The State of Primary Care Physician Workforce
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The primary care physician (PCP) workforce is integral to the U.S. healthcare system. In order to address primary care workforce shortages and distribution challenges, stakeholders at the state level need accurate information on their respective PCP workforce. With greater demands on the health system and projected PCP shortages, advocates and policymakers must be equipped with the tools to address these challenges. Up to date and relevant data is needed for informed policy decisions.

To meet this need, the Robert Graham Center created The State of Primary Care Physician Workforce series to equip state and national policymakers and practitioners with state-level information on primary care physician characteristics. Using comprehensive national data, we describe the landscape of the primary care physician workforce in all 50 states and District of Columbia. This series highlights age, gender, training origin, migration, and distribution of physicians, all in context of the states’ census division and national averages.
The State of Primary Care Physician Workforce: Alabama

Background
In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Alabama.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce
In 2018, Alabama had 2,774 PCPs in direct patient care, of which 1,203 were family physicians. In other words, 43% of its primary care workforce consisted of family physicians, compared to 38% in the East South Central Census Division and 38% nationwide. On a per capita basis, there were about 57 PCPs per 100,000 persons in Alabama, compared to 65 per 100,000 in the East South Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 38% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 47% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 10% of family physicians in the state were international medical school graduates and 8% were trained as osteopaths. While 24% of Alabama’s population lived in rural counties, 21% of family physicians work in these counties. Approximately 34% of Alabama’s residents live in underserved counties with more than 2,000 persons per PCP.

**Future Workforce**

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Alabama assess its future primary care workforce to meet the health care needs of its population.

There are 8 family medicine residency training programs in Alabama. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Alabama over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 345 family physicians; of these, 185 (54%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 68 family physicians trained in other states. Through elevated support of family medicine residency programs, Alabama can work to replenish the PCP pipeline practicing in local communities.


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<td>Percent Total State Population in Underserved County**</td>
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*US Census Bureau East South Central Census Division States: AL, KY, MS, TN
**Underserved counties had a population to PCP ratio greater than 2,000:1.

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The State of Primary Care Physician Workforce: Alaska

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Alaska.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Alaska had 617 PCPs in direct patient care, of which 394 were family physicians. In other words, 64% of its primary care workforce consisted of family physicians, compared to 40% in the Pacific Census Division and 38% nationwide. On a per capita basis, there were about 83 PCPs per 100,000 persons in Alaska, compared to 81 per 100,000 in the Pacific and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 51% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 38% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 3% of family physicians in the state were international medical school graduates and 18% were trained as osteopaths. While 32% of Alaska’s population lived in rural counties, 36% of family physicians work in these counties. Approximately 5% of Alaska’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Alaska assess its future primary care workforce to meet the health care needs of its population.

There is just one family medicine residency training program in Alaska. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Alaska over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 80 family physicians; of these, 47 (59%) stayed in-state. The loss of state-trained family physicians is offset by the inmigration of 52 family physicians trained in other states. Through elevated support of family medicine residency programs, Alaska can work to replenish the PCP pipeline practicing in local communities.

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Characteristics of Family Physicians and PCPs

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*US Census Bureau Pacific Census Division States: AK, CA, HI, OR
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The State of Primary Care Physician Workforce: Arizona

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Arizona.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Arizona had 4,001 PCPs in direct patient care, of which 1,713 were family physicians. In other words, 43% of its primary care workforce consisted of family physicians, compared to 40% in the Mountain Census Division and 38% nationwide. On a per capita basis, there were about 57 PCPs per 100,000 persons in Arizona, compared to 69 per 100,000 in the Mountain and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 42% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 44% of family physicians were over the age of 55, equal to the nationwide percentage of 44%.
In 2018, about 13% of family physicians in the state were international medical school graduates and 17% were trained as osteopaths. While 5% of Arizona’s population lived in rural counties, 7% of family physicians work in these counties. Approximately 12% of Arizona’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Arizona assess its future primary care workforce to meet the health care needs of its population.

There are 9 family medicine residency training programs in Arizona. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Arizona over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 280 family physicians; of these, 135 (48%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 149 family physicians trained in other states. Through elevated support of family medicine residency programs, Arizona can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Arkansas

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Arkansas.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Arkansas had 1,782 PCPs in direct patient care, of which 1,066 were family physicians. In other words, 60% of its primary care workforce consisted of family physicians, compared to 38% in the West South Central Census Division and 38% nationwide. On a per capita basis, there were about 59 PCPs per 100,000 persons in Arkansas, compared to 63 per 100,000 in the West South Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 32% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 44% of family physicians were over the age of 55, equal to the nationwide percentage of 44%.
In 2018, about 8% of family physicians in the state were international medical school graduates and 8% were trained as osteopaths. While 38% of Arkansas’s population lived in rural counties, 33% of family physicians work in these counties. Approximately 30% of Arkansas’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Arkansas assess its future primary care workforce to meet the health care needs of its population.

There are 8 family medicine residency training programs in Arkansas. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Arkansas over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 381 family physicians; of these, 189 (50%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 36 family physicians trained in other states. Through elevated support of family medicine residency programs, Arkansas can work to replenish the PCP pipeline practicing in local communities.
Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in California.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, California had 28,644 PCPs in direct patient care, of which 10,363 were family physicians. In other words, 36% of its primary care workforce consisted of family physicians, compared to 40% in the Pacific Census Division and 38% nationwide. On a per capita basis, there were about 72 PCPs per 100,000 persons in California, compared to 81 per 100,000 in the Pacific and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 47% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 14% of family physicians in the state were international medical school graduates and 8% were trained as osteopaths. While 2% of California’s population lived in rural counties, 2% of family physicians work in these counties. Approximately 12% of California’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help California assess its future primary care workforce to meet the health care needs of its population.

There are 60 family medicine residency training programs in California. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for California over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 2205 family physicians; of these, 1363 (62%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 605 family physicians trained in other states. Through elevated support of family medicine residency programs, California can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Colorado.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Colorado had 4,136 PCPs in direct patient care, of which 2,078 were family physicians. In other words, 50% of its primary care workforce consisted of family physicians, compared to 40% in the Mountain Census Division and 38% nationwide. On a per capita basis, there were about 74 PCPs per 100,000 persons in Colorado, compared to 69 per 100,000 in the Mountain and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 49% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 39% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 4% of family physicians in the state were international medical school graduates and 14% were trained as osteopaths. While 13% of Colorado’s population lived in rural counties, 15% of family physicians work in these counties. Approximately 3% of Colorado’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Colorado assess its future primary care workforce to meet the health care needs of its population.

There are 14 family medicine residency training programs in Colorado. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Colorado over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 426 family physicians; of these, 214 (50%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 158 family physicians trained in other states. Through elevated support of family medicine residency programs, Colorado can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Connecticut

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Connecticut.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Connecticut had 2,587 PCPs in direct patient care, of which 509 were family physicians. In other words, 20% of its primary care workforce consisted of family physicians, compared to 26% in the New England Census Division and 38% nationwide. On a per capita basis, there were about 72 PCPs per 100,000 persons in Connecticut, compared to 98 per 100,000 in the New England and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 46% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 48% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 13% of family physicians in the state were international medical school graduates and 6% were trained as osteopaths. While 5% of Connecticut’s population lived in rural counties, 4% of family physicians work in these counties. Approximately 4% of Connecticut’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Connecticut assess its future primary care workforce to meet the health care needs of its population.

There are 4 family medicine residency training programs in Connecticut. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Connecticut over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 119 family physicians; of these, 49 (41%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 51 family physicians trained in other states. Through elevated support of family medicine residency programs, Connecticut can work to replenish the PCP pipeline practicing in local communities.
Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Delaware.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Delaware had 641 PCPs in direct patient care, of which 269 were family physicians. In other words, 42% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 67 PCPs per 100,000 persons in Delaware, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 50% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 40% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 14% of family physicians in the state were international medical school graduates and 17% were trained as osteopaths. None of Delaware’s counties are classified as rural so, by definition, there were no rural physicians. None of Delaware’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Delaware assess its future primary care workforce to meet the health care needs of its population.

There are 2 family medicine residency training programs in Delaware. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Delaware over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 83 family physicians; of these, 21 (25%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 19 family physicians trained in other states. Through elevated support of family medicine residency programs, Delaware can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in District of Columbia.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, District of Columbia had 937 PCPs in direct patient care, of which 184 were family physicians. In other words, 20% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 135 PCPs per 100,000 persons in District of Columbia, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 58% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 38% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 7% of family physicians in the state were international medical school graduates and 3% were trained as osteopaths. None of District of Columbia’s counties are classified as rural so, by definition, there were no rural physicians. None of District of Columbia’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help District of Columbia assess its future primary care workforce to meet the health care needs of its population.

There is just one family medicine residency training program in District of Columbia. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for District of Columbia over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 102 family physicians; of these, 10 (10%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 28 family physicians trained in other states. Through elevated support of family medicine residency programs, District of Columbia can work to replenish the PCP pipeline practicing in local communities.


### Characteristics of Family Physicians and PCPs

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*US Census Bureau South Atlantic Census Division States: DE, DC, FL, GA, MD, NC, SC, VA, WV

**Underserved counties had a population to PCP ratio greater than 2,000:1.
The State of Primary Care Physician Workforce: Florida

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Florida.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Florida had 13,662 PCPs in direct patient care, of which 4,914 were family physicians. In other words, 36% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 65 PCPs per 100,000 persons in Florida, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 40% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 49% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 17% of family physicians in the state were international medical school graduates and 13% were trained as osteopaths. While 3% of Florida’s population lived in rural counties, 3% of family physicians work in these counties. Approximately 6% of Florida’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency.\(^3\) National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Florida assess its future primary care workforce to meet the health care needs of its population.

There are 23 family medicine residency training programs in Florida. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Florida over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 687 family physicians; of these, 348 (51%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 525 family physicians trained in other states. Through elevated support of family medicine residency programs, Florida can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce:
Georgia

Background
In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Georgia.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce
In 2018, Georgia had 5,993 PCPs in direct patient care, of which 2,260 were family physicians. In other words, 38% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 57 PCPs per 100,000 persons in Georgia, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 46% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 42% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

Age Distribution of Family Physicians, by Gender

Distribution of Primary Care Physicians, by Specialty

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In 2018, about 11% of family physicians in the state were international medical school graduates and 7% were trained as osteopaths. While 17% of Georgia’s population lived in rural counties, 17% of family physicians work in these counties. Approximately 32% of Georgia’s residents live in underserved counties with more than 2,000 persons per PCP.

**Future Workforce**

Evidence indicates that physicians are more likely to practice in the state in which they completed residency.\(^3\) National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Georgia assess its future primary care workforce to meet the health care needs of its population.

There are 16 family medicine residency training programs in Georgia. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Georgia over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 524 family physicians; of these, 242 (46%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 199 family physicians trained in other states. Through elevated support of family medicine residency programs, Georgia can work to replenish the PCP pipeline practicing in local communities.

**Characteristics of Family Physicians and PCPs**

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**Distribution of PCPs**

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*US Census Bureau South Atlantic Census Division States: DE, DC, FL, GA, MD, NC, SC, VA, WV
**Underserved counties had a population to PCP ratio greater than 2,000:1.


The State of Primary Care Physician Workforce: Hawaii

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in Hawaii.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Hawaii had 1,172 PCPs in direct patient care, of which 380 were family physicians. In other words, 32\% of its primary care workforce consisted of family physicians, compared to 40\% in the Pacific Census Division and 38\% nationwide. On a per capita basis, there were about 82 PCPs per 100,000 persons in Hawaii, compared to 81 per 100,000 in the Pacific and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 45\% female, which was equal to the percentage nationwide (45\%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 50\% of family physicians were over the age of 55, more than the nationwide percentage of 44\%.
In 2018, about 9% of family physicians in the state were international medical school graduates and 7% were trained as osteopaths. While 19% of Hawaii’s population lived in rural counties, 24% of family physicians work in these counties. None of Hawaii’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Hawaii assess its future primary care workforce to meet the health care needs of its population.

There are 3 family medicine residency training programs in Hawaii. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Hawaii over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 71 family physicians; of these, 20 (28%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 42 family physicians trained in other states. Through elevated support of family medicine residency programs, Hawaii can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Idaho.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Idaho had 948 PCPs in direct patient care, of which 603 were family physicians. In other words, 64% of its primary care workforce consisted of family physicians, compared to 40% in the Mountain Census Division and 38% nationwide. On a per capita basis, there were about 55 PCPs per 100,000 persons in Idaho, compared to 69 per 100,000 in the Mountain and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 35% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 38% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 3% of family physicians in the state were international medical school graduates and 19% were trained as osteopaths. While 33% of Idaho’s population lived in rural counties, 32% of family physicians work in these counties. Approximately 35% of Idaho’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Idaho assess its future primary care workforce to meet the health care needs of its population.

There are 6 family medicine residency training programs in Idaho. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Idaho over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 152 family physicians; of these, 73 (48%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 82 family physicians trained in other states. Through elevated support of family medicine residency programs, Idaho can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Illinois

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Illinois.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Illinois had 8,962 PCPs in direct patient care, of which 3,405 were family physicians. In other words, 38% of its primary care workforce consisted of family physicians, compared to 44% in the East North Central Census Division and 38% nationwide. On a per capita basis, there were about 70 PCPs per 100,000 persons in Illinois, compared to 76 per 100,000 in the East North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 47% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

Age Distribution of Family Physicians, by Gender

Distribution of Primary Care Physicians, by Specialty

- Family Physician: 3405
- General Internist: 3302
- Pediatrician: 1952
- General Practitioner: 154
- Geriatrician: 150

The information and opinions contained in research from the Graham Center do not necessarily reflect the views or policy of the AAFP.
In 2018, about 18% of family physicians in the state were international medical school graduates and 10% were trained as osteopaths. While 12% of Illinois’s population lived in rural counties, 11% of family physicians work in these counties. Approximately 24% of Illinois’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Illinois assess its future primary care workforce to meet the health care needs of its population.

There are 31 family medicine residency training programs in Illinois. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Illinois over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 1200 family physicians; of these, 510 (43%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 226 family physicians trained in other states. Through elevated support of family medicine residency programs, Illinois can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Indiana

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Indiana.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Indiana had 3,910 PCPs in direct patient care, of which 2,136 were family physicians. In other words, 55% of its primary care workforce consisted of family physicians, compared to 44% in the East North Central Census Division and 38% nationwide. On a per capita basis, there were about 59 PCPs per 100,000 persons in Indiana, compared to 76 per 100,000 in the East North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 42% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 11% of family physicians in the state were international medical school graduates and 10% were trained as osteopaths. While 22% of Indiana’s population lived in rural counties, 18% of family physicians work in these counties. Approximately 28% of Indiana’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Indiana assess its future primary care workforce to meet the health care needs of its population.

There are 14 family medicine residency training programs in Indiana. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Indiana over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 570 family physicians; of these, 298 (52%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 102 family physicians trained in other states. Through elevated support of family medicine residency programs, Indiana can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce: Iowa

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Iowa.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Iowa had 1,907 PCPs in direct patient care, of which 1,199 were family physicians. In other words, 63% of its primary care workforce consisted of family physicians, compared to 44% in the West North Central Census Division and 38% nationwide. On a per capita basis, there were about 61 PCPs per 100,000 persons in Iowa, compared to 77 per 100,000 in the West North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 44% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 39% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

Age Distribution of Family Physicians, by Gender

Distribution of Primary Care Physicians, by Specialty
In 2018, about 6% of family physicians in the state were international medical school graduates and 30% were trained as osteopaths. While 41% of Iowa’s population lived in rural counties, 35% of family physicians work in these counties. Approximately 22% of Iowa’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Iowa assess its future primary care workforce to meet the health care needs of its population.

There are 9 family medicine residency training programs in Iowa. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Iowa over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 391 family physicians; of these, 190 (49%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 78 family physicians trained in other states. Through elevated support of family medicine residency programs, Iowa can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Kansas.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Kansas had 1,793 PCPs in direct patient care, of which 1,030 were family physicians. In other words, 57% of its primary care workforce consisted of family physicians, compared to 44% in the West North Central Census Division and 38% nationwide. On a per capita basis, there were about 62 PCPs per 100,000 persons in Kansas, compared to 77 per 100,000 in the West North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 43% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 6% of family physicians in the state were international medical school graduates and 17% were trained as osteopaths. While 32% of Kansas’s population lived in rural counties, 26% of family physicians work in these counties. Approximately 15% of Kansas’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Kansas assess its future primary care workforce to meet the health care needs of its population.

There are 4 family medicine residency training programs in Kansas. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Kansas over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 272 family physicians; of these, 131 (48%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 100 family physicians trained in other states. Through elevated support of family medicine residency programs, Kansas can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce: Kentucky

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Kentucky.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Kentucky had 2,487 PCPs in direct patient care, of which 1,092 were family physicians. In other words, 44% of its primary care workforce consisted of family physicians, compared to 38% in the East South Central Census Division and 38% nationwide. On a per capita basis, there were about 56 PCPs per 100,000 persons in Kentucky, compared to 65 per 100,000 in the East South Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 41% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 9% of family physicians in the state were international medical school graduates and 9% were trained as osteopaths. While 41% of Kentucky’s population lived in rural counties, 37% of family physicians work in these counties. Approximately 36% of Kentucky’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency.\(^3\) National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce.

Understanding current primary care residency programs can help Kentucky assess its future primary care workforce to meet the health care needs of its population.

There are 8 family medicine residency training programs in Kentucky. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Kentucky over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 210 family physicians; of these, 116 (55%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 81 family physicians trained in other states. Through elevated support of family medicine residency programs, Kentucky can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce: Louisiana

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Louisiana.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Louisiana had 2,746 PCPs in direct patient care, of which 1,097 were family physicians. In other words, 40% of its primary care workforce consisted of family physicians, compared to 38% in the West South Central Census Division and 38% nationwide. On a per capita basis, there were about 59 PCPs per 100,000 persons in Louisiana, compared to 63 per 100,000 in the West South Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 40% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 42% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

Age Distribution of Family Physicians, by Gender

![Bar chart showing age distribution of family physicians by gender](image)

Distribution of Primary Care Physicians, by Specialty

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¹ The information and opinions contained in research from the Graham Center do not necessarily reflect the views or policy of the AAFP.
In 2018, about 10% of family physicians in the state were international medical school graduates and 2% were trained as osteopaths. While 16% of Louisiana’s population lived in rural counties, 14% of family physicians work in these counties. Approximately 40% of Louisiana’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Louisiana assess its future primary care workforce to meet the health care needs of its population.

There are 10 family medicine residency training programs in Louisiana. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Louisiana over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 451 family physicians; of these, 250 (55%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 50 family physicians trained in other states. Through elevated support of family medicine residency programs, Louisiana can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in Maine.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Maine had 1,261 PCPs in direct patient care, of which 680 were family physicians. In other words, 54% of its primary care workforce consisted of family physicians, compared to 26% in the New England Census Division and 38% nationwide. On a per capita basis, there were about 94 PCPs per 100,000 persons in Maine, compared to 98 per 100,000 in the New England and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 47% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 48% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 4% of family physicians in the state were international medical school graduates and 25% were trained as osteopaths. While 41% of Maine’s population lived in rural counties, 40% of family physicians work in these counties. None of Maine’s residents live in underserved counties with more than 2,000 persons per PCP.

### Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Maine assess its future primary care workforce to meet the health care needs of its population.

There are 4 family medicine residency training programs in Maine. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Maine over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 211 family physicians; of these, 100 (47%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 46 family physicians trained in other states. Through elevated support of family medicine residency programs, Maine can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Maryland

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Maryland.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Maryland had 4,811 PCPs in direct patient care, of which 1,213 were family physicians. In other words, 25% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 79 PCPs per 100,000 persons in Maryland, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state's family medicine workforce was 51% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 48% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 14% of family physicians in the state were international medical school graduates and 5% were trained as osteopaths. While 3% of Maryland’s population lived in rural counties, 4% of family physicians work in these counties. Approximately 9% of Maryland’s residents live in underserved counties with more than 2,000 persons per PCP.

**Future Workforce**

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Maryland assess its future primary care workforce to meet the health care needs of its population.

There are 4 family medicine residency training programs in Maryland. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Maryland over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 119 family physicians; of these, 49 (41%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 146 family physicians trained in other states. Through elevated support of family medicine residency programs, Maryland can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Massachusetts.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Massachusetts had 6,237 PCPs in direct patient care, of which 1,295 were family physicians. In other words, 21% of its primary care workforce consisted of family physicians, compared to 26% in the New England Census Division and 38% nationwide. On a per capita basis, there were about 91 PCPs per 100,000 persons in Massachusetts, compared to 98 per 100,000 in the New England and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 55% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 44% of family physicians were over the age of 55, equal to the nationwide percentage of 44%.

Age Distribution of Family Physicians, by Gender

Distribution of Primary Care Physicians, by Specialty
In 2018, about 9% of family physicians in the state were international medical school graduates and 5% were trained as osteopaths. While 1% of Massachusetts’s population lived in rural counties, 2% of family physicians work in these counties. None of Massachusetts’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Massachusetts assess its future primary care workforce to meet the health care needs of its population.

There are 5 family medicine residency training programs in Massachusetts. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Massachusetts over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 294 family physicians; of these, 134 (46%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 137 family physicians trained in other states. Through elevated support of family medicine residency programs, Massachusetts can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in Michigan.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Michigan had 6,852 PCPs in direct patient care, of which 2,951 were family physicians. In other words, 43% of its primary care workforce consisted of family physicians, compared to 44% in the East North Central Census Division and 38% nationwide. On a per capita basis, there were about 69 PCPs per 100,000 persons in Michigan, compared to 76 per 100,000 in the East North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 43% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 47% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 15% of family physicians in the state were international medical school graduates and 23% were trained as osteopaths. While 18% of Michigan’s population lived in rural counties, 17% of family physicians work in these counties. Approximately 20% of Michigan’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Michigan assess its future primary care workforce to meet the health care needs of its population.

There are 34 family medicine residency training programs in Michigan. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Michigan over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 1060 family physicians; of these, 442 (42%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 103 family physicians trained in other states. Through elevated support of family medicine residency programs, Michigan can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Minnesota

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Minnesota.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Minnesota had 4,195 PCPs in direct patient care, of which 2,392 were family physicians. In other words, 57% of its primary care workforce consisted of family physicians, compared to 44% in the West North Central Census Division and 38% nationwide. On a per capita basis, there were about 75 PCPs per 100,000 persons in Minnesota, compared to 77 per 100,000 in the West North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 48% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 41% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 6% of family physicians in the state were international medical school graduates and 6% were trained as osteopaths. While 22% of Minnesota’s population lived in rural counties, 23% of family physicians work in these counties. Approximately 14% of Minnesota’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Minnesota assess its future primary care workforce to meet the health care needs of its population.

There are 12 family medicine residency training programs in Minnesota. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Minnesota over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 570 family physicians; of these, 322 (56%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 156 family physicians trained in other states. Through elevated support of family medicine residency programs, Minnesota can work to replenish the PCP pipeline practicing in local communities.

*US Census Bureau West North Central Census Division States: IA, KS, MN, MO, NE, ND, SD
**Underserved counties had a population to PCP ratio greater than 2,000:1.

In 2018, about 6% of family physicians in the state were international medical school graduates and 6% were trained as osteopaths. While 22% of Minnesota’s population lived in rural counties, 23% of family physicians work in these counties. Approximately 14% of Minnesota’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Minnesota assess its future primary care workforce to meet the health care needs of its population.

There are 12 family medicine residency training programs in Minnesota. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Minnesota over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 570 family physicians; of these, 322 (56%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 156 family physicians trained in other states. Through elevated support of family medicine residency programs, Minnesota can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in Mississippi.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Mississippi had 1,318 PCPs in direct patient care, of which 626 were family physicians. In other words, 48% of its primary care workforce consisted of family physicians, compared to 38% in the East South Central Census Division and 38% nationwide. On a per capita basis, there were about 44 PCPs per 100,000 persons in Mississippi, compared to 65 per 100,000 in the East South Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 33% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 50% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 7% of family physicians in the state were international medical school graduates and 11% were trained as osteopaths. While 54% of Mississippi’s population lived in rural counties, 51% of family physicians work in these counties. Approximately 50% of Mississippi’s residents live in underserved counties with more than 2,000 persons per PCP.

**Future Workforce**

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Mississippi assess its future primary care workforce to meet the health care needs of its population. There are 4 family medicine residency training programs in Mississippi. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Mississippi over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 121 family physicians; of these, 57 (47%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 42 family physicians trained in other states. Through elevated support of family medicine residency programs, Mississippi can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Missouri.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Missouri had 3,716 PCPs in direct patient care, of which 1,548 were family physicians. In other words, 42% of its primary care workforce consisted of family physicians, compared to 44% in the West North Central Census Division and 38% nationwide. On a per capita basis, there were about 61 PCPs per 100,000 persons in Missouri, compared to 77 per 100,000 in the West North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 43% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 44% of family physicians were over the age of 55, equal to the nationwide percentage of 44%.
In 2018, about 8% of family physicians in the state were international medical school graduates and 22% were trained as osteopaths. While 25% of Missouri’s population lived in rural counties, 26% of family physicians work in these counties. Approximately 34% of Missouri’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Missouri assess its future primary care workforce to meet the health care needs of its population.

There are 8 family medicine residency training programs in Missouri. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Missouri over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 445 family physicians; of these, 189 (42%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 113 family physicians trained in other states. Through elevated support of family medicine residency programs, Missouri can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Montana

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Montana.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Montana had 702 PCPs in direct patient care, of which 420 were family physicians. In other words, 60% of its primary care workforce consisted of family physicians, compared to 40% in the Mountain Census Division and 38% nationwide. On a per capita basis, there were about 67 PCPs per 100,000 persons in Montana, compared to 69 per 100,000 in the Mountain and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 42% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 2% of family physicians in the state were international medical school graduates and 11% were trained as osteopaths. While 65% of Montana’s population lived in rural counties, 64% of family physicians work in these counties. Approximately 9% of Montana’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Montana assess its future primary care workforce to meet the health care needs of its population.

There are 2 family medicine residency training programs in Montana. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Montana over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 61 family physicians; of these, 33 (54%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 61 family physicians trained in other states. Through elevated support of family medicine residency programs, Montana can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Nebraska.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Nebraska had 1,175 PCPs in direct patient care, of which 655 were family physicians. In other words, 56% of its primary care workforce consisted of family physicians, compared to 44% in the West North Central Census Division and 38% nationwide. On a per capita basis, there were about 61 PCPs per 100,000 persons in Nebraska, compared to 77 per 100,000 in the West North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 40% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 41% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 5% of family physicians in the state were international medical school graduates and 6% were trained as osteopaths. While 35% of Nebraska’s population lived in rural counties, 35% of family physicians work in these counties. Approximately 14% of Nebraska’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Nebraska assess its future primary care workforce to meet the health care needs of its population.

There are 5 family medicine residency training programs in Nebraska. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Nebraska over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 309 family physicians; of these, 119 (39%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 30 family physicians trained in other states. Through elevated support of family medicine residency programs, Nebraska can work to replenish the PCP pipeline practicing in local communities.

**Characteristics of Family Physicians and PCPs**

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**Distribution of PCPs**

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<td>Percent Total State Population in Underserved County**</td>
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*US Census Bureau West North Central Census Division States: IA, KS, MN, MO, NE, ND, SD
**Underserved counties had a population to PCP ratio greater than 2,000:1.

The State of Primary Care Physician Workforce: Nevada

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Nevada.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Nevada had 1,523 PCPs in direct patient care, of which 626 were family physicians. In other words, 41% of its primary care workforce consisted of family physicians, compared to 40% in the Mountain Census Division and 38% nationwide. On a per capita basis, there were about 51 PCPs per 100,000 persons in Nevada, compared to 69 per 100,000 in the Mountain and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 39% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 42% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

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¹ Source: American Medical Association
² Source: Centers for Medicare and Medicaid Services
In 2018, about 19% of family physicians in the state were international medical school graduates and 16% were trained as osteopaths. While 9% of Nevada’s population lived in rural counties, 10% of family physicians work in these counties. Approximately 7% of Nevada’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Nevada assess its future primary care workforce to meet the health care needs of its population.

There are 6 family medicine residency training programs in Nevada. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Nevada over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 81 family physicians; of these, 36 (44%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 90 family physicians trained in other states. Through elevated support of family medicine residency programs, Nevada can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: New Hampshire

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in New Hampshire.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, New Hampshire had 1,029 PCPs in direct patient care, of which 472 were family physicians. In other words, 46% of its primary care workforce consisted of family physicians, compared to 26% in the New England Census Division and 38% nationwide. On a per capita basis, there were about 77 PCPs per 100,000 persons in New Hampshire, compared to 98 per 100,000 in the New England and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 47% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 46% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 7% of family physicians in the state were international medical school graduates and 14% were trained as osteopaths. While 37% of New Hampshire’s population lived in rural counties, 46% of family physicians work in these counties. None of New Hampshire’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help New Hampshire assess its future primary care workforce to meet the health care needs of its population.

There is just one family medicine residency training program in New Hampshire. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for New Hampshire over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 42 family physicians; of these, 14 (33%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 39 family physicians trained in other states. Through elevated support of family medicine residency programs, New Hampshire can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce: New Jersey

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in New Jersey.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, New Jersey had 6,582 PCPs in direct patient care, of which 1,591 were family physicians. In other words, 24% of its primary care workforce consisted of family physicians, compared to 26% in the Middle Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 73 PCPs per 100,000 persons in New Jersey, compared to 82 per 100,000 in the Middle Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 48% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 49% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 22% of family physicians in the state were international medical school graduates and 15% were trained as osteopaths. None of New Jersey’s counties are classified as rural so, by definition, there were no rural physicians. Approximately 9% of New Jersey’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help New Jersey assess its future primary care workforce to meet the health care needs of its population.

There are 16 family medicine residency training programs in New Jersey. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for New Jersey over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 467 family physicians; of these, 174 (37%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 99 family physicians trained in other states. Through elevated support of family medicine residency programs, New Jersey can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce: New Mexico

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in New Mexico.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, New Mexico had 1,394 PCPs in direct patient care, of which 718 were family physicians. In other words, 51\% of its primary care workforce consisted of family physicians, compared to 40\% in the Pacific Census Division and 38\% nationwide. On a per capita basis, there were about 67 PCPs per 100,000 persons in New Mexico, compared to 81 per 100,000 in the Pacific and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 49\% female, which was more than the percentage nationwide (45\%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 50\% of family physicians were over the age of 55, more than the nationwide percentage of 44\%.

![Age Distribution of Family Physicians, by Gender](image)

![Distribution of Primary Care Physicians, by Specialty](image)
In 2018, about 8% of family physicians in the state were international medical school graduates and 9% were trained as osteopaths. While 33% of New Mexico’s population lived in rural counties, 26% of family physicians work in these counties. Approximately 17% of New Mexico’s residents live in underserved counties with more than 2,000 persons per PCP.

### Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help New Mexico assess its future primary care workforce to meet the health care needs of its population.

There are 4 family medicine residency training programs in New Mexico. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for New Mexico over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 169 family physicians; of these, 79 (47%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 76 family physicians trained in other states. Through elevated support of family medicine residency programs, New Mexico can work to replenish the PCP pipeline practicing in local communities.

*US Census Bureau Pacific Census Division States: AK, CA, HI, OR
**Underserved counties had a population to PCP ratio greater than 2,000:1.

### Trends in Family Physicians Graduating from NM Residencies, 2005-2018

Between 2011 and 2017, the state produced a total of 169 family physicians; of these, 79 (47%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 76 family physicians trained in other states. Through elevated support of family medicine residency programs, New Mexico can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in New York.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, New York had 14,709 PCPs in direct patient care, of which 3,355 were family physicians. In other words, 23% of its primary care workforce consisted of family physicians, compared to 26% in the Middle Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 74 PCPs per 100,000 persons in New York, compared to 82 per 100,000 in the Middle Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 47% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 50% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 18% of family physicians in the state were international medical school graduates and 9% were trained as osteopaths. While 7% of New York’s population lived in rural counties, 8% of family physicians work in these counties. Approximately 7% of New York’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help New York assess its future primary care workforce to meet the health care needs of its population.

There are 35 family medicine residency training programs in New York. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for New York over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 1387 family physicians; of these, 492 (35%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 169 family physicians trained in other states. Through elevated support of family medicine residency programs, New York can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce: North Carolina

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in North Carolina.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, North Carolina had 6,324 PCPs in direct patient care, of which 2,783 were family physicians. In other words, 44% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 62 PCPs per 100,000 persons in North Carolina, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 46% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 41% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

![Age Distribution of Family Physicians, by Gender](image)

![Distribution of Primary Care Physicians, by Specialty](image)
In 2018, about 7% of family physicians in the state were international medical school graduates and 7% were trained as osteopaths. While 22% of North Carolina’s population lived in rural counties, 18% of family physicians work in these counties. Approximately 27% of North Carolina’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help North Carolina assess its future primary care workforce to meet the health care needs of its population.

There are 16 family medicine residency training programs in North Carolina. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for North Carolina over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 644 family physicians; of these, 278 (43%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 211 family physicians trained in other states. Through elevated support of family medicine residency programs, North Carolina can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce:
North Dakota

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in North Dakota.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, North Dakota had 481 PCPs in direct patient care, of which 298 were family physicians. In other words, 62% of its primary care workforce consisted of family physicians, compared to 44% in the West North Central Census Division and 38% nationwide. On a per capita basis, there were about 64 PCPs per 100,000 persons in North Dakota, compared to 77 per 100,000 in the West North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 44% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 38% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 10% of family physicians in the state were international medical school graduates and 6% were trained as osteopaths. While 50% of North Dakota’s population lived in rural counties, 36% of family physicians work in these counties. Approximately 31% of North Dakota’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency.\textsuperscript{3} National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help North Dakota assess its future primary care workforce to meet the health care needs of its population.

There are 6 family medicine residency training programs in North Dakota. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for North Dakota over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 132 family physicians; of these, 67 (51%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 33 family physicians trained in other states. Through elevated support of family medicine residency programs, North Dakota can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Ohio.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Ohio had 7,821 PCPs in direct patient care, of which 3,214 were family physicians. In other words, 41% of its primary care workforce consisted of family physicians, compared to 44% in the East North Central Census Division and 38% nationwide. On a per capita basis, there were about 67 PCPs per 100,000 persons in Ohio, compared to 76 per 100,000 in the East North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 44% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

![Age Distribution of Family Physicians, by Gender](image)

![Distribution of Primary Care Physicians, by Specialty](image)
In 2018, about 11% of family physicians in the state were international medical school graduates and 16% were trained as osteopaths. While 20% of Ohio’s population lived in rural counties, 18% of family physicians work in these counties. Approximately 25% of Ohio’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency.\(^3\) National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Ohio assess its future primary care workforce to meet the health care needs of its population.

There are 32 family medicine residency training programs in Ohio. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Ohio over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 906 family physicians; of these, 373 (41%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 144 family physicians trained in other states. Through elevated support of family medicine residency programs, Ohio can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce: Oklahoma

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in Oklahoma.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Oklahoma had 2,113 PCPs in direct patient care, of which 1,164 were family physicians. In other words, 55% of its primary care workforce consisted of family physicians, compared to 38% in the West South Central Census Division and 38% nationwide. On a per capita basis, there were about 54 PCPs per 100,000 persons in Oklahoma, compared to 63 per 100,000 in the West South Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 37% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 48% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 8% of family physicians in the state were international medical school graduates and 30% were trained as osteopaths. While 34% of Oklahoma’s population lived in rural counties, 29% of family physicians work in these counties. Approximately 35% of Oklahoma’s residents live in underserved counties with more than 2,000 persons per PCP.

**Future Workforce**

Evidence indicates that physicians are more likely to practice in the state in which they completed residency.\(^3\)

National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Oklahoma assess its future primary care workforce to meet the health care needs of its population.

There are 12 family medicine residency training programs in Oklahoma. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Oklahoma over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 329 family physicians; of these, 159 (48%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 61 family physicians trained in other states. Through elevated support of family medicine residency programs, Oklahoma can work to replenish the PCP pipeline practicing in local communities.
Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in Oregon.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Oregon had 3,413 PCPs in direct patient care, of which 1,563 were family physicians. In other words, 46% of its primary care workforce consisted of family physicians, compared to 40% in the Pacific Census Division and 38% nationwide. On a per capita basis, there were about 82 PCPs per 100,000 persons in Oregon, compared to 81 per 100,000 in the Pacific and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 50% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 40% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 5% of family physicians in the state were international medical school graduates and 11% were trained as osteopaths. While 16% of Oregon’s population lived in rural counties, 16% of family physicians work in these counties. Approximately 5% of Oregon’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Oregon assess its future primary care workforce to meet the health care needs of its population.

There are 6 family medicine residency training programs in Oregon. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Oregon over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 183 family physicians; of these, 94 (51%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 222 family physicians trained in other states. Through elevated support of family medicine residency programs, Oregon can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Pennsylvania

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Pennsylvania.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Pennsylvania had 9,067 PCPs in direct patient care, of which 3,791 were family physicians. In other words, 42% of its primary care workforce consisted of family physicians, compared to 26% in the Middle Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 71 PCPs per 100,000 persons in Pennsylvania, compared to 82 per 100,000 in the Middle Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 44% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 46% of family physicians were over the age of 55, more than the nationwide percentage of 44%.

1. This is a reference to a specific study or report.
2. This is a reference to another study or report.
In 2018, about 9% of family physicians in the state were international medical school graduates and 25% were trained as osteopaths. While 11% of Pennsylvania’s population lived in rural counties, 9% of family physicians work in these counties. Approximately 12% of Pennsylvania’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Pennsylvania assess its future primary care workforce to meet the health care needs of its population.

There are 43 family medicine residency training programs in Pennsylvania. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Pennsylvania over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 1270 family physicians; of these, 481 (38%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 108 family physicians trained in other states. Through elevated support of family medicine residency programs, Pennsylvania can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in Rhode Island.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Rhode Island had 905 PCPs in direct patient care, of which 246 were family physicians. In other words, 27% of its primary care workforce consisted of family physicians, compared to 26% in the New England Census Division and 38% nationwide. On a per capita basis, there were about 85 PCPs per 100,000 persons in Rhode Island, compared to 98 per 100,000 in the New England and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 48% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 44% of family physicians were over the age of 55, equal to the nationwide percentage of 44%.
In 2018, about 12% of family physicians in the state were international medical school graduates and 10% were trained as osteopaths. None of Rhode Island’s counties are classified as rural so, by definition, there were no rural physicians. None of Rhode Island’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Rhode Island assess its future primary care workforce to meet the health care needs of its population.

There are 2 family medicine residency training programs in Rhode Island. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Rhode Island over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 87 family physicians; of these, 38 (44%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 26 family physicians trained in other states. Through elevated support of family medicine residency programs, Rhode Island can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: South Carolina

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in South Carolina.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, South Carolina had 2,929 PCPs in direct patient care, of which 1,429 were family physicians. In other words, 49% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 58 PCPs per 100,000 persons in South Carolina, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 41% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 42% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 7% of family physicians in the state were international medical school graduates and 8% were trained as osteopaths. While 15% of South Carolina’s population lived in rural counties, 15% of family physicians work in these counties. Approximately 34% of South Carolina’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help South Carolina assess its future primary care workforce to meet the health care needs of its population.

There are 11 family medicine residency training programs in South Carolina. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for South Carolina over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 464 family physicians; of these, 188 (41%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 67 family physicians trained in other states. Through elevated support of family medicine residency programs, South Carolina can work to replenish the PCP pipeline practicing in local communities.
Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in South Dakota.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, South Dakota had 530 PCPs in direct patient care, of which 311 were family physicians. In other words, 59% of its primary care workforce consisted of family physicians, compared to 44% in the West North Central Census Division and 38% nationwide. On a per capita basis, there were about 61 PCPs per 100,000 persons in South Dakota, compared to 77 per 100,000 in the West North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 43% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 7% of family physicians in the state were international medical school graduates and 11% were trained as osteopaths. While 51% of South Dakota’s population lived in rural counties, 37% of family physicians work in these counties. Approximately 15% of South Dakota’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help South Dakota assess its future primary care workforce to meet the health care needs of its population.

There are 3 family medicine residency training programs in South Dakota. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for South Dakota over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 105 family physicians; of these, 51 (49%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 27 family physicians trained in other states. Through elevated support of family medicine residency programs, South Dakota can work to replenish the PCP pipeline practicing in local communities.


<table>
<thead>
<tr>
<th>Characteristics of Family Physicians and PCPs</th>
<th>South Dakota</th>
<th>West North Central*</th>
<th>Nation</th>
</tr>
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<tr>
<td>Percent over 55 Years (PCP)</td>
<td>43</td>
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<td>Percent Female (FP)</td>
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<td>Percent Osteopaths (FP)</td>
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<td>Percent International Medical School Graduates (FP)</td>
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<table>
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<tr>
<th>Distribution of PCPs</th>
<th>South Dakota</th>
<th>West North Central*</th>
<th>Nation</th>
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</thead>
<tbody>
<tr>
<td>Percent Total State Population Rural</td>
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<tr>
<td>Percent Family Physicians Rural</td>
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<tr>
<td>Percent Total State Population in Underserved County**</td>
<td>15</td>
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<td>18</td>
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</table>

*US Census Bureau West North Central Census Division States: IA, KS, MN, MO, NE, ND, SD
**Underserved counties had a population to PCP ratio greater than 2,000:1.
The State of Primary Care Physician Workforce: Tennessee

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.1 States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.2 This factsheet characterizes the primary care physician workforce in Tennessee.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Tennessee had 4,147 PCPs in direct patient care, of which 1,673 were family physicians. In other words, 40% of its primary care workforce consisted of family physicians, compared to 38% in the East South Central Census Division and 38% nationwide. On a per capita basis, there were about 62 PCPs per 100,000 persons in Tennessee, compared to 65 per 100,000 in the East South Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 38% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 46% of family physicians were over the age of 55, more than the nationwide percentage of 44%.

![Age Distribution of Family Physicians, by Gender](image)

![Distribution of Primary Care Physicians, by Specialty](image)
In 2018, about 8% of family physicians in the state were international medical school graduates and 8% were trained as osteopaths. While 23% of Tennessee’s population lived in rural counties, 19% of family physicians work in these counties. Approximately 31% of Tennessee’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Tennessee assess its future primary care workforce to meet the health care needs of its population.

There are 10 family medicine residency training programs in Tennessee. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Tennessee over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 387 family physicians; of these, 177 (46%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 115 family physicians trained in other states. Through elevated support of family medicine residency programs, Tennessee can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Texas.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Texas had 15,157 PCPs in direct patient care, of which 6,629 were family physicians. In other words, 44% of its primary care workforce consisted of family physicians, compared to 38% in the West South Central Census Division and 38% nationwide. On a per capita basis, there were about 54 PCPs per 100,000 persons in Texas, compared to 63 per 100,000 in the West South Central and 76 per 100,000 in the U.S. as a whole. The state's family medicine workforce was 45% female, which was equal to the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 40% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 15% of family physicians in the state were international medical school graduates and 11% were trained as osteopaths. While 11% of Texas’s population lived in rural counties, 9% of family physicians work in these counties. Approximately 27% of Texas’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Texas assess its future primary care workforce to meet the health care needs of its population.

There are 33 family medicine residency training programs in Texas. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Texas over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 1,609 family physicians; of these, 950 (59%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 486 family physicians trained in other states. Through elevated support of family medicine residency programs, Texas can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: Utah

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Utah.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Utah had 1,622 PCPs in direct patient care, of which 842 were family physicians. In other words, 52% of its primary care workforce consisted of family physicians, compared to 40% in the Mountain Census Division and 38% nationwide. On a per capita basis, there were about 52 PCPs per 100,000 persons in Utah, compared to 69 per 100,000 in the Mountain and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 31% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 35% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

![Age Distribution of Family Physicians, by Gender](chart1)

![Distribution of Primary Care Physicians, by Specialty](chart2)
In 2018, about 3% of family physicians in the state were international medical school graduates and 14% were trained as osteopaths. While 11% of Utah’s population lived in rural counties, 13% of family physicians work in these counties. Approximately 53% of Utah’s residents live in underserved counties with more than 2,000 persons per PCP.

**Future Workforce**

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Utah assess its future primary care workforce to meet the health care needs of its population.

There are 5 family medicine residency training programs in Utah. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Utah over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 163 family physicians; of these, 87 (53%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 84 family physicians trained in other states. Through elevated support of family medicine residency programs, Utah can work to replenish the PCP pipeline practicing in local communities.


The State of Primary Care Physician Workforce: Vermont

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Vermont.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Vermont had 613 PCPs in direct patient care, of which 279 were family physicians. In other words, 45% of its primary care workforce consisted of family physicians, compared to 26% in the New England Census Division and 38% nationwide. On a per capita basis, there were about 98 PCPs per 100,000 persons in Vermont, compared to 98 per 100,000 in the New England and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 52% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 52% of family physicians were over the age of 55, more than the nationwide percentage of 44%.
In 2018, about 2% of family physicians in the state were international medical school graduates and 5% were trained as osteopaths. While 65% of Vermont’s population lived in rural counties, 59% of family physicians work in these counties. Approximately 2% of Vermont’s residents live in underserved counties with more than 2,000 persons per PCP.

**Future Workforce**

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Vermont assess its future primary care workforce to meet the health care needs of its population.

There is just one family medicine residency training program in Vermont. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Vermont over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 42 family physicians; of these, 23 (55%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 28 family physicians trained in other states. Through elevated support of family medicine residency programs, Vermont can work to replenish the PCP pipeline practicing in local communities.

### Characteristics of Family Physicians and PCPs

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<thead>
<tr>
<th></th>
<th>Vermont</th>
<th>New England*</th>
<th>Nation</th>
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<tr>
<td>Percent over 55 Years (PCP)</td>
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<tr>
<td>Percent Female (FP)</td>
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<td>Percent Osteopaths (FP)</td>
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<td>Percent International Medical School Graduates (FP)</td>
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### Distribution of PCPs

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<th>Nation</th>
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<tr>
<td>Percent Total State Population Rural</td>
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<tr>
<td>Percent Family Physicians Rural</td>
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<td>Percent Total State Population in Underserved County**</td>
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<td>1</td>
<td>18</td>
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</tbody>
</table>

*US Census Bureau New England Census Division States: CT, ME, MA, NH, RI, VT

**Underserved counties had a population to PCP ratio greater than 2,000:1.

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce. States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings. This factsheet characterizes the primary care physician workforce in Virginia.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Virginia had 5,743 PCPs in direct patient care, of which 2,397 were family physicians. In other words, 42% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 68 PCPs per 100,000 persons in Virginia, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 49% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 42% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 11% of family physicians in the state were international medical school graduates and 8% were trained as osteopaths. While 12% of Virginia’s population lived in rural counties, 11% of family physicians work in these counties. Approximately 24% of Virginia’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Virginia assess its future primary care workforce to meet the health care needs of its population.

There are 12 family medicine residency training programs in Virginia. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Virginia over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 500 family physicians; of these, 216 (43%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 181 family physicians trained in other states. Through elevated support of family medicine residency programs, Virginia can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in Washington.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Washington had 5,568 PCPs in direct patient care, of which 2,897 were family physicians. In other words, 52% of its primary care workforce consisted of family physicians, compared to 40% in the Pacific Census Division and 38% nationwide. On a per capita basis, there were about 75 PCPs per 100,000 persons in Washington, compared to 81 per 100,000 in the Pacific and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 50% female, which was more than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 41% of family physicians were over the age of 55, less than the nationwide percentage of 44%.

¹

²
In 2018, about 8% of family physicians in the state were international medical school graduates and 9% were trained as osteopaths. While 10% of Washington’s population lived in rural counties, 8% of family physicians work in these counties. Approximately 8% of Washington’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Washington assess its future primary care workforce to meet the health care needs of its population.

There are 22 family medicine residency training programs in Washington. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Washington over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 611 family physicians; of these, 315 (52%) stayed in-state. The loss of state-trained family physicians is offset by the immigration of 230 family physicians trained in other states. Through elevated support of family medicine residency programs, Washington can work to replenish the PCP pipeline practicing in local communities.
The State of Primary Care Physician Workforce: West Virginia

Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.¹ States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.² This factsheet characterizes the primary care physician workforce in West Virginia.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, West Virginia had 1,253 PCPs in direct patient care, of which 661 were family physicians. In other words, 53% of its primary care workforce consisted of family physicians, compared to 38% in the South Atlantic Census Division and 38% nationwide. On a per capita basis, there were about 69 PCPs per 100,000 persons in West Virginia, compared to 74 per 100,000 in the South Atlantic and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 40% female, which was less than the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 43% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 12% of family physicians in the state were international medical school graduates and 27% were trained as osteopaths. While 38% of West Virginia’s population lived in rural counties, 34% of family physicians work in these counties. Approximately 30% of West Virginia’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency. National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help West Virginia assess its future primary care workforce to meet the health care needs of its population.

There are 7 family medicine residency training programs in West Virginia. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for West Virginia over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 265 family physicians; of these, 119 (45%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 30 family physicians trained in other states. Through elevated support of family medicine residency programs, West Virginia can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.1 States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.2 This factsheet characterizes the primary care physician workforce in Wisconsin.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Wisconsin had 4,000 PCPs in direct patient care, of which 2,140 were family physicians. In other words, 54% of its primary care workforce consisted of family physicians, compared to 44% in the East North Central Census Division and 38% nationwide. On a per capita basis, there were about 69 PCPs per 100,000 persons in Wisconsin, compared to 76 per 100,000 in the East North Central and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 45% female, which was equal to the percentage nationwide (45%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 41% of family physicians were over the age of 55, less than the nationwide percentage of 44%.
In 2018, about 9% of family physicians in the state were international medical school graduates and 10% were trained as osteopaths. While 26% of Wisconsin’s population lived in rural counties, 27% of family physicians work in these counties. Approximately 14% of Wisconsin’s residents live in underserved counties with more than 2,000 persons per PCP.

Future Workforce

Evidence indicates that physicians are more likely to practice in the state in which they completed residency.³ National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Wisconsin assess its future primary care workforce to meet the health care needs of its population.

There are 15 family medicine residency training programs in Wisconsin. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Wisconsin over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 507 family physicians; of these, 245 (48%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 149 family physicians trained in other states. Through elevated support of family medicine residency programs, Wisconsin can work to replenish the PCP pipeline practicing in local communities.


Background

In the United States, primary care physicians (PCPs) currently represent less than one-third of the total physician workforce.\(^1\) States are under increasing pressure to create solutions that bolster the number of physicians practicing primary care in both rural and urban settings.\(^2\) This factsheet characterizes the primary care physician workforce in Wyoming.

We used data mainly from the 2018 American Medical Association (AMA) Physician Masterfile. Physicians were classified as primary care if their primary specialty is family medicine, internal medicine, pediatrics, general practice or geriatrics. We restricted our counts to PCPs in direct patient care. With Centers for Medicare and Medicaid Services data, we identified PCPs that work mainly as hospitalists and excluded them from our analysis. Finally, we used additional data sources to identify osteopaths excluded from the AMA Masterfile.

Current Workforce

In 2018, Wyoming had 320 PCPs in direct patient care, of which 203 were family physicians. In other words, 64\% of its primary care workforce consisted of family physicians, compared to 40\% in the Mountain Census Division and 38\% nationwide. On a per capita basis, there were about 55 PCPs per 100,000 persons in Wyoming, compared to 69 per 100,000 in the Mountain and 76 per 100,000 in the U.S. as a whole. The state’s family medicine workforce was 37\% female, which was less than the percentage nationwide (45\%). Consistent with national trends, younger family physicians were more likely to be female than their older counterparts. About 39\% of family physicians were over the age of 55, less than the nationwide percentage of 44\%.
In 2018, about 7% of family physicians in the state were international medical school graduates and 12% were trained as osteopaths. While 69% of Wyoming’s population lived in rural counties, 66% of family physicians work in these counties. Approximately 30% of Wyoming’s residents live in underserved counties with more than 2,000 persons per PCP.

**Future Workforce**

Evidence indicates that physicians are more likely to practice in the state in which they completed residency.\(^3\) National PCP deficits have stimulated the growth of in-state residency programs to replenish the aging generation of physicians leaving the workforce. Understanding current primary care residency programs can help Wyoming assess its future primary care workforce to meet the health care needs of its population.

There are 2 family medicine residency training programs in Wyoming. Nationally, the number of family physicians graduating from the Accreditation Council for Graduate Medical Education-accredited programs declined from 3,225 in 2005 to 2,970 in 2012, then increased to 3,383 by 2017. Trends for Wyoming over the same period are shown in the adjacent figure.

Between 2011 and 2017, the state produced a total of 90 family physicians; of these, 30 (33%) stayed in-state. The loss of state-trained family physicians is offset by the in-migration of 23 family physicians trained in other states. Through elevated support of family medicine residency programs, Wyoming can work to replenish the PCP pipeline practicing in local communities.

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**Characteristics of Family Physicians and PCPs**

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<th></th>
<th>Wyoming</th>
<th>Mountain*</th>
<th>Nation</th>
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<tr>
<td>Percent over 55 Years (PCP)</td>
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<tr>
<td>Percent Female (FP)</td>
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<td>Percent Osteopaths (FP)</td>
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<td>Percent International Medical School Graduates (FP)</td>
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**Distribution of PCPs**

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<td>Percent Total State Population Rural</td>
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<td>Percent Family Physicians Rural</td>
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<tr>
<td>Percent Total State Population in Underserved County**</td>
<td>30</td>
<td>17</td>
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*US Census Bureau Mountain Census Division States: AZ, CO, ID, MT, NM, NV, UT, WY

**Underserved counties had a population to PCP ratio greater than 2,000:1.

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The primary care physician (PCP) workforce is integral to the U.S. healthcare system. In order to address primary care workforce shortages and distribution challenges, stakeholders at the state level need accurate information on their respective PCP workforce. With greater demands on the health system and projected PCP shortages, advocates and policymakers must be equipped with the tools to address these challenges. Up to date and relevant data is needed for informed policy decisions.

To meet this need, the Robert Graham Center created The State of Primary Care Physician Workforce series to equip state and national policymakers and practitioners with state-level information on primary care physician characteristics. Using comprehensive national data, we describe the landscape of the primary care physician workforce in all 50 states and District of Columbia. This series highlights age, gender, training origin, migration, and distribution of physicians, all in context of the states’ census division and national averages.

I. Main Data

A. 2018 American Medical Association (AMA) Physician Masterfile

The AMA Physician Masterfile is a proprietary data set maintained by the American Medical Association (AMA) that includes a near complete listing of all physicians in the United States. More than 1.4 million physicians, residents, and medical students in the United States have current and historical data in the AMA Physician Masterfile. The AMA Physician Masterfile includes detailed information about each individual, including their age, gender, self-reported specialty, practice address, type of medical degree (MD or DO), medical school identification, residency institution, practice type, specialty, and home address. The Robert Graham Center holds AMA Physician Masterfile data for each year between 2000 and 2018 with the exception of 2003. The Robert Graham Center geo-codes the addresses in the file (98% match rate) and can readily match the addresses with other geographic data.

• **Primary Care Physicians Estimates:** The methods used for estimating the number of primary care physicians (PCPs) are based on the 2018 American Medical Association (AMA) Physician Masterfile and described in literature. The following section describes similar methods used to update those estimates based on the 2018 AMA Physician Masterfile. Primary care physicians were identified by selecting physicians in direct patient care with a primary, self-designated specialty of family medicine, general practice, general internal medicine, general pediatrics, or geriatrics. Note that it is assumed that physicians reporting these specialties have not further specialized. In the AMA Physician Masterfile, physicians who first trained in internal medicine and then obtained further training are not still classified in internal medicine. Total counts of PCPs were adjusted for retirement not captured in the AMA Masterfile. For more information on this process, see II.A.

• **Age and Gender:** The 2018 AMA Physician Masterfile identifies age and gender of each physician. We incorporated the age and gender information for additional DOs using the 2018 Centers for Medicare & Medicaid Services (CMS) National Plan and Provider Enumeration System (NPPES) file.
PCP Distribution: To find the number of primary care physicians per 100,000 persons in each state, region, and nationwide, we used adjusted primary care physician totals from the 2018 AMA Physician Masterfile and divided this by population totals from the 2010 US Census (see part C). We then multiplied this rate by 100,000. This process was repeated for census division and the United States as a whole.

Osteopaths: We used the 2018 AMA Physician Masterfile to obtain a baseline count of osteopaths. However, the AMA Physician Masterfile undercounts osteopaths, so we conducted further analysis using the Centers for Medicare & Medicaid Services (CMS) National Plan and Provider Enumeration System (NPPES) and CMS Physician Compare. See II.B. for further information.

International Medical School Graduates: We used the 2018 AMA Physician Masterfile to identify international medical school graduates through their medical school identification information.

Resident Graduate Movement: To account for movement of family physicians who graduated from residency from 2011-2017, we matched the residency program state to their practice state in the 2018 AMA Physician Masterfile. This identified the family physicians that remained, left, and entered the state.

B. 2017 AMA Historical License and Residency File

The April 2017 AMA Historical License and Residency File is a supplementary file to the AMA Physician Masterfile and contains information on graduate medical training specialty, years in program, and institution code.

Resident Graduates: Data from residency graduates from 2011-2016 was available in the April 2017 AMA Historical License and Residency File. We used this supplemental file to identify residents, their residency institution, and their residency graduation year. We included data from the 2018 AMA Physician Masterfile to account for residency graduates in calendar year 2017.

C. 2016 Centers for Medicare & Medicaid Services (CMS) National Plan and Provider Enumeration System (NPPES)

The Centers for Medicare & Medicaid Services (CMS) National Plan and Provider Enumeration System (NPPES) Downloadable File (2008-present) is a freely available public data set that contains rich information on health care providers, including the National Provider Identifier (NPI), practice address, and practice arrangements. The NPPES data also contain more precise physician address information than the AMA Physician Masterfile data. A drawback of the NPPES data is the lack of an indicator for currently active providers.

Identifying Additional Osteopaths: We used the NPPES December 2016 dataset to identify additional osteopaths using the NPI and health provider taxonomy code variables. For a full explanation of this process, see II.B.

D. 2016 Centers for Medicare & Medicaid Services (CMS) Physician Compare

The Centers for Medicare and Medicaid Services (CMS) Physician Compare includes data from the PECOS dataset which is verified using claims data and supplemented with Board Certification details from American Board of Medical Specialties, American Osteopathic Association, American Board of Optometry, and American Board of
Wound Medicine and Surgery. Relevant variables include physician name, practice location, primary and secondary specialties, education, and board certifications. The data is publicly available and includes data from 2012-present, reported annually.\(^4\)

- **Identifying Additional Osteopaths**: We used the Physician Compare September 2016 data to identify additional osteopaths using the medical school identification and primary specialty variables. For a full explanation of this process, see II.B.

E. Population Data

The population data comes from the United States 2010 Census. This source supplies county-level population data.

F. United States Department of Agriculture 2013 Rural-Urban Continuum Codes

Every county in the United States is assigned a Rural-Urban Continuum Code by the United States Department of Agriculture.\(^5\) The latest version was updated in 2013. There are 9 codes, three of which are metro (codes 1, 2, and 3) and six are nonmetro (codes 4 through 9). We designated metro-coded counties as urban, and nonmetro counties as rural. We used this classification system to designate counties as rural, to find the percent of the population as rural, and to record the percent of family physicians practicing in rural counties in each state, region, and in the nation. To find the percent of the population living in underserved counties, we constructed a ratio of county populations to the number of primary care providers practicing in the county. Those living in counties with greater than 2,000 people per 1 PCP were denoted as underserved; the percent living in underserved counties was assessed at the state, regional, and national levels.

G. United States Census Bureau 2010 Census Divisions and Census Regions

We aggregated states at the regional level based on the U.S. Census Bureau 2010 census regions.\(^6\) We then further aggregated states at the census division level based on the U.S. Census Bureau 2010 census divisions. There are four census regions: Northeast, Midwest, South, and West. Within each of the four census regions, there are two to three census divisions (9 census divisions total).
<table>
<thead>
<tr>
<th>Region 1: Northeast</th>
<th>Region 2: Midwest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Division 1:</strong> New England</td>
<td><strong>Division 2:</strong> Middle Atlantic</td>
</tr>
<tr>
<td>Connecticut</td>
<td>New Jersey</td>
</tr>
<tr>
<td>Maine</td>
<td>New York</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td><strong>Division 3:</strong> East North Central</td>
<td><strong>Division 4:</strong> West North Central</td>
</tr>
<tr>
<td>Indiana</td>
<td>Iowa</td>
</tr>
<tr>
<td>Illinois</td>
<td>Kansas</td>
</tr>
<tr>
<td>Michigan</td>
<td>Minnesota</td>
</tr>
<tr>
<td>Ohio</td>
<td>Missouri</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Nebraska</td>
</tr>
<tr>
<td>North Dakota</td>
<td>South Dakota</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region 3: South</th>
<th>Region 4: West</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Division 5:</strong> South Atlantic</td>
<td><strong>Division 6:</strong> East South Central</td>
</tr>
<tr>
<td>Delaware</td>
<td>Alabama</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>Kentucky</td>
</tr>
<tr>
<td>Florida</td>
<td>Mississippi</td>
</tr>
<tr>
<td>Georgia</td>
<td>Tennessee</td>
</tr>
<tr>
<td>Maryland</td>
<td><strong>Division 7:</strong> West South Central</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Arkansas</td>
</tr>
<tr>
<td>South Carolina</td>
<td>Louisiana</td>
</tr>
<tr>
<td>Virginia</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>West Virginia</td>
<td>Texas</td>
</tr>
<tr>
<td><strong>Division 8:</strong> Mountain</td>
<td><strong>Division 9:</strong> Pacific</td>
</tr>
<tr>
<td>Arizona</td>
<td>Alaska</td>
</tr>
<tr>
<td>Colorado</td>
<td>California</td>
</tr>
<tr>
<td>Idaho</td>
<td>Hawaii</td>
</tr>
<tr>
<td>Montana</td>
<td>Oregon</td>
</tr>
<tr>
<td>Nevada</td>
<td>Washington</td>
</tr>
<tr>
<td>New Mexico</td>
<td>Utah</td>
</tr>
<tr>
<td>Utah</td>
<td>Wyoming</td>
</tr>
</tbody>
</table>

U.S. Census Bureau 2010 Census Regions and Census Divisions.
The 2016 Centers for Medicare and Medicaid Services Medicare Provider Utilization and Payment Data: Physician and Other Supplier Public Use File includes physician services provided to Medicare beneficiaries using CMS administrative claims data. It includes 100% of the non-institutional line items for Medicare fee-for-service population. It contains information on physician National Provider Identifier (NPI), Healthcare Common Procedure Coding System (HCPCS) codes.

- **Identifying Hospitalists:** We used the 2016 CMS Medicare Provider Utilization and Payment Data: Physician and Other Supplier Public Use File to identify hospitalists using the NPI and HCPCS variables. For a full explanation of this process, see II.C.

### I. American Medical Association FREIDA Residency & Fellowship Database

We used the American Medical Association (AMA) FREIDA Residency & Fellowship database to account for all Accreditation Council for Graduate Medical Education (ACGME)-accredited family medicine residency programs. We selected for residency programs for family medicine. The AMA FREIDA database provides the Program ID number, the program name, and the state.

### II. Adjustments to Count of Physicians

#### A. Adjusting for Retirees

To adjust for retired PCPs designated as in direct patient care in the AMA Physician Masterfile, we used a method developed by Petterson et al. (2016). Starting at age 55, the count of practicing PCPs was weighted using average cohort retirement rates. The weights were as follows:

<table>
<thead>
<tr>
<th>Age</th>
<th>Weight</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-59</td>
<td>0.97</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 3%.</td>
</tr>
<tr>
<td>60-64</td>
<td>0.913</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 8.7%.</td>
</tr>
<tr>
<td>65-69</td>
<td>0.799</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 20.1%.</td>
</tr>
<tr>
<td>70-74</td>
<td>0.738</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 26.2%.</td>
</tr>
<tr>
<td>75-79</td>
<td>0.616</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 38.4%.</td>
</tr>
<tr>
<td>80-84</td>
<td>0.457</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 54.3%.</td>
</tr>
<tr>
<td>85-89</td>
<td>0.294</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 70.6%.</td>
</tr>
<tr>
<td>90-98</td>
<td>0.186</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 81.4%.</td>
</tr>
<tr>
<td>99+</td>
<td>0.00</td>
<td>Assumes AMA Masterfile over-reports practicing physicians by 100%.</td>
</tr>
</tbody>
</table>

#### B. Adjusting for Underrepresentation of Doctors of Osteopathy (DOs) in AMA Masterfile

The AMA Physician Masterfile undercounts the Doctors of Osteopathy (DOs) in direct patient care. To address this, we utilized the NPPES and Physician Compare data to supplement the AMA Physician Masterfile figures.

We identified DOs in the NPPES using the Provider Credential Text. This variable includes respondent self-identification of their title. We included those with some variant of “DO” in their title for the identification of
doctors of osteopathy. A limitation of this method is the possible undercount of DOs who self-identified without using this text extract.

Next, we matched these newly identified DOs to the 2018 AMA Physician Masterfile using their NPI number. We kept only those DOs whose NPI numbers were not already included in the AMA Masterfile. Then, to narrow the identified DOs to those in primary care practice, we identified those with primary care specialties. The NPPES features healthcare provider taxonomy codes to identify state licensed allopathic and osteopathic physician by specialties and subspecialties.¹⁰ Physicians may list more than one specialty, and therefore may have many taxonomy codes. We used only the primary taxonomy for each physician, identified by the Primary Taxonomy Switch Code. Specialties included are family physician [207Q00000X], general practice [208000000X], pediatrics [208000000X], and general internal medicine [207R00000X].

Then, we incorporated an additional data source to identify DOs: 2016 CMS Physician Compare. Physician Compare features information on physicians’ credentials and medical schools. First, we identified DOs, MDs, and their corresponding medical schools using the Credential and Medical School Name variables. Medical schools with a greater total of DO graduates than MD graduates were designated as DO schools. In cases where DOs identified in the NPPES were not categorized as physicians in the NPPES, we used Physician Compare specialty information instead. From the NPPES and Physician Compare we identified 4,566 DO primary care physicians. These DOs not in the AMA Masterfile are generally younger, with 73% under the age of 35 and 96% under the age of 39, indicating that DOs that are missing in the AMA Masterfile are at the start of their careers. Finally, we added these DOs to the MDs and DOs in the AMA Masterfile.

C. Hospitalists

Working as a hospitalist is a rising trend among family physician residency graduates. In 2016, 9 percent of family physicians self-identified as hospitalists in a survey conducted 3 years after respondents’ completion of residency training.¹¹ Hospitalists practice in non-primary care settings, thus we corrected to remove hospitalists from PCP estimations.

To identify hospitalists, we used a method developed by Kuo (2009).¹² Using the 2016 CMS Medicare Provider Utilization and Payment Data: Physician and Other Supplier Public Use File, for each PCP we obtained a count of the number of office evaluation and management visits (E&M) [HCPCS codes 99201-99205 for new patients and 99211-99215 for established patients] as well as a count of the number of hospital visits [HCPCS codes 99221-99223, 99231-99233, 99251-99255]. Physicians are classified as hospitalists if hospital visits accounted for more than 90% of the sum of office and hospital visits.
### III. Total Count of Primary Care Physicians (PCP) (Non-Hospitalists), 2018

<table>
<thead>
<tr>
<th>Census Area (Country, Region, Division)</th>
<th>State</th>
<th>PCP (All)</th>
<th>PCP - Family Medicine</th>
<th>PCP - Internal Medicine</th>
<th>PCP - Pediatrics</th>
<th>PCP - General Practice</th>
<th>PCP - Geriatrics</th>
<th>PCP per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td></td>
<td>217,207.7</td>
<td>86,957.5</td>
<td>72,404.3</td>
<td>49,409.8</td>
<td>4,619.9</td>
<td>3,816.3</td>
<td>75.6</td>
</tr>
<tr>
<td>Northeast</td>
<td></td>
<td>42,990.0</td>
<td>12,216.2</td>
<td>18,068.4</td>
<td>11,085.2</td>
<td>601.4</td>
<td>1,018.7</td>
<td>85.9</td>
</tr>
<tr>
<td>New England</td>
<td></td>
<td>12,631.5</td>
<td>3,479.8</td>
<td>5,606.6</td>
<td>3,145.7</td>
<td>113.2</td>
<td>286.2</td>
<td>98.0</td>
</tr>
<tr>
<td>Connecticut (CT)</td>
<td></td>
<td>2,586.5</td>
<td>509.3</td>
<td>1,303.0</td>
<td>689.1</td>
<td>14.3</td>
<td>70.8</td>
<td>72.1</td>
</tr>
<tr>
<td>Massachusetts (MA)</td>
<td></td>
<td>6,237.1</td>
<td>1,295.0</td>
<td>3,098.8</td>
<td>1,651.6</td>
<td>46.4</td>
<td>145.2</td>
<td>90.9</td>
</tr>
<tr>
<td>Maine (ME)</td>
<td></td>
<td>1,261.5</td>
<td>679.5</td>
<td>318.2</td>
<td>214.1</td>
<td>24.1</td>
<td>25.5</td>
<td>94.4</td>
</tr>
<tr>
<td>New Hampshire (NH)</td>
<td></td>
<td>1,028.9</td>
<td>471.8</td>
<td>305.1</td>
<td>225.0</td>
<td>9.5</td>
<td>17.4</td>
<td>76.6</td>
</tr>
<tr>
<td>Rhode Island (RI)</td>
<td></td>
<td>904.5</td>
<td>245.6</td>
<td>402.4</td>
<td>226.6</td>
<td>12.4</td>
<td>17.6</td>
<td>85.4</td>
</tr>
<tr>
<td>Vermont (VT)</td>
<td></td>
<td>613.0</td>
<td>278.6</td>
<td>179.1</td>
<td>139.3</td>
<td>6.4</td>
<td>9.6</td>
<td>98.3</td>
</tr>
<tr>
<td>Middle Atlantic</td>
<td></td>
<td>30,358.5</td>
<td>8,736.4</td>
<td>12,461.9</td>
<td>7,939.5</td>
<td>488.2</td>
<td>732.5</td>
<td>81.6</td>
</tr>
<tr>
<td>New Jersey (NJ)</td>
<td></td>
<td>6,581.8</td>
<td>1,590.5</td>
<td>2,809.6</td>
<td>1,931.1</td>
<td>103.2</td>
<td>147.3</td>
<td>73.1</td>
</tr>
<tr>
<td>New York (NY)</td>
<td></td>
<td>14,709.4</td>
<td>3,355.3</td>
<td>6,682.5</td>
<td>4,099.8</td>
<td>174.8</td>
<td>396.9</td>
<td>74.1</td>
</tr>
<tr>
<td>Pennsylvania (PA)</td>
<td></td>
<td>9,067.3</td>
<td>3,790.6</td>
<td>2,969.7</td>
<td>1,908.6</td>
<td>210.1</td>
<td>188.3</td>
<td>70.8</td>
</tr>
<tr>
<td>Midwest</td>
<td></td>
<td>45,342.8</td>
<td>21,280.8</td>
<td>13,248.3</td>
<td>9,132.8</td>
<td>977.0</td>
<td>704.1</td>
<td>76.1</td>
</tr>
<tr>
<td>East North Central</td>
<td></td>
<td>31,545.7</td>
<td>13,845.5</td>
<td>10,035.5</td>
<td>6,460.1</td>
<td>709.8</td>
<td>496.8</td>
<td>75.9</td>
</tr>
<tr>
<td>Illinois (IL)</td>
<td></td>
<td>8,962.0</td>
<td>3,404.6</td>
<td>3,302.0</td>
<td>1,951.6</td>
<td>153.8</td>
<td>150.0</td>
<td>70.0</td>
</tr>
<tr>
<td>Indiana (IN)</td>
<td></td>
<td>3,910.4</td>
<td>2,136.1</td>
<td>923.0</td>
<td>733.8</td>
<td>69.7</td>
<td>47.8</td>
<td>58.7</td>
</tr>
<tr>
<td>Michigan (MI)</td>
<td></td>
<td>6,852.2</td>
<td>2,950.5</td>
<td>2,273.6</td>
<td>1,281.5</td>
<td>235.2</td>
<td>111.5</td>
<td>68.8</td>
</tr>
<tr>
<td>Ohio (OH)</td>
<td></td>
<td>7,821.1</td>
<td>3,214.1</td>
<td>2,534.9</td>
<td>1,746.1</td>
<td>199.5</td>
<td>126.5</td>
<td>67.1</td>
</tr>
<tr>
<td>Wisconsin (WI)</td>
<td></td>
<td>4,000.0</td>
<td>2,140.1</td>
<td>999.9</td>
<td>747.2</td>
<td>51.6</td>
<td>61.0</td>
<td>69.0</td>
</tr>
<tr>
<td>West North Central</td>
<td></td>
<td>13,797.1</td>
<td>7,435.2</td>
<td>3,214.8</td>
<td>2,672.6</td>
<td>267.2</td>
<td>207.3</td>
<td>76.5</td>
</tr>
<tr>
<td>Iowa (IA)</td>
<td></td>
<td>1,907.5</td>
<td>1,199.3</td>
<td>346.7</td>
<td>302.7</td>
<td>35.9</td>
<td>22.8</td>
<td>60.6</td>
</tr>
<tr>
<td>Kansas (KS)</td>
<td></td>
<td>1,793.2</td>
<td>1,030.5</td>
<td>364.0</td>
<td>327.6</td>
<td>49.3</td>
<td>21.9</td>
<td>61.6</td>
</tr>
<tr>
<td>Minnesota (MN)</td>
<td></td>
<td>4,195.0</td>
<td>2,392.1</td>
<td>955.6</td>
<td>753.4</td>
<td>26.9</td>
<td>67.0</td>
<td>75.2</td>
</tr>
<tr>
<td>Missouri (MO)</td>
<td></td>
<td>3,715.7</td>
<td>1,548.4</td>
<td>1,071.5</td>
<td>895.5</td>
<td>128.2</td>
<td>72.0</td>
<td>60.8</td>
</tr>
<tr>
<td>North Dakota (ND)</td>
<td></td>
<td>480.5</td>
<td>298.4</td>
<td>95.0</td>
<td>75.7</td>
<td>5.5</td>
<td>5.9</td>
<td>63.6</td>
</tr>
<tr>
<td>Nebraska (NE)</td>
<td></td>
<td>1,175.4</td>
<td>655.3</td>
<td>257.3</td>
<td>239.5</td>
<td>9.6</td>
<td>13.7</td>
<td>61.2</td>
</tr>
<tr>
<td>South Dakota (SD)</td>
<td></td>
<td>529.9</td>
<td>311.3</td>
<td>124.6</td>
<td>78.2</td>
<td>11.8</td>
<td>3.9</td>
<td>60.9</td>
</tr>
<tr>
<td>South</td>
<td></td>
<td>74,814.4</td>
<td>30,659.7</td>
<td>23,430.2</td>
<td>17,677.2</td>
<td>1,827.1</td>
<td>1,220.2</td>
<td>69.1</td>
</tr>
<tr>
<td>South Atlantic</td>
<td></td>
<td>42,292.7</td>
<td>16,112.0</td>
<td>14,325.4</td>
<td>10,048.3</td>
<td>1,031.4</td>
<td>775.6</td>
<td>74.5</td>
</tr>
<tr>
<td>Delaware (DE)</td>
<td></td>
<td>937.3</td>
<td>184.3</td>
<td>410.8</td>
<td>312.9</td>
<td>10.4</td>
<td>18.8</td>
<td>135.1</td>
</tr>
<tr>
<td>Florida (FL)</td>
<td></td>
<td>640.5</td>
<td>269.3</td>
<td>180.8</td>
<td>172.3</td>
<td>7.6</td>
<td>10.5</td>
<td>66.6</td>
</tr>
<tr>
<td>Georgia (GA)</td>
<td></td>
<td>13,661.8</td>
<td>4,913.7</td>
<td>4,908.7</td>
<td>2,947.8</td>
<td>592.0</td>
<td>299.6</td>
<td>65.1</td>
</tr>
<tr>
<td>Maryland (MD)</td>
<td></td>
<td>5,992.6</td>
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*Underserved counties had a population to PCP ratio greater than 2,000:1

DO: Doctor of Osteopathy. IMG: International Medical School Graduate.
References


