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MAJOR ARTICLE

Infectious Diseases Physician Compensation: An Improved Perspective

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Negotiating physician compensation can be complicated because many factors now influence the ways in which physicians can be compensated. Infectious diseases (ID) specialists typically provide a wide array of services, ranging from patient care to administrative leadership. Compensation surveys from national organizations have produced results based on small samples and often are not congruent with ID physicians' perceptions. In July of 2015, the Infectious Diseases Society of America (IDSA) conducted a compensation survey to assess current compensation earned by the diverse ID specialists within its membership. Members of IDSA's Clinical Affairs Committee report the results from the 2015 IDSA Physician Compensation survey, with a particular focus on the findings from respondents who indicate "patient care" as their primary responsibility and present a discussion that compares and contrasts results against other survey data.

Keywords. compensation; match results; reimbursement; workforce.

Physician compensation is a topic of great interest and considerable sensitivity. Surveys fielded by Medscape, Medical Group Management Association (MGMA) and others offer some valuable perspective on physician compensation in general and in relation to certain specialties. However, the results of these surveys are not always readily available. More importantly, given small sample sizes, the extent to which the results are representative of a specialty is debatable, especially when the specialty (of infectious diseases [ID]) makes up only 1% of respondents, in some cases. We are aware that compensation is a driving factor on specialty selection for residents and medical school students interested in the field of ID [1]. Due to the predominantly consultative nature of ID work and the related difficulty in quantifying the value of cognitive versus procedural medical care, the specialty is on average compensated significantly less than other specialties [2]. Furthermore, overall compensation for ID specialists will be affected by the evolution towards more value-based reimbursement, where bundled payments are becoming more prevalent and where providers struggle to report on meaningful quality measures on which payment is based. Nonpatient care-related sources of compensation such as Medical Directorships for Infection Prevention and Antimicrobial Stewardship are often derived through fair market value assessments, which reference compensation surveys as the benchmark for hourly rates applied in these types of contracts. Again, due to small sample sizes, the validity of such surveys is often questioned as to whether they accurately represent compensation levels across the specialty. Therefore, because these surveys influence perceptions of the specialty held by medical students and residents, as well as the fact that these surveys inform contract negotiations for ID specialists' services, it is important to explore the accuracy of their results.

The Infectious Diseases Society of America (IDSA) is concerned about the effect the perception of compensation may be having on the interest in ID. In July of 2015, IDSA fielded a compensation survey with the objective of capturing a large sample size that included physicians who work in clinical care, research, and public health, to more accurately represent the diversity of career opportunities and compensation within ID. This article, written by members of the IDSA's Clinical Affairs Committee, details the results from the 2015 IDSA Physician Compensation survey, with a particular focus on the findings from respondents who indicate "patient care" as their primary responsibility.

METHODS

From July 15 to August 22, 2015, IDSA conducted a self-administered, web-based, voluntary survey to better characterize ID physician compensation. The survey invitations were directly distributed via e-mail to 8302 IDSA physician members, associates, and fellows residing in the United States. Students, residents, members-in-training, honorary, and emeritus members were excluded. The survey was hosted on a secure website and asked a series of quantitative questions.

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Table 1. Overall Compensation Results

Membership Segment	Total Sample	% Female	% Full Time	Average	Median	25th Percentile	75th Percentile	90th Percentile
Overall	1878	40%	94%	$230 031	$205 000			
Patient Care	1257	39%	94%	$231 702	$210 000	$175 000	$260 000	$350 000
Research	363	40%	97%	$199 110	$175 000	$135 000	$234 500	$310 000
Public Health	71	55%	85%	$180 845	$180 000	$155 000	$207 250	$229 100
Other	187	34%	96%	$295 811	$260 000	$205 000	$350 000	$452 300

The final report that compiles the survey results is available to IDSA members via the IDSA member website (www.idsociety.org) under Manage Your Practice/Physician Payments. In addition, we compare and contrast survey data from MGMA and Medscape with this IDSA survey.

RESULTS

Demographics

A total of 1878 United States-based respondents completed the survey (22% response rate), of which 40% were female and 94% reported working full time. The average age across all respondents was 50 years old, and respondents had an average time in practice of 16 years. Most (71%) indicated that they worked in an urban setting, followed by suburban (24%) and rural (5%) locations. Although all respondents were United States-based, they were geographically dispersed throughout the country. The majority of survey respondents identified Patient Care (67%, n = 1257) as their primary responsibility, followed by "Research" (19%, n = 363). Almost one half of respondents (48%, n = 907) were employed in either a hospital or clinic, and an additional 383 (19%) were employed in a research facility or in a public health department. The range of compensation across the survey sample is $50 000 to $1.4 million. A summary of the data is provided in Table 1.

Analysis of Patient Care Segment

Table 2 provides a breakdown of the Patient Care segment according to practice affiliation. A total of 350 participants indicated they were either a solo practitioner/owner/partner ("Solo/Owner/Partner") in private practice (n = 224) or employed within a private practice as an associate (n = 126). Of these 350, 92% (321 respondents) report working full time (203 Solo/Owner/Partner and 118 associates). Of the 418 that reported being employed in a hospital or clinic, 95% report working full time. Similar results were seen with other types of patient care with the exception of the group reporting "Public Health" as their primary responsibility, which reported a slightly lower proportion of full-time status (85%). This analysis and the figures presented here only used the data from those respondents who were in full-time, clinical practice (Patient Care) at the time of the survey. In general, ID specialists who were in solo practice or were owner/partners of private practices were compensated higher than their peers employed at hospitals or clinics or in academic medical centers. With the exception of ID specialists employed in academic medical centers early in their careers, there appears to be a significant disparity in income across gender for subsegments of Patient Care ID specialists (Table 3).

Private practice physicians' income averaged $277 611, ranging from a minimum of $50 000 to a maximum of $1.45 million. In this analysis, outliers were included to reveal the broad range reported by IDSA members. Excluding outliers would result in differences in the overall mean and median figures of <10% from what is reported in this analysis. Those physicians who were Solo/Owner/Partner in a private practice reported approximately $75 000 more in average compensation than Associates. There is greater income disparity across genders in the Solo/Owner/Partner subsegment than in the Associate subsegment (see Table 3). Associates in private practice appear to earn more in comparison to their peers employed in hospitals or clinics later in their career (see 40–49 years old Associates vs Hospital/Clinic employed).

For those respondents who are employed in a hospital- or clinic-based setting, the average overall income is $241 319. Infectious diseases specialists employed in this setting report

Table 2. Average Compensation by Age and Gender

Patient Care Segment	Total Sample	% Female	% Full Time	Average	Median	25th Percentile	75th Percentile	90th Percentile
Overall Patient Care	1257	40%	94%	$231 702	$210 000	$170 000	$260 000	$350 000
Private Practice	350	34%	92%	$277 611	$250 000	$185 000	$341 250	$431 000
Solo/Owner/ Partner	224	29%	91%	$305 248	$272 500	$211 750	$350 000	$450 000
Associate	126	38%	94%	$230 302	$200 000	$170 000	$259 000	$380 000
Hosp/Clinic Employed	418	37%	95%	$241 319	$230 000	$200 000	$270 000	$327 500
AMC Employed	489	44%	94%	$191 485	$179 000	$150 000	$216 000	$261 400

Abbreviations: AMC, academicmedical center; Hosp, hospital.

Table 3. Patient Care IDSA Members: Average Compensation by Age and Gender

	30–39 Year Olds		40–49 Year Olds		50–59 Year Olds		60+ Year Olds	
Membership Segment	Male	Female	Male	Female	Male	Female	Male	Female
Private Practice								
Solo/Owner/ Partner	$320 750	$210 909	$351 140	$230 391	$326 013	$283 470	$308 527	$190 000
Associate	$201 400	$191 762	$276 106	$247 917	$272 917	$203 333	$259 147	$140 000
Hosp/Clinic Employed	$228 876	$204 216	$256 470	$221 559	$278 548	$226 927	$260 012	$235 545
AMC Employed	$150 013	$152 124	$202 773	$169 966	$247 310	$187 717	$242 574	$194 249

Abbreviations: AMC, academic medical center; Hosp, hospital; IDSA, Infectious Diseases Society of America.

better compensation early in their careers than their peers who are associates in private practice.

Infectious diseases specialists who are employed at academic medical centers report the lowest compensation level of all the Patient Care subsegments. For these ID specialists, there appears to be the greatest income parity across gender early in their careers.

DISCUSSION

In the past decade, medical student debt has ballooned. This has resulted in many downstream effects that are putting tremendous pressure on the current American medical field work force. Specialties with the highest compensation paired with favorable life style factors continue to be the most popular at attracting top US medical school graduates. Infectious diseases, as well as other cognitive subspecialties, have seen persistent and alarming declines in match rates in recent years. It is the opinion of the authors that this decline is due to perceptions informed by inaccurate, inconsistent data from several different sources with disparate results.

The 2013 Medscape Compensation survey reported average annual compensation for human immunodeficiency virus/ID ("HIV/ID") to be $170 000, which was reported as a 12% increase from the previous year's survey [3]. The 2013 survey had 21 878 respondents, and 1% of the respondents were identified as HIV/ID. In 2014, Medscape reported that ID physicians were compensated on average $174 000 [4]. This figure was based on a survey of 24 075 respondents, of which HIV/ID comprised <1%. Then, in 2015, Medscape reported that ID physician compensation increased to an average of $213 000, based on a survey of 19 657 respondents, and 1% of the respondents were identified as HIV/ID [5]. Based on the Medscape reports, the dramatic increase of $39 000 in average compensation for HIV/ID from 2014 to 2015 generates concern over which segment of ID physicians is responding to the survey and illustrates how problematic it is to have 1 compensation figure represent an entire specialty. Based on MGMA surveys over the past 3 years (2012–2014), the average annual compensation of an ID physician is reported to be between $260 000 and $270 000, and the median compensation is reported to be between $240 000 to $250 000, with survey sample sizes ranging from 200 to 270 ID specialists [6]. Given the membership composition of MGMA, it is reasonable to conclude that this sample largely draws from the large employed physician group model. It should be noted that the Medscape survey results are published online for free, whereas MGMA data are available under subscription service. One major concern with the reports published by these organizations is the low representation of ID physicians in the survey samples. In addition, the results are not reflective of the diversity of career options (patient care, research, public health) in the ID field, creating a false perception of uniformity in compensation for ID physicians. However, with the benefit of comparison against the 2015 IDSA compensation survey, we can see that the MGMA average compensation results seem to match closely with those of the IDSA survey. We note here that the MGMA median compensation figures are often referenced in contract negotiations, and here we see that the median compensation from the IDSA survey ranges from $179 000 to $272 500, across the subsegment of Patient Care.

The 2015 IDSA compensation survey clearly elucidates the variability of compensation in the ID field, ranging from the various practice affiliations within patient care to careers in research or public health. In addition, the IDSA survey boasts a much larger sample size of ID physicians than other common compensation reports, resulting in data that is more representative of the career opportunities available within ID. This information is important for the Society's efforts of attracting the best and brightest medical students and residents to the field of ID, because we note recent match results indicate an alarming continued decline in match rates [7]. It is important for students and residents (increasingly burdened with student debt) who are considering a career in ID to have accurate, comprehensive, and representative information on the compensation and career options available in the field. Accessible reports such as those readily available online by Medscape may skew the perception of compensation within the field, which may be discouraging students and residents from specializing in ID.

The 2015 IDSA compensation survey also brings to attention the income disparity across gender that exists within the subspecialty of ID. It has been reported from data compiled by the US Census Bureau as well as other research that a significant

income disparity exists across gender for all physicians [8–12]. Although the 2015 IDSA compensation survey was not designed to further explore the reasons behind the income disparity across gender, it is nonetheless useful to have figures from a representative sample specific to the ID specialty. Given the increasing percentages of women who are graduating from medical school, it will be important for the leaders within our field—male and female alike—to address the disparity in income and create a fair, welcoming environment for women physicians.

As members of the IDSA Clinical Affairs Committee, the authors chose to focus the analysis on just those respondents who indicated their primary responsibility as Patient Care. The results for the Research, Public Health, and "Other" segments of respondents are included here for comparison and to reinforce the notion of career diversity within the specialty. More detailed findings for each segment can be found in the final survey report, referenced above.

CONCLUSIONS

As our healthcare system undergoes a shift from volume to value, we recognize that the ID specialty needs to adapt. The sources of income reported by the IDSA survey respondents continue to point toward a varied and rewarding life and practice mix for ID professionals. We are confident that the future for ID specialists grows ever brighter, and we need to attract intellectually curious and motivated individuals to join our specialty, with an understanding that they can enjoy productive, fulfilling careers that are as financially competitive as other specialties. In pursuit of this objective, IDSA will continue efforts to attract new talent to the specialty, promote greater awareness of compensation trends, and advocate for the value that ID specialists bring to the healthcare system.

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