Health Care Access Among Self-Employed Workers in Nonmetropolitan Counties

Elizabeth A. Dobis
Jessica E. Todd
USDA, Economic Research Service

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What affects health care access?

• Availability of health care resources
  – Physical infrastructure of the health care system
  – Location of facilities and providers, services available, ability to reach care in timely manner

• Affordability of medical services
  – Whether people can pay for preventative, elective, and emergency medical care, and whether those costs are a burden

• Willingness to receive medical care
  – Distrust of medical providers or societal opinions like the stigma associated with mental health issues may dissuade people from getting care
Self-employed workers and nonmetro counties

• Self-employed workers are:
  – Individuals who works for themselves (unincorporated businesses) rather than for a private company, government, or as an unpaid family worker
    • 4.1% of U.S. adults age 26 years and older
    • 6.8% of households had a self-employed member
  – Most do not have direct access to an employer-based group health insurance plan, so they get their coverage through alternate means

• Nonmetro counties have:
  – Smaller populations, which may limit choice due to fewer facilities and less specialized medical services, while longer travel distances may increase the difficulty of accessing care
  – A larger share of self-employed workers (17.4%) than for the U.S. as a whole (13.5%)
Motivation

• Because health care access factors are influenced by:
  – Personal characteristics (e.g., employment, age, income)
  – Location characteristics (e.g., resources, services)

• Self-employed workers in nonmetro areas experience a unique blend of factors affecting availability and affordability of medical services
The report, in short

• Describes health care costs, insurance coverage, and numbers of professionals and facilities between 2014 and 2018, while the ACA was in full effect

• Conditions influencing availability and affordability have since changed
  – The repeal of the individual mandate of the ACA went into effect in 2019
  – The COVID-19 pandemic further affected health care access starting in 2020

• Three main sections:
  1. Affordability of health care (individuals and households)
  2. Availability of health care (counties)
  3. Changes during 2020 (individuals)
Affordability of Health Care Resources

Individuals’ health insurance coverage varied more by worker classification than metro status in 2018

Notes: Working-age adults = age 26-64; Retirement-age adults = age 65 and older. Other-employed = employed by government or private sector. Insurance types: Employer-based = private, group plan coverage; Direct-purchase = private, non-group coverage; Public = government coverage (e.g., Medicare, Medicaid).

Household-level health insurance varied more by employment type than metro status in 2018

Notes: Working-age adults = age 26-64; Retirement-age adults = age 65 and older. Household types: Self-employed = All employed adults are self-employed; Mixed-employment = some adults were self-employed and some were employed by private or government sectors; Other-employed = All employed adults were in the government or private sectors. Insurance types: Employer-based = private, group plan coverage; Direct-purchase = private, non-group coverage; Public = government coverage. Source: U.S. Department of Commerce, Bureau of the Census, 2019 Current Population Survey, Annual Social and Economic Supplement (CPS ASEC)
Family medical expenditures varied more by source of health insurance coverage than metro status in 2018

### Mean medical expenditures per person for families, 2018

<table>
<thead>
<tr>
<th>All health insurance sources</th>
<th>All families</th>
<th>Working-age families</th>
<th>Retirement-age families</th>
</tr>
</thead>
<tbody>
<tr>
<td>Out-of-pocket health insurance premiums ($)</td>
<td>1,144</td>
<td>1,181</td>
<td>1,081</td>
</tr>
<tr>
<td>Out-of-pocket health care spending ($)</td>
<td>815</td>
<td>691</td>
<td>1,025</td>
</tr>
<tr>
<td>Over-the-counter expenditures ($)</td>
<td>171</td>
<td>143</td>
<td>218</td>
</tr>
<tr>
<td>Total medical expenses ($)</td>
<td>2,130</td>
<td>2,016</td>
<td>2,324</td>
</tr>
<tr>
<td>Multiple policy sources (%)</td>
<td>29.2</td>
<td>14.2</td>
<td>54.5</td>
</tr>
</tbody>
</table>

**Employer-based insurance (private, group)**
- Out-of-pocket health insurance premiums ($) | 1,496 | 1,470 | 1,593 |
- Multiple policy sources (%) | 34.0 | 18.3 | 92.8 |

**Direct-purchase insurance (private, non-group)**
- Out-of-pocket health insurance premiums ($) | 1,832 | 2,059 | 1,700 |
- Multiple policy sources (%) | 79.2 | 44.4 | 99.2 |

**Public insurance (government)**
- Out-of-pocket health insurance premiums ($) | 793 | 355 | 1,064 |
- Multiple policy sources (%) | 47.2 | 33.4 | 55.8 |

Notes: Working-age families = all adults are age 26-64; Retirement-age families = at least one adult is age 65 or older. Source: U.S. Department of Commerce, Bureau of the Census, 2019 Current Population Survey, Annual Social and Economic Supplement (CPS ASEC)

- Very similar rates and patterns for metro and nonmetro counties, with differences of less than $100
- Biggest expenditure differences due to premiums differing by source of insurance
- Retirement-age families pay slightly more in total expenses than working-age families, mainly due to out-of-pocket and over-the-counter expenses
Availability of Health Care Resources

Uses aggregate data from the 2018-19 Area Health Resource File (AHRF) and 2014-18 American Community Survey (ACS)
Availability of health care facilities varied across U.S. regions and rurality in 2017

<table>
<thead>
<tr>
<th>Percentage of U.S. counties with medical facilities, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>United States</td>
</tr>
<tr>
<td>Metro</td>
</tr>
<tr>
<td>Micro</td>
</tr>
<tr>
<td>Noncore</td>
</tr>
<tr>
<td>Midwest</td>
</tr>
<tr>
<td>Northeast</td>
</tr>
<tr>
<td>South</td>
</tr>
<tr>
<td>West</td>
</tr>
</tbody>
</table>

Notes: Short-term general hospitals provide general medical and surgical care to patients that usually stay less than 30 days. Skilled nursing facilities provide inpatient medical, nursing, or rehabilitative care at a level below that of a hospital. Metro counties are part of, or are economically linked to, a large urban area (≥50,000 residents). Micro counties are population hubs in nonmetro counties (10,000 to 499,999 residents) and the counties that are economically linked to them, while noncore counties are all other nonmetro counties. Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, 2018–19 Area Health Resources File

- A smaller share of noncore counties had medical facilities
- The greatest shares for hospitals were in micro counties, while for skilled nursing facilities the greatest shares were in metro counties
- Overall, the Northeast had the best access to medical facilities (and providers), while the South had the worst
Availability of health care resources varied by county rurality, 2017 and 2019

Health care availability measures by metro status, 2017 and 2019

<table>
<thead>
<tr>
<th>Health care availability measures</th>
<th>Metro counties</th>
<th>Micro counties</th>
<th>Noncore counties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean bed-to-population ratio (per 10,000 residents, 2017)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>25.0</td>
<td>27.8</td>
<td>35.2</td>
</tr>
<tr>
<td>Short-term general hospital</td>
<td>20.2</td>
<td>24.5</td>
<td>32.7</td>
</tr>
<tr>
<td>Skilled nursing facility</td>
<td>58.2</td>
<td>75.8</td>
<td>96.1</td>
</tr>
<tr>
<td><strong>Mean provider-to-population ratio (per 10,000 residents, 2017)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total physicians</td>
<td>21.2</td>
<td>13.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Primary care physicians</td>
<td>6.1</td>
<td>5.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Dentists</td>
<td>4.1</td>
<td>3.6</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Share of counties completely covered by HPSAs (%, 2019)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary care HPSA</td>
<td>16.3</td>
<td>16.8</td>
<td>40.4</td>
</tr>
<tr>
<td>Dentist HPSA</td>
<td>7.5</td>
<td>10.8</td>
<td>24.0</td>
</tr>
<tr>
<td>Mental health HPSA</td>
<td>36.0</td>
<td>70.0</td>
<td>80.6</td>
</tr>
</tbody>
</table>

Notes: Health professional shortage areas (HPSAs) can be defined at a subcounty level using minor civil divisions or census tracts. Primary care health professionals are physicians specializing in family and general medicine, general internal medicine, general pediatrics, and obstetrics and gynecology. Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, 2018–19 Area Health Resources File; U.S. Department of Commerce, Bureau of the Census, American Community Survey 2018 5-year data

- Metro counties had the greatest availability of medical professionals but the fewest beds per 10,000 residents
- Noncore counties had the greatest beds per 10,000 residents but the fewest health care professionals. They were also most likely to have an HPSA.
- Counties were least likely to have a dentist HPSA, followed by primary care physicians. Mental health HPSAs were most likely.
Most high self-employment counties were nonmetro, 2014-18

• High self-employment counties are in the highest quartile by share of workers (age 16 and older) who are self-employed
  – 9.1% to 36.7% are self-employed

• 786 counties:
  – 84 metro, 702 nonmetro

• Concentrated in Great Plains and upper Mountain West

Source: U.S. Department of Commerce, Bureau of the Census, American Community Survey 2018 5-year data
Availability of medical doctors favors metropolitan counties with low rates of self-employment

- Between 1970 and 2000, the average rate of MDs increased for all county types.
- After 2000, the average rate of MDs started decreasing in nonmetro counties while increases slowed in metro counties.
- By 2017:
  - Average rate of MDs in low self-employment nonmetro counties fell below the rate in high self-employment metro counties.
  - The gap between high self-employment metro and low self-employment nonmetro counties had increased to 16 MDs per 10,000 residents.

Notes: MD = Doctor of Medicine
Changes During 2020

Uses survey data from the 2020 Household Pulse Survey (HPS), Phases 1, 2, and 3
Health insurance coverage declined among employed adults during 2020

(a) Percentage of individuals with no health insurance coverage

(b) Percentage of individuals with employer-based health insurance coverage

Notes: Employer-based health insurance coverage refers to private, group plans. Source: U.S. Department of Commerce, Bureau of the Census, Household Pulse Survey, Phases 1, 2, and 3 up through December 21, 2020. Data Review Board approval numbers CBDRBFY21-Pop001-0082.
COVID-19 impacted medical service use and overall population health in 2020

• Over the course of the pandemic in 2020, the share of respondents that delayed getting medical care or did not get needed medical care decreased
  – Delayed medical care: From about 40% to 30-33%
  – Did not get needed medical care: From 31-33% to 23-25%

• Metro residents were more likely to report excellent or very good health than nonmetro residents
  – In nonmetro counties, self-employed workers were more likely to report excellent or very good health than other employed workers (64.6% vs 57.9%)

• From April to December 2020, there were declines in health status for all groups, with most of the decline happening early in the pandemic
Key takeaways: Motivation

• Greater health care access is meant to improve the overall health of U.S. residents, along with their quality of life
  – Access is affected by a combination of personal and location characteristics
  – From a community development standpoint, this means that you need to be aware of the factors associated with how residents access health care

• Self-employed workers in nonmetro areas experience a unique blend of factors affecting availability (their location) and affordability (their personal characteristics) of medical services
Key takeaways: Affordability

• Health insurance coverage rates and sources differed more by age and whether workers are self-employed than by metro status
  – Households play a big role in the source of health insurance coverage that self-employed workers have (if any)
  – Retirement-age adults and households experienced different health insurance coverage patterns than working-age adults and households

• Family medical expenditures differed more by age and source of insurance coverage than by metro status or whether a member is self-employed
  – Primarily due to premiums and use of medical services
Key takeaways: Availability and since 2018

• Availability of health care facilities and providers varied across U.S. regions and rurality

• Accessing medical care may have been more difficult in noncore and high self-employment counties due to fewer medical facilities and lower rates of medical professionals

• Health conditions have changed since 2018:
  – The repeal of the ACA’s individual mandate went into effect in 2019
  – In 2020, COVID-19 affected availability through fewer non-COVID services, affordability through lost income and insurance, as well as willingness to receive care
Thank You!

Contact information:

Elizabeth A. Dobis  
elizabeth.dobis@usda.gov

Jessica E. Todd  
jessica.todd@usda.gov