MP27-16: Industry Research Payments to Urologists: The First Five Years of OpenPayments Research Data

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INTRODUCTION

The OpenPayments Database (OPD) was created through the Sunshine Act, a provision within the Patient Protection and Affordable Care Act (PPACA), to promote greater transparency regarding the financial incentives that healthcare providers receive from manufacturers and Group Purchasing Organizations (GPO).[1]

Urology is a subspecialty that utilizes a wide variety of pharmaceuticals, medical devices, and surgical devices developed by manufacturers and Group Purchasing Organizations (GPOs) to guide the treatment of patients. In the 2014 OPD, Urology ranked within the top 10 specialties for non-research funding.[2] While previous studies have analyzed industry relationships with urologists using the OPD, to the best of our knowledge none have focused exclusively on research-related payments. The purpose of this study was to evaluate the OPD from 2014 to 2018 to examine the economic impact, examine temporal trends of these payments to urologists, and compare research payments to urologists as compared to non-urologists.

METHODS

For each year between 2014 and 2018, the OPD Research payments data was obtained through the Centers for Medicare and Medicaid Services.[3] Since there was not a full year of data for 2013, it was excluded from this analysis. Disputed payments, which comprise a vast minority of all payments in the database, also were excluded. No other exclusions were made to the OPD database. Urologists were identified as payment records where the Primary Investigator indicated their specialty as urology. Payment records to the subspecialties of Female Pelvic Medicine and Pediatric Urology were also identified and included, provided that the main specialty was urology.

Descriptive analysis was performed. Trend analysis was formally evaluated using Cochran-Armitage Test for Trend. When comparing the proportion of the total value of payments between urologists and all others, Pearson Chi-Square tests were used.

A P-Value < 0.05 indicates a statistically significant association. All analysis was done in SAS 9.4 (SAS Institute Inc., Cary, NC, USA). The OPD meets the definition of freely available public data; therefore, this study was Determined Not Human Subjects Research.

RESULTS

- Between 2014 and 2018, there was a total of 29,293 undisputed research payments made to 900 urologists for a total of **$164.65 million United States Dollars (USD)** (Figure 1).
- Among these payments, **12.02% were made to a teaching hospital** for a total of $20.03 million USD in payments;
- Among these payments, **22.84% were linked with a registered clinical trial** for $32.06 million USD in payments;
- Only **0.35% of payments**, or a total of $1.07 million USD in payments, were directed towards **preclinical research;**
- The majority of payments were made in the form **of cash/cash equivalent** (84.09%; $126.35 million USD) and were **from manufacturers or GPOs based in the United States** (95.82%; $155.71 million USD) (Table 1).
- The **South Eastern AUA section received the greatest number** (6,506) and total value ($42.13 million USD) of payments while the New England section received the least number (646) and total value ($4.69 million USD) of payments.
- The proportion of the value of all research payments in OPD associated with urologists **increased from 0.56% in 2014 to 0.99% in 2017, before slightly decreasing to 0.75% in 2018** (Trend P = < 0.0001).
- The average research payment to urologists **increased from $5,987 in 2014 to $7,873** in 2017 before decreasing to $5,594 in 2018 (P = < 0.0001).
- Amongst urologists, the proportion of value in payments associated with teaching hospitals **increased from 6.69% in 2014 to 17.42% in 2018** (Trend P = 0.0206) (Figure 2).
- Conversely, the proportion of value in urologist payments associated with registered clinical trials decreased from 27.49% in 2014 to 13.77% in 2018 (Trend P = < 0.0001) (Figure 2).
- The **average Urology research payment was $5,621** and was not significantly different than the average payment for non-urologists of $6,683 (P = 0.0920).
- The total value of payments to **urologists in teaching hospitals (12.17%) was significantly less than all other specialties** (21.03%) (P = < 0.0001).
- Only 0.65% of the total value of payments to urologists involved preclinical research, while 3.38% of all other specialty payments was associated with preclinical research (P = < 0.0001).
- Only 19.47% of urology payments were associated with registered clinical trials, while 17.09% of all other payments were associated with registered clinical trials (P = 0.0010).
- There was not a significant difference in the proportion of dollars coming from Domestic companies or paid in Cash/Cash Equivalents between urology and non-urology payments (both P > 0.05). The results of this comparison were similar when examining inflation-adjusted research payments.

PAYMENT TYPE	UROLOGIST (N = 29,293)	NON-UROLOGIST (N = 3,631,316)	
Domestic Payment (US Company)	28,069 (95.82%)	3,268,839 (90.02%)	P < 0.0001
Cash/Cash Equivalent	24,632 (84.09%)	2,923,933 (80.52%)	
Registered Clinical Trial	6,690 (22.84%)	785,411 (21.63%)	
In-Kind Items/Services	4,661 (15.91%)	707,372 (19.48%)	
Teaching Hospital	3,522 (12.02%)	467,117 (12.86%)	
Foreign Payment (Non-US Company)	1,224 (4.18%)	362,477 (9.98%)	
Preclinical Research	103 (0.35%)	51,314 (1.41%)	

Table 1. Research Payments Between Urologists vs Non-Urologists

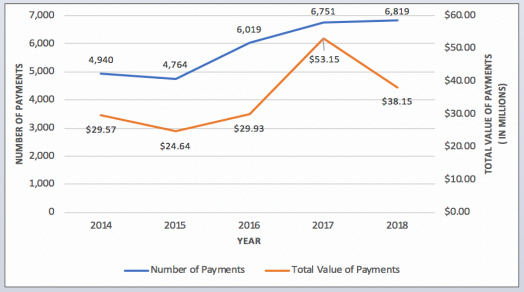

Figure 1. Share of research payments over time to urologists.

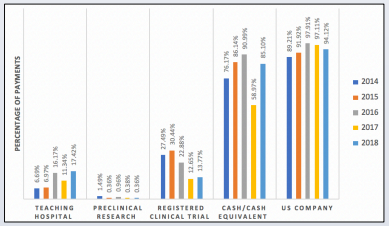

Figure 2. Trends in characteristics of research payments to urologists.

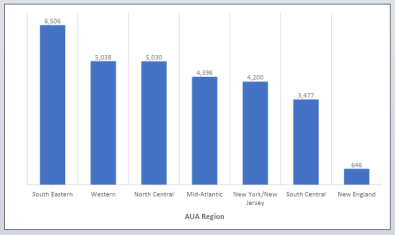

Figure 3. Number of payments made by AUA region.

DISCUSSION

This analysis of the OPD showed that a total of $164.65 million USD was paid in research payments to urologists between 2014 and 2018. Both industry and government funding contributed hundreds of millions of USD towards urology research in the United States during this time period. While a majority of urologists received non-research payments through OPD,[4] only about 7% of the 12,660 practicing Urologists as of 2018 received research payments as reported in the OPD based on AUA census data.[5]

Payments and total value of payments to urologists were less likely to be associated with a Teaching Hospital or Preclinical Research than recipients from other specialties. This finding may partially be explained by the 2018 AUA Census data, which shows that only 1 in 4 urologists (25%) practiced in an academic medical center while over half of urologists (57%) were affiliated with a private practice, commonly in group practice settings.10 Those employed in private practice may not have access to Preclinical facilities. Alternatively, nonteaching settings may have less policies related to regulatory and conflict of interest.[2] A greater proportion of payments and total value of payments were made to clinical trials for urologists than non-urologists. This may be partially explained by the large oncologic trials that were undergoing during this time period, as a previous study hypothesized that the primary source of research payments was associated with providing supplies for clinical trials.[2]

CONCLUSION

Urologists received a total of $164.54 million USD from industry payments during 2014-2018. The payments made into the field have also been increasing over this five-year period. Therefore, it is important for urologists to be aware of industry funding in their field in order to maintain an ethical and transparent practice with patients.

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