Economic Impacts of Private Practice Physicians in the State of New York
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Private Practice Physicians are vitally important to the State of New York, both in terms of their contribution to the structural economy (i.e. economic impacts) and their contribution to the public good. This study estimates the economic impact of Private Practice Physicians in the State of New York through use of the Redyn econometric model, in combination with a number of external data sources. It was completed by Specialized Analytics and its partners Kavet, Rockler & Associates, and sponsored by the Medical Society of the State of New York.

Federal government providers of data regarding employment, wage, income, output (sales), etc, generally report the activity of Private Practice Physicians as “Offices of Physicians,” which receives the designation 62111 at the 5-digit level of detail in the North American Industrial Classification System (NAICS). This industry is one of the largest industries in the State of New York by any measure, and in 2008 ranked:

- second in total business establishments
- sixth in total employment
- seventh in total personal income
- thirteenth in total corporate sales

Contributions to the structural economy by Private Practice Physicians in the State of New York go beyond direct employment, wages, and output. Two additional components which must be considered are indirect effects (all goods and services consumed by an industry in the process of conducting business) and induced effects (all goods and services consumed by employees through utilization of their wages). When all these factors are considered, the economic impacts of the Private Practice of Medicine in the State of New York, on the State of New York, for 2008 were:

- total employment of 330,594 persons
- total personal income of $24.096 billion
- total corporate sales of $44.748 billion

By 2020, the economic impacts on the State of New York are projected to increase to:

- total employment of 474,186 persons
- total personal income of $42.522 billion
- total corporate sales of $71.910 billion

The economic impacts of the Private Practice of Medicine in the State of New York, on the United States as a whole, for 2008 were:

- total employment of 670,912 persons
- total personal income of $41.053 billion
- total corporate sales of $91.986 billion

By 2020, these contributions are projected to increase to:

- total employment of 956,756 persons
- total personal income of $71.631 billion
- total corporate sales of $155.004 billion

Further, the activities of Private Practice Physicians make large contributions to both State and Local government tax revenues. In 2008, these contributions were:

- New York state tax revenue of $4.509 billion
- New York local tax revenue of $4.695 billion

By 2020, these contributions are projected to increase to:

- New York state tax revenue of $7.965 billion
- New York local tax revenue of $8.292 billion

There were 70,048 licensed physicians in the State of New York in 2008. Just over 60.6% of all physician employment in the State of New York is in Private Practice Medicine, which equates to 42,456 physicians if each is classified as either engaging in Private Practice Medicine, or engaging in Institutional Medicine (primarily hospital practice). In reality there are individual physicians engaged in both private and institutional practice, but the simplifying
assumption of one or the other is useful for clarity. Each Private Practice Physician in the State of New York supports significant economic activity. In 2008, each Private Practice Physician supported, in the State of New York, on average:

- employment of 7.79 persons
- personal income of $568 thousand
- corporate sales of $1.054 million
- New York state tax revenue of $106 thousand
- New York local tax revenue of $111 thousand

Each dollar of Private Practice Medical care in the State of New York supports much more than one dollar’s worth of economic activity, as measured by total corporate sales. In 2008, each dollar of Private Practice Medical care supported, in the State of New York, on average:

- total economic activity of more than $2.16
- New York state tax revenue of nearly $0.22
- New York local tax revenue of nearly $0.23

As mentioned earlier, Private Practice Physicians also make important contributions to the public good. Many of these contributions have clear and significant economic impacts, including, among others:

- Greater employment consistency due to improved health through preventative and acute care
- Greater productivity due to increased physical capabilities through improved health
- Greater productivity due to increased happiness/satisfaction through improved health

An attempt to quantify the economic impact of these contributions to the public good is beyond the scope of this study. However, much of the data generated for this study is of use to any further study which attempts to do so.
Study Proposal

What are the Economic Impacts of Private Practice Physicians in New York?

Health care is an increasingly important topic in American life. This is true in all facets of our society, and for each individual in our society. Health care reform dominates not only the daily news cycle in late 2009, but also occupies a major portion of policy discussion and debate at each level of government, especially Federal and State.

At this time when policy decisions are being enacted that affect every participant in the provision of health care, it is increasingly important for practitioners and their member groups to possess a solid understanding of their roles within health care as a whole, as well as the impacts of those roles. A fundamental understanding of the economic impact of Private Practice Physicians, and defensible data demonstrating that impact, helps local-level, state-level and national-level physician member organizations pursue important goals for themselves and the patients they serve.

This study is undertaken by the Medical Society of the State of New York (MSSNY) to achieve that understanding. As such, it uses the best available economic tools and data, as well as a high level of geographic and sector detail, to estimate the economic impacts of physicians engaged in the Private Practice of Medicine in the State of New York.

Study Regions

The State, each MSA, each County

New York is a diverse state in terms of the size and profile of the 62 counties of which it’s comprised, ranging from New York County (the largest and densest county in the United States in terms of economic activity) to Hamilton county (among the smallest by the same measure). It contains the largest metropolis in the country, and yet much of the state is more rural than is commonly understood.

About the Study

Given this wide variety of counties, it is useful to evaluate the economic impact of Private Practice Physicians at the county level. This allows for a complete understanding of how that impact differs across counties of widely varying profiles. This study estimates the economic impact of Private Practice Physician activity in each county on each county in the State of New York. A complete list of counties in the State of New York, as well as a map showing their locations within the state, is available in Appendix A.

County level results allow for the aggregation of impacts to the Metropolitan Statistical Area (MSA) level. There are 12 MSAs partially or wholly contained within the State of New York, and this study provides estimates for the economic impact of Private Practice Physician activity within the New York component of each. In addition to these MSAs, non-MSA counties in the State of New York are divided into 4 non-MSA regions as defined by the Bureau of Labor Statistics according to location within the state. Impacts are estimated for non-MSA regions in the same manner as for MSAs. For the purposes of this study, state references are removed from MSA names, and the New York component of the New York-Northern NJ-Long Island MSA is designated as New York-Long Island. A complete list of State of New York MSAs and non-MSA areas, their component counties, and maps showing their locations within the state, is available in Appendix A.

Finally, county level results are aggregated to the state level for the State of New York as a whole. At this level it is possible to provide useful and defensible information about the share of economic impacts which can be attributed to each Physician Specialty Grouping designated for this study by the MSSNY.

Study Plan

How to Estimate Economic Impact

This study uses commonly accepted and well-tested methods of Input-Output economic modeling to estimate impacts. These methods of estimating the economic impact of a specific sector are relatively straight-forward
and easy for both economists and lay-persons to understand.

In an Input-Output model of the structural economy, the impact of any specific sector can be estimated by removing all activity for that sector from the region of interest and allowing the model to remove any other activity that would otherwise have supported the sector of interest. For this study, the sector of interest is the activity of Private Practice Physicians, which is classified in the North American Industrial Classification System (NAICS) as “Offices of Physicians,” and is given the designation 62111 at the five-digit level of detail. Further, for this study the regions of interest, as previously noted, are each county in the State of New York.

Results presented in this study are estimates arrived at using the best available econometric tools and data, as opposed to results that might be obtained through a survey of all Offices of Physicians in the State of New York. Such a survey process would be both prohibitively time-consuming and prohibitively expensive, and would likely not provide increased accuracy given variations in self-reporting that are common in survey research.

**Study Tool**

**The Redyn Model**

The primary tool used for this study is the Redyn economic model, a product of Specialized Analytics. This model is widely used and accepted in the market for such tools. It has been rigorously vetted by the community of economists, both those in the private sector and those associated with academic institutions.

The Redyn economic model is the largest, most detailed economic model currently available. It is calibrated to data published by a number of public entities, including, among others:

- The Bureau of the Census (Census)
- The Bureau of Labor Statistics (BLS)
- The Bureau of Economic Analysis (BEA)
- The Department of the Treasury (Treasury)
- The Department of Energy (DoE)

Redyn is a structural model of the US economy that clearly incorporates cause-and-effect relationships between entities in the model. It combines conventional, highly-detailed Input-Output matrices with more comprehensive Social Accounting Matrices to explicitly account for all economic transactions. The baseline case of the model incorporates some underlying assumptions, including: all producers maximize profit; all consumers maximize utility; all local markets clear in each time period.

The Redyn model offers a greater level of detail for economic analysis than is available from any other model. Industrial sectors are defined to the six-digit level of detail in accordance with the North American Industrial Classification System (NAICS). Occupational sectors are defined to the six-digit level of detail in accordance with the Standard Occupational Classification (SOC) system. Goods and Service commodities are available to the detailed benchmark level as established by the Bureau of Economic Analysis (BEA), and Labor commodities are added to correspond on a one-to-one basis with each occupational type in the model. Additional industries and commodities representing the work and output of governments, speculators, households, and land are incorporated, as well. Geographic detail is similarly robust in the Redyn model as it includes complete regional economic data for each county, county-equivalent area, and independent city in the United States.

Spatial relationships between regions in the Redyn model are defined using impedance values for each of several modes of transport as described by the Oak Ridge National Laboratories Intermodal Transportation Network Modeling system. Thus, in the model, effective distance between any two regions is not based on straight-line physical separation, but rather by the relative difficulty of transportation between regions for each of several transportation modalities: highway, rail, water, air, and pipeline. Transportation impedance values are directional, meaning impedance from region A to region B is not necessarily equivalent to impedance from region B to region A. Further, because industry sectors in the model use a unique mix of transportation services in the process of distributing commodities produced, the Redyn model contains commodity-specific data regarding the difficulty of moving goods and services to and from each region in the model for each commodity in the model.
New Economic Geography provides a theoretical foundation for the Redyn model to estimate trade of goods and services between regions in the model. A doubly-constrained gravity model is used to estimate these trade flows, meaning that all supply is consumed and all demand is met for all regions and all commodities.

The Redyn model is both massively multiregional and dynamic. A multiregional model can simultaneously estimate impacts on multiple regions. In the case of Redyn, hundreds of regions can be modeled in this manner for any given scenario, far more than can be accommodated by any other regional economic model - thus, “massively” multiregional.

A dynamic model estimates not only what effects will occur, but also when those effects will occur. General Equilibrium properties of the Redyn model allow it to maintain accurate year-by-year predictions throughout the baseline forecast period. This is especially important in scenarios that model the long-term effects of profitability or price changes.

One important key feature of the Redyn economic model is consistency. In the model, all sectors exhibit essentially the same behavior. That is, they transform some menu of commodities to a different menu of commodities via sector-specific methods which are influenced by sector-, location-, and time-specific properties. A few distinct examples of this behavior are:

- manufacturers consume raw and pre-fabricated materials, energy, various forms of labor, capital equipment, facilities, and land to produce goods for sale
- service providers consume the same things in typically different ratios (e.g. fewer raw materials and pre-fabricated goods, more labor) to produce services for sale
- households consume final demand goods, energy, facilities, and land to produce labor of the type provided by their occupants

While this underlying behavior seems simplistic, it allows for the simulation of extremely complex behaviors and outcomes when applied to a large number of sectors across a large number of regions through a large number of years. It simultaneously allows for calibration of sector-, location- and time-specific behaviors to real economic data, as well as economic analysis at extremely fine levels of regional and sector detail.

**Study Metrics**

**Impact Concepts Reported in this Study**

Data regarding hundreds of concepts can be extracted from the Redyn model. This study focuses on five important concepts chosen both for their usefulness as descriptive measures of economic impact, as well as the ease with which they are understood by a wide variety of audiences. Those key concepts are:

- Total Employment
- Total Personal Income
- Total Corporate Sales
- New York State Tax Revenue
- New York Local Tax Revenue

Total employment is reported throughout this study in Full-Time Equivalent (FTE) employment units. That is, each job reported represents work completed during a full-time schedule for a single person working a standard 40-hour work week throughout the course of the year. The actual number of people employed varies somewhat from this number due to part-time employment, overtime employment, and other similar deviations. However, the FTE concept is a widely accepted means of collecting and reporting employment information.

Total personal income is reported throughout this study in thousands of dollars ($1,000s). Total personal income consists of wages paid to employees and proprietors’ income.

In the Redyn model, historical data for employment, wage bill, and proprietors’ income are taken from several sources, including: the Quarterly Census of Employment and Wage (QCEW) as published by the Bureau of Labor Statistics (BLS), County Business Patterns as published by the Bureau of the Census (Census), the Regional Economic Information System (REIS) as published by the Bureau of Economic Analysis (BEA), and others.
Total corporate sales is reported throughout this study in thousands of dollars ($1,000s). Total corporate sales consists of all sales of goods and services produced by affected sectors. In the Redyn model, historical data for output (sales) are taken from several sources, including: Benchmark Input-Output tables as published by the BEA, Input-Output tables and Input-Output projections as published by the BLS, the National Income and Product Accounts (NIPA) data as published by the BEA, and others.

New York state tax revenue is reported throughout this study in thousands of dollars ($1,000s). New York state tax revenue consists of all sources of funding for the State of New York government.

New York local tax revenue is reported throughout this study in thousands of dollars ($1,000s). New York local tax revenue consists of all sources of revenue for local governments in the State of New York, including those for counties, municipalities, etc.

In the Redyn model, historical data for New York state tax revenues and New York local tax revenues are taken primarily from the Census of Government Finance as published by the Census. Revenue items designated in this publication are correlated with appropriate income and consumption concepts within the model to allow for accurate prediction of state and local tax revenue changes as a result of other activity within the model. Census of Government Finance data is published at the state level, and all tax rates for individual counties in the Redyn model are average rates for all counties within each state. For this study, all tax revenue effects reported are the result of average taxation rates for all counties in the State of New York. As a result, relative distribution of New York state tax revenue and New York local tax revenue are very similar. While state and local tax revenue impact values will be reported individually, the distribution of tax revenue impacts will be discussed as a single concept.

All currency values in this study are reported in real 2008 dollars. This allows for easy comparison between years, and means that observed increases and decreases in sector activity are the result of inflation adjusted growth or contraction.

Finally, all impacts reported in this study are impacts within the State of New York, with the sole exception of impacts reported at the State level. At this highest level of geographic aggregation, impacts on the remainder of the United States are also reported for employment, personal income, and corporate sales.

Study Neutrality

Independence of Data and Methodology

All data sources for the primary tool for this study, the Redyn model, are produced by public entities not associated with or controlled by any producer or demographic sectors that are represented within that model. Therefore, forecast results produced by the Redyn model are not biased toward any particular outcome other than those that historical data and known relationships between sectors and locations would suggest.

For this study, two sources of data external to the model are required:

- data regarding the relative distribution of Physician Specialty Groupings within the State of New York
- data regarding the relative compensation of Physician Specialty Groupings

Both data sources are required to determine the share of the economic impact of Physicians engaged in Private Practice Medicine that is attributed to each Physician Specialty Grouping. Compensation data for this study is provided by entities not associated with the study sponsor, the MSSNY, through independent survey research.

The MSSNY does provide data regarding the relative distribution of Physician Specialty Groupings within the State of New York. However, because this is simple survey data concerning the geographic location of member and non-member physicians, and is comprehensive with regard to physicians licensed in the State of New York, it is not reasonably subject to bias. This data in no way impacts the type or scope of economic impacts reported by this study.
Data within the Redyn Model

The Redyn model provides a wide variety of information about the Private Practice of Medicine in the United States. For each county, data is available regarding the scope of that practice, the individuals performing that practice, the goods and services necessary to support it, and the location of the producers of those goods and services.

The scope of the Private Practice of Medicine is generally captured as the activity of “Offices of Physicians,” which receives the designation 62111 at the 5-digit level of detail in the North American Industrial Classification System (NAICS). The Redyn model incorporates employment, wage bill, proprietors’ income, and output information about this industry as published by a number of federal data providers as noted in the description of study metrics.

Occupational data regarding individuals involved in the Private Practice of Medicine are available at the most detailed level of the Standard Occupational Classification (SOC) system as reported in the Occupational Employment Statistics (OES) program as published by the Bureau of Labor Statistics. Of particular interest for this study are the eight physician occupations included in the minor group 29-1060: Physicians and Surgeons, as listed in Table 1 (this page).

Finally, goods and services necessary to support the private practice of medicine are tracked at the most detailed level available. Budget inputs for “Offices of Physicians” are taken from input-output data as published by the Bureau of Economic Analysis and the Bureau of Labor Statistics. Details regarding the volume of transactions, type of suppliers, and location of suppliers are captured by commodity trade information within the model.

Data from the Medical Society of the State of New York

Member and non-member data provided by the Medical Society of the State of New York is the basis for the total population of physicians in the State of New York, as well as the breakdown of physicians by Specialty Grouping. For this study, physician specialties were aggregated into 21 Specialty Groupings, as indicated in Table 2 (page 8).

Data provided by the MSSNY includes member and non-member populations for each Specialty Grouping in each county in the State of New York. The county to which a physician is assigned is based on the address retained for each individual physician, some of which are practice addresses and some of which are residence addresses. Limitations for the use of Specialty Grouping data arise as a result of this use of multiple address types, as detailed in subsequent sections.

Data on Relative Compensation

A number of surveys were reviewed to obtain data regarding the relative compensation of Physician Specialty Groupings as defined for this study. Among these were publications by:

- American Medical Group Association (AMGA)
- Medical Group Management Association (MGMA)
- Hospital & Healthcare Compensation Service (HHCS)
- The Hay Group
- Merritt, Hawkins & Associates
- Sullivan, Cotter & Associates
- Warren Surveys

Of the compensation survey data reviewed, the 2009 Physician Compensation Survey by the AMGA contained the greatest specialty detail and collected data from the
The greatest number of respondent physicians. The AMGA publishes compensation survey data for physicians in the US as a whole, as well as within each of four US regions. Accordingly, AMGA survey data is the source for relative Specialty Grouping compensation for this study.

Because relative compensation, and not total compensation, is the concept of interest here, the broader national data was used instead of the more specific, and limited, regional data. This vastly larger respondent sample provides better understanding of relative Specialty Grouping compensation, which does not vary significantly by region, as does total compensation. Relative Specialty Grouping compensation for this study is listed in Table 2 (this page), and displayed in Figure 1 (page 9).

Note: Data regarding compensation of Clinical Pharmacologists was not available in any survey data reviewed. However, because pharmacologists as an occupation are compensated to a significantly lesser degree than physicians as an occupation, Clinical Pharmacologists were assigned a relative compensation value equal to the lowest Specialty Grouping value observed in available data.

### Data on Rate of Participation in Private Practice Medicine

The rate at which physicians participate in Private Practice Medicine is a critical component of evaluating the economic impact of Private Practice Physicians. Further, in order to provide economic impact data by Specialty Grouping, it is necessary to determine the rate of participation in Private Practice Medicine for each Specialty Grouping.

Data from the Occupation Employment Statistics (OES) program as published by the Bureau of Labor Statistics details the rate at which the eight OES physician occupations participate in Private Practice Medicine at the national level. State-level OES data allows for the extrapolation of New York specific participation rates for each SOC physician occupation.

More than 75% of all physicians are captured by the seven specific physician occupations as defined in OES data, each of which has a one-to-one correspondence with a Specialty Grouping as defined for this study. Rates of participation are as follows:

<table>
<thead>
<tr>
<th>Specialty Grouping</th>
<th>Total Physicians</th>
<th>Relative Compensation</th>
<th>Private Practice Rate</th>
<th>Private Practice Physicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomic/Clinical Pathology</td>
<td>1,400</td>
<td>1.74</td>
<td>54.56%</td>
<td>764</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>3,342</td>
<td>1.85</td>
<td>79.20%</td>
<td>2,647</td>
</tr>
<tr>
<td>Clinical Pharmacology</td>
<td>19</td>
<td>1.00</td>
<td>57.51%</td>
<td>11</td>
</tr>
<tr>
<td>Dermatology</td>
<td>945</td>
<td>1.77</td>
<td>44.85%</td>
<td>424</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>1,923</td>
<td>1.35</td>
<td>70.38%</td>
<td>1,353</td>
</tr>
<tr>
<td>Family Medicine</td>
<td>4,290</td>
<td>1.00</td>
<td>65.10%</td>
<td>2,793</td>
</tr>
<tr>
<td>General Surgery</td>
<td>4,525</td>
<td>1.72</td>
<td>78.48%</td>
<td>3,551</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>24,532</td>
<td>1.04</td>
<td>61.13%</td>
<td>14,997</td>
</tr>
<tr>
<td>Neurology</td>
<td>1,377</td>
<td>1.35</td>
<td>47.74%</td>
<td>657</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynecology</td>
<td>3,640</td>
<td>1.49</td>
<td>79.85%</td>
<td>2,906</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>1,756</td>
<td>1.65</td>
<td>48.87%</td>
<td>858</td>
</tr>
<tr>
<td>Orthopedic Surgery</td>
<td>1,743</td>
<td>2.41</td>
<td>58.28%</td>
<td>1,016</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>718</td>
<td>1.85</td>
<td>50.85%</td>
<td>365</td>
</tr>
<tr>
<td>Pathology</td>
<td>160</td>
<td>1.74</td>
<td>49.44%</td>
<td>79</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>6,870</td>
<td>1.17</td>
<td>58.65%</td>
<td>4,029</td>
</tr>
<tr>
<td>Physical Medicine &amp; Rehabilitation</td>
<td>1,039</td>
<td>1.20</td>
<td>66.76%</td>
<td>694</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>619</td>
<td>1.97</td>
<td>47.61%</td>
<td>295</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>5,859</td>
<td>1.07</td>
<td>24.66%</td>
<td>1,445</td>
</tr>
<tr>
<td>Radiology</td>
<td>2,962</td>
<td>2.09</td>
<td>71.82%</td>
<td>2,127</td>
</tr>
<tr>
<td>Urology</td>
<td>856</td>
<td>1.97</td>
<td>70.79%</td>
<td>606</td>
</tr>
<tr>
<td>Other or No Specialty</td>
<td>1,473</td>
<td>1.07</td>
<td>57.00%</td>
<td>840</td>
</tr>
<tr>
<td><strong>All Specialty Groupings</strong></td>
<td><strong>70,048</strong></td>
<td><strong>1.32</strong></td>
<td><strong>60.61%</strong></td>
<td><strong>42,456</strong></td>
</tr>
</tbody>
</table>

Economic Impacts of Private Practice Physicians in the State of New York

in Private Practice Medicine were calculated for each of the 14 Specialty Groupings included in this study that are not specifically captured in OES data, but rather are reported with the “Physicians and Surgeons, All Other” occupation designation.

Correlation values between the distribution, within the State of New York, of each of these 14 Specialty Groupings and each of the seven OES physician occupations were calculated. Effects contributed by the distribution of total physician population were controlled. Positive correlations between the distributions of Specialty Groupings were used to generate a weighted average of the seven known rates of participation for each of the 14 unknown rates of participation. Resulting rates of participation in Private Practice Medicine for each specialty grouping are listed in Table 2 (page 8), and displayed in Figure 2 (page 10). Resulting Private Practice Physician populations for each specialty grouping are listed in Table 2 (page 8), and displayed in Figure 3 (page 10).

Method of Study

This study was completed using a 63-region model in the Redyn economic analysis application. Regions in the model included each county in the State of New York, as well as a single region for the remainder of the United States.

For each county in the model, an economic impact scenario was completed for NAICS 62111 - Offices of Physicians, for years 2008 through 2020, as described in About this Study: Study Plan above. Impacts for each scenario were scaled such that total impacts on NAICS 62111 were equal to the original baseline values for that sector. This prevents overestimation of impacts due to the fact that NAICS 62111 requires some amount of itself to support its activities.

Results were aggregated to the MSA and State levels. For the State of New York, impacts were shared out to each Specialty Grouping based on the following data:

- Specialty Grouping Population
- Specialty Grouping rate of participation in Private Practice Medicine
- Specialty Grouping relative compensation

Average impacts for the State of New York were calculated for an individual Private Practice Physician in each Specialty Grouping, as well as for the average Private Practice Physician across the total population.

Average State of New York Economic Value of one dollar of Private Practice Medical care was calculated for the State of New York, each MSA and MSA-equivalent, and each county. Average State of New York State and Local Tax Revenue per dollar Private Practice Medical care was calculated for the same regions.
Offices of Physicians as Compared to Other State of New York Industries

NAICS 62111 - Offices of Physicians is one of the largest industries in the State of New York. For 2008, it ranked near the top in many categories of economic activity, four of which are detailed here.

Offices of Physicians ranked second in the State of New York for 2008 in the number of business establishments. Only home-based businesses are more prevalent in New York than small businesses operated by Private Practice Physicians. The ten largest industries in the State of New York for 2008, in terms of the number of business establishments, are listed in Table 3 (page 11).

Offices of Physicians ranked sixth in the State of New York for 2008 in terms of total employment as measured in full-time-equivalents (FTE). General Medical and Surgical Hospitals are the largest employer in New York. The ten largest industries in the State of New York for 2008, in terms of employment, are listed in Table 4 (page 11).
Offices of Physicians ranked seventh in the State of New York for 2008 in terms of total personal income. Securities Brokerage firms generate the highest aggregate personal income in New York. The ten largest industries in the State of New York for 2008, in terms of personal income, are listed in Table 5 (this page).

Table 3: Top Ten New York Industries by Establishments, 2008. The ten largest industries in New York in 2008 as measured by total number of establishments.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Private Households</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Offices of Physicians</strong></td>
</tr>
<tr>
<td>3.</td>
<td>Full-Service Restaurants</td>
</tr>
<tr>
<td>4.</td>
<td>Limited-Service Eating Places</td>
</tr>
<tr>
<td>5.</td>
<td>Residential Building Construction</td>
</tr>
<tr>
<td>6.</td>
<td>Lenders of Residential Buildings and Dwellings</td>
</tr>
<tr>
<td>7.</td>
<td>Offices of Lawyers</td>
</tr>
<tr>
<td>8.</td>
<td>Computer Systems Design and Related Services</td>
</tr>
<tr>
<td>9.</td>
<td>Management Consulting Services</td>
</tr>
<tr>
<td>10.</td>
<td>Wholesale Trades Agents and Brokers</td>
</tr>
</tbody>
</table>

Offices of Physicians ranked thirteenth in the State of New York for 2008 in terms of total corporate sales generated. Management of Companies and Enterprises firms generate the highest aggregate corporate sales in New York. The thirteen largest industries in the State of New York for 2008, in terms of corporate sales, are listed in Table 6 (this page).

Table 4: Top Ten New York Industries by Employment, 2008. The ten largest industries in New York in 2008 as measured by total employment in full-time equivalents (FTE).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>General Medical and Surgical Hospitals</td>
</tr>
<tr>
<td>2.</td>
<td>Full-Service Restaurants</td>
</tr>
<tr>
<td>3.</td>
<td>Limited-Service Eating Places</td>
</tr>
<tr>
<td>4.</td>
<td>Colleges, Universities, and Professional Schools</td>
</tr>
<tr>
<td>5.</td>
<td>Supermarkets and Other Grocery (except Convenience) Stores</td>
</tr>
<tr>
<td>6.</td>
<td><strong>Offices of Physicians</strong></td>
</tr>
<tr>
<td>7.</td>
<td>Management of Companies and Enterprises</td>
</tr>
<tr>
<td>8.</td>
<td>Nursing Care Facilities</td>
</tr>
<tr>
<td>9.</td>
<td>Offices of Lawyers</td>
</tr>
<tr>
<td>10.</td>
<td>Services for the Elderly and Persons with Disabilities</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Securities Brokerage</td>
</tr>
<tr>
<td>2.</td>
<td>Investment Banking and Securities Dealing</td>
</tr>
<tr>
<td>3.</td>
<td>General Medical and Surgical Hospitals</td>
</tr>
<tr>
<td>4.</td>
<td>Management of Companies and Enterprises</td>
</tr>
<tr>
<td>5.</td>
<td>Portfolio Management</td>
</tr>
<tr>
<td>6.</td>
<td>Offices of Lawyers</td>
</tr>
<tr>
<td>7.</td>
<td><strong>Offices of Physicians</strong></td>
</tr>
<tr>
<td>8.</td>
<td>Colleges, Universities, and Professional Schools</td>
</tr>
<tr>
<td>9.</td>
<td>Commercial Banking</td>
</tr>
<tr>
<td>10.</td>
<td>Computer Systems Design and Related Services</td>
</tr>
</tbody>
</table>

Table 6: Top Thirteen New York Industries by Corporate Sales, 2008. The ten largest industries in New York in 2008 as measured by total corporate sales.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Management of Companies and Enterprises</td>
</tr>
<tr>
<td>2.</td>
<td>Commercial Banking</td>
</tr>
<tr>
<td>3.</td>
<td>Securities Brokerage</td>
</tr>
<tr>
<td>4.</td>
<td>Computer and Peripheral Equipment Manufacturing</td>
</tr>
<tr>
<td>5.</td>
<td>Investment Banking and Securities Dealing</td>
</tr>
<tr>
<td>6.</td>
<td>Wired Telecommunications Carriers</td>
</tr>
<tr>
<td>7.</td>
<td>General Medical and Surgical Hospitals</td>
</tr>
<tr>
<td>8.</td>
<td>Lenders of Residential Buildings and Dwellings</td>
</tr>
<tr>
<td>9.</td>
<td>Real Estate Property Management</td>
</tr>
<tr>
<td>10.</td>
<td>Portfolio Management</td>
</tr>
<tr>
<td>11.</td>
<td>Offices of Lawyers</td>
</tr>
<tr>
<td>12.</td>
<td>Electric Power Transmission, Control, and Distribution</td>
</tr>
<tr>
<td>13.</td>
<td><strong>Offices of Physicians</strong></td>
</tr>
</tbody>
</table>
Viewpoints in Reporting the Economic Impacts of Private Practice Physicians

The economic impacts of Physicians engaged in Private Practice Medicine in the State of New York are equivalent to the economic impacts of the industry into which their economic activity is classified, NAICS 62111 - Offices of Physicians. Total economic impacts are the aggregate total of three distinct types of economic effect caused by the activity of this industry. Those effect types are:

- **Direct effects**: the total employment, personal income, corporate sales, etc. of this industry
- **Indirect effects**: the total employment, personal income, corporate sales, etc. required to provide all goods and services consumed by this industry in the process of conducting business
- **Induced effects**: the total employment, personal income, corporate sales, etc. required to provide all goods and services consumed by employees of this industry in the process of utilizing their personal income

As indicated in *About the Study: Study Method*, the economic impact of Private Practice Physicians was determined for each county in the State of New York on each county in the State of New York. This attention to regional detail provides two distinct viewpoints from which the resulting economic impacts can be analyzed, which are:

- Regional *share of* total economic impacts
- Regional *contribution to* total economic impacts

From the first viewpoint, the portion of total impacts in the State of New York that is *observed in a specific region* is analyzed. For example, the corporate sales impact on Erie County resulting from the Private Practice of Medicine in all counties of the State of New York during 2008 was $2.206 billion, of which $1.518 billion resulted from the Private Practice of Medicine in Erie County and $688 million resulted from the Private Practice of Medicine in the other 61 counties of the State of New York. In other words, the Private Practice of Medicine in all counties of the State of New York generated $2.206 billion in corporate sales in Erie County during 2008.

In *State of New York Impacts: Impacts at the Metropolitan Statistical Area Level* (pages 16 through 31) and *State of New York Impacts: Impacts at the County Level* (pages 32 through 47), the economic impacts of Private Practice Physicians in the State of New York are reported from the first viewpoint for each Metropolitan Statistical Area (MSA) and each county, respectively. All five core concepts indicated in *About this Study: Study Metrics* are detailed individually in each of these sections.

From the second viewpoint, the portion of total impacts in the State of New York that results from economic activity in a specific region is analyzed. For example, the State of New York corporate sales impact resulting from the Private Practice of Medicine in Erie County during 2008 was $2.655 billion, of which $1.518 billion was observed in Erie county itself and $1.137 billion was observed in the remaining 61 counties of the State of New York. In other words, the Private Practice of Medicine in Erie County generated $2.655 billion in corporate sales in all counties of the State of New York during 2008.

In *Metropolitan Statistical Area Contributions to Impacts* (pages 54 through 70) and *County Contributions to Impacts* (pages 71 to 87), the economic impacts of Private Practice Physicians in each MSA and each county (respectively) are reported from the second viewpoint. All five core concepts indicated in *About this Study: Study Metrics* are detailed individually in each of these sections.

As it relates to support for the Private Practice of Medicine, a variance in the economic impacts reported from each viewpoint for a specific region indicates one of two cases. If economic impacts from the first viewpoint are greater than economic impacts from the second viewpoint, the region in question demands less from the remainder of the State of New York than the remainder of the State of New York demands from it. If economic impacts from the second viewpoint are greater than economic impacts from the first viewpoint, the region in question demands more from the remainder of the State of New York than the remainder of the State of New York demands from it.