REPORT HIGHLIGHTS
Survey of 2017 Nephrology Fellows

Prepared for:
The American Society of Nephrology
by
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Preface

Physicians in training represent the future practitioners in their field and provide a picture of the future supply. The experience of those completing their training and about to embark on their careers is also an indicator of physician demand in their specialty. For these reasons, the George Washington University Health Workforce Institute (GW-HWI) research team and the American Society of Nephrology (ASN) have conducted an annual online survey of current nephrology fellows and trainees beginning in 2014 to obtain data on demographic and educational background, educational debt, career plans, job search experiences, and factors influencing job opportunities and choices.

In 2017, the survey tool—adapted from the University at Albany Center for Health Workforce Studies (CHWS) annual NY State Resident Exit Survey and slightly modified from 2014, 2015 and 2016—was distributed to 1451 ASN Fellow/Trainee members (to whom ASN offers free membership) in May and June 2017. Four hundred and thirty-seven (437) fellows or trainees provided informed consent and responded to the survey questions for an overall response rate of 30.1%. (This analysis excludes pediatric nephrology fellows unless otherwise stated.) Among the assumed 863 fellows in their first and second year of Accreditation Council for Graduate Medical Education (ACGME)—accredited training programs, we received responses from 390 fellows (45.2% response rate). (2017 ACGME data was not available at the time this report was written; comparisons are made with 2016 ACGME data instead.) The response rate for second-year fellows was 48.0% (206 of 429) providing a good picture of the job market faced by new nephrologists. (The basic nephrology fellowship is 2 years, but many stay on for an additional year[s] for subspecialty training or research.)

This report presents demographic information for respondents in all years of fellowship and training, as well as job market experiences and fellows’ plans for those completing their second year of fellowship or beyond. It also presents data on job offers accepted by nephrology fellows and their assessments of the overall state of the specialty and job market. For all of the statistical tests presented, we considered probability values <0.05 to be statistically significant.

Key Findings

Overview

Three overarching themes emerge from the 2017 survey and analysis of the trends over the past 4 years:

• The job market for new nephrologists improved in 2017 for US medical graduates (USMGs) and international medical graduates (IMGs).
• The job market for USMGs was significantly better than for IMGs, who represent a majority of the trainees.
• Lifestyle concerns, both in terms of training and practice, are important to fellows and may be discouraging applicants to the specialty.

An Improving Job Market with Continued Challenges for IMGs

Among nephrology fellows who had searched for a job, perceptions of local nephrology job opportunities were much improved compared to earlier years for both USMGs and IMGs. The percent of USMGs who indicated “no jobs” or “very few jobs” in the national job market dropped from 13.1% in 2014 to 1.8% in 2017, and from 35.1% to 9.3% for the local job market.

While the view of the market was far more negative than for USMGs, the improvement for IMGs was also impressive with the percentage responding “no jobs” or “very few jobs” dropping from 29.9% in 2014 to 9.8% in 2017 for the national job market, and from 56.3% to 28.8% for the local job market.

The complete report is available at http://www.asn-online.org/workforce. #NephWorkforce
Fewer than half of respondents (45.6%) who had searched for jobs reported having difficulty finding a satisfactory position compared to 53.1% in 2016. There was a statistically significant difference between IMG and USMG fellows’ reports of difficulty finding a position: 55.4% of IMGs reported having difficulty finding a position they were satisfied with, a substantial improvement over the 70.0% of 2016. For USMGs, 28.8% reported having difficulty compared to 26% in 2016.

Overall, the percentage of respondents indicating that they had changed their plans because of limited nephrology job opportunities continued its decline, from 42.9% in 2015 to 35.4% in 2016 and 32.7% in 2017. While both USMGs and IMGs were less likely to report changing their plans in 2017 due to limited job opportunities than in prior years, their likelihood of changing plans was significantly different: only 13.6% of USMGs reported that they had to change plans, while 44% of IMGs reported changing plans (p<0.001). This difference likely reflects more limited job opportunities that meet visa requirements allowing IMGs to practice in the US.

Fellows’ anticipated salaries in 2017 were higher than in previous years; the median anticipated salary for all demographic groups (by IMG status and sex) was between $180,000 and $189,999, with a mean anticipated salary of $187,000.

There was a statistically significant difference in satisfaction with salary and compensation between IMGs and USMGs. USMGs were slightly more likely to report being “Very satisfied” with their salary and compensation (22.9% vs. 18.5%).

When asked to identify the incentives they had received for accepting their primary job offers, respondents were most likely to report receiving the following:

- Support for maintenance of certification (MOC) and continuing medical education (CME) (42.3%)
- Income guarantees (41.4%)
- Career development opportunities (34.2%)
- Relocation allowances (29.7%)
- Sign-on bonus (22.5%)

### Lifestyle Concerns

Responses to a number of questions indicated the importance of lifestyle factors to fellows, both during training and for practice after training.

Respondents in their second year of fellowship or beyond rated the following factors as “very important” or “important” in their job selection:

- Frequency of weekend duties (96.3%)
- Frequency of overnight calls (94.0%)
- Job/practice in desired location (94.0%)
- Salary/compensation (92.0%)
- Job/practice in desired practice setting (89.4%)
- Length of each workday (88.5%)

This may reflect the nature of much of nephrology practice today and may be of concern to both nephrology fellows and residents who do not select the specialty.

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[The complete report is available at http://www.asn-online.org/workforce. #NephWorkforce]
Fellows who would not recommend nephrology to medical students and residents cited the heavy workload, low compensation, difficult schedule, undervaluing of the specialty by other specialties, and lack of opportunities that support visas for IMGs as reasons for their negative assessments. This was consistent with the 2015 and 2016 responses.

The survey included a specific question: “Please rate your work-life balance during your fellowship” The responses were:

<table>
<thead>
<tr>
<th>Please rate your work-life balance during fellowship.</th>
<th>No.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
<td>37</td>
<td>15.6</td>
</tr>
<tr>
<td>Good</td>
<td>72</td>
<td>30.4</td>
</tr>
<tr>
<td>Acceptable</td>
<td>88</td>
<td>37.1</td>
</tr>
<tr>
<td>Poor</td>
<td>27</td>
<td>11.4</td>
</tr>
<tr>
<td>Very poor</td>
<td>13</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>237</td>
<td>100</td>
</tr>
</tbody>
</table>

Only a minority of respondents (46.0%) in their second year and beyond felt their work-life balance during fellowship had been good or very good. About 1 in 6 rated their work-life balance as being poor or very poor.

Other Findings

Recommending the Specialty

Despite their mixed assessments of the nephrology job market, a majority (71.8%) of fellows indicated they would recommend nephrology to current medical students and residents, the same as in 2016. However, IMGs were significantly less likely than USMGs to report that they would recommend the specialty to others (67.1% vs. 78.9% respectively).

<table>
<thead>
<tr>
<th>Would Recommend Nephrology to Medical Students and Residents</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>USMGs</td>
<td>82.2%</td>
<td>74.4%</td>
<td>78.1%</td>
<td>78.9%</td>
</tr>
<tr>
<td>IMGs</td>
<td>65.7%</td>
<td>62.7%</td>
<td>67.6%</td>
<td>67.1%</td>
</tr>
<tr>
<td>Total</td>
<td>71.8%</td>
<td>67.7%</td>
<td>71.8%</td>
<td>71.8%</td>
</tr>
</tbody>
</table>

Fellows who said they would recommend nephrology to medical students and residents cited many of the same factors mentioned by 2015 and 2016 respondents as reasons for their positive assessments: the intellectual challenge/interest of the field, variety of activities, and long-term patient relationships.

Practice Setting

Among respondents in their second year of fellowship or beyond who indicated their plans for the upcoming year, the largest proportion indicated that they planned to enter clinical nephrology practice (54.4%). Thirty-one percent (31%) intended to continue in their current fellowships or pursue additional subspecialty training. Frequently reported areas of continuing training included research, transplant nephrology and critical care.

Among respondents who had already accepted job offers, the largest group (43.1%) reported that they planned to work in nephrology group practices. Another 23.3% reported that they planned to work in academic nephrology practices, 11.2% said they planned to work in hospitals, and another 11.2% in 2-physician partnerships. Other settings included multispecialty group practices (5.2%) and multispecialty academic practices (3.4%).

Practice in Underserved Areas

As in previous years, IMGs appear to be making an important contribution to care in underserved areas. While 78 IMGs (29.7%) indicated an obligation to work in a federally designated Health Professional Shortage Area (HPSA), only 1 (0.6%) USMG did! For many IMGs on temporary visas, practice in an underserved area is the only way to remain in the US. Hence their perception of an obligation to work in such an area.

The Job Market

When asked an open-ended question regarding the types of jobs they perceived to be more and less available, newly graduating fellows mentioned several types of jobs that were more easily available according to their experience:

- Jobs in remote, rural, or undesirable areas especially with large dialysis providers
- Jobs appear to be more available in the South and Midwest
- Private practice jobs
- Jobs in solo or small practices/hospitals/communities
- They reported several types of jobs that were less easily available:
  - Academic jobs
  - Jobs in metro areas or other preferred geographic areas (e.g., Florida, California, Pacific Northwest)
  - Jobs that meet visa requirements for IMGs

The complete report is available at http://www.asn-online.org/workforce. #NephWorkforce
Compensation

There was a statistically significant difference in income by population density of the geographical area of practice, with the highest average incomes in small cities ($213,700) and rural areas ($212,200), and lower incomes in suburban ($185,800), large city areas other than inner city ($175,000), and inner-city areas ($169,100). It appears that small cities and rural communities need to offer nephrologists considerably more compensation than they can get in larger cities and suburban areas in order to recruit them.

<table>
<thead>
<tr>
<th>Population Density</th>
<th>No.</th>
<th>Mean Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner City</td>
<td>27</td>
<td>$169,100</td>
</tr>
<tr>
<td>Other area within major city</td>
<td>27</td>
<td>$175,000</td>
</tr>
<tr>
<td>Suburban</td>
<td>25</td>
<td>$185,800</td>
</tr>
<tr>
<td>Small city (population less than 50,000)</td>
<td>23</td>
<td>$213,700</td>
</tr>
<tr>
<td>Rural</td>
<td>9</td>
<td>$212,200</td>
</tr>
</tbody>
</table>

As in 2016, there was a statistically significant difference in mean anticipated incomes between different practice settings.

Job Responsibilities

The vast majority of respondents cited outpatient nephrology care and hospital care among their primary job responsibilities (93.2% for both). Other responsibilities listed included temporary dialysis catheter placement (29.1%), kidney biopsy (24.8%), medical directorship with a dialysis provider (22.2%), and clinical research (20.5%).

Content of Fellowship Training

When asked about fellowship topics they would most like to receive additional instruction in during fellowship the highest response rates were for home hemodialysis (55.8%), peritoneal dialysis (46.0%), kidney ultrasound interpretation (44.2%), obstetric nephrology (35.8%), and acute glomerulonephritis diagnosis/management (34.5%).

Selecting Nephrology

The survey asked: When did you decide you wanted to pursue nephrology as a specialty? As indicated, a majority decided during residency.

<table>
<thead>
<tr>
<th>Practice Setting</th>
<th>No.</th>
<th>Mean Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solo Practice</td>
<td>2</td>
<td>$135,000</td>
</tr>
<tr>
<td>Partnership (2 People)</td>
<td>13</td>
<td>$173,100</td>
</tr>
<tr>
<td>Group practice (exclusively Nephrology)</td>
<td>47</td>
<td>$192,200</td>
</tr>
<tr>
<td>Group practice (multispecialty)</td>
<td>6</td>
<td>$201,700</td>
</tr>
<tr>
<td>Academic practice (exclusively Nephrology)</td>
<td>27</td>
<td>$160,900</td>
</tr>
<tr>
<td>Academic practice (multispecialty)</td>
<td>4</td>
<td>$172,500</td>
</tr>
<tr>
<td>Hospital</td>
<td>12</td>
<td>$246,700</td>
</tr>
</tbody>
</table>

The views and findings in this report reflect the work of the GW Health Workforce Institute (GW-HWI) and do not necessarily reflect the views of ASN or GW University. The GW-HWI and ASN welcome comments and feedback on this report. Please send your comments to workforce@asn-online.org.