Oklahoma State University-Center for Health Sciences, Department of Psychiatry and Behavioral Sciences **Evaluation of Industry Payments and Financial Conflict of Interest Disclosures Among Task Force Authors of Endocrine Society Clinical Practice Guidelines**

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INTRODUCTION

Clinical practice guidelines are considered the gold standard for disease management and treatment. Industry payments to guideline authors may influence their clinical recommendations, potentially resulting in medical and/or financial consequences to patients.

OBJECTIVES

Our team of investigators sought to determine to what extend Endocrine Society guideline authors receive and properly report financial conflicts of interest from industry payments in adherence to the Physician Payments Sunshine Provision of the Affordable Care Act.

METHODS

Study Design: A cross-sectional analysis of all clinical practice guidelines published by the Endocrine Society since the Sunshine Provision mandate. Our primary outcome was the number of authors receiving payments from industry, stratified by amount thresholds. Secondary outcome measure was the number of authors with accurate conflict of interest disclosure statements.

We searched the Endocrine Society's website for clinical practice guidelines published between January 2014 and December 2017. Identified guideline authors were independently searched by two investigators on the Open Payments Database. Received payments were extracted and statistically analyzed (excluding food/beverage payments). Payments were cross-referenced with corresponding author disclosure statements.

RESULTS

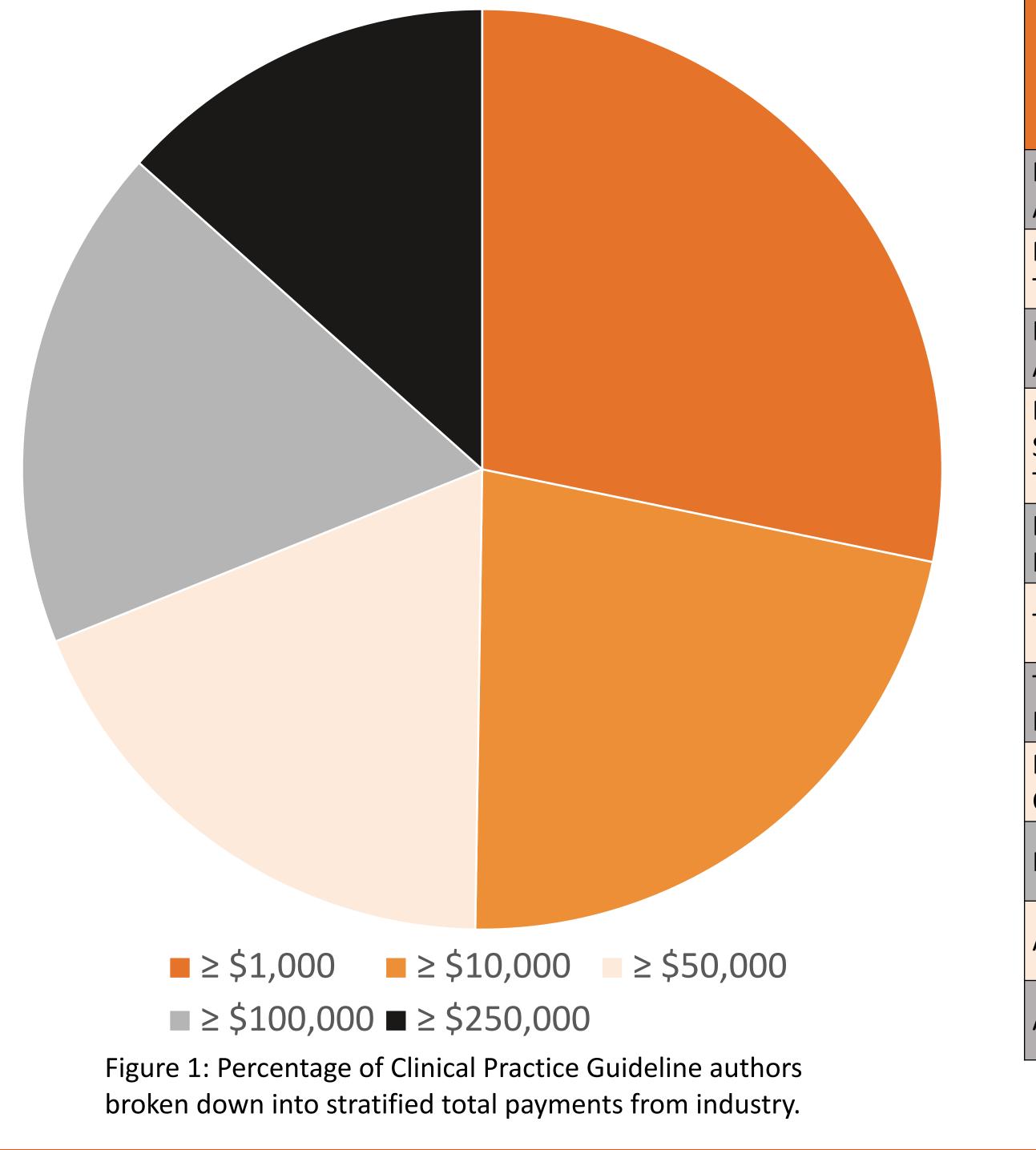
Guideline Authors who Received Payment(s) from Industry

Guideline Title (No. of Authors)	No. (%) of Authors					Timeframe for Which Date was
	Receiving Payment	Receiving ≥\$1,000	Receiving ≥ \$50,000	Receiving ≥ \$100,000	Receiving ≥ \$250,000	Timeframe for Which Data was Included
Functional Hypothalamic Amenorrhea (9)	5 (56)	5 (56)	1 (11)	0 (0)	0 (0)	Jan 2016 to Dec 2017
Pediatric Obesity: Assessment, Treatment, & Prevention (7)	2 (29)	2 (29)	2 (29)	2 (29)	1 (14)	Jan 2016 to Dec 2017
Diagnosis & Treatment of Primary Adrenal Insufficiency (11)	1 (9)	1 (9)	0 (0)	0 (0)	0 (0)	Jan 2015 to Dec 2017
Diabetes Technology: Continuous Subcutaneous Insulin Infusion Therapy & Continuous Glucose (8)	5 (63)	5 (63)	4 (50)	4 (50)	4 (50)	Jan 2015 to Dec 2017
Hormonal Replacement in Hypopituitarism in Adults (7)	3 (43)	3 (43)	3 (43)	3 (43)	3 (43)*	Jan 2015 to Dec 2017
Treatment of Cushing's Syndrome (7)	3 (43)	3 (43)	1 (14)	1 (14)	1 (14)	Jan 2014 to Dec 2016
Treatment of Symptoms of the Menopause (7)	3 (43)	2 (29)	2 (29)	1 (14)	1 (14)	Jan 2014 to Dec 2016
Pharmacological Management of Obesity (8)	5 (63)	5 (63)	4 (50)	4 (50)	3 (38)	Jan 2014 to Dec 2016
Paget's Disease of Bone (7)	3 (43)	3 (43)	1 (14)	1 (14)	1 (14)	Jan 2013 to Dec 2015
Androgen Therapy in Women (8)	3 (38)	3 (38)	3 (38)	2 (25)	0 (0)	Jan 2013 to Dec 2015
Acromegaly (7)	3 (43)	3 (43)	3 (43)	3 (43)	3 (43)*	Jan 2013 to Dec 2015

Table 1: 11 of the 14 clinical practice guidelines published by the Endocrine Society had \geq 1 author who received payment from industry. Of those 11 clinical practice guidelines, 57 authors were evaluable, with 34 (60%) receiving > 1 payment from industry. Monetary data was included the year prior, publication year, and year following clinical practice guideline publication, when available.

* The same author published 2 guidelines and received > \$250,000 in payment from industry during the corresponding timeframe for each guideline. The author contributed as 1 in the denominator for all appropriate author percentage calculations.

Percentage (%) of Authors who Received ≥ 1 **Payments from Industry**



Discrepant Guideline Author COI Disclosures

	No. (%)	of Authors	Total New Diseless			
Guideline Title (No. of Authors)	Receiving Payment	Receiving Payment with Discrepant COI Disclosures	Total Non-Disclose Payments per Author, Median (IQR), \$			
Functional Hypothalamic Amenorrhea (9)	5 (56)	2 (40)	7,461 (7,070-7,851)			
Pediatric Obesity: Assessment, Treatment, & Prevention (7)	2 (29)	2(100)	42,448 (37,068-47,828)			
Diagnosis & Treatment of Primary Adrenal Insufficiency (11)	1 (9)	0 (0)	0 (0)			
Diabetes Technology: Continuous Subcutaneous Insulin Infusion Therapy & Continuous Glucose (8)	5 (63)	5 (100)	67,189 (17,773-203,898)			
Hormonal Replacement in Hypopituitarism in Adults (7)	3 (43)	3 (100)	76,788 (64,896-4000,753)			
Treatment of Cushing's Syndrome (7)	3 (43)	3 (100)	2,173 (2,118-8,519)			
Treatment of Symptoms of the Menopause (7)	3 (43)	1 (33)	564 (0)			
Pharmacological Management of Obesity (8)	5 (63)	4 (80)	17,512 (5,447-175,407)			
Paget's Disease of Bone (7)	3 (43)	3 (100)	2,798 (2,594-6,410)			
Androgen Therapy in Women (8)	3 (38)	3 (100)	116,740 (89,719-127,463)			
Acromegaly (7)	3 (43)	2 (67)	58,776 (52,116-65,436)			



Clinical Practice Guideline Author Payments

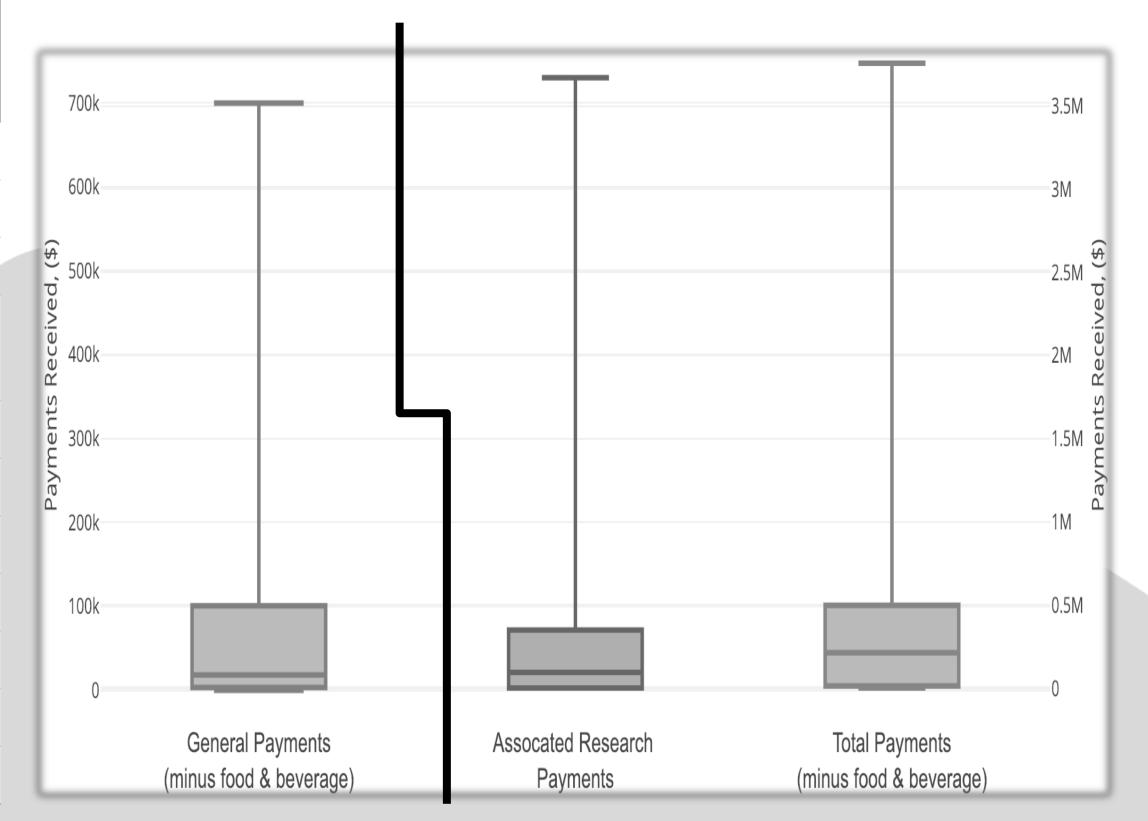


Figure 2: Of the 34 authors who received \geq 1 payment from industry, the median general payment (minus food & beverage) was \$18,169 (\$3,326-99,076), median associated research payment of \$94,910 (\$0-338,928), and median total payment (minus food & beverage) of \$212,362 (\$19,150-480,230) per clinical practice guideline author. Cumulative total of all payments (minus food & beverage) was \$14,834,661 with a maximum of \$3,758,021 for a single author.

Table 2: Of the 11 Clinical Practice Guidelines in which \geq 1 author received industry payment, 27 (47%) financial disclosure statements were inaccurate. Median inaccurate disclosure payment was \$28,524 (IQR \$5,714-94,418), with a payment total of \$2,870,485.27.

CONCLUSION

Industry payments among Endocrine Society clinical practice guideline authors were widespread, with several exceeding \$250,000. Nearly half of author disclosure statements were inaccurate. The Endocrine Society's disclosure policy should be more strictly enforced for future guideline authors.