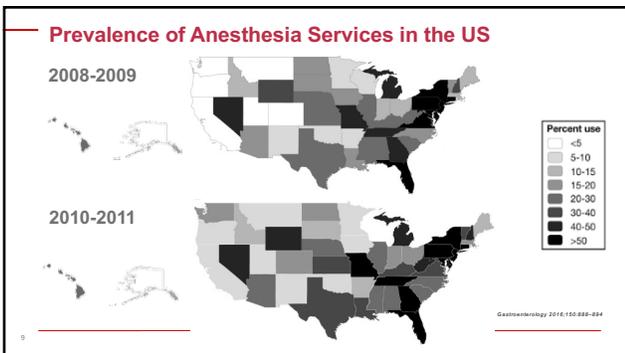
Incidence of Colonoscopy-Related Bowel Perforation, Splenic Injury and Aspiration Pneumonia by Receipt of AA Following Outpatient Colonoscopy in Ontario Adults, 2005–2012 (n = 3,059,045) (AA, anesthesia assistance)

Outcome	Unassisted colonoscopy N = 2,196,228		Anesthesia-assisted colonoscopy N = 862,817		P value
	Events	Rate	Events	Rate	
Perforation	977	1 in 2248	419	1 in 2059	.133
Splenic injury	102	1 in 21,532	36	1 in 23,967	.58
Aspiration	112	1 in 19,609	74	1 in 11,660	<.001

https://doi.org/10.1053/j.gastro.2017.08.043

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Slide 11

Results of 4 Logistic Regression Models Examining the Effect of AA on Colonoscopy-Related Bowel Perforation, Aspiration Pneumonia, and Splenic Injury in a Propensity-Matched Cohort of AA for Outpatient Colonoscopy in Ontario, January 1, 2005 to December 31, 2012 (n = 1,586,146) (AA, anesthesia assistance; CI, confidence interval; OR, odds ratio)

Model	Outcome	Independent variable(s)	OR (95% CI)	P value
1	Perforation	Anesthesia	0.99 (0.84–1.16)	.885
		No anesthesia	Ref	
1a	Perforation	Anesthesia	0.99 (0.85–1.16)	.919
		No anesthesia	Ref	
		Therapy		
		Large polypectomy	7.60 (4.83–11.96)	<.001
		Dilation or stent placement	16.80 (8.80–32.06)	<.001
		Standard polypectomy	1.78 (1.52–2.10)	<.001
		Biopsy	1.14 (0.88–1.46)	.326
		No therapy	Ref	
2	Aspiration pneumonia	Anesthesia	1.63 (1.11–2.37)	.012
		No anesthesia	Ref	
3	Splenic injury	Anesthesia	1.09 (0.62–1.90)	.771
		No anesthesia	ref	

https://doi.org/10.1053/j.gastro.2017.08.043

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ABSTRACT

In clinical research, study results, which are **statistically significant are often interpreted as being clinically important. While statistical significance indicates the reliability of the study results, clinical significance reflects its impact on clinical practice.** The third article in this series exploring pitfalls in statistical analysis clarifies the importance of differentiating between statistical significance and clinical significance.

Perspect Clin Res. 2015 Jul-Sep; 6(3): 169–170.

Discussion

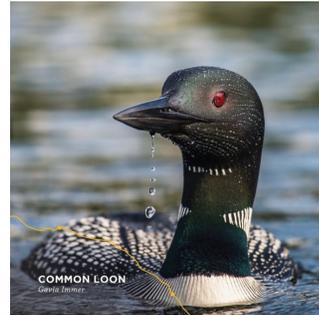©THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

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Questions

1. Does anything we discussed cause you to want to change your practice?

2. How does this information effect your thoughts on NPO guidelines (2, 4, 6, 8, hours for bowel prep)?

3. Do you believe you see much aspiration during colonoscopy at your institution?

4. How does the Canadian reimbursement system impact the cost distribution/burden compared to the US system?

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COMMON LOON
Gavia Immer

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