



RHODE ISLAND  
FOUNDATION

# Rhode Island Primary Care Providers Implications of Health Reform

Working Paper  
October 31, 2013  
(Updated)

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## Executive Summary

The implementation of the Affordable Care Act (ACA) is expected to substantially raise the numbers of Americans with health insurance across the country. Primary care provider (PCP) shortages have been predicted to intensify as a result of the national health reform. This working paper seeks to answer the following research questions: How many PCPs are practicing in Rhode Island? How many are needed? What is the potential impact of health reform on the primary care workforce?

The Area Health Resource File 2012-2013 serves as the data source from which statewide and county PCP-per-population ratios are calculated. Selected benchmarks include: 1) threshold for Health Resources and Services Administration (HRSA) Health Professional Shortage Area (HPSA) and 2) optimal range of PCPs as recommended by the Council on Graduate Medical Education (COGME). The number of uninsured residents who are expected to gain health insurance coverage in Rhode Island under the ACA legislation is also reported.

Primary care provider ratios were compared to the PCP ratios needed for the expected uninsured Rhode Islanders who will be newly-eligible for health insurance under ACA. In 2011, Rhode Island had 117 primary care providers statewide per 100,000 persons, ranging by county from 93 to 178 PCPs per 100,000 persons. An analysis of the HRSA shortage threshold of 50 PCPs per 100,000 suggests that Rhode Island does currently have an adequate number of health professionals who practice primary care statewide. According to these figures, which include physicians and physician assistants, the state will be able to accommodate the expected additions of insured residents based on the HRSA benchmarks.

Rhode Island also has a current statewide primary care physician ratio sufficient relative to the COGME benchmark. However, the COGME analysis indicates that the state has less capacity to absorb incoming patients with regard to physicians. In 2011, Rhode Island had 92 primary care physicians (non-resident medical doctors and non-resident doctors of osteopathic medicine) per 100,000 persons, ranging widely by county from 71 to 174 physicians per 100,000 persons. These primary care physician ratios do not exceed the COGME benchmark to the same extent as the HRSA benchmarks. This is due to the exclusion of physician assistants in the COGME calculations. The counties with lower physician ratios should plan to investigate physician locations and consider strategies to facilitate the access of primary care providers across Rhode Island counties.

There are a number of limitations to this analysis. PCP accessibility among medically underserved areas and populations, medical student specialty selection, and physician retirement rate, and which medical professions to include as primary care providers, are issues that should be considered in the assessment of the primary care workforce.



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## Background

Primary care is recognized as an essential part of the health care system that contributes to lower costs, improvements in quality and expanded access to care (The Robert Wood Johnson Foundation, 2011). Primary care plays a critical role in Rhode Island in creating and maintaining a robust statewide system that delivers affordable and quality health care (Koller, Brennan, & Bailit, 2010; The Robert Wood Johnson Foundation, 2011).

The full implementation of the Affordable Care Act in 2014 is expected to increase the number of persons with health insurance across the nation, and lead to a significant rise in the demand for primary care services. As a result, there has been concern about primary care physician shortages predicted to intensify as a result of health reform (The New York Times, 2012; Reinhardt, 2012; The Washington Post, 2012).

It is estimated that 27.8 million nonelderly adults will enroll in health insurance across the country as a result of the Affordable Care Act, and the uninsurance rate is expected to fall from 18.6 to 8.3 percent (The Robert Wood Johnson Foundation; The Urban Institute, 2010). While the number of uninsured in the U.S. is projected to decline for all income categories, the greatest decline is expected in the lowest-income population (The Robert Wood Johnson Foundation; The Urban Institute, 2010).

This working paper provides information about the current number of primary care providers (PCPs) in Rhode Island, and discusses the impact of the implementation of the Affordable Care Act on the primary care workforce in Rhode Island. The following three questions will be addressed:

- ✚ **How many primary care providers are currently practicing in RI per 100,000 population?**
- ✚ **How many PCPs are needed?**
- ✚ **What impact will the health care reform have on the number of primary care providers?**

## Number of Primary Care Providers (PCPs) in Rhode Island

### ✚ How many primary care providers are practicing in RI per 100,000 population?

According to data reported in the Health Resources and Services Administration (HRSA) Area Health Resource File (AHRF) 2012-2013, the number of **primary care providers** statewide in **Rhode Island** is **117.3 per 100,000 persons**.

While the number of primary care providers is 117.3 per 100,000 on average across the state, the number varied by county. The county with the lowest PCP ratio is **Kent County, at 93.6 per 100,000**, and the highest is **Bristol County, at 178.7 per 100,000**.

Table 1 presents primary care provider numbers and ratios for each of the counties in Rhode Island, as reported by the Health Resources and Services Administration (HRSA). The primary care providers reported by HRSA includes non-federal medical doctors (MD), doctors of osteopathic medicine (DO) and physician assistants (PA). The HRSA primary care provider designation excludes hospital residents, and inactive physician assistants. These figures also do not include nurse practitioners, as HRSA does to include nurse practitioners in their operational definition of primary care provider. The census population is used to calculate the PCP-per-population ratio.

**Table 1. Primary Care Providers (MD & DO & PA) in Rhode Island (2011)**

	# Primary Care Providers (PCPs) <sup>†</sup>	Census Population	2011 PCPs per 100,000 population
<b>Rhode Island</b>	<b>1,233</b>	<b>1,051,302</b>	<b>117.3</b>
Bristol County	89	49,800	178.7
Kent County	155	165,535	93.6
Newport County	79	82,695	95.5
Providence County	772	62,6709	123.2
Washington County	138	126,563	109.0

Source: Health Resources and Services Administration (HRSA), *Area Health Resource File 2012-2013* (AHRF), retrieved from <http://arf.hrsa.gov/>.

<sup>†</sup>The Area Health Resource File (AHRF) is compiled by the Health Services and Resources Administration (HRSA). The most recent AHRF (2012-2013) reports 2011 primary care provider figures. AHRF includes the following health professions under primary care: medical doctors (MD), doctors of osteopathic medicine (DO), and physician assistants (PA). The primary care providers in Table 1 includes the total number of: non-federal, non-resident MDs and DOs, and active physician's assistants. The calculation excludes: physician/MD/DO hospital residents and inactive physician assistants. The AHRF does not include nurse practitioner data in primary care providers. The ratio per 100,000 is calculated using 2011 Rhode Island projected census data accessed from the same file (AHRF 2012-2013).

## Number of Primary Care Providers Needed

### How many PCPs are needed?

Since a single guideline has not been identified for determining how many primary care providers are needed per population, two benchmarks are used: 1) the Health Resources and Services Administration's (HRSA) Health Professional Shortage Area (HPSA) threshold for primary care, and 2) the Council on Medical Graduate Education's (COGME) recommended optimal range of Primary Care Physicians.

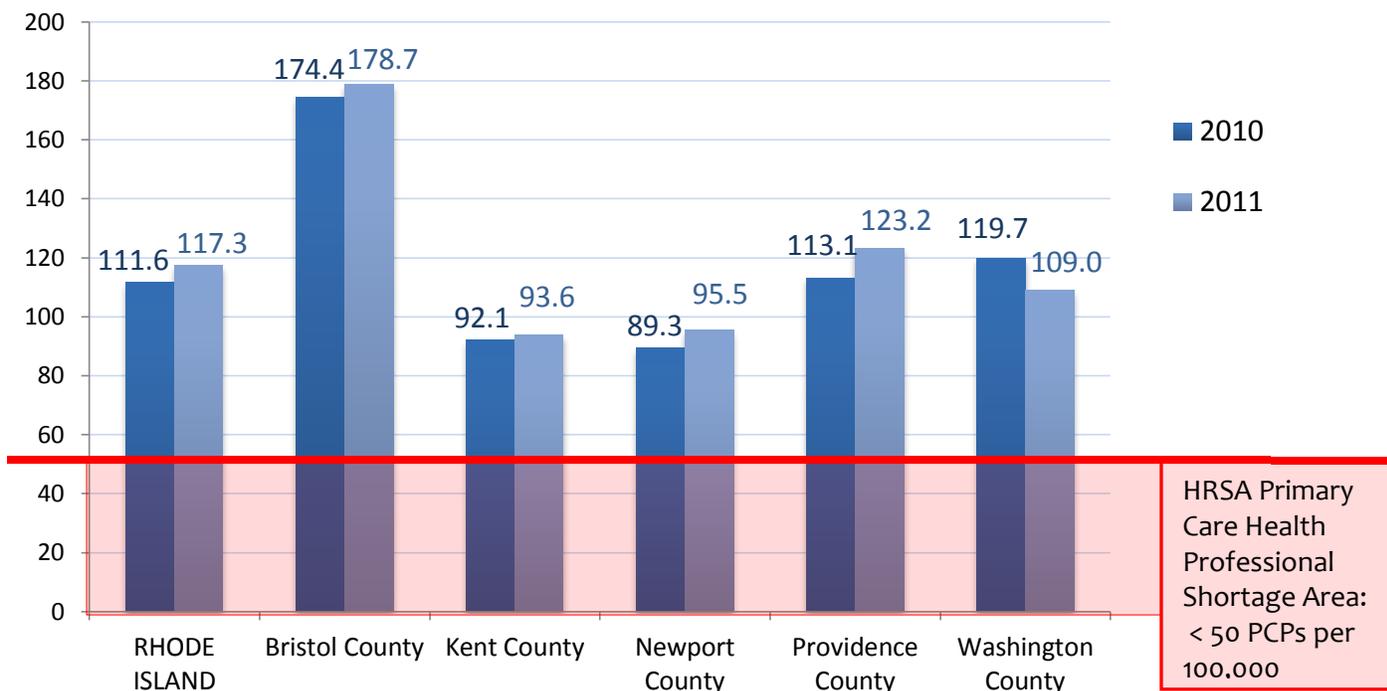
The Health Resources and Services Administration (HRSA) is the primary Federal agency for improving access to health care services for people who are uninsured and medically underserved. The Health Resources and Services Administration (HRSA) designates Health Professional Shortage Areas (HPSA) by geographical area and facility within each state. The primary care Health Professional Shortage Area (HPSA) designation is based on a population-to-provider threshold of 2,000:1. This ratio of 2,000 population to 1 provider calculates to **50 primary care providers per 100,000 population**. It is important to note that HRSA includes 1) non-resident medical doctors (MDs) and 2) non-resident doctors of osteopathy (DOs), as well as 3) active physician assistants (PAs), in its operational definition of primary care provider. In contrast, COGME does not consider physician assistants as it only indicates primary care physicians.

Under the HPSA designation, an area or facility that has less than 50 primary care providers per 100,000 is considered a professional shortage area. Conversely, an area or facility with 50 providers or more per 100,000 is not considered a primary care shortage area. Since this ratio is used to determine shortage (rather than the optimum), it represents an upper limit to determine whether an area has a PCP shortage, and a lower limit to determine whether there are enough PCPs to adequately serve the population.

The Council on Graduate Medical Education (COGME) is an advisory committee that was authorized by Congress to provide an ongoing assessment of physician workforce trends, training issues and financing policies, and to recommend appropriate federal and private sector efforts to address identified needs.

The Council on Graduate Medical Education (COGME) suggests that the required number of primary care physicians (generalists) to meet population needs range between **60 to 80 physicians per 100,000 population** (Council on Graduate Medical Education, 1996; The New York Times, 2012). COGME based this recommendation on several research studies which provide projections of patient care needs, and estimate the required number of generalists and specialist physicians based on those projections.

**Graph 1: Primary Care Providers (Physicians & PAs) in Rhode Island & HRSA Benchmark MD & DO & Physician Assistants to 100,000 Population 2010-2011**



Sources: Health Resources and Services Administration (HRSA), *Area Resource File 2011-2012 (ARF) & Area Health Resource File 2012-2013 (AHRF)*, retrieved from <http://arf.hrsa.gov/>. Health Resources and Services Administration: *Primary Medical Care HPSA Designation Overview* <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/primarycarehpsaoverview.html>

As shown in the Graph 1, **the most recent statewide primary care provider-to-population ratio is reported to be 117.3 per 100,000**. The primary care provider-to-population ratios across Rhode Island counties range between 93.6 and 178.7 per 100,000. According to HRSA, the primary care provider-to-population ratio exceeds the benchmark of 50 per 100,000, by over 100% across the state of Rhode Island, and by 80 to over 200% within each of the five counties.

While no county as a whole in the state of Rhode Island has been designated by HRSA as primary care Health Professional Shortage Areas (HPSA), HRSA has designated **specific cities and health care facilities within Newport, Providence and Washington Counties as Health Professional Shortage Areas (HPSA)**, as these locations and facilities have less than the required number of primary care professionals to serve the population. The complete list of HRSA primary care Health Professional Shortage Areas (HPSA) by county appears in Table 2.

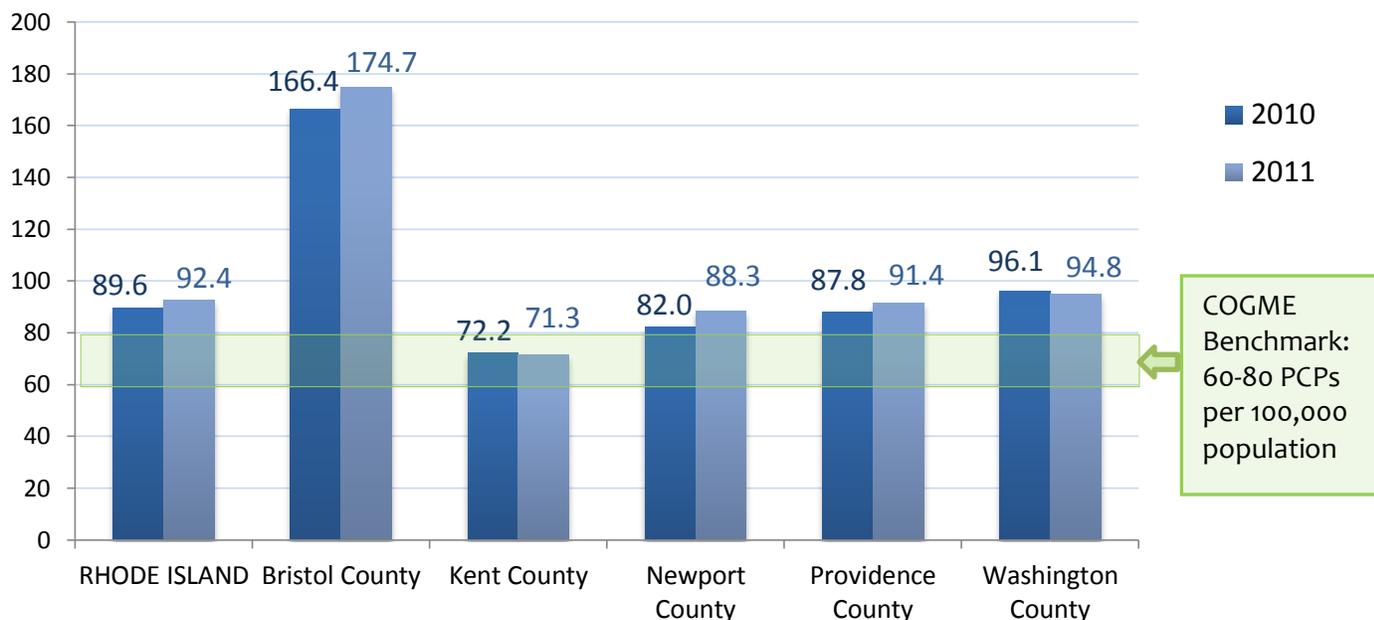
**Table 2. Primary Care Health Professional Shortage Areas in Rhode Island (2013)**

Primary Care Health Professional Shortage Area (HPSA)	Type
<b>Bristol County</b>	
None	
<b>Kent County</b>	
None	
<b>Newport County</b>	
East Bay Community Action Program	Comprehensive Health Center
<b>Providence County</b>	
Rhode Island Adult Correctional Institution	Correctional Facility
Woonsocket City	Minor Civil Division
Providence City	Minor Civil Division
Central Falls City	Minor Civil Division
Pawtucket City	Minor Civil Division
Thundermist Healthcare	Comprehensive Health Center
Blackstone Valley Community Healthcare	Comprehensive Health Center
Providence Community Health Center	Comprehensive Health Center
Northwest Community Health Center	Comprehensive Health Center
Chad Brown Health Center	Federally Qualified Health Center Look A Like
Tri-Town Community Action Program	Comprehensive Health Center
Comprehensive Community Action, Inc.	Comprehensive Health Center
<b>Washington County</b>	
Bayside Family Healthcare, Inc.	Federally Qualified Health Center Look A Like
Wood River Health Services	Comprehensive Health Center
Narragansett Indian Tribe Health Program	Native American Tribal Population

Source: Health Resources and Services Administration (HRSA), *Find Shortage Areas: HPSA by State & County*, retrieved October 31, 2013 from <http://hpsafind.hrsa.gov/HPSASearch.aspx>.

With respect to physicians, COGME suggests that adequate primary care physician ratios range between 60 to 80 per 100,000 population. Based on data from the Area Health Resource File (AHRF), the statewide primary care physician (MDs and DOs) ratio in Rhode Island exceeds the COGME 60-80 benchmark. As shown in Graph 2, the statewide primary care physician ratio stands at 92.4 per 100,000 population. By county, the primary care physician ratio varies widely. In Bristol County, the ratio is well above the COGME 60-80 benchmark at 174.7 primary care physicians per 100,000. In contrast, in Kent County, the ratio is considerably lower at 71.3 primary care physicians per 100,000. The remaining counties, Newport, Providence and Washington Counties, have primary care physician ratios that are a modest amount greater than the COGME benchmark, at 88.3-94.8 primary care physicians per 100,000.

**Graph 2: Primary Care Providers (Physicians Only) in Rhode Island & COGME Benchmark  
MDs & DOs to 100,000 Population 2010-2011**



Sources: Health Resources and Services Administration (HRSA), *Area Resource File 2011-2012 (ARF) & Area Health Resource File 2012-2013 (AHRF)*, retrieved from <http://arf.hrsa.gov/>. Council on Graduate Medical Education (1996), *Patient Care Physician Supply and Requirements: Testing COGME Recommendations*.

## Impact of the Affordable Care Act (ACA) on the PCP Workforce

### What impact will the health care reform have on the number of primary care providers?

As presented in Table 3, **125,029 Rhode Islanders under the age of 65 are without health insurance**, which represents 14.3% of the statewide, non-elderly population (The Economic Progress Institute, 2013). Providence County has had the highest uninsurance rate of over 15%, and largest population of uninsured is Providence County at over 80,000 persons (Health Resources and Services Administration, 2012-2013). Seventy percent of Rhode Island's total uninsured population resides in Providence County. The number of uninsured Rhode Islanders statewide who are expected to gain eligibility to health insurance under the Affordable Care Act (ACA) is estimated at 45,000 as a result of Medicaid expansion, and 44,000 from the RI Healthcare Exchange. Therefore, the total number of Rhode Islanders expected gain eligibility for health insurance under ACA equals 89,000 residents. (The Economic Progress Institute, 2013)

**Table 3. Rhode Island’s Uninsurance Rates (2012) & PCPs to Population of Newly-Eligible for Health Insurance Under ACA**

	Persons < 65 without Health Insurance (2012)	< 65 Uninsurance Rate (2012)	Estimated Newly Eligible for Coverage via ACA-RI Medicaid Expansion	Estimated Newly Eligible for Coverage via RI Healthcare Exchange	Total Rhode Islanders Estimated Newly Eligible for Coverage Under ACA
<b>Rhode Island Statewide</b>	<b>125,029</b>	<b>14.3%</b>	<b>45,000</b>	<b>44,000</b>	<b>89,000</b>
<b>Primary care physicians needed for Rhode Islanders who will become newly eligible for health insurance coverage under ACA<sup>‡</sup></b>			<b>27.0 - 36.0</b>	<b>26.4 - 35.2</b>	<b>53.4 - 71.2</b>

Sources: The Economic Progress Institute (2013 Sept) *Press Release: 125,000 Rhode Islanders under Age 65 Lacked Health Insurance in 2012*. <http://www.economicprogressri.org>. Council on Graduate Medical Education (1996), *Patient Care Physician Supply and Requirements: Testing COGME Recommendations*.

<sup>‡</sup> The number of PCPs needed is calculated using COGME benchmark of 60-80 PCPs per 100,000 and the estimated number of uninsured Rhode Islanders who will gain eligibility for coverage, as reported by The Economic Progress Institute.

The bottom row of Table 3 shows the number of primary care physicians that would be needed to serve the newly-eligible Rhode Islanders under ACA. The primary care physicians to serve the incoming patients were calculated with the COGME benchmark of 60-80 primary care physicians per 100,000. The results show that Rhode Island needs 27-36 primary care physicians to adequately serve the influx of Rhode Islanders eligible under Medicaid expansion, and 26-35 physicians to serve Rhode Islanders eligible in the Healthcare Exchange. In total, the state would need 53-71 primary care physicians to adequately serve 100% of uninsured Rhode Islanders who are expected to gain access to health insurance in the next few years.

It is important to highlight the assumption that ACA implementation will yield 100% enrollment of the newly-eligible Rhode Islanders. In the case in which less than 100% of newly-eligible Rhode Islanders enroll, the need for physicians would still exist. However, the need would likely to be expected in other parts of the health care system, such as in urgent or emergent care. In any case, the number of primary care physicians who are needed for the newly-eligible Rhode Islanders could be partially absorbed by the current primary care workforce. The capacity for Rhode Island to absorb at least part of the need for primary care providers can be seen in Graph 1, which shows that Rhode Island exceeds the HRSA benchmark for primary care health professionals in each county by about 80-200%, and statewide by over 100%. As seen in Graph 2, on the other hand, the COGME benchmark indicates that the state has less capacity to absorb incoming patients with regard to physicians. Therefore, the areas with lower physician ratios should plan to investigate physician locations and consider strategies to facilitate the access of primary care providers across Rhode Island counties.

Although the analyses can provide a general sense of the number of Rhode Islanders expected to access health insurance under the Affordable Care Act, there are of course limitations to the approaches. As mentioned, there is no certainty that the estimated number of uninsured will enroll in health insurance and there are likely to be differences by county. Also, the statewide and county data available do not account for distribution of providers and concentration of uninsurance rates within counties. There will be even greater need placed on the primary care workforce in medically underserved communities. In addition, there are various other factors that may impact demand of the primary care services, such as changing demographics, including aging and growing populations, and changes in service delivery, such as the adoption of innovative technology and new practice models. (The Robert Wood Johnson Foundation, 2011). Furthermore, this scenario does not take into account the retirement rate of physicians. According to the Association of American Medical Colleges, 25%, or 1 in 4 of physicians in Rhode Island will reach retirement age in the next 5 years, which means about 825 active physicians will be expected to exit the health care workforce. (Association of American Medical Colleges, 2011)

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## Conclusion

This working paper presented information about the current number of primary care providers in Rhode Island. According to the Health Resources and Services Administration (HRSA) the state has an average of 117.3 primary care providers (physicians and physician assistants) per 100,000 population. This ratio varies by county. The county with the lowest PCP-to-population ratio is in Kent County, at 93.6 per 100,000. The county with the highest ratio is Bristol County, at 178.7 per 100,000.

Two benchmarks have been used to determine the need of primary care providers per population. The first is the Health Professional Shortage Area (HPSA) threshold. The threshold of 50 providers per 100,000 population is used by the Health Resources and Services Administration to designate HPSA primary care shortage areas. The second is the Council on Medical Graduate Education (COGME) benchmark for optimal number of primary care physicians (generalists) per population. The COGME benchmark is a range between 60 to 80 primary care providers per 100,000 population.

The impact of health care reform on the need for physicians is a complex issue, as there are multiple factors and uncertainties. However, a starting point can be found in an analysis of the number of uninsured Rhode Islanders who would gain eligibility for health insurance under ACA. The Economic Progress Institute has estimated that 45,000 uninsured Rhode Islanders will be newly eligible in the Medicaid expansion, and 44,000 uninsured Rhode Islanders will be able to gain health insurance coverage in the RI Healthcare Exchange.

As previously mentioned, Rhode Island has 117.3 primary care providers (physicians and physician assistants) per 100,000 population. This exceeds the HRSA benchmark by 67 PCPs per 100,000, which is over 100%. According to the HRSA health profession shortage area benchmark for primary care, the current level of primary care workforce in Rhode Island appears to have the capacity to serve the expected influx of new patients.

However, assuming 100% enrollment of the total anticipated 89,000 newly-eligible Rhode Islanders, the number of primary care physicians (medical doctors and doctors of osteopathic medicine) needed to serve the total number would be 53-71 primary care physicians, according to the COGME benchmark. This method of analysis on the number of primary care physicians needed for only the newly-eligible Rhode Islanders allows for the current primary care physician ratios to remain constant. In this approach, we can see that the need for 53-71 primary care physicians will be positively offset by the statewide primary care provider workforce which exceeds the benchmarks, and at the same time, negatively offset by the expected 25% retirement rate of physicians over the next few years. In the end, there is an indication for the need to increase primary care physician and medical profession workforce in the state to meet the anticipated demand that will arise due to ACA and changing demographics.

This analysis has provided an idea about the possible scope of the impact from health reform; however, there are limitations to the analysis. A discussion of various concerns appears below.

- The analysis presented does not take into account the geographic and institutional distribution of providers in relation to populations within Rhode Island.
- Specific communities in Rhode Island will likely have a greater need for additional providers as a result of health reform.
- Medically underserved communities, which already experience unmet needs for primary care, should be considered in assessing need for primary care.
- Communities with growing and aging populations are expected to see a rise in the demand for primary care services.
- Provider characteristics and behaviors represent an uncertain factor, for example physician retirement rates, number of new physicians choosing generalist versus specialist practices, and changes in medical education policies, may influence the overall number of primary care physicians over time.
- The adoption of innovative health information technology and service delivery models can lead to more efficient health systems, which can improve the capacity of the provider workforce.

- The inclusion of qualified professionals (e.g. nurse practitioners) to the PCP category can increase primary care workforce capacity.

In addition, as discussed by the Robert Wood Johnson Foundation, the care-seeking behavior of the newly insured is not well known. Individuals who are currently uninsured may seek primary care services more or less than those who are currently insured. (The Robert Wood Johnson Foundation, 2011)

Many factors and uncertainties make it difficult to predict the impact of the implementation of national health reform in 2014, not to mention the limitations in data and models of analysis, as well as an uncertainty as to future political and legislative changes.

However, with the identified sources of health information, and the general benchmarks that are presented in this working paper, it is possible start to assess the scope of the issue, examine trends and continue to research, evaluate and build on the contents as health reform unfolds in Rhode Island.

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