



THE DOCTOR /S IN

NEW YORK STATE'S INCREASING NUMBER OF PRACTICING PHYSICIANS

ENDORSED BY:

CENTER FOR JUSTICE & DEMOCRACY
CENTER FOR MEDICAL CONSUMERS
COMMISSION ON THE PUBLIC'S HEALTH SYSTEM
EMPIRE STATE CONSUMER PROJECT
NEW YORK PUBLIC INTEREST RESEARCH GROUP
NEW YORKERS FOR PATIENT & FAMILY EMPOWERMENT
PEGGY LILLIS FOUNDATION
PULSE OF NEW YORK

AUGUST 2014

Acknowledgements

Written by Blair Horner of the New York Public Interest Research Group Fund, Arthur Levin of the Center for Medical Consumers and Suzanne Mattei of New Yorkers for Patient & Family Empowerment. The authors thank Casey Ciceron of NYPIRG for her significant contributions.

The **Center for Medical Consumers**, a non-profit advocacy organization, was founded in 1976 with this philosophy: Whenever long-term drug therapy, elective surgery, or any other major treatment is prescribed, the question of whether the treatment has been proven safe and effective should come up. And the prescribing physician should be expected to cite the relevant studies. Toward this goal, CMC:

- participates in nationwide and statewide efforts to reduce medical errors;
- encourages public access to information about the comparative performance of doctors and hospitals.
- works with policy makers to strengthen the process by which physicians and other health professionals are licensed and disciplined;
- represents patients and consumers on national committees working to develop health care performance measures;
- works with other advocacy organizations to increase patient and family engagement in health information technology.
- and supports New York State's efforts to transform the paper-based medical record system to a digital system that will enhance communication between patients and health care providers.

New Yorkers for Patient & Family Empowerment (also known as "Patient & Family") is a not-for-profit organization that seeks to:

- (1) Empower patients and their loved ones in interacting with the healthcare system;
- (2) Strengthen public access to information on patient safety; and
- (3) Improve the quality and safety of healthcare in New York.

We define "family" to include the key support persons and loved ones in the patient's life, as determined by the patient.

The **New York Public Interest Research Group Fund** (NYPIRG) is a nonpartisan, not-for-profit organization whose mission is to affect policy reforms while training New Yorkers to be citizen advocates. NYPIRG's full-time staff works with citizens, produces studies on a wide array of topics, coordinates state campaigns, engages in public education efforts and lobbies public officials.

© 2014, NYPIRG

You can download the report by going to the NYPIRG website:

www.nypirg.org

The Doctor *Is* In: New York's Increasing Number of Doctors *Executive Summary*

New York has had a robust and diverse population of doctors for decades -- with one of the nation's highest ratios of practicing medical doctors to population served, including high ranking for physicians practicing in specialties such as OB/GYN and general surgery.

This review of the data on practicing physicians finds that the abundance of physicians in New York State continues today.

It has been reported that the number of physicians in some rural (and even in poor urban) areas have declined due to shrinking populations and economic/social factors. These area-specific shortages, some of which have been long-standing problems, have been seized upon by industry lobbyists who seek to blame malpractice premiums for the situation. Their ill-considered assertions, however, conveniently ignore the fact that the areas with the highest premiums are actually attracting the most doctors. These arguments also are an unnecessary distraction from real solutions to enhance rural/low income community medical practice.

The result of this analysis demonstrates that New York has an abundance of doctors, including specialty doctors, and that the number of doctors is increasing statewide. It also finds that New York, like other states, has difficulty attracting doctors to certain rural, low income areas that provide fewer professional amenities, and urges that policymakers focus on filling those gaps.

Background

Citing recently-published research, the Medical Society of the State of New York has argued that “the number of physicians trained here who actually remain in New York has dramatically declined in the past decade, from 53 percent in 2001 to only 44 percent in 2012. What specifically is driving them out? For starters, medical-liability insurance costs in New York are sky-high — higher, in fact, than anywhere else in the nation.”¹

The above referenced report does not, however, find that doctors are leaving New York; it found that a smaller *percentage* of doctors *educated and trained* in the state set up practice here. However, to most readers the message – although a misleading one – is that high medical malpractice premiums are responsible for a shortage of doctors *practicing* in New York State.

¹ Opinion piece written by Kleinman, A., “The Right Rx to Halt NY’s Doctors Drain,” *New York Post*, 5/13/14, see: <http://nypost.com/2014/05/13/right-rx-to-halt-nys-doctor-drain/>. Dr. Kleinman is the President of the Medical Society of the State of New York.

In addition to organized medicine's arguments, some business lobbyists have seized on shortages in some areas of the state and argued that the reason is New York's medical malpractice system, claiming "The real reason that doctors are not choosing upstate New York is the astronomical cost of lawsuits and medical liability insurance."² **But are these claims based on evidence? Or are industry lobbyists using data selectively to drive their anti-consumer, self-interested agenda?**

FINDINGS:

This report was written to examine these claims and to see if there is objective evidence to support a relationship between medical malpractice insurance premiums and shortages of physicians. **This report shows not only that there is no such shortage in the state, but in fact the areas with the most expensive malpractice insurance premiums are the areas with the most doctors – and the biggest increase in the number of doctors.**

Why would industry lobbyists make claims that are unsupported by the evidence? Their tactics are designed to frighten New Yorkers, and their lawmakers, into accepting the claims of these lobbyists and their allies. In truth, despite New York having medical malpractice premiums that are higher than the national average, there is little, if any, apparent impact on the number of physicians who choose to practice in the state. In fact, New York State has one of the highest ratios of physicians to population in the nation. This report finds:

- **New York State has the nation's second highest number of doctors per capita in the nation. This number includes *only* those doctors currently in clinical practice, but does not include those primarily in research or teaching and other similar, non-clinical activities. New York has the third highest per capita of doctors *overall*.**
- **The pool of doctors is growing at a significantly higher rate than the state's overall population.** From 2004 through 2012 the number of physicians actively practicing in New York increased over 10%. During that same period, the state's population grew less than 2%.
- **New York is among the top five states for the number of physicians per capita practicing in the so-called "high-risk" specialties of OB/GYN and general surgery.** New York has the *fifth* highest per capita number of practicing OB/GYNs (fourth overall), the *fourth* highest per capita number of general surgeons, and the *fourth* highest per capita number of internal medicine specialists.
- **New York counties in which medical malpractice premiums (generally downstate) are highest are the counties that have the**

² Letter to the Editor by Stebbins, T., "Letter: Medical liability reform will ease doctor shortage," *Buffalo News*, April 15, 2014, see: <http://www.buffalonews.com/opinion/letters-to-the-editor/letter-medical-liability-reform-will-ease-doctor-shortage-20140415>. Mr. Stebbins is the Executive Director of the Lawsuit Reform Alliance of New York.

largest number of doctors. And the same counties also have seen the biggest increase in doctors. Nineteen counties have seen decreases in the number of doctors between 2004 and 2012, and generally speaking, those counties are the ones in which premiums are among the lowest.

- **The well-documented and long-standing physician shortages that exist in New York’s rural areas correlate to factors that make them unattractive locations for physician practice. These factors include stagnating local economies and decreasing populations and are unrelated to the medical malpractice environment.** Such shortages in rural areas are a national concern and are not unique to New York State. Population growth in all of New York was less than 2% from 2004 to 2012, but *declined* in many parts of western and central New York – areas that contain the most rural parts of the state.

RECOMMENDATIONS:

Policymakers need to ensure that patients receive both high quality care as well as have access to such health care. At a minimum, New York should:

- **Examine the public’s access to health care providers in New York State, particularly in those areas that have demonstrated shortages.** Policymakers should review the successes and failures of past and current federal and state governments’ programs intended to remedy doctor shortages in rural areas to understand what has worked and what has not. In addition, policymakers should examine whether other health care professionals could fill gaps in these areas (e.g. increased availability of supervised nurse practitioners or physician assistants). The state should also examine carefully expanding the use of telemedicine to enhance access in areas with shortages to specialty services.³
- **Mandate periodic, routine recertification of physicians as a condition of licensure.** Both the National Academy of Sciences’ Institute of Medicine⁴ and the New York State Department of Health⁵ have recommended that physicians be recertified on the basis of periodic assessment of their competency. Physician evaluations should focus on the content of their current clinical practice and not just their historical training or board specialty.

³ For a more detailed look at New York’s physician shortage areas as well as the state’s efforts to encourage physicians to locate in these areas, see: “Doctors Across New York Physician Loan Repayment and Physician Practice Support Program Awards 2009 – 2013,” April, 2014, *The Center for Health Workforce Studies Health Research, Inc. School of Public Health, University at Albany, NY*

<http://chws.albany.edu/archive/uploads/2014/04/DANYawardsreport2014.pdf>.

⁴ National Academy of Sciences’ Institute of Medicine, “To Err is Human: Building A Better Health Care System,” November 1999, p. 10.

⁵ New York State Department of Health, “Report of the New York State Advisory Committee on Physician Recredentialing: Phase One General Principles, Proposed Process, Recommendations,” January 1988.

The Number Of New York State Doctors Has Increased At A Rate That Far Exceeds The Slow Growth In The General Population

According to the U.S. Census, in 2012 it was estimated that New York State had 19.6 million residents; in 2004 the state had 19.2 million residents.⁶ Thus, the state's population had increased slightly, just under 2%.

As seen in the *Appendix*, there has been a significant increase in the number of licensed doctors in New York. In 2004, there were over 81,000. In 2012, that number had increased to nearly 90,000 licensed doctors. That's an increase of about 10% -- a *five-fold* increase as compared to the state's overall population increase.

Despite a essentially stagnant statewide population – and a loss in population in many upstate areas – in only nineteen counties out of New York State's 62 counties was there a decline in the number of physicians.

Moreover, New York State continues to issue physicians licenses at a steady rate, according to the State Education Department. In fact, the number of new physicians being licensed was higher in 2013 than any recent year.

THE NUMBER OF NEW PHYSICIAN LICENSES ISSUED, 2004 THROUGH 2013⁷

| | 2004 | 2005 | 2006 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Number of physicians | 3,908 | 3,773 | 4,170 | 4,343 | 4,190 | 4,038 | 3,994 | 4,272 | 5,223 |

As seen above, in 2013 New York State saw a significant increase in the number of doctors licensed. That increase plainly indicates that New York continues to be an attractive location for new physicians.

⁶ Source for 2012 New York State population estimate: U.S. Census Bureau, "State and County Quickfacts: New York" <http://quickfacts.census.gov/qfd/states/36000.html>. Source for U.S. Census Bureau, 2004 population estimate: <http://www.census.gov/popest/data/counties/totals/2004/CO-EST2004-01.html>.

⁷ New York State Education Department. Current year is available at: <http://www.op.nysed.gov/prof/med/medcounts.htm>. Our data did not have the new physician licenses issued in 2008.

New York State Ranks Second in the Number of Practicing Doctors and Near the Top in Key Specialties

The industry’s lobbyists claim that rising malpractice premiums are forcing New York doctors to quit practicing “high-risk” specialties, including obstetrics, and general surgery. But New York boasts a very high per capita ratio of doctors practicing in these “high risk” specialties.⁸

- **Overall:** New York State had the second highest number of practicing physicians per capita in 2012 (the latest year that national data was available).
- **OB/GYNs:** The per capita number of New York doctors practicing in obstetrics and gynecology is fifth highest in the nation. New York has 18 OB/GYNs per 100,000 population. The national average is 13 per 100,000.
- **General surgeons and internal medicine specialists:** The per capita number of New York general surgeons is fourth highest and the per capita number of internal medicine specialists is also the fourth highest in the nation.

Ranking of States’ With The Highest Number of Practicing Doctors Per 100,000 Population⁹

| Overall Rank | | OB/GYN Rank | | Surgeon Rank | | Internal Med Rank | | |
|--------------|-----------------|-------------------|-----------------|--------------|--|-------------------|-----------------|-----------|
| 1 | Massachusetts | 402 ¹⁰ | Connecticut | 21 | Vermont | 18 | Massachusetts | 104 |
| 2 | New York | 345 | Rhode Island | 20 | Massachusetts | 17 | Connecticut | 87 |
| 3 | Maryland | 344 | Maryland | 19 | Rhode Island | 16 | Rhode Island | 87 |
| 4 | Rhode Island | 342 | Vermont | 19 | New York (tied with 6 other states) | 15 | New York | 85 |
| 5 | Connecticut | 339 | New York | 18 | | | Maryland | 83 |

⁸ We chose these three specialties because, as you will see later in this report, those are the specialties often highlighted due to their malpractice premiums.

⁹ American Medical Association, “Physician Characteristics and Distribution in the US,” 2014 Edition, Appendices 2 through 5 contains data for all 50 states.

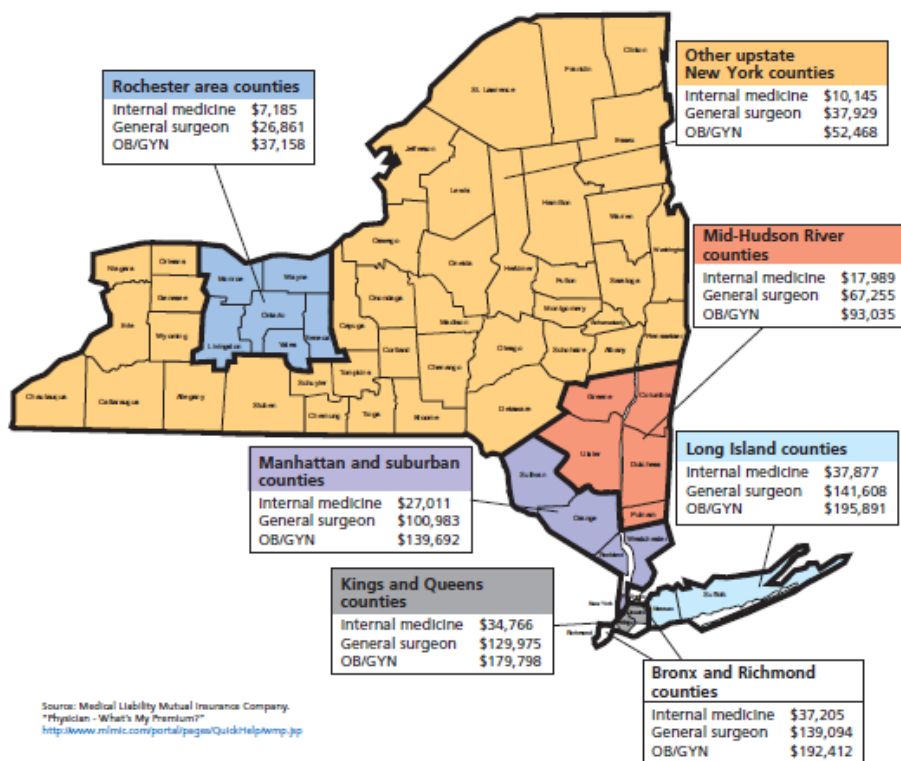
¹⁰ This number represents the number of doctors per 100,000 population for each of the rankings.

New York Counties In Which Medical Malpractice Premiums Are Highest Are The Counties That Have Growing Numbers Of Doctors

As seen below, New York State has a wide range in average medical malpractice premiums. Generally speaking, premiums for doctors practicing downstate tend to be higher than those practicing in the same specialty in upstate.¹¹

New York state medical malpractice coverage premiums

2013-2014 standard medical malpractice premium rates



Standard medical malpractice premium rates paid by physicians in New York state vary significantly by medical practice and geographical location. For example, the premium rate for a neurosurgeon practicing in Long Island is \$331,295, while the rate for an allergist in Rochester is \$1,905 (data not shown).¹ The state is divided into seven malpractice rating territories. A sample of premium rates for three types of physician practices is displayed above to illustrate the significant variations by practice and geographical location, reflecting the underlying aggregate claims experience. Physicians and hospitals that employ physicians are often able to qualify for discounts on the standard rates. Standard rates typically reflect what are called occurrence policies that provide liability coverage for services rendered during a policy period, regardless of when the claim is reported. The typical limits of liability are \$1.3 million for damages sustained by a single patient and \$3.9 million for an entire policy year.

¹¹ Excellus Blue Cross Blue Shield, "The Facts About New York State Medical Malpractice Coverage Premiums, 2011-2012 Standard Medical Malpractice Premium Rates," Winter 2011-2012.

If medical malpractice premiums were a primary reason for alleged shortages, we would expect to see declining numbers of doctors practicing in those areas with the highest premiums. However, as seen below (and in more detail in Appendix 1), often the opposite is true.

Of course, no one would argue that higher medical malpractice premiums lead to larger numbers of doctors. But it is fair to say that malpractice premiums are not determinative in where doctors choose to practice.¹² As seen in the next section of this report, other variables are more important.

New York State Counties Experiencing The Biggest Increases And Decreases In The Number of Doctors, Comparing 2004 and 2012¹³

| Counties With Largest Increases in Doctors | | Counties With Largest Decreases in Doctors | |
|--|--------|--|--------|
| County | Number | County | Number |
| Manhattan | 2,203 | Schenectady | -31 |
| Brooklyn | 1,139 | Chautauqua | -26 |
| Nassau | 874 | Delaware | -18 |
| Suffolk | 630 | Allegany, Fulton, | -12 |
| Bronx | 586 | Niagara | |

Looking at the *percentage* change in number of doctors is revealing as well. From 2004 to 2012, the vast majority of New York's counties – 43 out of 62 – there was no decrease in its doctor population. In Appendix 1, we have a chart showing a county-by-county breakdown of the percentage changes in doctor population, plus each county's doctor population comparing 2004 and 2012.

The five counties with the greatest *percentage* increases in doctor population were: Schuylar, 40% (20 doctors in 2004 increased to 28 in 2012); Saratoga, 30.8% (403 to 527); Washington, 25.6% (39 to 49); Ontario, 20.9% (278 to 336); and Otsego, 19.1% (319 to 380).

Of the sixty-two New York State counties, nineteen saw a decline in the number of physicians. The five counties with the greatest *percentage* decreases in doctor population were: Delaware, -31% (58 doctors in 2004 to 40 in 2012); Alleghany, -21.8% (55 to 43); Fulton, -15.2%, (79 to 67); Chenango -12.1% (66 to 58); and Chautauqua, -11.7% (223 to 197).

However, as seen in the medical malpractice map, generally those counties with the highest insurance premiums saw the biggest increase in the number of

¹² "2012 New York Residency Training Outcomes, A Summary of Key Findings from the 2012 New York Resident Exit Survey," March, 2013. *Center for Health Workforce Studies, School of Public Health, University at Albany, State University of New York*, Figure 2 lists the cost of medical malpractice insurance as one of the *least* important reasons for not practicing in the state, p. 6.

¹³ American Medical Association, "Physician Characteristics and Distribution in the US," 2014 Edition and 2006 Edition.

doctors. Those counties with the lowest premiums generally saw the least growth – or a decline – in the number of doctors.

Many Factors Contribute to a Continually Low Supply of Rural Physicians

Policies to improve patient access to and supply of doctors in rural areas should be based on meaningful, objective evidence that they meet that goal. Efforts to remedy this problem should not be designed so as to hurt the very patients whose access to care they are designed to improve. Industry lobbyists have argued, in what sometimes approaches alarmist language, that patients in rural areas are the victims of the fallout from unrestricted malpractice awards. Their argument is that it is medical malpractice that is causing doctors to abandon rural New Yorkers and that for some specialties which are no longer available throughout the state, the demographic of eroding access is regional.

As detailed earlier in this report, government data shows that overall New York is one of the most physician-rich states in the nation.

But to the extent that doctors practicing certain specialties (including primary care as well as so-called high-risk practices) are not accessible or even available in some parts of the state, the available objective evidence fails to support the claim that this access problem is the result of high malpractice insurance rates or of unrestricted non-economic damage awards. As discussed earlier, New York's economic growth has been unevenly distributed with some rural parts of the state stagnating both in terms of economic activity and population.

For decades, many rural communities in the nation have not had the number of medical professionals that most experts consider adequate.¹⁴

- **Access to medical care has long been a problem throughout rural America.** According to the Council on Graduate Medical Education (COGME), "Geographic maldistribution of health care providers and services [the tendency for physicians to practice in affluent urban and suburban areas] is one of the most persistent characteristics of the American health care system. Even as oversupply of some physician specialties is apparent in many urban health care service areas across the country, many inner-city and rural communities still struggle to attract an adequate number of health professionals to provide high-quality care to local people. This is the central paradox of the American health care system: shortages among surplus."¹⁵

¹⁴ Ricketts, T., "Special People for Special Places," *The Journal of Rural Health*, Spring 1999, at 210.

¹⁵ Council on Graduate Medical Education, "Tenth Report: Physician Distribution and Health Care Challenges in Rural and Inner City Areas," see: www.cogme.gov/10.pdf, at p. xiii.

COGME also notes, “The relative shortage of health professionals in rural areas of the United States is one of the few constants in any description of the United States medical care system.”¹⁶

- **Attracting and retaining rural doctors is currently a problem throughout the country and has been for decades – and not just in states that do not limit malpractice awards or have low premiums.**

Rural doctors around the country find it difficult to recruit additions to their practice and community groups in rural areas have similar troubles in recruiting doctors to work in their communities.¹⁷

Although nearly 25 percent of the U.S. population resides in rural areas, only about 10 percent of the nation’s doctors work in these areas.¹⁸

- **A number of factors have been cited by doctors and researchers to explain the low supply of rural doctors.**

People who live in rural areas are more likely to be uninsured than those who live in urban areas, meaning that they see a doctor less often or are often unable to generate sufficient income for doctors who care for them.¹⁹

The percentage of public health insurance beneficiaries is also greater in rural areas.²⁰ Low Medicaid reimbursement rates can significantly limit income for those doctors who lack sufficient number of better insured patients to improve their earnings.

Rural doctors have a lower volume of patients, while costs for things like practice overhead remain the same.²¹

Rural doctors report that they are overworked.²²

¹⁶ COGME at p. 11.

¹⁷ Ricketts at p. 210.

¹⁸ Gamm L., Huchison L., Dabney B., and Dorsey A., eds. (2003). *Rural Healthy People 2010: A Companion Document to Healthy People 2010, Volume 2*, at 17, available at www.srph.tamushsc.edu/rhp2010/litreview/Volume2.pdf.

¹⁹ Gamm L., Huchison L., Dabney B., and Dorsey A., eds. (2003). *Rural Healthy People 2010: A Companion Document to Healthy People 2010, Volume 1*, at 19, available at www.srph.tamushsc.edu/rhp2010/litreview/Volume1.pdf.

²⁰ Fondren, L. and Ricketts, T., “The North Carolina Obstetrics Access and Professional Liability Study: A Rural-Urban Analysis,” *The Journal of Rural Health*, Spring 1993, at 135.

²¹ Kramer, A., “Rural Areas a Hard Sell for Doctors; Practicing Medicine in the Country is Becoming More of a Money-Losing Proposition. Fewer Hours and Lower Costs Lure Many to Cities,” *Los Angeles Times*, October 12, 2003.

²² Ricketts at p. 210.

Rural doctors are more likely to report that they receive inadequate assistance and coverage from other health professionals. One study of obstetricians and gynecologists in North Carolina investigated doctors' perceptions of adequacy of consultation and coverage and found that 13 percent of rural physicians in North Carolina indicated that assistance (opportunities for colleagues to see patients and review charts) in high-risk delivery situations was "inadequate" or "very inadequate." This compares to only 1.5 percent of urban physicians who have the same complaint. In terms of coverage (opportunities for colleagues to assist in the primary doctor's absence), 16.7 percent of rural physicians and only 2.5 percent of urban physicians indicated that coverage was "inadequate" or "very inadequate."²³

Studies indicate that women physicians are less likely to settle in rural areas than are men. As the percentage of doctors who are women increases, it has been suggested that female doctors' preferences for urban practice may be contributing to the problem of recruiting and retaining rural doctors.²⁴

- **Numerous additional factors explain the limited number of rural doctors.** According to the Association of Maternal and Child Health Programs, the health departments in Alaska, Idaho and Washington, cite the following barriers to attracting doctors to rural areas of their states.²⁵
 1. "**Burnout** is one reason it is so difficult to retain qualified primary care providers. Physicians note that as the only doctor in a small, isolated community they are on-duty 24-7 and can expect to be asked for medical opinions at the post office, grocery store or a 2:00 a.m. call at home from a worried family member. Taking time off for vacation or professional training means complicated arrangements for a substitute doctor."
 2. "**Isolation** is a factor in rural practice, not only for the physician but also for their families. Physicians note that while they may find rural practice challenging and engaging, their families may be less enthusiastic. Rural areas offer limited employment opportunities for spouses and limited educational, recreational and social opportunities for children. Physicians are also isolated from colleagues. Rural physicians are not able to enjoy the day-to-day personal contact with peers for consultations, quality assurance and feedback."

²³ Fondren and Ricketts.

²⁴ COGME at p. 17.

²⁵ The Association of Maternal Child Health Programs, *From Rural to Remote: Family Health Care in Alaska, Idaho, Oregon and Washington* (March 2004) at 11, available at: www.amchp.org/aboutamchp/Rural%20Health.pdf.

3. “**Wages** are generally lower for non-urban practitioners. Higher rates of unemployment and poverty, uninsured residents and fewer patients mean rural communities are less able to match the financial incentives and job benefits offered in urban areas.”
4. “**Community and cultural connections** are important for both physicians and the patients they serve, but are not easily made. Physicians and health care providers are usually recruited from larger urban areas or from out-of-state and usually have limited knowledge of the health needs, culture or history of the people in their care. At the same time the physician is feeling disconnected, community members are reluctant to accept or support a new physician unless they have proven their commitment to the community over time.”
5. “**The health care infrastructure** – such as a hospital, clinic and laboratory facilities – is essential support for primary health care providers. Physicians are reluctant to locate in a community without a hospital or other supporting facilities.”

An Agenda To Protect Patients

Policymakers need to ensure that patients receive both high quality care as well as have adequate access to such health care. At a minimum, New York should:

- **Examine the public's access to health care providers in New York State, particularly in those areas that have demonstrated shortages.** Policymakers should review the successes and failures of past and current federal and state governments' programs intended to remedy doctor shortages in rural areas to understand what has worked and what has not. In addition, policymakers should examine whether other health care professionals could fill gaps in these areas (e.g. increased availability of supervised nurse practitioners or physician assistants). Moreover, the state should examine carefully expanding the use of telemedicine to enhance access in areas with shortages to specialty services.
- **Mandate periodic, routine recertification of physicians as a condition of licensure.** Both the Institute of Medicine²⁶ and the State Department of Health²⁷ have recommended that physicians be recertified on the basis of periodic assessment of their competency. Physician evaluations should focus on the content of their current clinical practice and not just their historical training or board specialty.

²⁶ National Academy of Sciences' Institute of Medicine, "To Err is Human: Building A Better Health Care System," November 1999, p. 10.

²⁷ New York State Department of Health, 'Report of the New York State Advisory Committee on Physician Recredentialing: Phase One General Principles, Proposed Process, Recommendations,' January 1988.

**Appendix 1: Comparison Of The Numbers Of New York Doctors By County,
As Of 12/31/2004 And 12/31/2012²⁸**

| <i>County</i> | 2012 | 2004 | %Ch²⁹ | <i>County</i> | 2012 | 2004 | %Ch | <i>County</i> | 2012 | 2004 | %Ch |
|---------------|--------------|-------------|-------------------------|---------------|---------------|-------------|------------|------------------|---------------|---------------|--------------|
| Albany | 1,941 | 1,696 | 14% | Jefferson | 232 | 240 | -3% | Saratoga | 527 | 403 | 31% |
| Allegany | 43 | 55 | -22% | Kings | 8,475 | 7,336 | 16% | Schenectady | 518 | 549 | -6% |
| Bronx | 4,108 | 3,522 | 17% | Lewis | 29 | 28 | 4% | Schoharie | 24 | 22 | 9% |
| Broome | 645 | 645 | 0% | Livingston | 66 | 66 | 0% | Schuyler | 28 | 20 | 40% |
| Cattaraugus | 136 | 130 | 5% | Madison | 126 | 110 | 15% | Seneca | 21 | 22 | -5% |
| Cayuga | 96 | 107 | -10% | Monroe | 4,021 | 3,629 | 11% | Steuben | 173 | 163 | 6% |
| Chautauqua | 197 | 223 | -12% | Montgomery | 91 | 91 | 0% | St. Lawrence | 191 | 179 | 7% |
| Chemung | 269 | 261 | 3% | Nassau | 9,782 | 8,908 | 10% | Suffolk | 5,388 | 4,758 | 13% |
| Chenango | 58 | 66 | -12% | New York | 22,052 | 19,849 | 11% | Sullivan | 118 | 118 | 0% |
| Clinton | 232 | 209 | 11% | Niagara | 306 | 318 | -4% | Tioga | 40 | 38 | 5% |
| Columbia | 128 | 123 | 4% | Oneida | 623 | 611 | 2% | Tompkins | 310 | 265 | 17% |
| Cortland | 65 | 67 | -3% | Onondaga | 2,599 | 2,297 | 13% | Ulster | 374 | 384 | -3% |
| Delaware | 40 | 58 | -31% | Ontario | 336 | 278 | 21% | Warren | 271 | 247 | 10% |
| Dutchess | 972 | 841 | 16% | Orange | 949 | 807 | 18% | Washington | 49 | 39 | 26% |
| Erie | 3,985 | 3,802 | 5% | Orleans | 32 | 35 | -9% | Wayne | 81 | 88 | -8% |
| Essex | 50 | 49 | 2% | Oswego | 111 | 119 | -7% | Westchester | 7,449 | 7,244 | 3% |
| Franklin | 101 | 105 | -4% | Otsego | 380 | 319 | 19% | Wyoming | 50 | 49 | 2% |
| Fulton | 67 | 79 | -15% | Putnam | 222 | 216 | 3% | Yates | 33 | 35 | -6% |
| Genesee | 83 | 90 | -8% | Queens | 6,780 | 6,224 | 9% | NYS TOTAL | 89,947 | 81,716 | 10.1% |
| Greene | 45 | 45 | 0% | Rensselaer | 301 | 293 | 3% | | | | |
| Hamilton | 4 | 4 | 0% | Richmond | 2,108 | 1,791 | 18% | | | | |
| Herkimer | 53 | 54 | -2% | Rockland | 1,363 | 1,297 | 5% | | | | |

²⁸ American Medical Association, "Physician Characteristics and Distribution in the US," 2014 Edition and 2006 Edition.

²⁹ Rounded to the nearest whole number, except for the statewide total which is rounded to the nearest tenth.

| Appendix 2 – States' Per Capita Number Of Doctors, 2012³⁰ | | |
|---|-------------------------------|--|
| State | Physicians Per 100,000 | Physicians Involved in Patient Care Per 100,000 |
| Alabama | 250 | 202 |
| Alaska | 262 | 211 |
| Arizona | 273 | 206 |
| Arkansas | 239 | 193 |
| California | 325 | 245 |
| Colorado | 321 | 242 |
| Connecticut | 445 | 339 |
| Delaware | 295 | 225 |
| Florida | 314 | 229 |
| Georgia | 260 | 204 |
| Hawaii | 366 | 269 |
| Idaho | 204 | 159 |
| Illinois | 335 | 258 |
| Indiana | 252 | 204 |
| Iowa | 226 | 171 |
| Kansas | 271 | 210 |
| Kentucky | 268 | 213 |
| Louisiana | 311 | 255 |
| Maine | 344 | 253 |
| Maryland | 484 | 344 |
| Massachusetts | 550 | 402 |
| Michigan | 308 | 241 |
| Minnesota | 353 | 278 |
| Mississippi | 212 | 168 |
| Missouri | 289 | 228 |
| Montana | 275 | 202 |
| Nebraska | 287 | 227 |
| Nevada | 223 | 169 |
| New Hampshire | 358 | 271 |
| New Jersey | 362 | 279 |
| New Mexico | 289 | 216 |
| New York | 460 | 345 |
| North Carolina | 299 | 232 |
| North Dakota | 284 | 232 |
| Ohio | 324 | 249 |

³⁰ American Medical Association, "Physician Characteristics and Distribution in the US," 2014 Edition, see Table 6.17. For the purposes of these rankings, we did not include the District of Columbia or other non-states included in the AMA report.

| | | |
|----------------------|------------|------------|
| Oklahoma | 208 | 166 |
| Oregon | 350 | 259 |
| Pennsylvania | 362 | 270 |
| Rhode Island | 451 | 342 |
| South Carolina | 271 | 214 |
| South Dakota | 267 | 212 |
| Tennessee | 307 | 246 |
| Texas | 248 | 200 |
| Utah | 249 | 196 |
| Vermont | 456 | 329 |
| Virginia | 324 | 247 |
| Washington | 329 | 244 |
| West Virginia | 272 | 212 |
| Wisconsin | 311 | 246 |
| Wyoming | 223 | 170 |
| United States | 323 | 247 |

Growth in overall per capita number of doctors, New York State 1980-2012³¹

| Year | Per capita of doctors, overall |
|-------------|---------------------------------------|
| 1980 | 280 |
| 1990 | 342 |
| 2000 | 413 |
| 2012 | 460 |

³¹ American Medical Association, "Physician Characteristics and Distribution in the US," 2014 Edition, see Table 6.15.

| Appendix 3 – States' Per Capita Number Of OB/GYNs, 2012³² | | | | | | |
|---|-------------------------------|------------------|-----------------------------|-----------------------|-------------------------------|-------------------|
| State | Population, 7/1/13 | Specialty | Total Physicians | Per capita | Total Patient Care | Per capita |
| Alabama | 4833722 | OB/GYN | 595 | 12 | 576 | 12 |
| Alaska | 735132 | OB/GYN | 84 | 11 | 84 | 11 |
| Arizona | 6626624 | OB/GYN | 745 | 11 | 713 | 11 |
| Arkansas | 2959373 | OB/GYN | 277 | 9 | 273 | 9 |
| California | 38332521 | OB/GYN | 5,158 | 13 | 5,003 | 13 |
| Colorado | 5268367 | OB/GYN | 733 | 14 | 714 | 14 |
| Connecticut | 3596080 | OB/GYN | 766 | 21 | 742 | 21 |
| Delaware | 925749 | OB/GYN | 101 | 11 | 98 | 11 |
| Florida | 19552860 | OB/GYN | 2,339 | 12 | 2,276 | 12 |
| Georgia | 9992167 | OB/GYN | 1,369 | 14 | 1,333 | 13 |
| Hawaii | 1404054 | OB/GYN | 246 | 18 | 235 | 17 |
| Idaho | 1612136 | OB/GYN | 144 | 9 | 143 | 9 |
| Illinois | 12882135 | OB/GYN | 1,871 | 15 | 1,826 | 14 |
| Indiana | 6570902 | OB/GYN | 693 | 11 | 667 | 10 |
| Iowa | 3090416 | OB/GYN | 226 | 7 | 217 | 7 |
| Kansas | 2893957 | OB/GYN | 321 | 11 | 317 | 11 |
| Kentucky | 4395295 | OB/GYN | 496 | 11 | 486 | 11 |
| Louisiana | 4625470 | OB/GYN | 743 | 16 | 723 | 16 |
| Maine | 1328302 | OB/GYN | 158 | 12 | 152 | 11 |
| Maryland | 5928814 | OB/GYN | 1,184 | 20 | 1,127 | 19 |
| Massachusetts | 6692824 | OB/GYN | 1,132 | 17 | 1,095 | 16 |
| Michigan | 9895622 | OB/GYN | 1,328 | 13 | 1,283 | 13 |
| Minnesota | 5420380 | OB/GYN | 659 | 12 | 650 | 12 |
| Mississippi | 2991207 | OB/GYN | 335 | 11 | 329 | 11 |
| Missouri | 6044171 | OB/GYN | 734 | 12 | 713 | 12 |
| Montana | 1015165 | OB/GYN | 93 | 9 | 93 | 9 |
| Nebraska | 1868516 | OB/GYN | 222 | 12 | 217 | 12 |
| Nevada | 2790136 | OB/GYN | 272 | 10 | 267 | 10 |
| New Hampshire | 1323459 | OB/GYN | 199 | 15 | 194 | 15 |
| New Jersey | 8899339 | OB/GYN | 1,497 | 17 | 1,445 | 16 |
| New Mexico | 2085287 | OB/GYN | 246 | 12 | 240 | 12 |
| New York | 19651127 | OB/GYN | 3,647 | 19 | 3,536 | 18 |
| North Carolina | 9848060 | OB/GYN | 1,342 | 14 | 1,305 | 13 |
| North Dakota | 723393 | OB/GYN | 65 | 9 | 65 | 9 |
| Ohio | 11570808 | OB/GYN | 1,521 | 13 | 1,488 | 13 |
| Oklahoma | 3850568 | OB/GYN | 349 | 9 | 337 | 9 |

³² American Medical Association, "Physician Characteristics and Distribution in the US," 2014 Edition, see table 3.17. Calculations of per capita number of doctors by authors. Non-states not included in analysis.

| | | | | | | |
|----------------------|--------------------|---------------|---------------|-----------|---------------|-----------|
| Oregon | 3930065 | OB/GYN | 570 | 15 | 555 | 14 |
| Pennsylvania | 12773801 | OB/GYN | 1,731 | 14 | 1,668 | 13 |
| Rhode Island | 1051511 | OB/GYN | 214 | 20 | 206 | 20 |
| South Carolina | 4774839 | OB/GYN | 619 | 13 | 607 | 13 |
| South Dakota | 844877 | OB/GYN | 77 | 9 | 76 | 9 |
| Tennessee | 6495978 | OB/GYN | 914 | 14 | 887 | 14 |
| Texas | 26448193 | OB/GYN | 3,278 | 12 | 3,178 | 12 |
| Utah | 2900872 | OB/GYN | 328 | 11 | 320 | 11 |
| Vermont | 626630 | OB/GYN | 118 | 19 | 117 | 19 |
| Virginia | 8260405 | OB/GYN | 1,252 | 15 | 1,225 | 15 |
| Washington | 6971406 | OB/GYN | 823 | 12 | 796 | 11 |
| West Virginia | 1854304 | OB/GYN | 205 | 11 | 197 | 11 |
| Wisconsin | 5742713 | OB/GYN | 656 | 11 | 643 | 11 |
| Wyoming | 582658 | OB/GYN | 62 | 11 | 60 | 10 |
| United States | 315,482,390 | OB/GYN | 42,737 | 14 | 41,496 | 13 |

| Appendix 4 – States’ Per Capita Number Of General Surgeons, 2012³³ | | | | | | |
|--|-------------------------------|------------------------|-----------------------------|-------------------|-------------------------------|-----------------------|
| State | Population, 7/1/13 | Specialty | Total Physicians | Per capita | Total Patient Care | Per capita |
| Alabama | 4833722 | General Surgery | 525 | 11 | 516 | 11 |
| Alaska | 735132 | General Surgery | 73 | 10 | 70 | 10 |
| Arizona | 6626624 | General Surgery | 699 | 11 | 680 | 10 |
| Arkansas | 2959373 | General Surgery | 273 | 9 | 266 | 9 |
| California | 38332521 | General Surgery | 4,022 | 10 | 3,925 | 10 |
| Colorado | 5268367 | General Surgery | 573 | 11 | 563 | 11 |
| Connecticut | 3596080 | General Surgery | 559 | 16 | 535 | 15 |
| Delaware | 925749 | General Surgery | 103 | 11 | 99 | 11 |
| Florida | 19552860 | General Surgery | 2,008 | 10 | 1,964 | 10 |
| Georgia | 9992167 | General Surgery | 1,089 | 11 | 1,060 | 11 |
| Hawaii | 1404054 | General Surgery | 177 | 13 | 170 | 12 |
| Idaho | 1612136 | General Surgery | 135 | 8 | 134 | 8 |
| Illinois | 12882135 | General Surgery | 1,387 | 11 | 1,348 | 10 |
| Indiana | 6570902 | General Surgery | 582 | 9 | 571 | 9 |
| Iowa | 3090416 | General Surgery | 290 | 9 | 284 | 9 |
| Kansas | 2893957 | General Surgery | 290 | 10 | 281 | 10 |
| Kentucky | 4395295 | General Surgery | 549 | 12 | 531 | 12 |
| Louisiana | 4625470 | General Surgery | 638 | 14 | 623 | 13 |
| Maine | 1328302 | General Surgery | 197 | 15 | 193 | 15 |
| Maryland | 5928814 | General Surgery | 940 | 16 | 893 | 15 |
| Massachusetts | 6692824 | General Surgery | 1,169 | 17 | 1,122 | 17 |
| Michigan | 9895622 | General Surgery | 1,247 | 13 | 1,217 | 12 |
| Minnesota | 5420380 | General Surgery | 649 | 12 | 639 | 12 |
| Mississippi | 2991207 | General Surgery | 267 | 9 | 260 | 9 |
| Missouri | 6044171 | General Surgery | 689 | 11 | 669 | 11 |
| Montana | 1015165 | General Surgery | 98 | 10 | 97 | 10 |
| Nebraska | 1868516 | General Surgery | 215 | 12 | 207 | 11 |
| Nevada | 2790136 | General Surgery | 227 | 8 | 225 | 8 |
| New Hampshire | 1323459 | General Surgery | 206 | 16 | 200 | 15 |
| New Jersey | 8899339 | General Surgery | 1,136 | 13 | 1,111 | 12 |
| New Mexico | 2085287 | General Surgery | 221 | 11 | 216 | 10 |
| New York | 19651127 | General Surgery | 3,087 | 16 | 2,994 | 15 |
| North Carolina | 9848060 | General Surgery | 1,123 | 11 | 1,089 | 11 |
| North Dakota | 723393 | General Surgery | 110 | 15 | 106 | 15 |
| Ohio | 11570808 | General Surgery | 1,509 | 13 | 1,468 | 13 |
| Oklahoma | 3850568 | General Surgery | 309 | 8 | 304 | 8 |

³³ American Medical Association, “Physician Characteristics and Distribution in the US,” 2014 Edition.

| | | | | | | |
|----------------------|--------------------|------------------------|---------------|-----------|---------------|-----------|
| Oregon | 3930065 | General Surgery | 521 | 13 | 509 | 13 |
| Pennsylvania | 12773801 | General Surgery | 1,990 | 16 | 1,925 | 15 |
| Rhode Island | 1051511 | General Surgery | 176 | 17 | 172 | 16 |
| South Carolina | 4774839 | General Surgery | 527 | 11 | 511 | 11 |
| South Dakota | 844877 | General Surgery | 94 | 11 | 94 | 11 |
| Tennessee | 6495978 | General Surgery | 901 | 14 | 879 | 14 |
| Texas | 26448193 | General Surgery | 2,493 | 9 | 2,432 | 9 |
| Utah | 2900872 | General Surgery | 237 | 8 | 229 | 8 |
| Vermont | 626630 | General Surgery | 112 | 18 | 110 | 18 |
| Virginia | 8260405 | General Surgery | 936 | 11 | 915 | 11 |
| Washington | 6971406 | General Surgery | 744 | 11 | 724 | 10 |
| West Virginia | 1854304 | General Surgery | 246 | 13 | 241 | 13 |
| Wisconsin | 5742713 | General Surgery | 663 | 12 | 636 | 11 |
| Wyoming | 582658 | General Surgery | 62 | 11 | 61 | 10 |
| United States | 315,482,390 | General Surgery | 37,073 | 12 | 36,068 | 11 |

| Appendix 5 – States’ Per Capita Number Of Internal Medicine Specialists, 2012³⁴ | | | | | | |
|---|-------------------------------|--------------------------|-----------------------------|-----------------------|-------------------------------|-------------------|
| State | Population, 7/1/13 | Specialty | Total Physicians | Per capita | Total Patient Care | Per capita |
| Alabama | 4833722 | Internal Medicine | 1,969 | 41 | 1,880 | 39 |
| Alaska | 735132 | Internal Medicine | 179 | 24 | 172 | 23 |
| Arizona | 6626624 | Internal Medicine | 2,783 | 42 | 2,657 | 40 |
| Arkansas | 2959373 | Internal Medicine | 840 | 28 | 806 | 27 |
| California | 38332521 | Internal Medicine | 20,144 | 53 | 18,882 | 49 |
| Colorado | 5268367 | Internal Medicine | 2,258 | 43 | 2,125 | 40 |
| Connecticut | 3596080 | Internal Medicine | 3,362 | 93 | 3,114 | 87 |
| Delaware | 925749 | Internal Medicine | 391 | 42 | 372 | 40 |
| Florida | 19552860 | Internal Medicine | 9,578 | 49 | 9,185 | 47 |
| Georgia | 9992167 | Internal Medicine | 4,336 | 43 | 4,094 | 41 |
| Hawaii | 1404054 | Internal Medicine | 853 | 61 | 815 | 58 |
| Idaho | 1612136 | Internal Medicine | 344 | 21 | 331 | 21 |
| Illinois | 12882135 | Internal Medicine | 7,927 | 62 | 7,517 | 58 |
| Indiana | 6570902 | Internal Medicine | 2,392 | 36 | 2,251 | 34 |
| Iowa | 3090416 | Internal Medicine | 802 | 26 | 743 | 24 |
| Kansas | 2893957 | Internal Medicine | 1,026 | 35 | 982 | 34 |
| Kentucky | 4395295 | Internal Medicine | 1,704 | 39 | 1,635 | 37 |
| Louisiana | 4625470 | Internal Medicine | 2,245 | 49 | 2,136 | 46 |
| Maine | 1328302 | Internal Medicine | 671 | 51 | 637 | 48 |
| Maryland | 5928814 | Internal Medicine | 5,578 | 94 | 4,901 | 83 |
| Massachusetts | 6692824 | Internal Medicine | 7,764 | 116 | 6,988 | 104 |
| Michigan | 9895622 | Internal Medicine | 5,402 | 55 | 5,113 | 52 |
| Minnesota | 5420380 | Internal Medicine | 2,850 | 53 | 2,657 | 49 |
| Mississippi | 2991207 | Internal Medicine | 898 | 30 | 874 | 29 |
| Missouri | 6044171 | Internal Medicine | 2,977 | 49 | 2,801 | 46 |
| Montana | 1015165 | Internal Medicine | 316 | 31 | 300 | 30 |
| Nebraska | 1868516 | Internal Medicine | 725 | 39 | 682 | 36 |
| Nevada | 2790136 | Internal Medicine | 1,097 | 39 | 1,055 | 38 |
| New Hampshire | 1323459 | Internal Medicine | 768 | 58 | 722 | 55 |
| New Jersey | 8899339 | Internal Medicine | 6,573 | 74 | 6,158 | 69 |
| New Mexico | 2085287 | Internal Medicine | 878 | 42 | 819 | 39 |
| New York | 19651127 | Internal Medicine | 17,852 | 91 | 16,663 | 85 |
| North Carolina | 9848060 | Internal Medicine | 4,634 | 47 | 4,319 | 44 |
| North Dakota | 723393 | Internal Medicine | 310 | 43 | 300 | 41 |
| Ohio | 11570808 | Internal Medicine | 6,030 | 52 | 5,752 | 50 |
| Oklahoma | 3850568 | Internal Medicine | 1,120 | 29 | 1,058 | 27 |
| Oregon | 3930065 | Internal Medicine | 2,184 | 56 | 2,068 | 53 |

³⁴ American Medical Association, “Physician Characteristics and Distribution in the US,” 2014 Edition.

| | | | | | | |
|----------------------|--------------------|--------------------------|----------------|-----------|----------------|-----------|
| Pennsylvania | 12773801 | Internal Medicine | 7,838 | 61 | 7,241 | 57 |
| Rhode Island | 1051511 | Internal Medicine | 970 | 92 | 915 | 87 |
| South Carolina | 4774839 | Internal Medicine | 1,774 | 37 | 1,687 | 35 |
| South Dakota | 844877 | Internal Medicine | 345 | 41 | 321 | 38 |
| Tennessee | 6495978 | Internal Medicine | 3,315 | 51 | 3,155 | 49 |
| Texas | 26448193 | Internal Medicine | 9,775 | 37 | 9,317 | 35 |
| Utah | 2900872 | Internal Medicine | 820 | 28 | 773 | 27 |
| Vermont | 626630 | Internal Medicine | 425 | 68 | 389 | 62 |
| Virginia | 8260405 | Internal Medicine | 4,065 | 49 | 3,844 | 47 |
| Washington | 6971406 | Internal Medicine | 3,277 | 47 | 3,043 | 44 |
| West Virginia | 1854304 | Internal Medicine | 734 | 40 | 702 | 38 |
| Wisconsin | 5742713 | Internal Medicine | 2,657 | 46 | 2,514 | 44 |
| Wyoming | 582658 | Internal Medicine | 139 | 24 | 135 | 23 |
| United States | 315,482,390 | Internal Medicine | 167,894 | 53 | 157,600 | 50 |

Appendix 6 - New York State Counties' Estimated Population Changes, 2004-2013³⁵

| County | July 1, 2013 | July 1, 2004 | % Ch |
|-----------------------------------|-------------------|-------------------|--------------|
| New York State | 19,651,127 | 19,227,088 | 2.21% |
| Albany County, New York | 306,945 | 298,432 | 2.85% |
| Allegany County, New York | 48,109 | 50,575 | -4.88% |
| Bronx County, New York | 1,418,733 | 1,365,536 | 3.90% |
| Broome County, New York | 197,534 | 197,696 | -0.08% |
| Cattaraugus County, New York | 78,892 | 83,179 | -5.15% |
| Cayuga County, New York | 79,477 | 81,916 | -2.98% |
| Chautauqua County, New York | 133,080 | 137,267 | -3.05% |
| Chemung County, New York | 88,506 | 89,984 | -1.64% |
| Chenango County, New York | 49,503 | 51,861 | -4.55% |
| Clinton County, New York | 81,591 | 81,875 | -0.35% |
| Columbia County, New York | 62,243 | 63,668 | -2.24% |
| Cortland County, New York | 48,976 | 49,006 | -0.06% |
| Delaware County, New York | 46,722 | 47,328 | -1.28% |
| Dutchess County, New York | 296,916 | 293,395 | 1.20% |
| Erie County, New York | 919,866 | 936,318 | -1.76% |
| Essex County, New York | 38,762 | 38,901 | -0.36% |
| Franklin County, New York | 51,688 | 51,009 | 1.33% |
| Fulton County, New York | 54,586 | 55,463 | -1.58% |
| Genesee County, New York | 59,454 | 59,689 | -0.39% |
| Greene County, New York | 48,455 | 49,195 | -1.50% |
| Hamilton County, New York | 4,773 | 5,227 | -8.69% |
| Herkimer County, New York | 64,181 | 63,858 | 0.51% |
| Jefferson County, New York | 119,504 | 111,467 | 7.21% |
| Kings County, New York | 2,592,149 | 2,475,290 | 4.72% |
| Lewis County, New York | 27,149 | 26,564 | 2.20% |
| Livingston County, New York | 64,705 | 64,819 | -0.18% |
| Madison County, New York | 72,382 | 70,407 | 2.81% |
| Monroe County, New York | 749,606 | 735,177 | 1.96% |
| Montgomery County, New York | 49,897 | 49,283 | 1.25% |
| Nassau County, New York | 1,352,146 | 1,339,641 | 0.93% |
| New York County, New York | 1,626,159 | 1,562,723 | 4.06% |
| Niagara County, New York | 214,249 | 218,060 | -1.75% |
| Oneida County, New York | 233,585 | 234,962 | -0.59% |
| Onondaga County, New York | 468,387 | 459,805 | 1.87% |
| Ontario County, New York | 109,103 | 103,504 | 5.41% |

³⁵ Sources: Annual Estimates of the Population for Counties of New York: April 1, 2000 to July 1, 2004, Population Division, U.S. Census Bureau, Release Date: April 14, 2005, see: <https://www.census.gov/popest/data/counties/totals/2004/CO-EST2004-01.html>. Annual Estimates of the Population for Counties of New York: April 1, 2010 to July 1, 2013, Population Division, U.S. Census Bureau, Release Date: March, 2014, see: <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>. Counties listed in bold face are those in which the estimated population increase exceeded the state average.

| | | | |
|-------------------------------------|------------------|------------------|--------------|
| Orange County, New York | 375,592 | 370,352 | 1.41% |
| Orleans County, New York | 42,235 | 44,138 | -4.31% |
| Oswego County, New York | 121,165 | 123,776 | -2.11% |
| Otsego County, New York | 61,683 | 62,518 | -1.34% |
| Putnam County, New York | 99,645 | 100,570 | -0.92% |
| Queens County, New York | 2,296,175 | 2,237,216 | 2.64% |
| Rensselaer County, New York | 159,918 | 154,077 | 3.79% |
| Richmond County, New York | 472,621 | 463,314 | 2.01% |
| Rockland County, New York | 320,903 | 293,626 | 9.29% |
| St. Lawrence County, New York | 111,963 | 111,306 | 0.59% |
| Saratoga County, New York | 223,865 | 212,706 | 5.25% |
| Schenectady County, New York | 155,333 | 148,042 | 4.92% |
| Schoharie County, New York | 31,844 | 32,012 | -0.52% |
| Schuyler County, New York | 18,460 | 19,505 | -5.36% |
| Seneca County, New York | 35,409 | 35,075 | 0.95% |
| Steuben County, New York | 98,650 | 98,814 | -0.17% |
| Suffolk County, New York | 1,499,738 | 1,475,488 | 1.64% |
| Sullivan County, New York | 76,665 | 76,110 | 0.73% |
| Tioga County, New York | 50,243 | 51,535 | -2.51% |
| Tompkins County, New York | 103,617 | 100,135 | 3.48% |
| Ulster County, New York | 180,998 | 181,779 | -0.43% |
| Warren County, New York | 65,337 | 65,147 | 0.29% |
| Washington County, New York | 63,093 | 62,807 | 0.46% |
| Wayne County, New York | 92,473 | 93,861 | -1.48% |
| Westchester County, New York | 968,802 | 942,444 | 2.80% |
| Wyoming County, New York | 41,531 | 42,986 | -3.38% |
| Yates County, New York | 25,156 | 24,669 | 1.97% |