

Why the Biden Administration Should Help States Develop Capitated Public Options

Technical Appendix (by Taylor L. Wang and Richard M. Scheffler¹)

Four key indicators were used to identify whether a given state had a strong enough managed care foundation to build a public option based on risk-based capitation: HMO penetration, ACO Penetration, Medicare Advantage penetration, and percent of physicians in a group with 30+ physicians. We began by selecting all states that sit above the median in terms of HMO penetration. Then, we identified Tier 1 as the states that sat above the median in two of the remaining three categories. Tier 2 states consisted of states that were only above the median in one of the remaining three categories. Finally, we used the political leaning of the state legislature to determine if a public option would even be considered in each state.

HMO Penetration

To calculate HMO penetration, we used the number of individuals enrolled in commercial HMOs as well as all individuals enrolled in a Medicaid Managed Care plan as our numerator, operating under the assumption that Medicaid managed care plans are very similar to HMOs. We then divided this by the total number of individuals with Medicaid managed care plans or commercial insurance in each state. HMO enrollment data came from the HealthLeaders-Interstudy, and all data is for the 2020 calendar year.

ACO Penetration

State values for ACO penetration came from [Muhlestein and colleagues' descriptive analysis](#) of Leavitt Partners' accountable care organizations database in 2018. To measure penetration, they calculated the percent of lives covered by ACOs, and grouped all states into seven brackets of penetration: 0-3%, 3-5%, 5-7%, 7-10%, 10-15%, 15-20%, and 20%+. We selected the median cutoff point as all states above 10% penetration, resulting in 27 states sitting above the median.

Medicare Advantage Penetration

We used [Kaiser Family Foundation's analysis](#) of CMS Market penetration files. Figure 2 identifies MA penetration as the share of Medicare beneficiaries in Medicare Advantage plans by state in 2020.

Physician Concentration in 30+ Person Physician Groups

With IQVIA's OneKey Physician Database 2020, we used the corporate parent attached to each organization to calculate the number of FTEs for each corporate parent-state combination in the data. Physicians that practice in multiple health care organizations were distributed using FTEs. For example, 0.33 FTE was allocated to each organization for physicians that practice in three organizations. We then summed the FTEs of organizations whose corporate parents had more

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than 30 FTEs in each state. The resulting sum divided by the total number of FTEs in the state generated the physician concentration percentages.

All state values for the four indicators can be found in the table below.

Table 1: State Values for Four Key Indicators

<i>State</i>	<i>HMO Penetration</i>	<i>ACO Penetration</i>	<i>MA Penetration</i>	<i>Physician Concentration in Groups with 30+ Physicians</i>
Median Cutoff	30.49%	10%	34.50%	49.36%
Alabama	2.1%	5-7%	41%	13.8%
Alaska	0.0%	15-20%	1%	33.1%
Arizona	36.4%	10-15%	39%	41.8%
Arkansas	21.3%	7-10%	26%	41.4%
California	65.1%	5-7%	40%	54.0%
Colorado	26.3%	20+%	38%	43.4%
Connecticut	10.3%	15-20%	41%	51.6%
Delaware	34.5%	5-7%	17%	34.3%
Florida	34.1%	7-10%	43%	40.0%
Georgia	34.2%	5-7%	37%	46.3%
Hawaii	45.9%	7-10%	44%	36.9%
Idaho	4.0%	5-7%	33%	60.3%
Illinois	34.4%	10-15%	25%	44.9%
Indiana	29.1%	10-15%	32%	56.6%
Iowa	41.1%	20+%	22%	58.8%
Kansas	20.7%	7-10%	19%	47.0%
Kentucky	40.5%	5-7%	34%	51.4%
Louisiana	44.2%	20+%	38%	43.6%
Maine	21.4%	20+%	36%	68.2%
Maryland	49.4%	5-7%	11%	47.3%
Massachusetts	40.6%	20+%	23%	64.2%
Michigan	38.7%	15-20%	42%	48.3%
Minnesota	17.9%	10-15%	43%	74.1%
Mississippi	29.3%	7-10%	20%	61.2%
Missouri	18.0%	5-7%	35%	34.6%
Montana	0.1%	3-5%	18%	51.8%
Nebraska	19.8%	10-15%	17%	55.5%
Nevada	39.7%	3-5%	36%	74.6%
New Hampshire	44.1%	10-15%	19%	52.2%
New Jersey	26.3%	10-15%	29%	59.9%
New Mexico	53.9%	0-3%	35%	39.6%

New York	40.1%	7-10%	40%	38.1%
North Carolina	2.4%	10-15%	36%	31.3%
North Dakota	25.5%	7-10%	17%	48.3%
Ohio	28.7%	10-15%	39%	58.7%
Oklahoma	7.3%	3-5%	22%	43.6%
Oregon	42.8%	20+%	42%	51.2%
Pennsylvania	31.8%	10-15%	41%	61.1%
Rhode Island	40.1%	20+%	39%	51.3%
South Carolina	29.1%	5-7%	28%	53.2%
South Dakota	30.2%	7-10%	19%	67.4%
Tennessee	30.8%	10-15%	38%	46.6%
Texas	25.2%	10-15%	37%	39.8%
Utah	19.0%	15-20%	36%	61.6%
Vermont	17.0%	20+%	12%	49.7%
Virginia	32.0%	7-10%	21%	49.0%
Washington	37.4%	10-15%	33%	71.5%
West Virginia	41.3%	10-15%	31%	70.1%
Wisconsin	42.1%	10-15%	42%	44.7%
Wyoming	0.2%	0-3%	0.0%	14.7%

Table 2: Tier 1 States

<i>State</i>	<i>HMO Penetration</i>	<i>ACO Penetration</i>	<i>MA Penetration</i>	<i>Physician Concentration in Groups with 30+ Physicians</i>
California	65.1%	5-7%	40%	54.0%
Massachusetts	40.6%	20+%	23%	64.2%
Nevada	39.7%	3-5%	36%	74.6%
New Hampshire	44.1%	10-15%	19%	52.2%
Oregon	42.8%	20+%	42%	51.2%
Rhode Island	40.1%	20+%	39%	51.3%
Washington	37.4%	10-15%	33%	71.5%

Table 3: Tier 2 States

<i>State</i>	<i>HMO Penetration</i>	<i>ACO Penetration</i>	<i>MA Penetration</i>	<i>Physician Concentration in Groups with 30+ Physicians</i>
Hawaii	45.9%	7-10%	44%	36.9%
Illinois	34.4%	10-15%	25%	44.9%
New Mexico	53.9%	0-3%	35%	39.6%
New York	40.1%	7-10%	40%	38.1%

