

Physician Practice Information Survey (PPIS) Data Submitted for 2010:  
Non-MD/DO and Health Professionals Practice Information

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## Table of Contents

<b>I.</b>	<b>INTRODUCTION</b> .....	<b>4</b>
<b>II.</b>	<b>METHODOLOGY</b> .....	<b>5</b>
	<b>A. Data Collection</b> .....	<b>5</b>
	<b>B. Analysis of Survey Results</b> .....	<b>6</b>
	<b>C. Precision Requirements for the Physician Practice Information Survey (PPIS)</b> .....	<b>6</b>
	<b>D. Weighting</b> .....	<b>8</b>
<b>III.</b>	<b>AUDIOLOGY</b> .....	<b>9</b>
<b>IV.</b>	<b>CHIROPRACTOR</b> .....	<b>11</b>
<b>V.</b>	<b>CLINICAL PSYCHOLOGY</b> .....	<b>13</b>
<b>VI.</b>	<b>CLINICAL SOCIAL WORK</b> .....	<b>15</b>
<b>VII.</b>	<b>OPTOMETRY</b> .....	<b>17</b>
<b>VIII.</b>	<b>ORAL SURGERY (DENTISTS)</b> .....	<b>19</b>
<b>IX.</b>	<b>PHYSICAL THERAPY</b> .....	<b>21</b>
<b>X.</b>	<b>PODIATRY</b> .....	<b>23</b>
<b>XI.</b>	<b>RADIATION ONCOLOGIST (FREESTANDING CENTERS)</b> .....	<b>25</b>
<b>XII.</b>	<b>REGISTERED DIETICIANS</b> .....	<b>29</b>

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American Optometric Association (AOA)

American Association of Oral and Maxillofacial Surgeons (AAOMS)

American Physical Therapy Association (APTA)

American Podiatric Medical Association (APMA)

Association of Freestanding Radiation Oncology Centers (AFROC) and

American Society for Therapeutic Radiology and Oncology (ASTRO)

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We are grateful for the CMS' continued confidence in The Lewin Group and value our ongoing working relationship with the CMS project director and staff.

## I. INTRODUCTION

This report is being submitted in conjunction with the American Medical Association's (AMA) Physician Practice Information Survey (PPIS), administered in 2007 and 2008. The tables in this report summarize practice expense information by specialty from practice expense surveys conducted for the DO (Doctors of Osteopathy) and other health professional specialties. (DO specialties that are also MD [Doctor of Medicine] specialties are covered by the AMA PPI S.) The included specialties are audiology, chiropractic, clinical psychology, clinical social work, optometry, oral surgery, physical therapy, podiatry, freestanding radiation oncology centers and registered dietitians. This report only reflects the practice expense analysis conducted by The Lewin Group for the non-MD/DO and health professions not represented by the AMA Physician Masterfile.

Since 1999, The Lewin Group has appreciated the opportunity to assist CMS in numerous supplemental practice expense surveys for various health care specialties. Our most recent report, prior to this current report, was *Recommendations Regarding Supplemental Practice Expense Data Submitted for 2006, Revised*, September 2005.

Data for each group are being formally submitted to the Centers for Medicare and Medicaid Services (CMS) by The Lewin Group for consideration in the planned revisions to the practice expense Resource-Based Relative Value Units (RBRVUs) used in the Medicare Physician Fee Schedule. The purpose of this report is to present a brief background on prior supplemental data collection efforts and our analyses of each of the non MD/DO and health specialty surveys.

## II. METHODOLOGY

### A. Data Collection

The PPIS is a nationally representative survey of physicians drawn randomly from the AMA's Physician Masterfile, which is a listing of all member and non-member physicians in the United States. The survey was conducted in conjunction with national medical specialty societies and other health care professionals,<sup>1</sup> representing 51 specialties and health professions. The AMA and the other participating organizations jointly funded the survey effort and distributed consistent communications to their membership to encourage accurate and complete responses. Under contract to CMS for physician practice expense, The Lewin Group was brought on board to assist in the survey effort and in particular, conduct the analysis of the specialties not represented by the AMA.

The survey was conducted by external contractors. In 2007 the PPIS project was contracted to the Gallup Organization. In late 2007 the AMA transitioned the survey effort to **dmrkynetec**, formally Doane Marketing Research, to complete the project. **Dmrkynetec** conducted the majority of the specialty level surveys that were implemented by CMS.

The same PPIS worksheet used by groups in the AMA Physician Masterfile was used by the non-MD/DO specialties: optometry, oral surgery, podiatry and chiropractors. A modified survey worksheet was used for the health care professional survey: audiology, clinical psychology, clinical social work, registered dieticians and physical therapy. The survey was modified to a practice level survey for the freestanding radiation oncology centers. The survey was conducted via a number of different modes, including phone, facsimile, mail, and Internet.

Each survey respondent was sent a worksheet to complete in advance of completing the questionnaire. Survey respondents were specifically encouraged to seek input from their practice manager or accountant to answer the practice expense questions. In particular, **dmrkynetec** made every effort to re-contact respondents to address incomplete practice expense questions or to clarify responses as needed. Respondents were encouraged to provide data based on their 2006 financial statements and tax returns. However, in a few cases, respondents chose to provide either 2005 or 2007 data. For these cases, The Lewin Group scaled the data to 2006 based on changes in the total Medicare Economic Index (MEI).

Only non-federal, non-resident, patient care physicians and other health care professionals who work at least 20 hours per week in direct patient care were included in the PPIS effort. In contrast to earlier surveys, the survey results include practice expense information collected from both owners and employees. All respondents were asked to provide all practice costs attributable to their services at the individual level. If respondents were interested in participating and could not provide data at the individual level, they were allowed to provide data at the single-specialty

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<sup>1</sup> American Academy of Audiology (AAA), American Chiropractic Association (ACA), American Psychological Association (APA), National Social Workers Association (NSWA), American Optometric Association (AOA), American Association of Oral and Maxillofacial Surgeons (AAOMS), American Physical Therapy Association (APTA), American Podiatric Medical Association (APMA), Association of Freestanding Radiation Oncology Centers (AFROC) and American Society for Therapeutic Radiology and Oncology (ASTRO)

practice level or at a department level, as long as they indicated the level at which expenses were reported.

## **B. Analysis of Survey Results**

The Lewin Group analyzed 1,538 responses from the non-MD/DO practice specialties and health care professionals. The Lewin Group worked closely with the AMA to ensure that all data were analyzed in a consistent manner. The following records were excluded from the practice expense per hour computations:

Records with one or more missing expense questions;

Records with total expenses were zero;

Records not indicating the level to which expense data pertain;

Records with missing practice size information and those in multispecialty practices that provided data at the practice level;

Records with respondents practicing fewer than 26 weeks per year (including cases where weeks worked per year was missing); and those that did not provide at least 20 hours and less than 168 hours per week in direct patient care; and

Outlier records, which were defined as records with the total expense per hour of more than three standard deviations from the natural mean of total expense per hour.

Where possible, results were weighted for unit non-response based on practice size or practice setting depending on available information. CMS may ask Lewin to incorporate a blended weight on radiation oncology using physician time weights based on FY2005 utilization in hospital based to freestanding weights.<sup>2</sup>

## **C. Precision Requirements for the Physician Practice Information Survey (PPIS)**

The PPIS administered in 2007 and 2008 was designed and fielded to update the specialty-specific practice expense (PE) per hour data used to develop practice expense relative value units. Currently, PE per hour data is obtained from the American Medical Association's SMS survey, which was collected during the mid to late 1990's. For those specialties that more recently collected additional PE per hour data through a supplemental survey, these data were incorporated in developing PE per hour values.

While the SMS survey was not specifically designed for the purpose of establishing practice expense RVUs, these data were deemed to be the best available at the time. The SMS was a multi-specialty survey effort conducted using a consistent survey instrument and method across specialties. The survey sample was randomly drawn from the AMA Physician Masterfile to ensure national representativeness. The AMA discontinued the SMS survey in 1999. In addition to being outdated, the SMS data do not cover all the specialties, have small sample sizes for many specialties and do not include non-physician health care professionals paid under the MFS.

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<sup>2</sup> The Lewin Group Memorandum to CMS: *Recommendations Regarding Practice Expense*, September 29, 2006.

As a result, non-physician specialties were crosswalked to those specialties with PE per hour data.

As required by Section 212 of the Balanced Budget Refinement Act of 1999, CMS established a process by which specialty groups could submit supplemental practice expense data. In an Interim Final Rule published May 3, 2000 (65 FR 26664), establishing criteria for acceptance of supplemental data. These included: (1) that the sample be drawn from the AMA Masterfile for physician groups or, for non-physician specialties, using a method to draw a nationally representative sample; and (2) that the survey be conducted using the SMS survey instrument and protocols.

In the May 3, 2000 interim final rule, CMS indicated that the statistical precision of the survey data would be an essential element to the data review process. The precision requirements were in the first instance that a given supplemental survey had to have a sampling error of + or – 10 percent with a confidence level of 90 percent. This means that  $1.645 * \text{the standard error divided by the variable mean}$  would be less than or equal to 0.10. This latter was relaxed in the June 2002 interim regulation to a requirement of a sampling error of 0.15 or less at a confidence level of 90 percent. Our criteria and precision requirement were established to ensure comparability between the PE data obtained from supplemental surveys and the AMA SMS. CMS relaxed the precision required in the spirit of inclusiveness so that as much new PE data as possible could be included in the practice expense determination. The supplemental PE surveys conducted between 1999 and 2005, filled many information gaps by adding information for some health professionals and updating a few specialty groups.

To update the PE per hour data used to construct RVUs, CMS supported the PPIS. The PPIS was a multi-specialty effort that collected practice expense data through a nationally representative survey using a consistent survey instrument and methods. The PPIS gathered practice expense information across 51 physician specialty and health care professional groups. The PPIS is also corrected for non response rates using national lists of the known universe of providers. The PPIS, thus, is the most comprehensive source of PE information available to date.

The PPIS used a consistent survey methodology across all specialty and health care profession groups. This methodology is highly consistent with the prior SMS methodology as only small deviations were allowed to accommodate practice style differences across the various groups surveyed.

The PPIS was conducted in accordance with the known conventions governing PE collection activities. The data are as a consequence representative and reliable. A goal of 100 completed surveys for each specialty was set as a goal for the PPIS. Of the 1,538 surveys collected for the non MD/DO specialties and health professions, on average, greater than 50 percent of the responses collected at a specialty level were usable observations. In an attempt to be as flexible as possible, consistent with a goal of obtaining and using updated information collected for the same time period (2006) for as many provider groups as feasible, it is not a requirement that every specialty and health care profession group meet a pre-determined statistical precision level.

While CMS required sampling error precision levels for the supplemental surveys, such a requirement would be counter-productive for PPIS individual specialty level PE information.

The goal of using consistently collected and the most recent information available for as many specialties as possible outweighs the use of precision criteria that would not allow use to all of the PPIS data which as a whole is the best information currently available on provider practice expenses.

#### **D. Weighting**

For physician specialties, the AMA weighted survey responses to adjust for non-response bias. Non-response weights were developed based on the size of practice (1-2 physicians or other) using information in the AMA Masterfile. The AMA has indicated that the weighting has only a small impact on PE per hour values. Such weighting is not possible with non-physician specialties that do not appear in the AMA Masterfile. For these specialties The Lewin Group, attempted to obtain practice-size information on the universe of providers from provider associations. Where available, The Lewin Group adjusted for practice size non-response. Lewin asked the various sponsoring associations for estimates of the distribution of practices by practice setting or practice group size. Upon examination of the survey data and discussion with the various associations on their reporting capabilities, the practice settings were classified as solo practice, group practice and all other settings. Similarly based on the survey data and association capabilities, the practice size groupings were classified as: single practitioner, 2 to 3 practitioners and 4 or more practitioners.

### III. AUDIOLOGY

The American Academy of Audiology (AAA) and the American Speech-Language and Hearing Association (ASHA) provided member and non-member mailing lists that were used by The Lewin Group to draw a representative sample for the PPIS effort. The AAA provided information on practice size which allowed for weighting the audiology practice expense.

**Exhibit 3.1: Distribution of Sample by Number of Practice Professionals, Audiology**

<b>Number of Audiologists in Practice</b>	<b>AAA Estimate of Distribution by Practice Size</b>	<b>Percent of Survey Sample (n=71)</b>
<b>1 Practitioner</b>	50%	62%
<b>2-3 Practitioners</b>	35%	30%
<b>4+ Practitioners</b>	15%	8%

**Exhibit 3.2: Practice Expenses per Hour (unweighted), Audiology**

<b>Expense Category</b>	<b>Estimated Mean (N=71)</b>	<b>Standard Error (N=71)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=71)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	\$4.15	1.486	0.59
Medical Equipment	\$2.66	0.493	0.30
Medical Supplies	\$4.81	2.329	0.80
<b>Indirect PE per hour</b>			
Office Expense	\$39.08	5.568	0.23
Clerical Payroll	\$19.71	3.032	0.25
Other Expense	\$10.94	2.184	0.33
<b>Total PE per hour</b>	<b>\$81.34</b>	<b>8.587</b>	<b>0.17</b>

**Exhibit 3.3: Practice Expenses per Hour (unweighted), Audiology, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	50	\$92.33
<b>Employee</b>	21	\$55.70

**Exhibit 3.4: Practice Expenses per Hour (unweighted), Audiology, by Practice Size**

<b>Number of Audiologists in Practice</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>1 Practitioner</b>	44	\$94.35
<b>2-3 Practitioners</b>	21	\$59.75
<b>4+ Practitioners</b>	6	\$63.36

**Exhibit 3.5: Practice Expenses per Hour Weighted by Practice Size, Audiology**

<b>Expense Category</b>	<b>Estimated Mean (N=71)</b>	<b>Standard Error (N=71)</b>	<b>Precision [1.645 × SE/Mean] (N=71)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	4.58	1.595	0.57
Medical Equipment	2.81	0.509	0.30
Medical Supplies	5.28	2.442	0.76
<b>Indirect PE per hour</b>			
Office Expense	39.30	5.306	0.22
Clerical Payroll	20.86	3.152	0.25
Other Expense	12.01	2.312	0.32
<b>Total PE per hour</b>	<b>\$84.84</b>	<b>4.732</b>	<b>0.09</b>

#### IV. CHIROPRACTOR

Because the American Chiropractic Association (ACA) was not able to provide member and non-member mailing lists for use with the survey effort, The Lewin Group purchased a representative sample mailing list from American Medical Information, Inc. (AMI). The ACA was not able to provide information on practice size or practice setting to allow for weighting of the chiropractor practice expense.

**Exhibit 4.1: Distribution of Sample by Practice Setting, Chiropractor**

<b>Percent of Chiropractors by Practice Setting</b>	<b>ACA Estimate of Distribution by Practice Setting</b>	<b>Percent of Survey Sample (n=120)</b>
<b>Solo Practice</b>	Not Available	80%
<b>Group Practice</b>	Not Available	18%
<b>Other Setting</b>	Not Available	2%

**Exhibit 4.2: Practice Expenses per Hour (unweighted), Chiropractor**

<b>Expense Category</b>	<b>Estimated Mean (N=120)</b>	<b>Standard Error (N=120)</b>	<b>Precision [<math>1.645 \times SE/\text{Mean}</math>] (N=120)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	5.02	0.998	0.33
Medical Equipment	4.04	1.047	0.43
Medical Supplies	1.64	0.266	0.27
<b>Indirect PE per hour</b>			
Office Expense	40.38	3.126	0.13
Clerical Payroll	15.70	1.326	0.14
Other Expense	9.25	1.377	0.24
<b>Total PE per hour</b>	<b>\$76.03</b>	<b>5.146</b>	<b>0.11</b>

**Exhibit 4.3: Practice Expenses per Hour (unweighted), Chiropractor, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	110	\$77.49
<b>Employee</b>	10	\$58.99

**Exhibit 4.4: Practice Expenses per Hour (unweighted), Chiropractor, by Practice Setting**

<b>Chiropractors by Practice Setting</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Solo Practice</b>	96	\$75.82
<b>Group Practice</b>	21	\$69.73
<b>Other Setting</b>	3	\$123.36

## V. CLINICAL PSYCHOLOGY

The American Psychological Association (APA) was not able to provide member and non-member mailing lists for use with the survey effort therefore The Lewin Group purchased a representative sample mailing list from American Medical Information, Inc. (AMI). The APA provided information on practice setting, which allowed for weighting the clinical psychology practice expense.

**Exhibit 5.1: Distribution of Sample by Practice Setting, Clinical Psychology**

<b>Percent of Clinical Psychologist by Practice Setting</b>	<b>APA Estimate of Distribution by Practice Setting</b>	<b>Percent of Survey Sample (n=56)</b>
<b>Solo Practice</b>	78%	82%
<b>Group Practice</b>	20%	5%
<b>Other Setting</b>	2%	13%

**Exhibit 5.2: Practice Expenses per Hour (unweighted), Clinical Psychology**

<b>Expense Category</b>	<b>Estimated Mean (N=56)</b>	<b>Standard Error (N=56)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=56)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	0.00	0.00	0.00
Medical Equipment	1.22	0.684	0.92
Medical Supplies	0.07	0.044	1.03
<b>Indirect PE per hour</b>			
Office Expense	13.77	1.803	0.22
Clerical Payroll	2.14	0.501	0.38
Other Expense	3.62	0.504	0.23
<b>Total PE per hour</b>	<b>\$20.82</b>	<b>2.073</b>	<b>0.16</b>

**Exhibit 5.3: Practice Expenses per Hour (unweighted), Clinical Psychology, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	53	\$21.32
<b>Employee</b>	3	\$11.86

**Exhibit 5.4 Practice Expenses per Hour (unweighted), Clinical Psychology, by Practice Setting,**

<b>Clinical Psychologist Practice Settings</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Solo Practice</b>	46	\$21.57
<b>Group Practice</b>	3	\$18.60
<b>Other Setting</b>	7	\$16.79

**Exhibit 5.5 Practice Expenses per Hour Weighted by Practice Setting, Clinical Psychology**

<b>Expense Category</b>	<b>Estimated Mean (N=56)</b>	<b>Standard Error (N=56)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=56)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	0.00	0.000	0.00
Medical Equipment	1.38	0.744	0.89
Medical Supplies	0.07	0.045	1.11
<b>Indirect PE per hour</b>			
Office Expense	14.64	1.884	0.21
Clerical Payroll	1.65	0.376	0.37
Other Expense	3.78	0.521	0.23
<b>Total PE per hour</b>	<b>\$21.52</b>	<b>1.719</b>	<b>0.13</b>

## VI. CLINICAL SOCIAL WORK

The National Social Workers Association (NSWA) was not able to provide member and non-member mailing lists for use with the survey effort therefore The Lewin Group purchased a representative sample mailing list from American Medical Information, Inc. (AMI). The NSWA was not able to provide information on practice size to allow for weighting the clinical social work practice expense.

**Exhibit 6.1: Distribution of Sample by Practice Setting, Clinical Social Work**

<b>Percent of Clinical Social Workers by Practice Setting</b>	<b>NSWA Estimate of Distribution by Practice Setting</b>	<b>Percent of Survey Sample (n=127)</b>
<b>Solo Practice</b>	Not Available	82%
<b>Group Practice</b>	Not Available	4%
<b>Other Setting</b>	Not Available	14%

**Exhibit 6.2: Practice Expenses per Hour (unweighted), Clinical Social Work**

<b>Expense Category</b>	<b>Estimated Mean (N=127)</b>	<b>Standard Error (N=127)</b>	<b>Precision [1.645 × SE/Mean] (N=127)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	0.21	0.193	1.52
Medical Equipment	0.13	0.081	1.01
Medical Supplies	0.19	0.082	0.72
<b>Indirect PE per hour</b>			
Office Expense	10.82	0.957	0.15
Clerical Payroll	2.26	0.846	0.62
Other Expense	4.72	0.699	0.24
<b>Total PE per hour</b>	<b>\$18.32</b>	<b>1.884</b>	<b>0.17</b>

**Exhibit 6.3: Practice Expenses per Hour (unweighted), Clinical Social Work, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	112	\$16.19
<b>Employee</b>	15	\$34.14

**Exhibit 6.4: Practice Expenses per Hour (unweighted), Clinical Social Work, by Practice Setting**

<b>Clinical Social Work Practice Settings</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Solo Practice</b>	104	\$16.74
<b>Group Practice</b>	5	\$43.96
<b>Other Setting</b>	18	\$20.25

## VII. OPTOMETRY

The American Optometric Association (AOA) was not able to provide member and non-member mailing lists for use with the survey effort therefore The Lewin Group purchased a representative sample mailing list from American Medical Information, Inc. (AMI). The AOA provided information on practice setting, which allowed for weighting the optometry practice expense.

**Exhibit 7.1: Distribution of Sample by Practice Setting, Optometry**

<b>Percent of Optometrists by Practice Setting</b>	<b>AOA Estimate of Distribution by Practice Setting</b>	<b>Percent of Survey Sample (n=106)</b>
<b>Solo Practice</b>	35%	47%
<b>Group Practice</b>	37%	45%
<b>Other Setting</b>	28%	8%

**Exhibit 7.2: Practice Expenses per Hour (unweighted), Optometry**

<b>Expense Category</b>	<b>Estimated Mean (N=106)</b>	<b>Standard Error (N=106)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=106)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	15.70	2.203	0.23
Medical Equipment	6.24	0.868	0.23
Medical Supplies	4.57	1.391	0.50
<b>Indirect PE per hour</b>			
Office Expense	52.13	4.293	0.14
Clerical Payroll	23.44	1.850	0.13
Other Expense	12.19	2.327	0.31
<b>Total PE per hour</b>	<b>\$114.27</b>	<b>7.148</b>	<b>0.10</b>

**Exhibit 7.3: Practice Expenses per Hour (unweighted), Optometry, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	89	\$125.39
<b>Employee</b>	17	\$55.52

**Exhibit 7.4: Practice Expenses per Hour (unweighted), Optometry, by Practice Setting**

<b>Optometry Practice Settings</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Solo Practice</b>	50	\$116.40
<b>Group Practice</b>	48	\$116.64
<b>Other Setting</b>	8	\$85.65

**Exhibit 7.5: Practice Expenses per Hour Weighted by Practice Setting, Optometry**

<b>Expense Category</b>	<b>Estimated Mean (N=106)</b>	<b>Standard Error (N=106)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=106)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	15.79	2.197	0.23
Medical Equipment	6.35	0.876	0.23
Medical Supplies	4.62	1.395	0.49
<b>Indirect PE per hour</b>			
Office Expense	52.35	4.301	0.13
Clerical Payroll	23.44	1.848	0.13
Other Expense	12.23	2.323	0.31
<b>Total PE per hour</b>	<b>\$114.78</b>	<b>3.512</b>	<b>0.05</b>

## VIII. ORAL SURGERY (DENTISTS)

The American Association of Oral and Maxillofacial Surgeons (AAOMS) provided member and non-member mailing lists that were used by The Lewin Group to draw a representative sample for the PPIS effort. The AAOMS provided information on practice setting, which allowed for weighting the oral surgery practice expense.

**Exhibit 8.1: Distribution of Sample by Sample by Practice Setting, Oral Surgery**

Percent of Oral Surgeons by Practice Setting	AAOMS Estimate of Distribution by Practice Setting	Percent of Survey Sample (n=70)
Solo Practice	48%	47%
Group Practice	41%	53%
Other Setting	6%	0%

**Exhibit 8.2: Practice Expenses per Hour (unweighted), Oral Surgery**

Expense Category	Estimated Mean (N=70)	Standard Error (N=70)	Precision [ $1.645 \times SE/Mean$ ] (N=70)
<b>Direct PE per hour</b>			
Clinical Payroll	39.97	4.183	0.17
Medical Equipment	16.87	3.143	0.31
Medical Supplies	35.71	4.411	0.20
<b>Indirect PE per hour</b>			
Office Expense	101.74	10.849	0.18
Clerical Payroll	50.41	3.710	0.12
Other Expense	20.04	2.666	0.22
<b>Total PE per hour</b>	<b>\$264.74</b>	<b>17.646</b>	<b>0.11</b>

**Exhibit 8.3: Practice Expenses per Hour (unweighted), Oral Surgery, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	69	\$266.18
<b>Employee</b>	1	\$78.19

**Exhibit 8.4: Practice Expenses per Hour (unweighted), Oral Surgery, by Practice Setting**

<b>Oral Surgery Practice Setting</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Solo Practice</b>	33	\$277.98
<b>Group Practice</b>	37	\$250.58
<b>Other Setting</b>	0	NA

**Exhibit 8.5: Practice Expenses per Hour Weighted by Practice Setting, Oral Surgery**

<b>Expense Category</b>	<b>Estimated Mean (N=70)</b>	<b>Standard Error (N=70)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=70)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	40.34	4.231	0.17
Medical Equipment	16.81	3.102	0.30
Medical Supplies	35.40	4.310	0.20
<b>Indirect PE per hour</b>			
Office Expense	102.78	10.923	0.17
Clerical Payroll	50.65	3.685	0.12
Other Expense	19.76	2.605	0.22
<b>Total PE per hour</b>	<b>\$265.73</b>	<b>9.073</b>	<b>0.06</b>

## IX. PHYSICAL THERAPY

The American Physical Therapy Association (APTA) provided member and non-member mailing lists that were used by The Lewin Group to draw a representative sample for the PPIS effort. The APTA was not able to provide information on practice size to allow for weighting the physical therapy practice expense.

**Exhibit 9.1: Distribution of Sample by Practice Setting, Physical Therapy**

<b>Percent of Physical Therapists by Practice Setting</b>	<b>APTA Estimate of Distribution by Practice Size</b>	<b>Percent of Survey Sample (n=76)</b>
<b>Solo Practice</b>	Not Available	42%
<b>Group Practice</b>	Not Available	34%
<b>Other Setting</b>	Not Available	24%

**Exhibit 9.2: Practice Expenses per Hour (unweighted), Physical Therapy**

<b>Expense Category</b>	<b>Estimated Mean (N=76)</b>	<b>Standard Error (N=76)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=76)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	6.94	1.962	0.47
Medical Equipment	2.51	0.424	0.28
Medical Supplies	1.76	0.454	0.43
<b>Indirect PE per hour</b>			
Office Expense	33.75	4.668	0.23
Clerical Payroll	15.30	2.333	0.25
Other Expense	8.21	1.339	0.27
<b>Total PE per hour</b>	<b>\$68.47</b>	<b>7.412</b>	<b>0.18</b>

**Exhibit 9.3: Practice Expenses per Hour (unweighted), Physical Therapy, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	58	\$71.65
<b>Employee</b>	18	\$57.90

**Exhibit 9.4: Practice Expenses per Hour (unweighted), Physical Therapy, by Practice Setting**

<b>Physical Therapists Practice Setting</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Solo Practice</b>	32	\$79.73
<b>Group Practice</b>	26	\$61.39
<b>Other Setting</b>	18	\$58.35

## X. PODIATRY

The American Podiatric Medical Association (APMA) provided member and non-member mailing lists that were used by The Lewin Group to draw a representative sample for the PPIS effort. The APMA provided information on practice setting which allowed for weighting the podiatry practice expense.

**Exhibit 10.1: Distribution of Sample by Practice Setting, Podiatry**

<b>Percent of Podiatrist by Practice Settings</b>	<b>APMA, 2005 Estimate of Distribution by Practice Setting</b>	<b>Percent of Survey Sample (n=99)</b>
<b>Solo Practice</b>	55%	75%
<b>Group Practice</b>	40%	21%
<b>Other Setting</b>	5%	4%

**Exhibit 10.2: Practice Expenses per Hour (unweighted), Podiatry**

<b>Expense Category</b>	<b>Estimated Mean (N=99)</b>	<b>Standard Error (N=99)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=99)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	7.18	1.087	0.25
Medical Equipment	2.75	0.572	0.34
Medical Supplies	7.07	0.992	0.23
<b>Indirect PE per hour</b>			
Office Expense	44.97	3.801	0.14
Clerical Payroll	20.61	1.649	0.13
Other Expense	8.16	0.813	0.16
<b>Total PE per hour</b>	<b>\$90.74</b>	<b>5.735</b>	<b>0.10</b>

**Exhibit 10.3: Practice Expenses per Hour (unweighted), Podiatry, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	96	\$91.51
<b>Employee</b>	3	\$53.44

**Exhibit 10.4: Practice Expenses per Hour (unweighted), Podiatry, by Practice Setting**

<b>Podiatry Practice Settings</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Solo Practice</b>	74	\$88.27
<b>Group Practice</b>	21	\$104.57
<b>Other Setting</b>	4	\$54.31

**Exhibit 10.5: Practice Expenses per Hour Weighted by Practice Setting, Podiatry**

<b>Expense Category</b>	<b>Estimated Mean (N=99)</b>	<b>Standard Error (N=99)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=99)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	7.07	1.071	0.25
Medical Equipment	2.51	0.531	0.35
Medical Supplies	6.69	0.868	0.21
<b>Indirect PE per hour</b>			
Office Expense	45.68	3.817	0.14
Clerical Payroll	20.90	1.635	0.13
Other Expense	8.18	0.818	0.16
<b>Total PE per hour</b>	<b>\$91.03</b>	<b>3.164</b>	<b>0.06</b>

## XI. RADIATION ONCOLOGIST (FREESTANDING CENTERS)

The Association of Freestanding Radiation Oncology Centers (AFROC) and American Society for Therapeutic Radiology and Oncology (ASTRO) provided member and non-member mailing lists that were used by The Lewin Group to draw a representative sample for the PPIS effort. A practice-level survey was administered for this specialty. In a practice-level survey such as the one administered for freestanding radiation oncology centers, the solo practice and the ten-physician practice are equally likely to be sampled. However, in a physician-level survey, a practice with (say) ten physicians is ten times more likely to be sampled (through one of its physicians) as a solo practice. To ensure that the results of a practice-level survey are comparable to a physician-level survey, such as the PPI, the survey observations are weighted by the number of physicians in the practice.

**Exhibit 11.1: Distribution of Sample by Number of Practice Professionals, Radiation Oncology (Freestanding Centers)**

<b>Freestanding Radiation Oncologists by Practice Type</b>	<b>Percent of Survey Sample (n=88)</b>
<b>1-2 Practitioners</b>	57%
<b>Other Settings</b>	43%

**Exhibit 11.2: Practice Expenses per Hour (unweighted), Radiation Oncology (Freestanding Centers)**

<b>Expense Category</b>	<b>Estimated Mean (N=88)</b>	<b>Standard Error (N=88)</b>	<b>Precision [<math>1.645 \times SE/Mean</math>] (N=88)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	171.13	14.351	0.14
Medical Equipment	138.19	15.586	0.19
Medical Supplies	59.27	31.912	0.88
<b>Indirect PE per hour</b>			
Office Expense	197.48	25.402	0.21
Clerical Payroll	73.22	6.813	0.15
Other Expense	72.92	10.396	0.23
<b>Total PE per hour</b>	<b>\$712.22</b>	<b>76.048</b>	<b>0.18</b>

**Exhibit 11.3 Practice Expenses per Hour (unweighted), Radiation Oncology (Freestanding Centers), Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	63	\$794.91
<b>Employee</b>	22	\$504.62

**Exhibit 11.4: Practice Expenses per Hour (unweighted), Radiation Oncology (Freestanding Centers), by Practice Type**

<b>Radiation Oncologists by Practice Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>1-2 Practitioners</b>	50	\$958.27
<b>Other Settings</b>	38	\$388.47

**Exhibit 11.5: Practice Expenses per Hour Weighted by Practice Size, Radiation Oncology (Freestanding Centers)**

<b>Expense Category</b>	<b>Estimated Mean (N=88)</b>	<b>Standard Error (N=88)</b>	<b>Precision [1.645 × SE/Mean] (N=88)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	134.74	11.32	0.14
Medical Equipment	91.22	11.37	0.21
Medical Supplies <sup>3</sup>	29.74	18.70	1.03
<b>Indirect PE per hour</b>			
Office Expense	141.29	19.73	0.23
Clerical Payroll	64.99	5.70	0.14
Other Expense	46.69	8.54	0.30
<b>Total PE per hour</b>	<b>\$508.67</b>	<b>53.61</b>	<b>0.17</b>

**Exhibit 11.6: Practice Expenses per Hour (unweighted), Radiation Oncology by Percent of Physician Time by Setting**

<b>Percent of Radiation Oncology Time by Setting</b>	<b>n</b>	<b>Weight<sup>4</sup></b>	<b>Estimated Mean Total PE/hour</b>
<b>Hospital Based</b>	71	63%	\$62.25
<b>Freestanding Centers</b>	88	37%	\$508.67

<sup>3</sup> The survey for freestanding radiation oncologist did not collect the value for separately billable supplies. Separately billable supplies were calculated as .06 of supplies based on the ratio of separately billable supplies to supplied values as reported by the AMA PPI, 2009 for the combined specialties of radiology, interventional radiology and nuclear medicine. (The ratio was recommended by ASTRO/AFROC as representative of an appropriate ratio for separately billable supplies for freestanding radiation oncology centers).

<sup>4</sup> The Lewin Group Memorandum to CMS: *Recommendations Regarding Practice Expense*, September 29, 2006. Physician time is based on FY2005 utilization.

**Exhibit 11.7: Practice Expenses per Hour Weighted Physician Time by Setting, Radiation Oncology, Hospital Based to Freestanding Centers**

<b>Expense Category</b>	<b>Freestanding RO Center Estimated Mean PE/HR (N=88)</b>	<b>Hospital Based RO Estimated Mean PE/HR (N=71)</b>	<b>Physician Time Weighted Radiation Oncology PE/HR</b>
<b>Direct PE per hour</b>			
Clinical Payroll	134.74	6.24	53.79
Medical Equipment	91.22	2.55	35.36
Medical Supplies	29.74	0.98	11.62
<b>Indirect PE per hour</b>			
Office Expense	141.29	20.84	65.41
Clerical Payroll	64.99	13.77	32.72
Other Expense	46.69	17.86	28.53
<b>Total PE per hour</b>	<b>\$508.67</b>	<b>\$62.25</b>	<b>\$227.42</b>

## XII. REGISTERED DIETICIANS

The Association American Dietetic Association (ADA) was not able to provide member and non-member mailing lists for use with the survey effort therefore The Lewin Group purchased a representative sample mailing list from American Medical Information, Inc. (AMI). The ADA was not able to provide information on practice size to allow for weighting the registered dieticians practice expense.

**Exhibit 12.1: Distribution of Sample by Practice Setting, Registered Dieticians**

<b>Percent of Registered Dietician by Practice Settings</b>	<b>ADA Estimate of Distribution by Practice Size</b>	<b>Percent of Survey Sample (n=51)</b>
<b>Solo Practice</b>	Not Available	53%
<b>Group Practice</b>	Not Available	6%
<b>Other Setting</b>	Not Available	41%

**Exhibit 12.2: Practice Expenses per Hour (unweighted), Registered Dieticians**

<b>Expense Category</b>	<b>Estimated Mean (N=51)</b>	<b>Standard Error (N=51)</b>	<b>Precision [<math>1.645 \times SE/\text{Mean}</math>] (N=51)</b>
<b>Direct PE per hour</b>			
Clinical Payroll	1.76	1.317	1.23
Medical Equipment	1.44	0.862	0.99
Medical Supplies	0.40	0.184	0.75
<b>Indirect PE per hour</b>			
Office Expense	10.39	2.188	0.35
Clerical Payroll	3.46	1.268	0.60
Other Expense	4.59	1.159	0.41
<b>Total PE per hour</b>	<b>\$22.05</b>	<b>4.025</b>	<b>0.30</b>

**Exhibit 12.3: Practice Expenses per Hour (unweighted), Registered Dieticians, Owner and Employee**

<b>Respondent Type</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Owner</b>	31	\$24.73
<b>Employee</b>	20	\$17.86

**Exhibit 12.4: Practice Expenses per Hour (unweighted), Registered Dieticians, by Practice Setting**

<b>Registered Dietician Practice Settings</b>	<b>Observations</b>	<b>Estimated Mean Total PE/hour</b>
<b>Solo Practice</b>	27	\$26.50
<b>Group Practice</b>	3	\$12.40
<b>Other Setting</b>	21	\$17.66