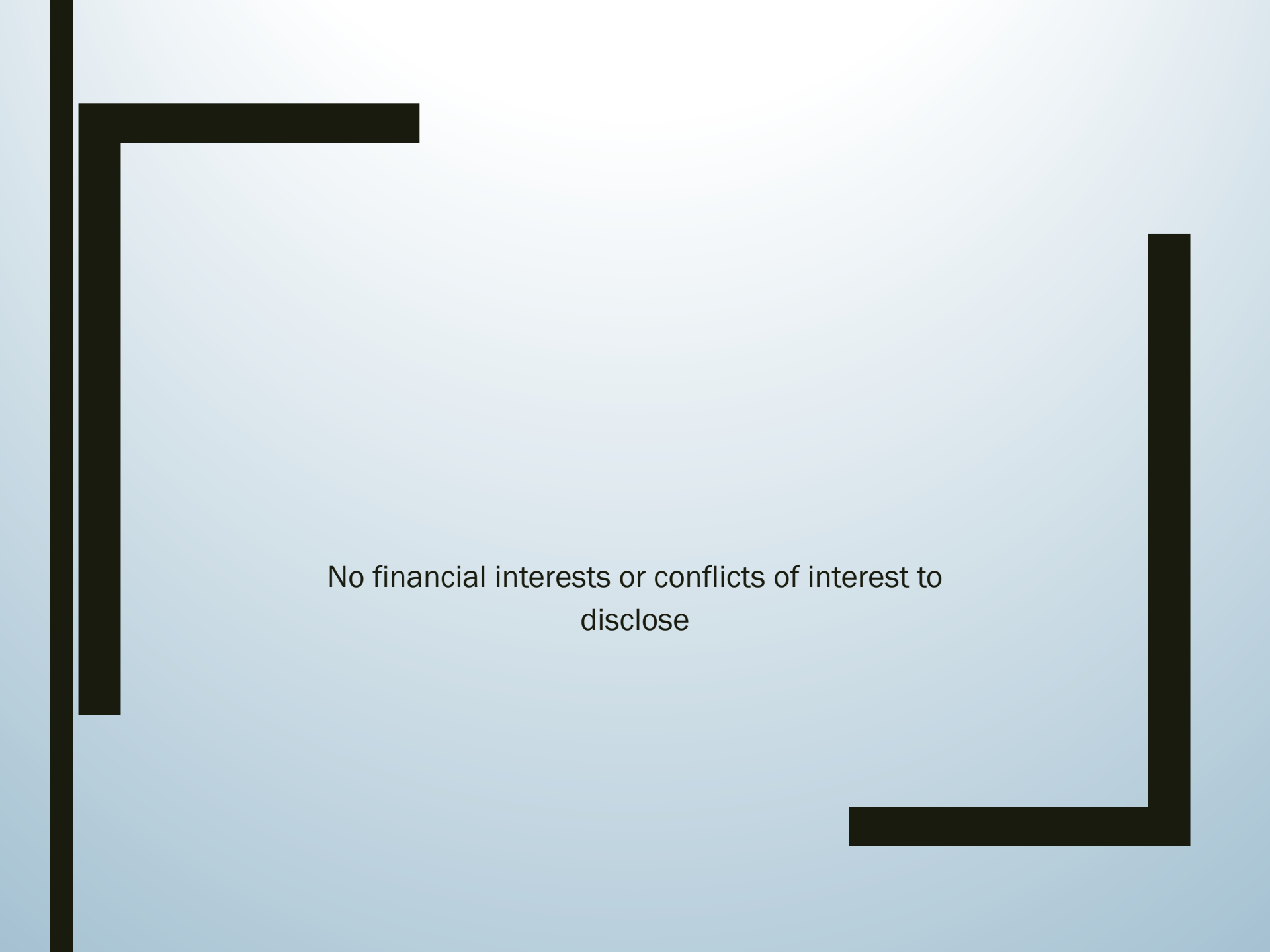


# NEPHROLOGY ADVANCED PRACTITIONER SALARY SURVEY

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No financial interests or conflicts of interest to  
disclose

# Background

- CKD and ESRD are on the rise in the United states<sup>1</sup>
- The number of medical graduates entering nephrology residencies is declining<sup>2</sup>
  - *43% of US nephrology residency programs don't fill all spots in 2014<sup>3</sup>*
- Nephrology APs work across practice settings
- Reimbursement systems unique to nephrology obscure AP revenue generation
  - *Traditional measures of productivity don't accurately represent AP contribution*



# Salary Survey Objectives

- Provide data APs can use to negotiate salary and benefits
- Define AP contribution to nephrology practice
  - *Productivity, revenue generation, scope of practice*
- Identify predictors of salary variation
  - *Provider characteristics, practice setting, job scope*
- Compare nephrology AP salaries to national AP salary averages
- Develop benchmark practice-setting specific standards of productivity
- Understand AP expectations of patient volume
  - *Assess congruence between actual and expected practice volume across practice settings*
  - *Determine whether nephrology APs are over/underutilized in clinical practice relative to reported range of reasonable patient volume*

# Methods



- Original survey developed by Kim Zuber PA-C
- Survey has been administered three times previously over the last six years
- Abbreviated survey developed with guidance from Dr. Susan Chapman, an academic researcher experienced in survey development, administration and analysis
- IRB approval obtained from University of California San Francisco
- Survey was reviewed by a panel of nephrology APs for face and content validity
- Data collected using Qualtrics survey tool
- Distributed to Nephrology Advanced Practitioners via professional association listservs
  - *PAs, Nurse Practitioners, Clinical Nurse Specialists*

# Methods

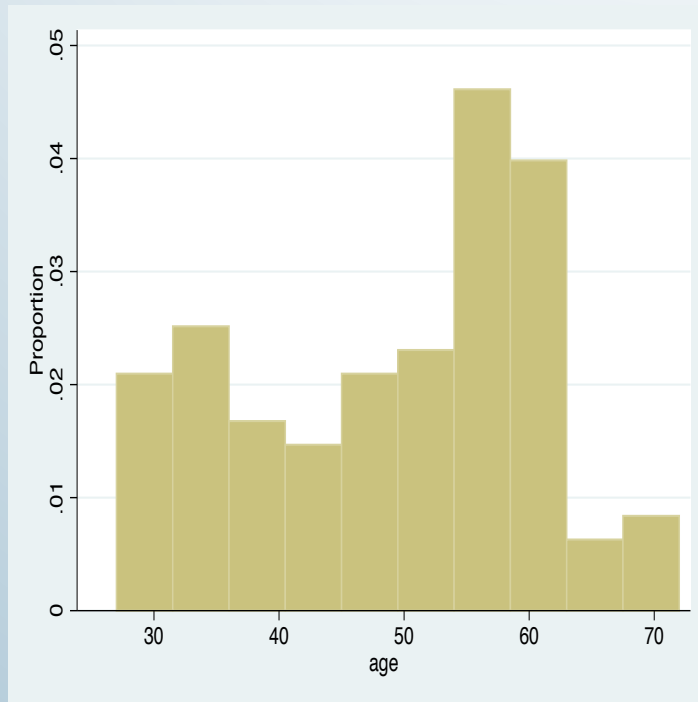
- Survey questions allow for free text to capture responses outside of anticipated parameters
- Content included the following domains
  - *Demographics*
  - *Productivity/workload (actual and high/low estimate of reasonable patient volume across practice settings)*
  - *Scope of practice*
  - *Compensation (wage and benefits)*
- Statistical analysis performed with STATA

# Results

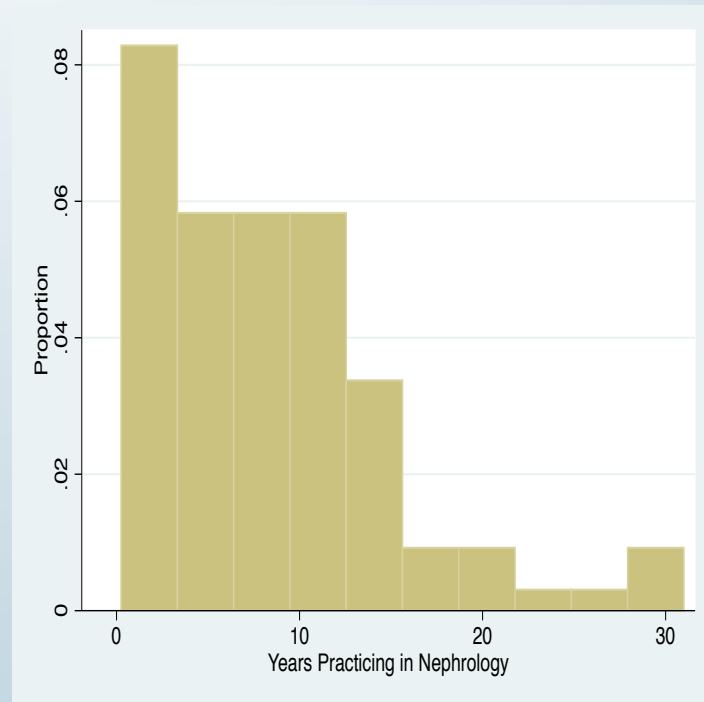
- 107 responses, 13 with partial missing data
- Average time for survey completion 10.1 minutes
- 89% of respondents are female
- 79% of respondents are Nurse Practitioners, 21% are PAs
  - *1 CNS respondent, grouped with NPs for analysis*
- 84% of respondents are non-Hispanic white
- Mean age of respondents is 48

# Respondent Characteristics

## Age



## Years Practicing in Nephrology





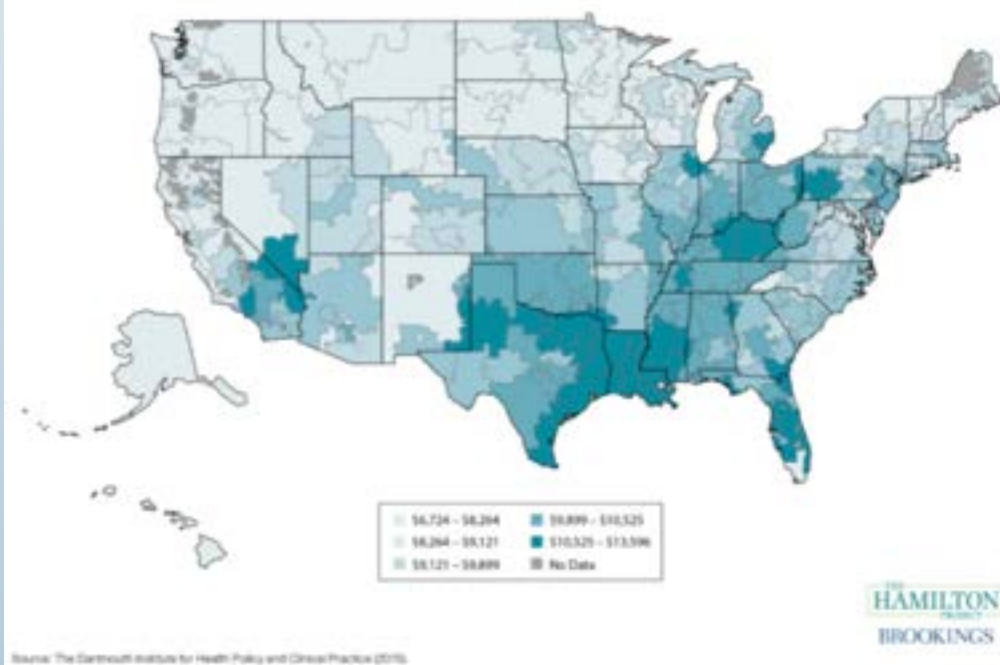
# ANOVA Table of Salary Means by Characteristics of Provider and Practice Setting

	Salary mean (SE)	Salary mean (SE)	Salary mean (SE)	F (p)
<b>Gender</b>	Female <i>n</i> =96 103,363 (2288)	Male <i>n</i> =11 100,218 (6079)		0.21 (.65)
<b>Race</b>	Non-Hisp White <i>n</i> =90 103,540 (2084)	Minority <i>n</i> =17 99,454 (9009)		0.39 (.5)
<b>Provider Type</b>	NP <i>n</i> =78 103,546 (2581)	PA <i>n</i> =27 104,777 (3788)		0.06 (.8)
<b>Age</b>	Up to 35 <i>n</i> =22 100,317 (5482)	35-50 <i>n</i> =28 104,871 (3947)	>50 <i>n</i> =56 102,230 (2790)	0.29 (.74)
<b>Years in Nephrology</b>	0-5 <i>n</i> =43 100,939 (3856)	6-10 <i>n</i> =32 103,578 (4451)	>10 <i>n</i> =31 105,416 (2238)	0.39 (.67)
<b>HRR Cost Quintile</b>	Low <i>n</i> =32 98,955 (3759)	High <i>n</i> =31 103,525 (4001)		1.07 (.31)
<b>Practice Size</b>	Small (1-5) <i>n</i> =18 106,456 (5889)	Med (6-12) <i>n</i> =31 101,897 (3757)	Large (>12) <i>n</i> =21 98,574 (4112)	0.65 (.5)

# Dartmouth Atlas Hospital Referral Regions

## Average Medicare Reimbursements per Enrollee, by Hospital Referral Region, Adjusted for Price, Age, Sex, and Race, 2012

In 2012, average Medicare reimbursements per enrollee ranged an adjusted \$6,724 in the hospital referral region with the lowest spending to \$13,596 in the region with the highest.



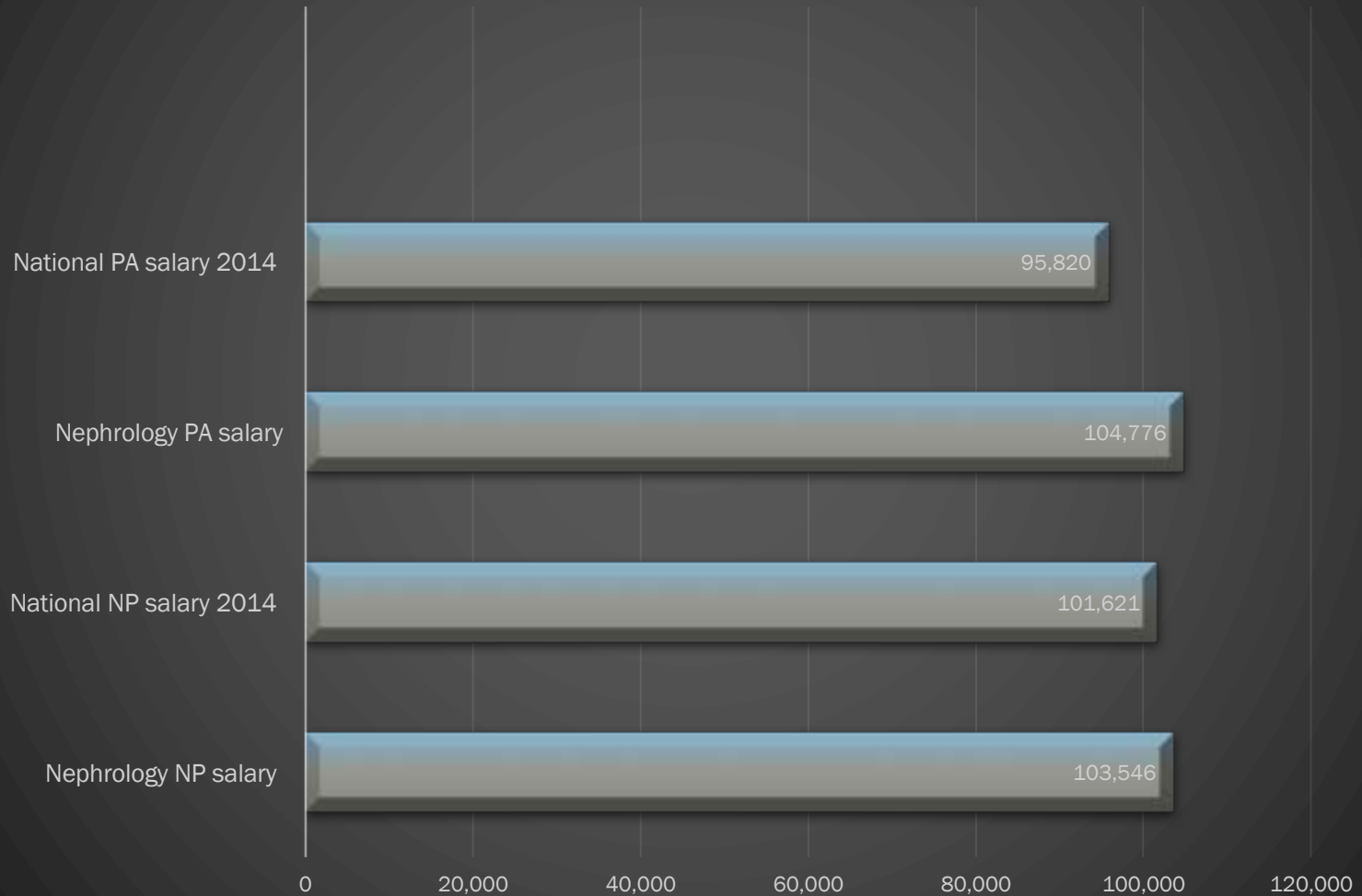
- Correlation between AP salary and regional medical spending
  - *Dartmouth Atlas hospital referral region (HRR) used to define spending quintiles*

# Multivariable Regression Analysis of Salary Predictors

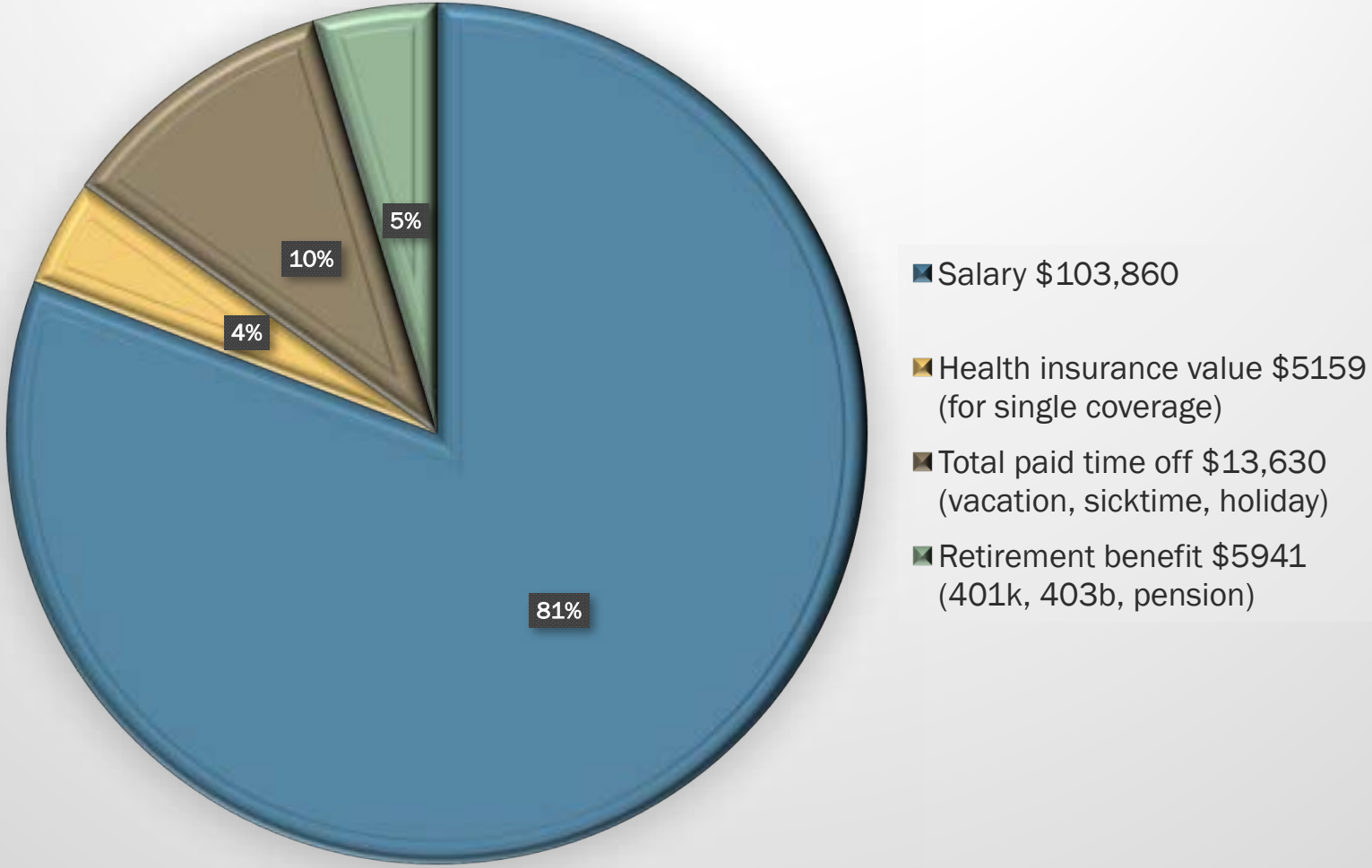
Characteristic (Reference Group)	Salary N=98 β coefficient (p value)	Benefits n=94 β coefficient (p value)	Salary and Benefits n=94 β coefficient (p value)
<b>Provider Characteristics</b>			
Gender (Female)	2115 (.78)	-680 (.86)	1436 (.88)
Age	-120 (.54)	-26 (.78)	-147 (.54)
Race (White)	-5097 (.4)	<b>-5898 (.05)*</b>	-10,993 (.14)
Provider Type (Physician Assistant)	112 (.98)	2185 (.43)	2297 (.74)
Years in Nephrology	376 (.28)	204 (.24)	581 (.18)
F, R-squared	.48, .027	1.23, .065	.95, .051
<b>Practice Setting</b>			
Practice Size	-463 (.14)	32 (.79)	-431 (.24)
Medicare Spending, HRR quintile	1315 (.43)	625 (.34)	1941 (.33)
F, R-squared	1.42, .043	0.51, .602	1.18, .034
<b>Job Scope</b>			
Hemodialysis Unit	-10,535 (.11)	-624 (.83)	-11158 (.15)
On-Call	-6241 (.17)	-709 (.74)	-6951 (.2)
HDU Comprehensive Visits	-900 (.84)	1764 (.4)	864 (.87)
Office	2488 (.17)	2888 (.16)	5377 (.3)
Peritoneal Dialysis Unit	2628 (.54)	1079 (.59)	3707 (.47)
Hospital	4699 (.27)	<b>5193 (.01)*</b>	<b>9893 (.05)*</b>
Administration	6005 (.16)	<b>4779 (.02)*</b>	<b>10,784 (.04)*</b>
F, R-squared	1.78, .121	2.62, .169	2.59, .167



## Nephrology NP and PA Salaries Compared with National Averages

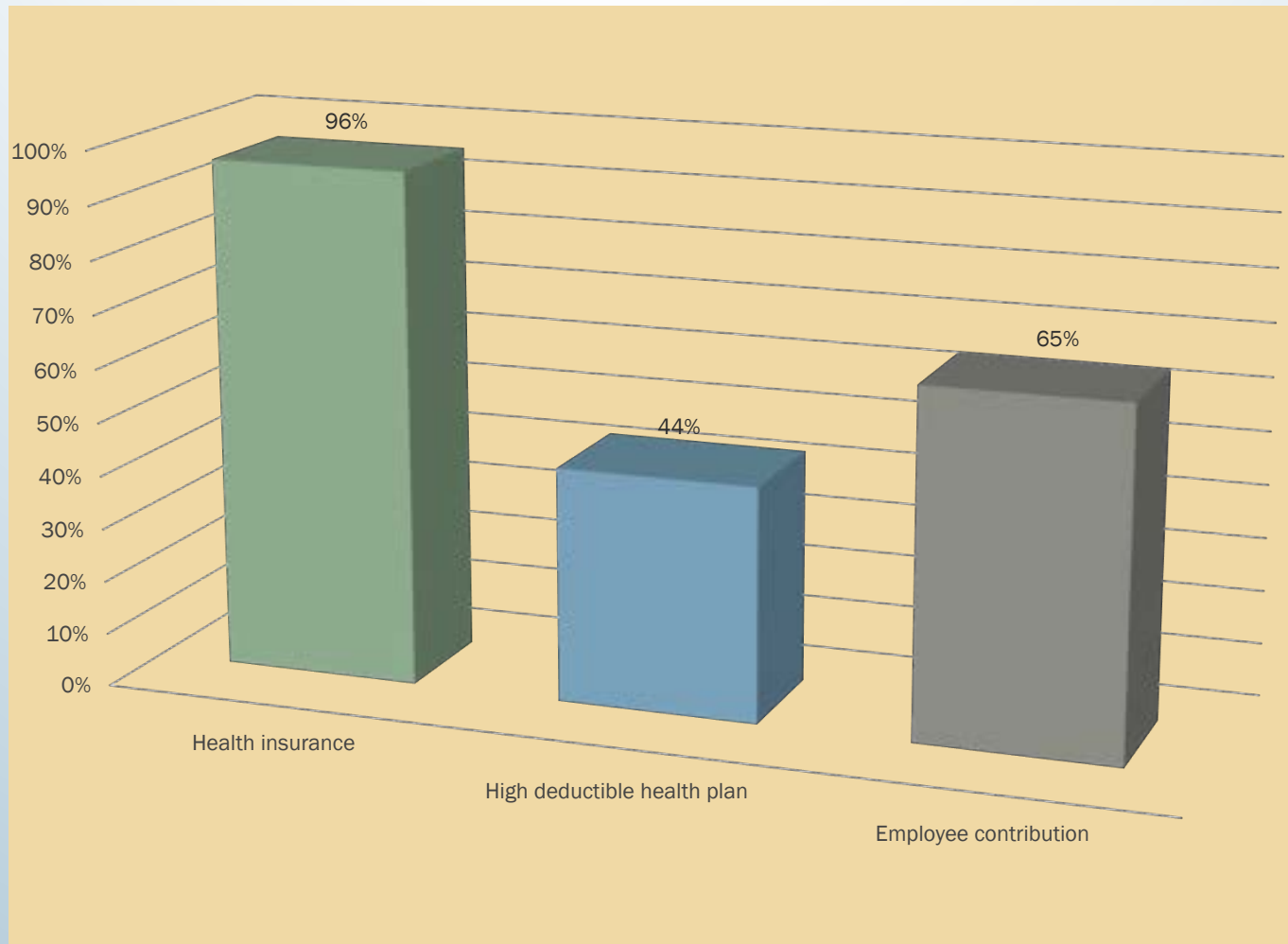


# Nephrology AP Compensation

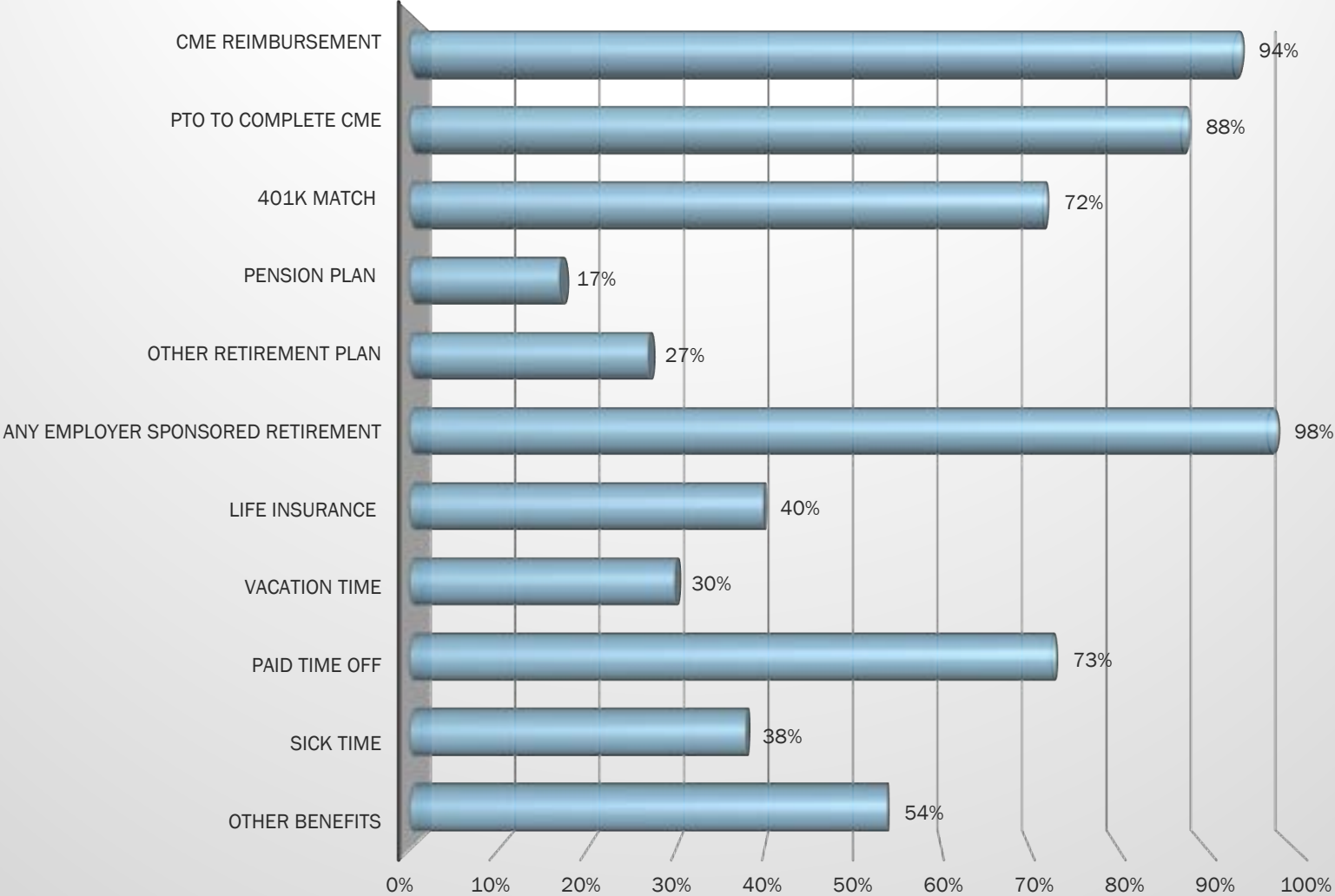


Total average annual compensation \$128,590

# Health Insurance Benefits



# Nephrology AP Benefits

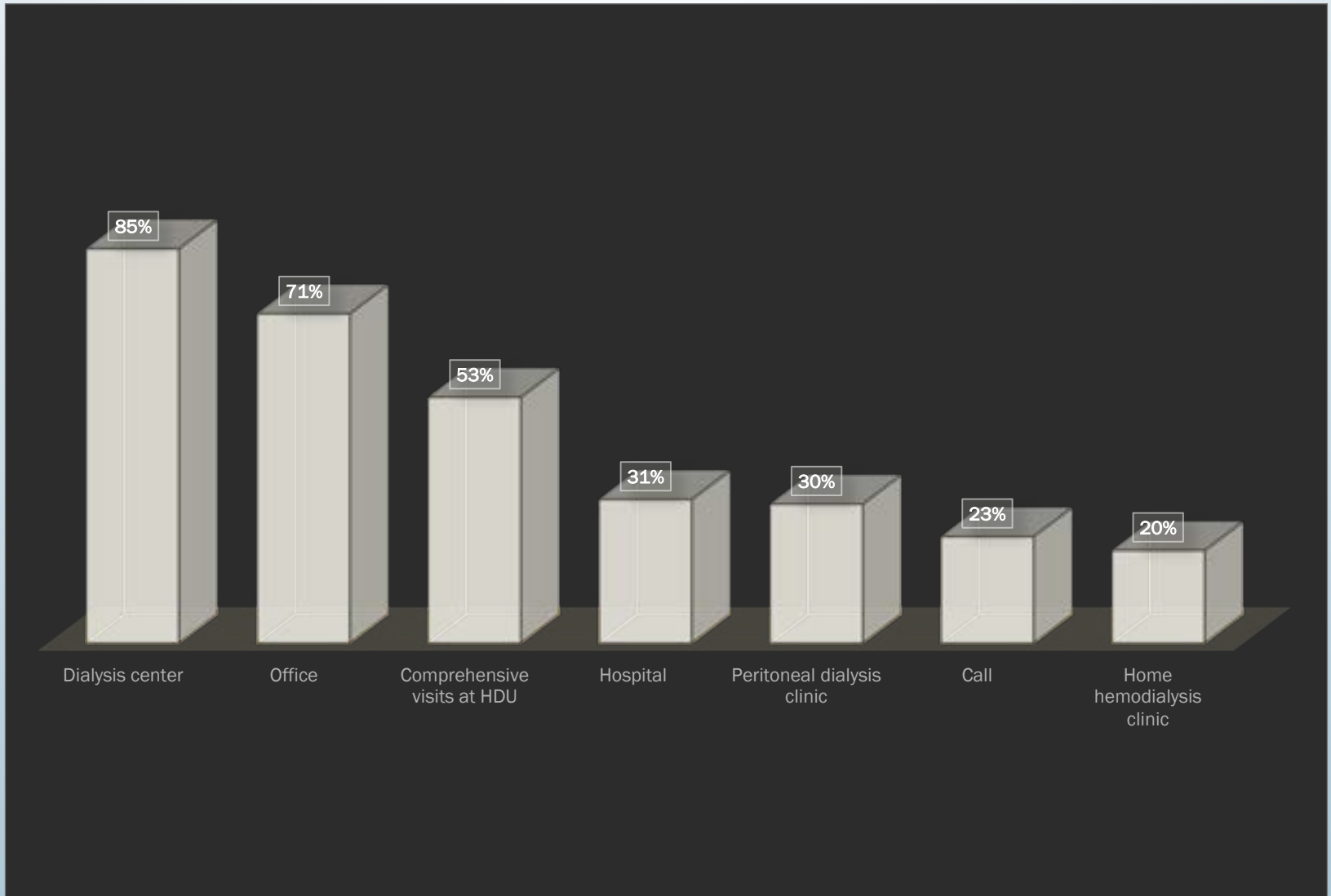




# Additional Benefits

- License renewal
- Travel for conferences
- Higher education tuition subsidy
- Membership to professional organizations
- Journal and UpToDate subscriptions
- Malpractice insurance
- Dental insurance
- Disability insurance
- Phone
- iPad
- Lab coats
- Costco membership
- Pay for sick leave not taken
- Mileage
- Car allowance
- Expense account
- Bonus Pay

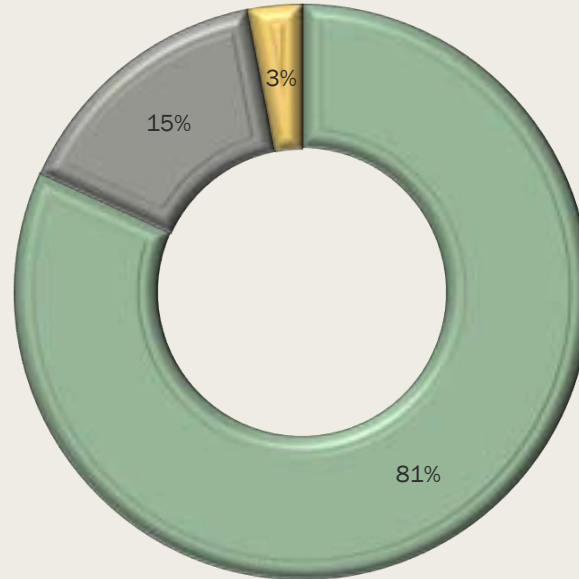
# Nephrology AP Practice Settings/Job Scope



# Work Hours

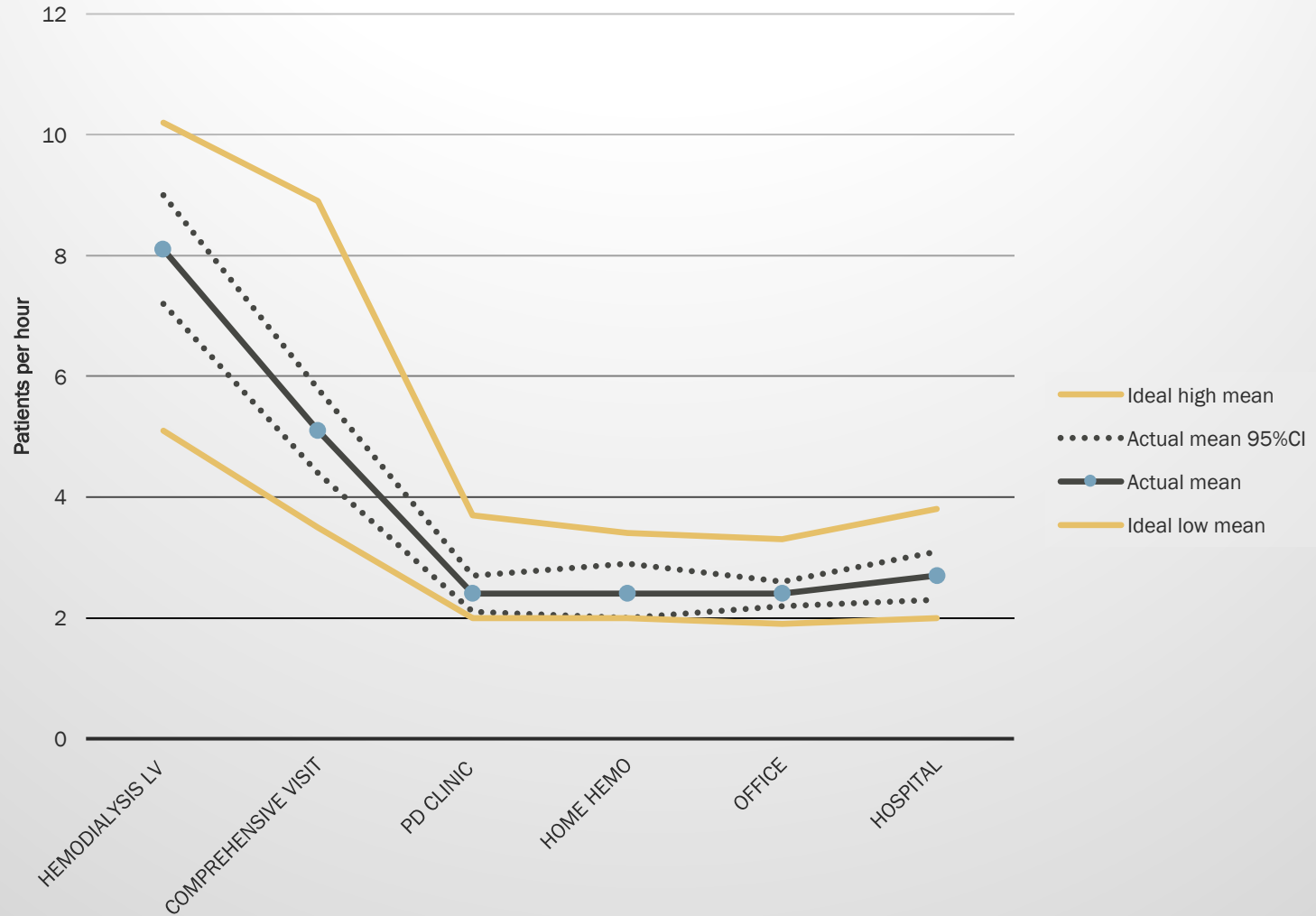
## Full Time/Part Time Breakdown

■ 40 hours or greater   ■ 32-39 hours   ■ <32 hours

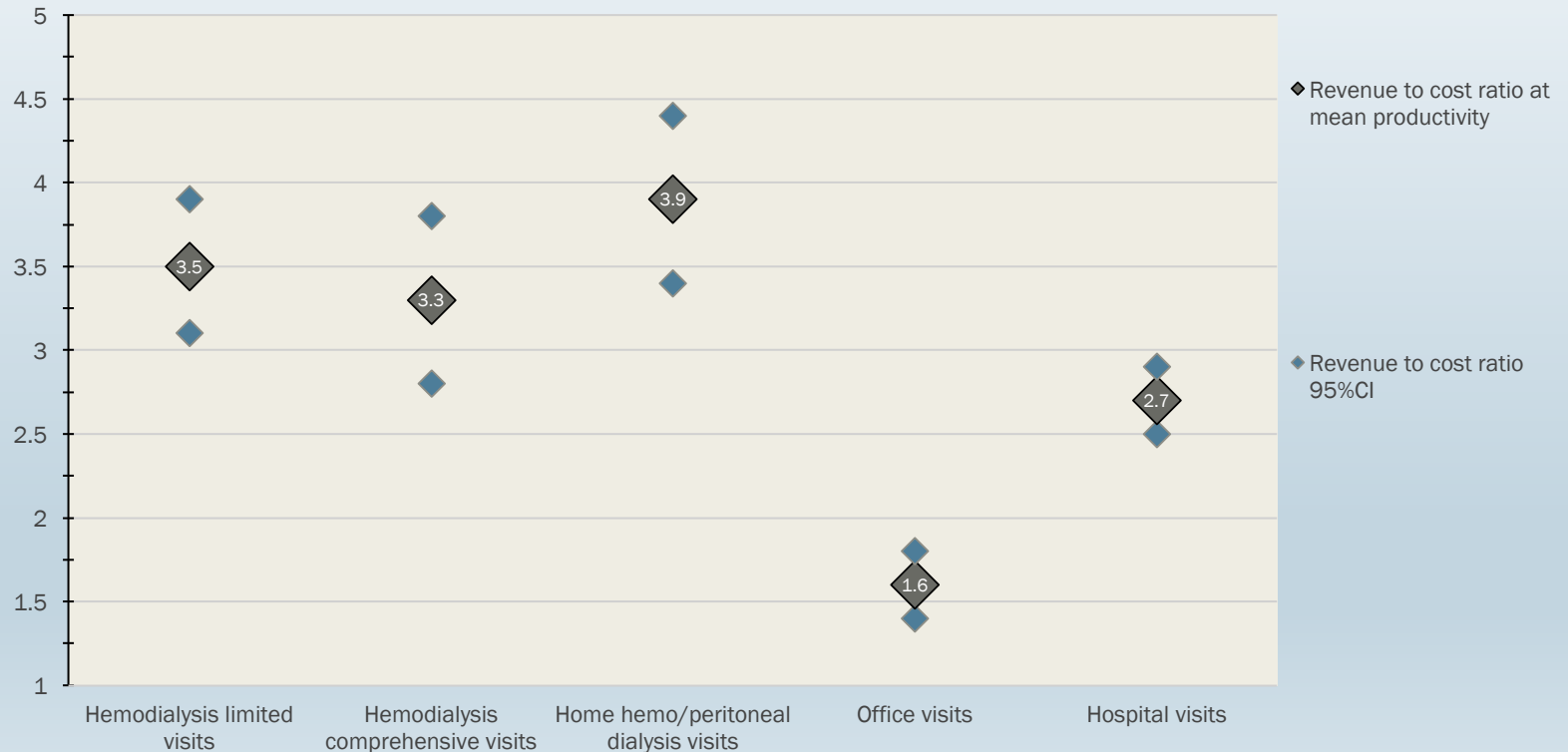


- 73% of Nephrology AP FTEs work more than 40 hours per week
- Average number of hours/wk for FTEs (working 40 or >hrs/wk) is 45.2

# Actual and Ideal Number of Patients per Hour Across Practice Settings



# Ratio of Revenue Generated by Nephrology APs to Nephrology AP Employment Cost Across Practice Settings



Revenue generated by FT AP calculated in hospital, office and dialysis center settings based on average actual practice volume and current national average Medicare reimbursement rates

\*Revenue adjusted for national average overhead costs in medical practice<sup>4</sup>

\*Salary adjusted for non-comp costs to employer (payroll taxes, benefits, etc)<sup>5</sup>

# Limitations

- Self reported data
- Small sample size with wide geographic distribution
  - *Represents a substantial proportion of nephrology APs practicing in the US*
- HRR referral may not adequately control for regional variations in compensation
- Value of benefits estimated using Kaiser Family Foundation and Bureau of Labor Statistics data
  - *May not accurately capture true benefit value*
- Revenue generation projections are based on Medicare reimbursement
  - *Actual revenue generated will vary based on case mix of patient population*

# Conclusions

- Non-Hispanic white race has a statistically significant association with higher value benefits and higher adjusted salary
- Working in administration or hospital in hospital is associated with significant higher compensation (benefits, salary/benefits)
- Nephrology APs work in a wide range of practice settings
- Nephrology AP salaries are consistent with AP salaries nationwide
- The majority of APs have HDHP and/or pay for part of their health insurance premiums

# Conclusions

- Nephrology APs report that actual patient volume is on the lower end of their self-defined 'reasonable range' in most practice settings
- Nephrology APs can generate revenue up to 3x employment costs
- Reimbursement to employment cost ratio is highest for dialysis, lowest in the office setting
- Nephrology APs are a hard working bunch!



# References

- [1] “Kidney Disease Statistics for the United States.” [Online]. Available: <http://www.niddk.nih.gov/health-information/health-statistics/Pages/kidney-disease-statistics-united-states.aspx>. [Accessed: 26-Apr-2016].
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Questions?

Comments?

Suggestions for next years  
survey....