

## Why Fair Market Value Is Not One Number

By Norman M. Goldfarb

Most principal investigators are physicians. Given the financial pressures on healthcare providers in the United States, few physicians can afford to devote time to clinical research unless the monetary compensation is comparable to what they can earn in their medical practice. Variations in those rates of compensation, as well other costs and prices for a clinical research site, help determine the fair market value (FMV) for a clinical research site's services.

Study sponsors typically use the FMV concept to stay clear of anti-kickback and other laws that prohibit overpaying physicians and research sites. Sponsors often determine an FMV for the entire U.S. and then work to minimize variations from that. This strategy ignores the obvious fact that clinical research costs vary regionally and across medical specialties, and that some sites are better than others at clinical research. In other words, the "national average" FMV strategy causes study sponsors to pay most sites either more or less than their actual FMV.

### Variation by Medical Specialty

Table 1 lists U.S. physician annual compensation by medical specialty.<sup>1</sup> Compensation ranges from a low of \$185,280 for pediatric rheumatologists to a high of \$916,284 for pediatric cardiac/thoracic surgeons, a factor of five difference. These rates help explain why the cost of conducting clinical research can even vary by department in a hospital, much less nationally.

**Table 1. Physician Compensation by Specialty**  
(Annual Median Compensation, 2016 Data, \$US)<sup>1</sup>

Specialty	Comp	Specialty	Comp
Allergy & Immunology	311,750	Orthopedic Surgery - Spine	795,086
Anesthesiology	415,685	Orthopedic-Medical	507,191
Bariatric Surgery	502,051	Otolaryngology	440,092
Breast Surgery	363,519	Pain Management (Non-Anesthesiology)	420,000
Cardiac & Thoracic Surgery	690,000	Palliative Care	232,133
Cardiology	485,945	Pathology	373,794
Cardiovascular Surgery	718,433	Pediatric Allergy	238,784
Colon & Rectal Surgery	437,000	Pediatric Anesthesiology	471,500
Critical Care / Intensivist	400,000	Pediatric Cardiac / Thoracic Surgery	916,284
Dentistry	236,151	Pediatric Cardiology	305,693
Dermatology	457,118	Pediatric Emergency Medicine	250,754
Emergency Medicine	348,178	Pediatric Endocrinology	208,278
Endocrinology	248,931	Pediatric Gastroenterology	272,500
Family Medicine	242,210	Pediatric Genetics	204,011
Family Medicine - with Obstetrics	262,266	Pediatric Hematology / Oncology	229,531
Gastroenterology	519,124	Pediatric Hospitalist	201,250
General Surgery	413,047	Pediatric Infectious Disease	196,624
Geriatrics	229,505	Pediatric Intensive Care	322,757
Gynecological Oncology	466,615	Pediatric Nephrology	221,933
Gynecology	260,427	Pediatric Neurology	264,400
Gynecology & Obstetrics	342,700	Pediatric Orthopedic Surgery	563,058

Hematology & Medical Oncology	444,766	Pediatric Otolaryngology	422,112
Hospitalist - Family Medicine	273,593	Pediatric Pulmonary Disease	251,743
Hospitalist - Internal Medicine	281,500	Pediatric Radiology	472,682
Hospitalist - Nocturnist	293,435	Pediatric Rheumatology	185,280
Hypertension & Nephrology	339,750	Pediatric Surgery	577,972
Infectious Disease	263,651	Pediatric Urology	528,161
Internal Medicine	259,765	Pediatrics & Adolescent	241,116
Internal Medicine - Pediatrics	249,510	Physical Medicine & Rehabilitation	280,750
Maternal Fetal Medicine / Perinatology	468,157	Plastic & Reconstructive Surgery	528,283
Medical Oncology	361,536	Podiatry - Medical	240,705
Neonatology	337,388	Psychiatry	266,540
Nephrology	327,718	Psychiatry - Child	265,227
Neurological Surgery	779,266	Pulmonary / Critical Care	397,547
Neurology	295,211	Pulmonary Disease	372,250
Nuclear Medicine	384,120	Radiation Therapy (M.D. only)	525,000
Obstetrics	312,382	Radiology-Interventional	610,500
Obstetrics & Gynecology	342,700	Radiology-Non-Interventional	503,225
Occupational / Environmental Medicine	244,064	Reproductive Endocrinology	412,458
Oncology - Surgical	434,709	Rheumatologic Disease	254,604
Ophthalmology - Medical	304,616	Sports Medicine	275,513
Ophthalmology - Retinal Surgical	549,965	Thoracic Surgery	523,755
Ophthalmology - Surgical	414,996	Transplant Surgery - Kidney	437,404
Oral - Maxillofacial Surgery	503,633	Transplant Surgery - Liver	552,603
Orthopedic Surgery	581,092	Trauma Surgery	471,967
Orthopedic Surgery - Foot & Ankle	494,700	Urgent Care	266,591
Orthopedic Surgery - Hand	604,869	Urology	453,680
Orthopedic Surgery - Joint Replacement	718,618	Vascular Surgery	489,240
Orthopedic Surgery - Pediatrics	563,058		

## Variation by Geography

While a study participant in one locale delivers about the same value to a study sponsor as one from another locale, there are statistical and other reasons why a study sponsor would want a study's sample population to be geographically dispersed. Just as the price of healthcare varies regionally, so does the price for clinical study conduct. These variations are correlated, but not identical, based on local competition and other factors. Nevertheless, healthcare pricing can be used as a rough proxy for clinical research pricing, and certainly indicates the degree of variation across regions.

The U.S. Centers for Medicare & Medicaid Services (CMS) publishes national and regional Medicare physician reimbursement rates. For example, the average national fee for a CPT 93452 procedure (left heart catheterization including intraprocedural injection(s) for left ventriculography, imaging supervision and interpretation, when performed) is currently \$847. However, the fee in San Francisco, California is \$1,054 (24% higher), while the fee in Arkansas is only \$750 (11% lower). The San Francisco fee is thus 40% higher than the Arkansas fee.<sup>3</sup>

## Variation by Physician Experience and Reputation

Physicians can provide expert witness and other consulting services. Their fees typically vary by experience and reputation. VMG Health, a prominent firm that specializes in determining the fair market value in the healthcare industry, including physician consultants, categorizes them in three tiers:

**Tier 1 physicians** typically have extensive experience, have a significant national or even international presence, and have a multitude of presentations and publications.

**Tier 2 physicians** typically have a moderate level of experience, have some national and maybe international presence, and have a moderate number of presentations and publications.

**Tier 3 physicians** are typically inexperienced, do not have a national or international presence, and have only a handful of presentations and publications.

*For the purposes of this article, VMG Health has provided rough estimates, intended only to indicate typical rates and the relation of rates between tiers. These rates should not be used in actual practice.* In the medical specialty of general surgery, a Tier 3 consultant might earn up to \$300/hour, a Tier 2 consultant might earn up to \$400/hour, and a Tier 1 consultant might earn up to \$500/hour.

VMG's determinations are for physician consultants, not principal investigators. Based on this example, their findings do, however, suggest that if a Tier 1 physician is required for a study, he or she might warrant an hourly rate that is 60% more than one with minimal experience. The same rationale can be applied to other site personnel conducting a clinical study, along with sites in their entirety.

## **Conclusion**

Sponsors that want to get the best results in their clinical studies should spend their study budgets on the best sites they can afford, without any false notions that FMV requires them to pay all sites about the same. In fact, the correct application of FMV requires sponsors to pay each site for the value it provides to the study, which can vary substantially by medical specialty, geography and site capabilities.

## **References**

1. 2017 Medical Group Compensation & Financial Survey, American Medical Group Association. Accessed 11/27/18 at <https://www.cejkasearch.com/physician-compensation-report>.
2. Medscape Physician Compensation Report 2018. Accessed 11/27/18 at <https://www.medscape.com/slideshow/2018-compensation-overview-6009667#9>
3. CMS Physician Fee Schedule Search. Accessed 11/17/18 at <https://www.cms.gov/apps/physician-fee-schedule/search/search-criteria.aspx>.

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