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JON GODFREAD, COMMISSIONER

North Dakota's Health Care Cost Study: An Unprecedented Look at Health Care Costs and the Necessary Steps Towards Controlling Same

Commissioner Jon Godfread, NDID

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September 23, 2021

Background of Health Care Cost Study

- **Spring 2019:** North Dakota legislature approves a health care cost study to be performed by the North Dakota Insurance Department

- **October 2019:** the North Dakota Insurance Department (NDID) engaged JWHammer, LLC and consultant Horizon Government Affairs (HGA) to develop a multi-pronged study of North Dakota's health costs, including data gathering and analysis, baseline current-policy projections for the next several years, development of policy alternatives, and cost estimates of alternative policies relative to baseline.

- **October 2019 – Summer 2020:** Collection and analysis of data occurs.

- **September 2020:** Preliminary Report prepared.

- **December 2020:** Final report prepared with data for 2019 on North Dakota and 50-state insurance markets from the National Association of Insurance Commissioners (NAIC) and the Medicare Cost Report system.

How was the Study conducted?

In-Depth Study of Nine North Dakota Hospitals.

- Issued a data request to these nine hospitals based on the American Hospital Association's (AHA's) annual survey, after discussion with the state's hospitals and the North Dakota Hospital Association (NDHA).
- NDHA arranged to have the historical data submissions for the survey sent back from the AHA to each hospital, to make the data response less burdensome.
- One key purpose of the data request was to supplement and verify the publicly available data from HCRIS, which we use for state-by-state comparisons. Our preliminary finding is that the HCRIS 2010-2018 data provides a good summary of the state's utilization, expenses, and revenues, although there were several cases where we had to make corrections to the HCRIS data for individual North Dakota hospitals based on the hospital's AHA data response and in subsequent discussion with hospitals.
- The one concept where the HCRIS and AHA did differ noticeably was on the hospitals' allocations of their revenues from payers: commercial vs. Medicare and Medicaid. In general, we have defaulted to using the AHA data as a guide for our projections.

Agenda:

1. Summary of the Hospital Market
2. Significant Findings of Volatile Health Care Costs
3. **Solution:** Private Reinsurance
4. Secret Shopper Survey
5. Is it Patient Financial Assistance?
6. Revenues – Where are they going?
7. **Solution:** Price Disclosures are Necessary
8. Pharmacy Cost Increases
9. **Solution:** Management of Chronic Conditions
10. Insurance Market Findings: It's Steady

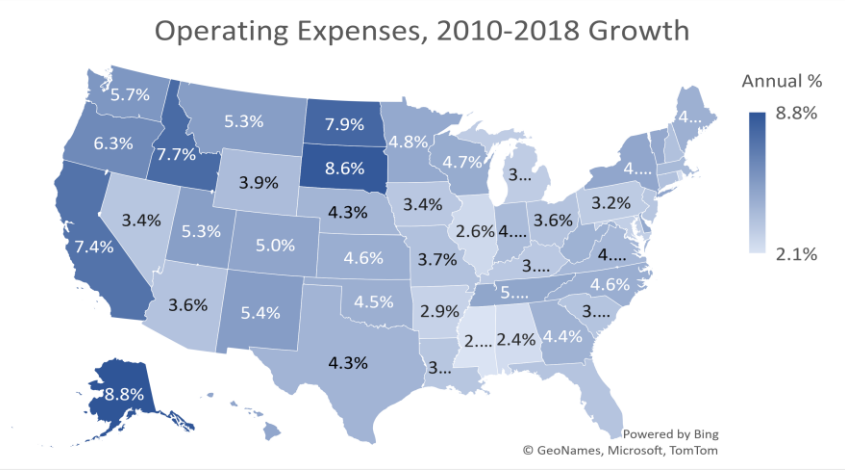
Hospital Market Summary

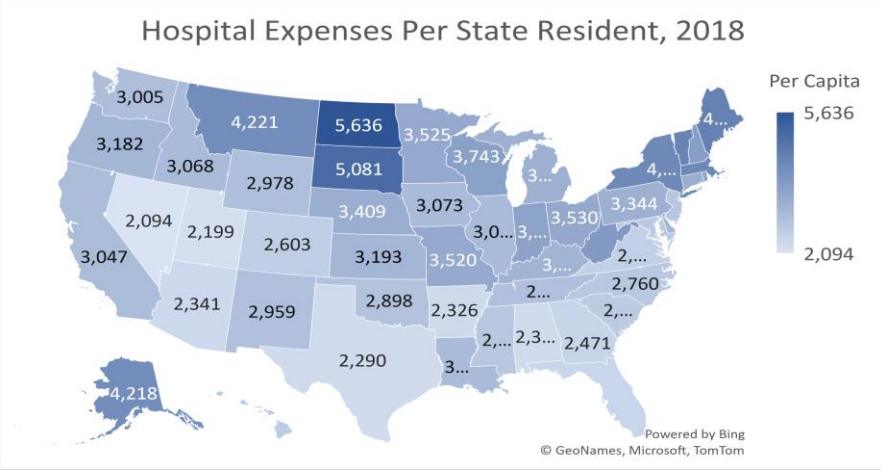
North Dakota Hospital Rankings vs. Other States, 2010-2018*	Rank (highest to lowest)	
	Level	Growth
Inpatient Discharges		14
Inpatient Days		5
Inpatient Days per 1,000 People	4	12
Average Length of Stay	4	3
Occupancy Rate	39	23
Beds Per Person	5	12
Operating Expenses		3
Operating Expenses per Person	1	4
Operating Revenues		2
Operating Revenues per Person	2	3
Average Salaries per FTE	4	5
Inpatient Revenue per Discharge	7	2
Commercial to Medicare Rate Ratio	12	9
Medicare Case Mix Index	30	16
Medicare Revenues per Enrollee	2	2
Medicare Inpatient Revenues		4
Medicare Inpatient Revenue per Discharge [+]	30	3
Medicare Outpatient Revenues		3
Medicare Outpatient Revenues per Enrollee	1	2
Medicaid Revenues		3
Medicaid Inpatient Discharges		7
Medicaid Inpatient Days		6
Medicaid Revenues per Enrollee	1	1
Private Patient Revenues per Private Insurance Enrollee	6	9
Patient Financial Assistance	38	3

Source. HGA based on data from the Medicare Hospital Cost Reports.
Level Rankings are based on 2017 or 2018, and Growth Rankings are based on 2010 or 2011 to 2017 or 2018, depending on data availability.

High Hospital Operating Expenses

- North Dakota's growth from 2010-2017 is more than double the national average.
- Ranked 3rd in the U.S.: Only South Dakota and Alaska rank higher.
- North Dakota's growth from 2010-2017 is more than double the national average.
- Operating expenses per resident: North Dakota ranked 1st in the U.S.
- Operating Expenses. Overall operating expenses for North Dakota hospitals grew by an average of 7.9 percent annually between 2010 and 2018, well above the national average of 4.5 percent per year. Only South Dakota and Alaska had more rapid rates of growth in expenses during this period (see Tables 18-19 and Figure 6). North Dakota's hospital operating expenses per state resident were highest in the nation in 2018. Between 2010 and 2018, North Dakota overtook DC for the highest expenses per capita.





Patient Utilization Measures Were Stagnant, Grew by About 1-2% Per Year

Aggregate Utilization Measures (AHA Data vs. HCRIS)

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Nine Responding Plans (by calendar year)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average Annual Growth
Admissions				**AHA Historical Data**							
Medicare	33,327	33,734	33,991	32,447	32,033	32,892	33,266	34,081	34,850	35,016	0.6%
Medicaid	11,395	12,010	11,550	10,543	11,624	13,287	15,540	15,659	16,227	16,447	4.2%
Private/Other	35,648	36,899	39,871	39,410	37,116	34,288	29,914	30,295	30,009	31,147	-1.5%
Total	80,370	82,643	85,411	82,399	80,773	80,467	78,719	80,034	81,085	82,610	0.3%
Days											
Medicare	165,591	172,163	178,394	177,299	171,340	179,089	175,646	172,764	175,152	173,370	0.5%
Medicaid	47,813	50,064	51,015	51,457	63,848	73,616	83,832	84,841	86,288	86,551	6.8%
Private/Other	124,500	128,035	139,158	137,875	130,317	125,119	119,596	113,605	114,437	120,147	-0.4%
Total	337,903	350,262	368,567	366,630	366,805	379,124	379,073	371,210	375,877	380,068	1.3%
Inpatient Surgeries	25,872	25,684	26,030	25,702	24,987	24,696	24,635	24,718	24,202	24,156	-0.8%
ED Visits	206,738	224,232	244,550	244,103	252,343	256,880	253,005	246,322	244,994	247,200	2.0%
Outpatient Visits	1,809,797	1,838,424	1,958,487	2,083,629	2,148,674	2,156,467	2,171,771	2,109,200	2,061,083	2,013,684	1.2%
Outpatient Surgeries	43,231	53,934	61,136	63,953	66,806	68,218	68,734	69,183	69,905	69,564	5.4%
Beds	1,554	1,593	1,588	1,603	1,634	1,638	1,631	1,668	1,700	1,675	0.8%
Occupancy Rate	59.6%	60.3%	63.6%	62.7%	61.5%	63.4%	63.7%	61.0%	60.6%	62.2%	0.5%
Average Length of Stay (days per admission)											
Medicare	5.0	5.1	5.2	5.5	5.3	5.4	5.3	5.1	5.0	5.0	0.0%
Medicaid	4.2	4.2	4.4	4.9	5.5	5.5	5.4	5.4	5.3	5.3	2.5%
Private/Other	3.5	3.5	3.5	3.5	3.5	3.6	4.0	3.8	3.8	3.9	1.1%
Weighted Average	4.2	4.2	4.3	4.4	4.5	4.7	4.8	4.6	4.6	4.6	1.0%
Overall Utilization Index, 2010=1 \a	1.00	1.04	1.11	1.12	1.13	1.15	1.14	1.13	1.13	1.13	1.4%
Admissions				**HCRIS Data**							
Medicare	26,680	26,921	27,699	27,191	27,753	28,782	29,288	30,106	30,354		1.6%
Medicaid	10,095	10,334	9,921	8,798	9,210	10,145	11,133	10,850	11,555		1.7%
Private/Other	39,380	40,528	39,610	39,613	36,258	35,500	35,670	36,442	35,008		-1.5%
Total	76,155	77,783	77,230	75,602	73,221	74,428	76,092	77,398	76,917		0.1%
Days											
Medicare	122,885	129,796	135,946	136,284	137,920	147,385	149,090	148,579	148,875		2.4%
Medicaid	49,019	49,788	53,843	55,584	65,111	70,929	73,126	71,768	69,828		4.5%
Private/Other	136,558	142,672	145,570	141,440	134,108	130,901	130,184	130,771	132,611		-0.4%
Total	308,463	322,257	335,359	333,308	337,139	349,215	352,400	351,118	351,315		1.6%
Beds	1,308	1,312	1,337	1,442	1,388	1,436	1,452	1,475	1,475		1.5%
Occupancy Rate	64.6%	67.3%	68.7%	63.3%	66.5%	66.6%	66.5%	65.2%	65.2%		
Average Length of Stay (days per admission)											
Medicare	4.6	4.8	4.9	5.0	5.0	5.1	5.1	4.9	4.9		0.8%
Medicaid	4.9	4.8	5.4	6.3	7.1	7.0	6.6	6.6	6.0		2.8%
Private/Other	3.5	3.5	3.7	3.6	3.7	3.7	3.6	3.6	3.8		1.1%
Weighted Average	4.1	4.1	4.3	4.4	4.6	4.7	4.6	4.5	4.6		1.5%

Source: Horizon Government Affairs. HCRIS data via RAND, vintage 11-4-19.

Note: Average annual growth rate is 2010-2019 for AHA data; 2010-2018 for HCRIS data.

\a Overall utilization composite index is calculated by HGA using data from the AHA survey responses. It is not an AHA calculation.

Growth in Costs Per Unit of Use Averaged 6.5% Per Year

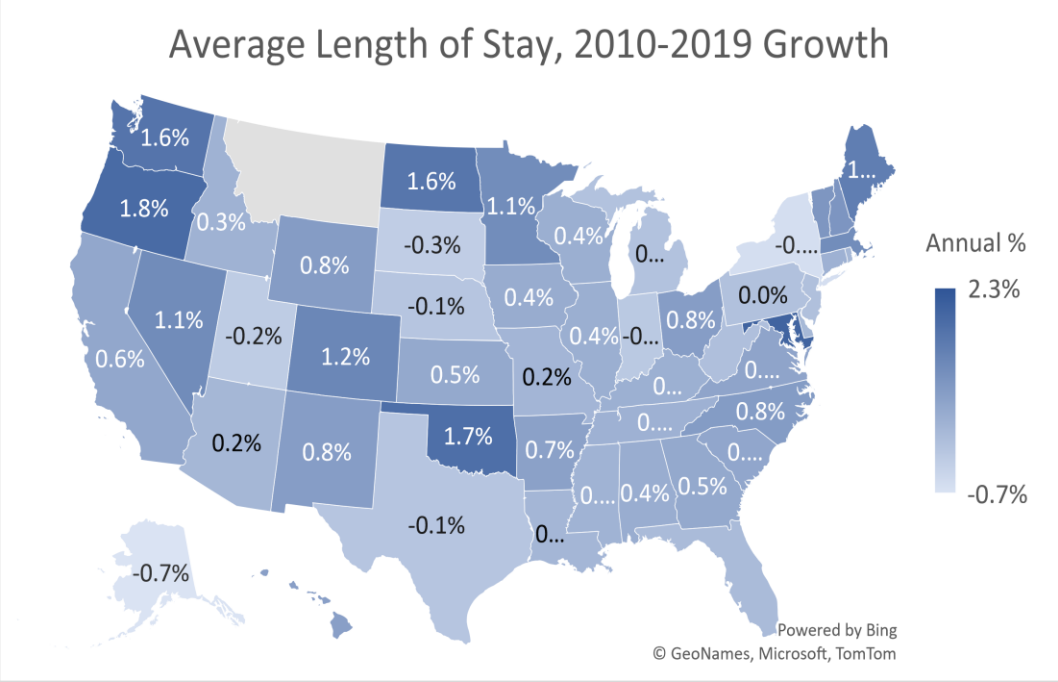
Average Annual Growth in Expenses Per Unit of Use, 2010-2019 **DRAFT**

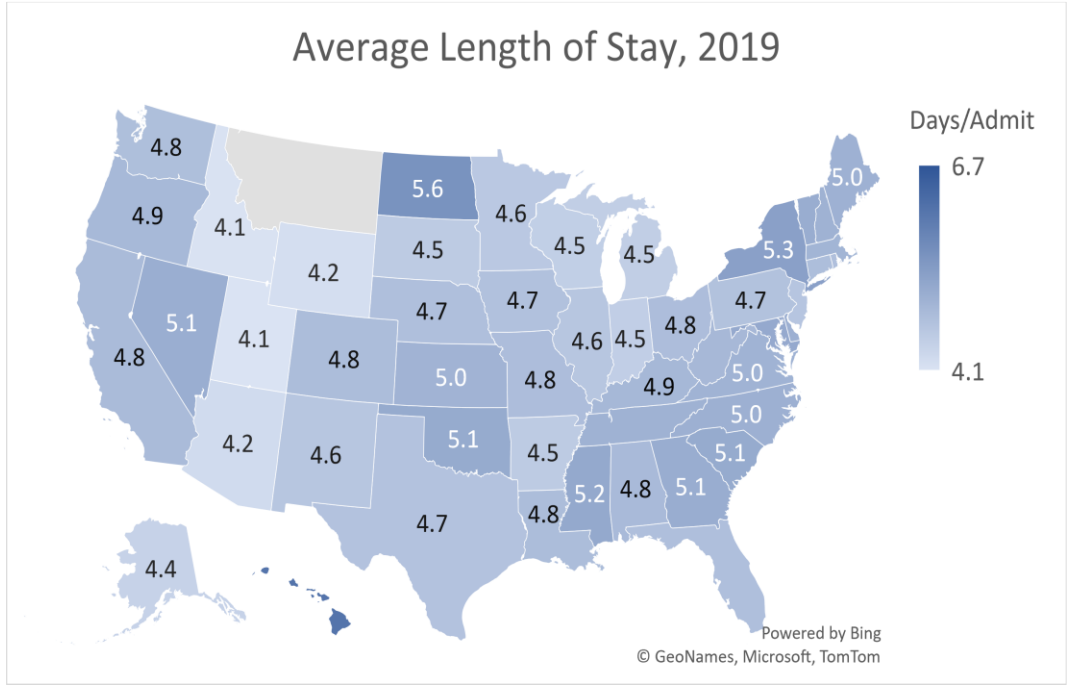
Six Large Acute Care Hospitals	Expense Growth	Utilization Growth	Unit Costs Expenses/Use
St Alexius	4.0%	-1.0%	5.0%
Sanford Bismarck	8.9%	4.4%	4.3%
Essentia	5.1%	0.8%	4.3%
Sanford Fargo	14.0%	2.4%	11.3%
Altru	6.0%	1.4%	4.5%
Trinity	3.1%	-1.0%	4.1%
Large Hospitals Weighted Average	**8.0%**	**1.5%**	**6.5%**
Three Critical Access Hospitals	7.4%	0.2%	7.2%
All 9 Hospitals Weighted Average	**8.0%**	**1.4%**	**6.5%**

Source: Horizon Government Affairs.

Note: Weighting is a custom blend of inpatient and outpatient utilization by HGA.

Significant Increase in Length of Stays (3rd in growth)





Hospital Revenues and Expenses Have Risen by about 7.5-8.0% Per Year

Aggregate Revenues and Expenses (AHA Data vs. HCRIS), All Nine Reporting Hospitals **DRAFT**

(by calendar year)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average Annual Growth
				AHA-Style Data							
AHA Data											
Payroll	947	1,062	1,187	1,226	1,261	1,360	1,467	1,561	1,631	1,681	6.6%
Benefits	169	188	210	214	220	242	271	288	298	309	6.9%
Total, Wages and Benefits	1,116	1,250	1,397	1,440	1,481	1,602	1,739	1,850	1,929	1,990	6.6%
Interest Expense	30	32	34	36	39	42	43	46	49	47	5.4%
Other Expenses	754	886	1,126	1,223	1,315	1,395	1,459	1,532	1,649	1,747	9.8%
Total, Expenses	1,899	2,169	2,556	2,699	2,835	3,038	3,240	3,428	3,627	3,784	8.0%
Patient Revenues	1,934	2,195	2,521	2,618	2,824	3,072	3,221	3,360	3,495	3,598	7.1%
Non-Patient, Non-Oper. Revenue	102	105	130	183	199	170	183	203	256	327	13.8%
Total, Revenues	2,036	2,300	2,651	2,801	3,023	3,241	3,404	3,563	3,751	3,925	7.6%
Margin	136	131	94	103	188	203	164	135	124	140	
Margin %	7%	6%	4%	4%	6%	6%	5%	4%	3%	4%	
Medicare Cost Reports				**HCRIS Data**							
Total Wages and Benefits	1,008	1,171	1,370	1,437	1,489	1,572	1,650	1,711	1,744		7.1%
Interest Expense	32	35	36	38	40	42	43	48	52		6.5%
Other Expenses	930	1,089	1,260	1,335	1,429	1,537	1,667	1,766	1,851		9.0%
Operating Expenses	1,970	2,295	2,666	2,810	2,958	3,152	3,361	3,526	3,647		8.0%
Patient Revenues	2,012	2,336	2,622	2,729	2,944	3,190	3,323	3,419	3,532		7.3%
Non-Patient, Non-Oper. Revenue	102	94	108	164	181	155	192	230	239		11.2%
Total, Revenues	2,114	2,430	2,730	2,893	3,125	3,344	3,514	3,649	3,771		7.5%
Margin	102	94	108	164	181	155	192	230	239		
Margin %	5%	4%	4%	6%	6%	5%	5%	6%	6%		

Source: Tabulations and calculations by Horizon Government Affairs. HCRIS data as processed by RAND vintage 11-4-2019.

Note: Average annual growth rate is 2010-2019 for AHA data; 2010-2018 for HCRIS data.

Average Salaries Rose 4%

Average Salaries (HCRIS Data) **DRAFT**

(by calendar year)	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average Annual Growth
	HCRIS Wages and Salaries per FTE									
6 Large Acute Care Hospitals										
St Alexius	66,688	72,970	73,775	78,038	79,763	82,923	88,278	101,845	106,813	6.1%
Sanford Bismarck	70,999	79,883	87,866	88,893	89,920	86,573	100,681	97,246	103,652	4.8%
Essentia	72,667	71,527	74,581	78,618	81,676	83,275	85,040	92,315	93,902	3.3%
Sanford Fargo	79,517	90,554	98,717	95,554	95,203	96,490	100,311	103,115	102,572	3.2%
Altru	82,330	83,528	90,990	92,367	96,429	99,393	101,598	107,803	112,262	4.0%
Trinity \a	75,000	75,027	75,897	81,238	77,714	90,581	87,712	86,785	100,138	4.2%
Weighted Average	76,175	81,754	87,583	88,527	89,487	92,278	96,403	100,402	104,313	4.0%
3 Critical Access Hospitals										
Jamestown	71,088	72,469	75,005	74,807	76,079	81,821	89,217	81,652	87,322	2.6%
Dickinson	63,473	79,882	79,882	85,063	90,865	95,036	101,822	97,886	94,557	5.1%
Williston	71,560	84,470	79,205	67,530	74,404	74,404	89,186	95,240	90,427	3.0%
Weighted Average	68,565	79,824	78,296	75,573	80,402	83,195	93,680	92,507	91,113	3.6%
All Reporting Hospitals	75,682	81,638	87,047	87,747	88,905	91,704	96,239	99,924	103,532	4.0%

Source: HCRIS via RAND vintage 11-4-2019. Additional Calculation and Estimates by Horizon Government Affairs.

Note: Weighting is a custom blend of inpatient and outpatient utilization by HGA.

\a 2010 figure is a rough approximation; Average annual growth is calculated 2011-2018.

Hospital Compensation for Top Executives and Physicians Ranged Widely

Top Executive and Physician Compensation Reported on IRS Form 990 **DRAFT**

Millions of Dollars

	2010	2011	2012	2013	2014	2015	2016	2017	Average Annual Growth
Top Executives				**St Alexius**					
Highest	0.61	0.50	0.70	0.56	0.80	0.76	0.61	0.62	0%
2nd	0.48	0.50	0.55	0.43	0.67	0.65	0.57	0.56	2%
3rd	0.25	0.28	0.30	0.23	0.38	0.53	0.29	0.40	7%
Top Physicians									
Highest	1.50	1.67	1.98	1.96	2.30	2.00	2.09	1.70	2%
2nd	1.40	1.65	1.60	1.56	2.10	1.98	1.30	1.46	1%
3rd	0.91	0.80	1.00	0.76	1.00	1.20	0.99	1.04	2%
Top Executives				**Sanford (group, includes other states)**					
Highest	1.85	2.07	2.15	4.80	2.50	4.60	4.17	3.16	8%
2nd	1.08	1.20	1.11	3.78	1.36	1.18	3.03	1.48	5%
3rd	1.00	0.99	0.87	1.95	1.02	1.15	1.17	1.10	1%
Top Physicians									
Highest	2.30	2.10	2.12	2.63	3.40	2.92	2.93	2.92	3%
2nd	2.30	2.08	2.10	2.43	2.49	2.68	2.68	2.69	2%
3rd	1.80	2.06	2.09	2.29	2.30	2.49	2.58	2.68	6%
Top Executives				**Altru**					
Highest	0.42	0.50	0.54	0.57	0.69	1.08	1.09	0.85	11%
2nd	0.35	0.33	0.39	0.47	0.43	0.66	0.76	0.75	12%
3rd	0.32	0.30	0.35	0.31	0.42	0.65	0.68	0.56	8%
Top Physicians									
Highest	1.60	1.77	1.85	1.86	1.19	1.20	1.36	1.40	-2%
2nd	1.10	1.08	1.07	1.10	1.03	0.99	1.00	1.18	1%
3rd	1.05	1.08	1.04	0.99	1.03	0.91	0.97	1.01	-1%
Top Executives				**Trinity**					
Highest	0.41	0.44	0.49	0.56	0.68	0.83	0.76	0.84	11%
2nd	0.29	0.26	0.26	0.25	0.30	0.35	0.37	0.38	4%
3rd	0.22	0.24	0.22	0.21	0.25	0.28	0.28	0.29	4%
Top Physicians									
Highest	0.99	1.01	0.82	1.08	0.62	0.55	0.85	0.78	-3%
2nd	0.71	0.84	0.55	0.75	0.13	0.20	0.58	0.60	-2%

Source: Tabulations and calculations by Horizon Government Affairs.

Note: Average annual growth rate calculations are from 2010-2017.

Solution to the Volatile Health Care Costs: What does it look like? Private Reinsurance

The State of North Dakota in conjunction with RAND would purchase a transparent, reliable, and easily understood reinsurance policy that provides immediate recoveries based on predetermined attachment and exhaustion points.

When considering the existing Reinsurance Association of North Dakota (RAND) program, there are two main structural options to consider.

Excess of Loss

- Provides recoveries after a pre-determined amount of loss
- Smooths results in excess of pre-determined attachment point

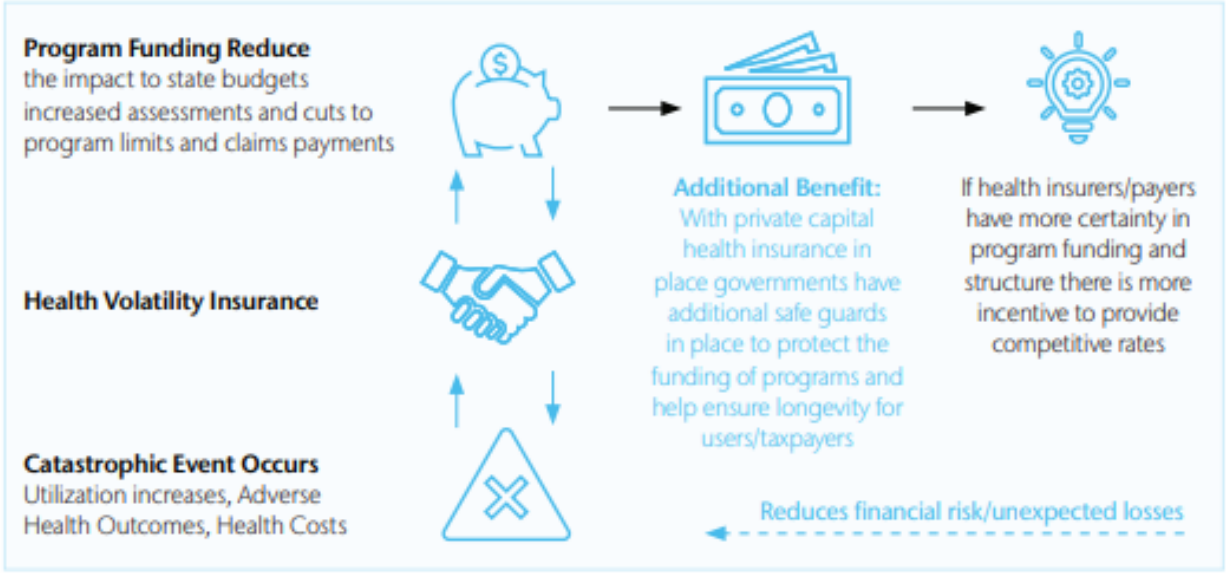
Aggregate Stop Loss

- Provides recoveries after a pre-determined amount of loss in a defined/determined time period
- Coverage ensures the aggregation of numerous claims do not drain the financial reserves of the risk-bearer/entity

Private Reinsurance through a 1332

Reinsurance through state waivers under Section 1332 of the Affordable Care Act has driven down pricing and expanded insurance options for individuals on marketplace plans. Federal pass-through dollars under 1332 waivers, such as Advanced Premium Tax Credits and Premium Tax Credits, can help states further stabilize their health insurance markets, expand insurance options, and expand access: by allowing states to utilize pass-through funding to fund third-party reinsurance in addition to existing state-based reinsurance.

Third-party reinsurance helps states identify and quantify financial exposure to high-cost health claims alongside cost-effective solutions to reduce and transfer that financial exposure away from taxpayers, stabilizing the market. Removing large swings in health premium volatility can stabilize markets over long period of time, allowing consumers to benefit even in years where health costs rise.



State Example

North Dakota has newly passed legislation (HB 1087) that allows the state to utilize federal pass through dollars to fund third party reinsurance as a supplement to their current program. This allows the State of North Dakota to prepare for unexpected spikes in volatility and keep their market rates and offering competitive for all eligible constituents.

Contact

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A Deeper Drive into the Cost Drivers:

1. Secret Shopper: Is it individual hospitals?
2. Is charity care driving the results?
3. A closer look at revenues
4. Is an older population driving costs? A brief look at Medicare
5. Solution: Price Disclosures

Secret Shopping Produced Wide Price Variances

This issue raises consumer education and protection concerns.

Direct to Consumer Pricing: Disclosure of Consumer Prices. We used a secret shopper to compare prices at several hospitals in North Dakota for three common procedures: colonoscopy, normal vaginal delivery, and caesarian section (see Table 60). What we found was drastically different estimates. For colonoscopy, the prices quoted ranged from a high of $5,509 to a low of $1,775, a difference of more than 300 percent. For vaginal childbirth, the range from highest quoted price to lowest was nearly 350 percent, and for delivery by Caesarian Section, prices ranged from about $5,000 to more than $31,000, a difference of more than 600 percent.

Hospital-Reported Prices for Selected Common Procedures

	Colonoscopy	Normal Vaginal Delivery	Caesarian Section
Trinity Hospital - St.Josephs (Minot)	2,980	4,343	5,058
St.Alexius Medical Center (Bismarck)	1,775	4,895	9,675
Sanford Medical Center (Fargo)	3,843	15,056	22,376
Sanford Medical Center (Bismarck)	5,509	13,603	20,386
Altru Health System (Grand Forks)	2,064	12,239	19,269
Jamestown Regional Medical Center	2,100	13,000	25,000
Innovis Health (Fargo)	4,700	11,000	31,000
Ratio of Highest to Lowest (Percent)	**310%**	**347%**	**613%**

Source: JWHammer LLC.

Patient Financial Assistance: What is it?

Patient Financial Assistance. HCRIS reported charity care is based on both uninsured and insured patients qualifying for hospitals' financial assistance programs, less partial payments received. The valuation of the assistance is adjusted to a cost basis using cost-to-charge ratios. As noted above, North Dakota hospitals' financial assistance has increased rapidly (see Table 36 and Figure 17). However, at 1.3 percent of net patient revenues, the level of assistance is low compared with most other states, and well below the national average of nearly 3 percent (see Table 37). Importantly, the valuation of patient financial assistance in the HCRIS data is quite volatile from year to year, and therefore may be more uncertain than other measures.

Patient Financial Assistance is About 1% of Patient Revenues

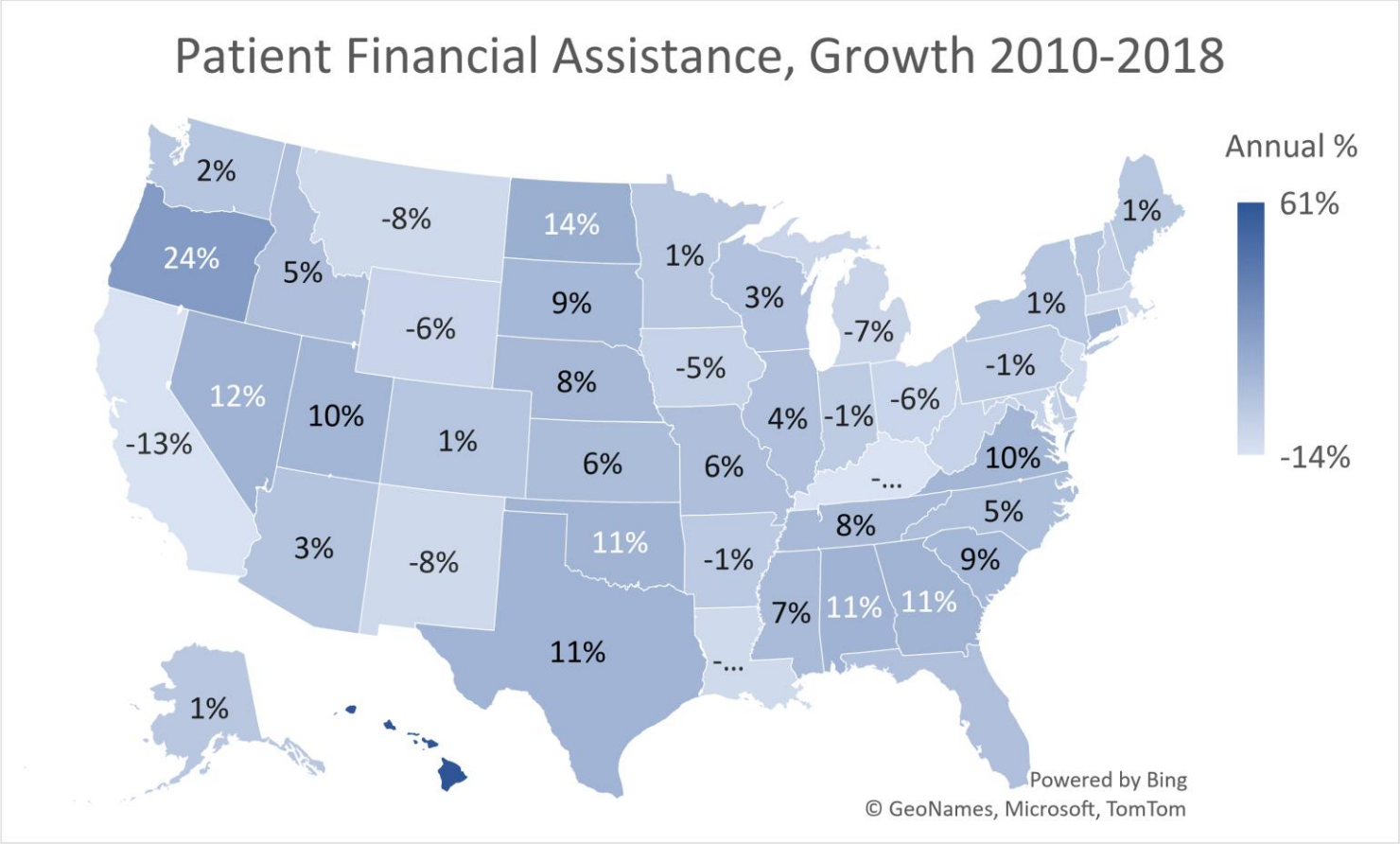
Financial Assistance (Uninsured and Insured Patients) **DRAFT**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average Annual Growth
Raw HCRIS Data (by cost report year, millions of dollars)											
6 Large Acute Care Hospitals											
St Alexius		1	1	1	0	3	4	3	2	2	18.4%
Sanford Bismarck		5	13	7	6	8	5	5	6	4	-1.0%
Essentia		2	1	2	1	3	2	4	4	5	10.1%
Sanford Fargo		4	5	9	17	17	12	13	16	18	22.4%
Altru		2	1	2	2	1	1	1	4	/a	12.7%
Trinity \a		0	0	0	3	1	5	6	11	2	-10.2%
Total		13	22	21	30	33	30	32	43	/a	9.6%
3 Critical Access Hospitals		3	2	2	2	1	1	2	3	4	1.3%
Other Critical Access Hospitals		2	2	3	2	1	1	3	3	/a	12.4%
All North Dakota Hospials		19	27	25	34	36	32	36	49	/a	9.8%
As a Percentage of Net Patient Revenues											
6 Large Acute Care Hospitals											
St Alexius		0.3%	0.5%	0.5%	0.2%	1.0%	1.3%	1.1%	0.7%		
Sanford Bismarck		1.5%	4.1%	3.9%	1.7%	1.9%	1.0%	0.9%	1.2%		
Essentia		0.9%	0.3%	0.6%	0.3%	0.9%	0.6%	1.1%	1.0%		
Sanford Fargo		0.7%	0.7%	1.1%	1.9%	1.8%	1.2%	1.2%	1.4%		
Altru		0.4%	0.3%	0.4%	0.4%	0.3%	0.3%	0.2%	0.7%		
Trinity		0.0%	0.0%	0.0%	0.8%	0.2%	1.1%	1.3%	2.4%		
Total		0.6%	0.9%	0.9%	1.1%	1.1%	1.0%	1.0%	1.3%		
3 Critical Access Hospitals		2.9%	1.8%	1.2%	1.3%	0.4%	0.7%	1.0%	1.4%		
Other Critical Access Hospitals		0.9%	0.7%	0.8%	0.6%	0.5%	0.3%	0.8%	0.9%		
All North Dakota Hospitals		0.8%	0.9%	0.9%	1.1%	1.0%	0.9%	1.0%	1.3%		

Source: Tabulations and calculations by Horizon Government Affairs. HCRIS data as processed by RAND vintage 11-4-2019; 2019 figures from vintage 11-1-2020.

Note: Average annual growth rate calculations are from 2011-2019 except as noted.

\a Data for some hospitals is missing for 2019. Average annual growth is computed from 2011-2018. Trinity reported zero financial assistance in 2011-2013; growth is calculated as 2014-2019.


Patient Financial Assistance, Growth 2010-2018
Annual %
61%
-14%
2%
24%
5%
-8%
14%
1%
3%
-7%
1%
1%
-6%
9%
-5%
-1%
-13%
12%
10%
1%
8%
4%
-1%
-6%
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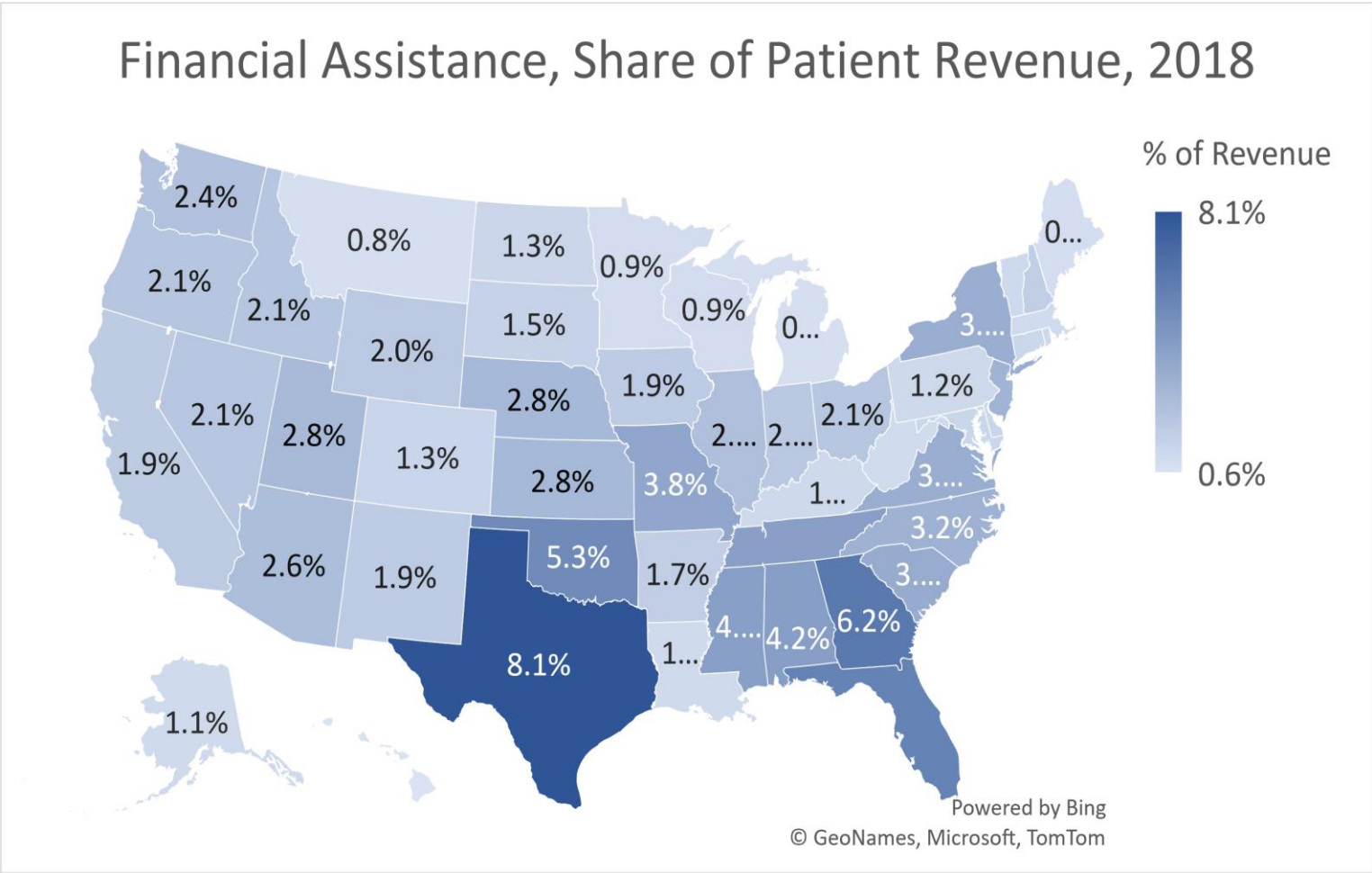
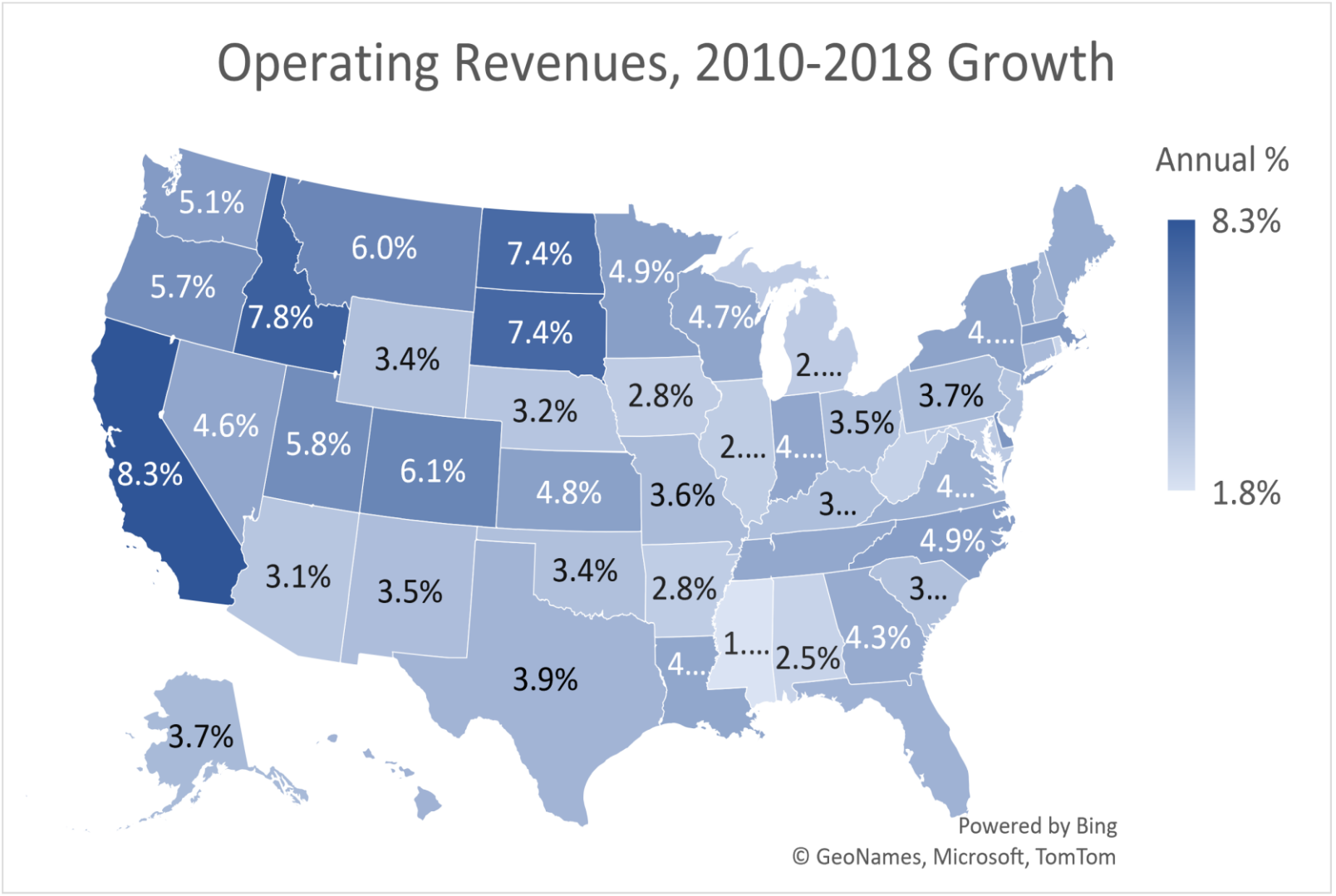
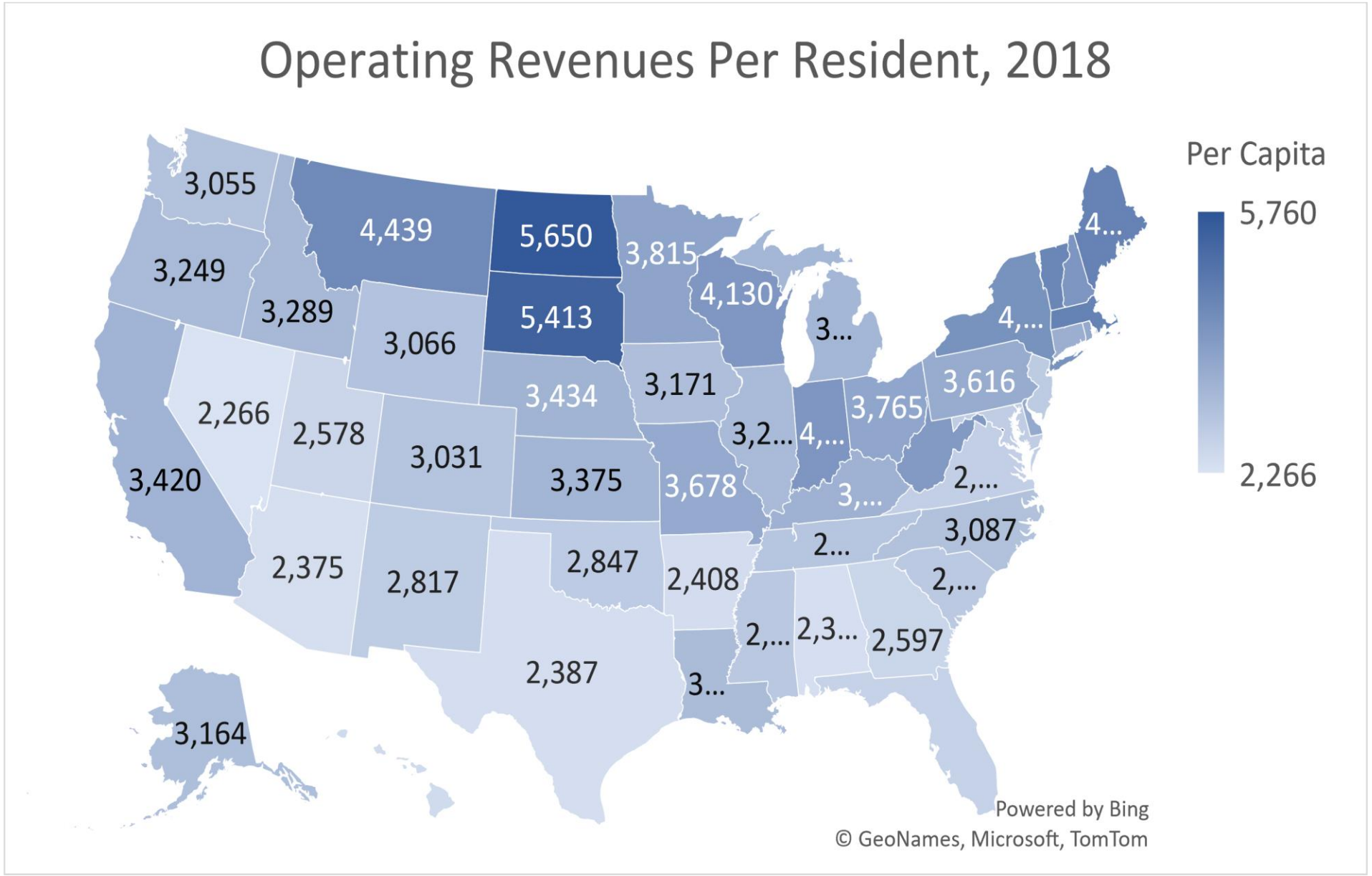
Financial Assistance, Share of Patient Revenue, 2018



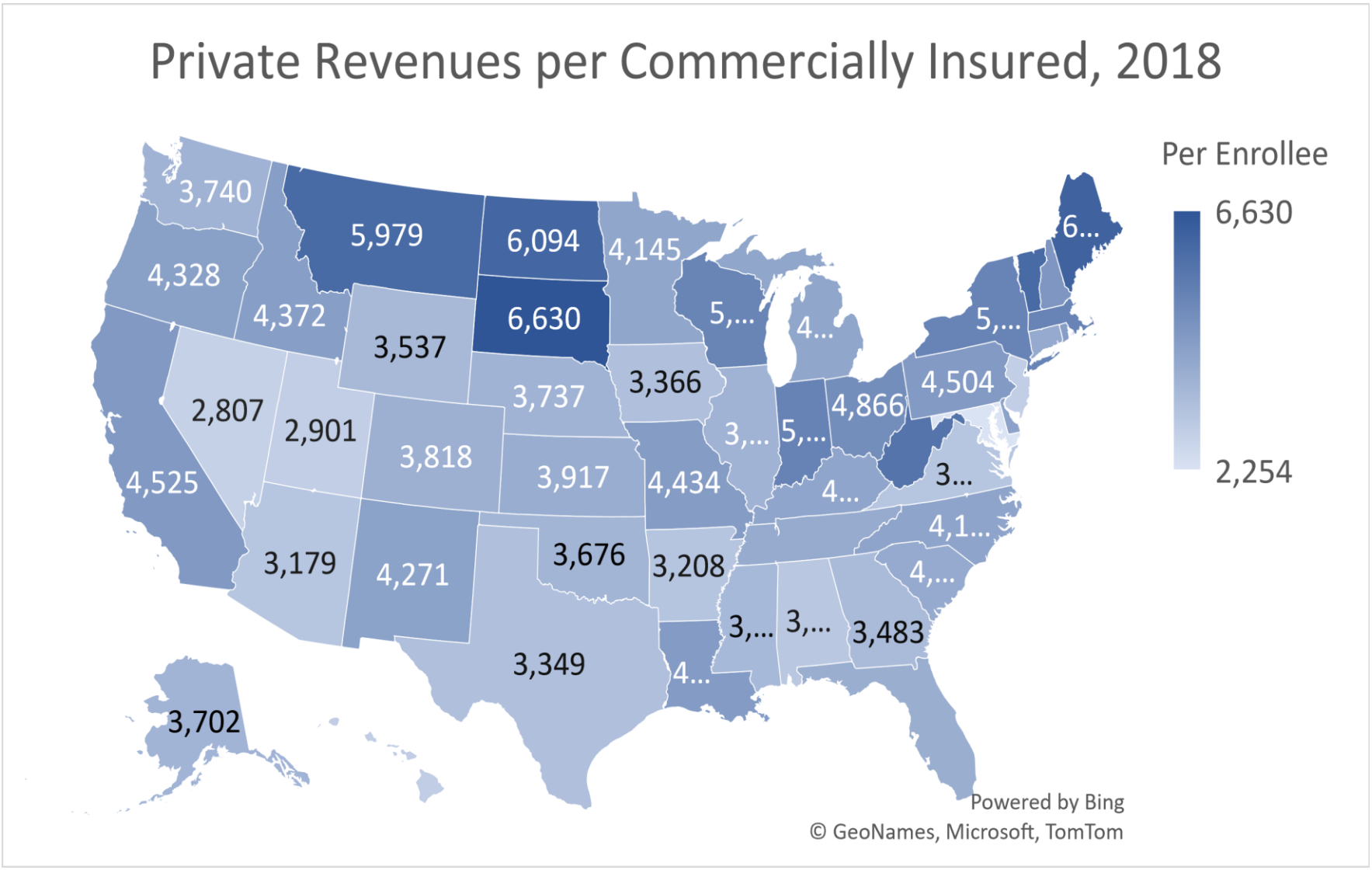
Operating Revenues, 2010-2018 Growth



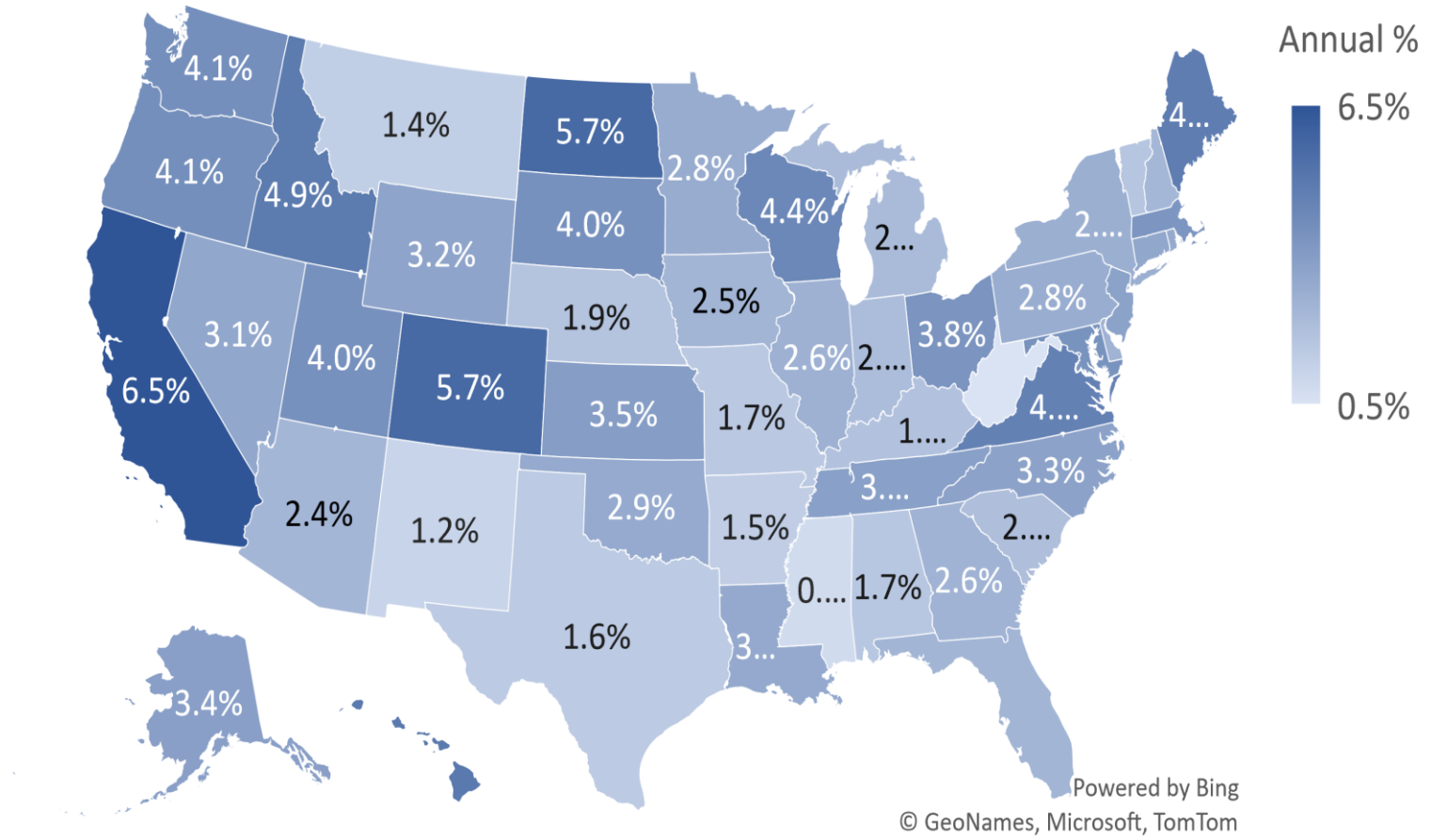
Operating Revenues Per Resident, 2018



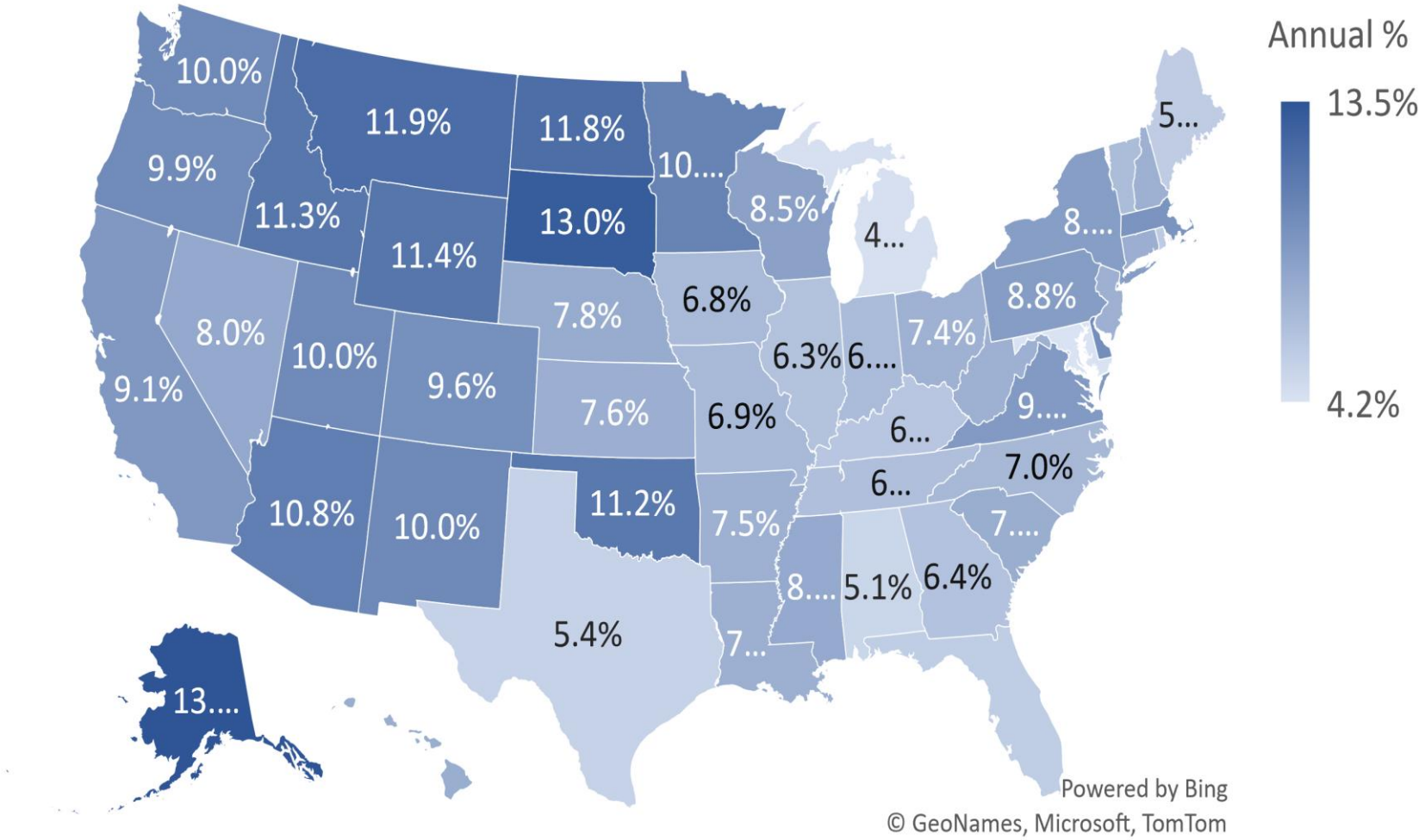
Private Revenues per Commercially Insured, 2018



Inpatient Revenues Per Discharge, Growth 2010-2019



Medicare Outpatient Revenues, Growth 2010-2018



An Older Population: Case Mix Index Growth in Medicare was 1% Per Year

Medicare Casemix Index (HCRIS Data, Approximated by RAND)

DRAFT

(by calendar year)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Average Annual Growth /a
6 Large Acute Care Hospitals	**HCRIS/RAND Calculations ("impact_cmi")**										
St Alexius	2.03	2.10	2.08	2.08	2.08	2.01	2.02	1.99	2.04	1.92	-0.6%
Sanford Bismarck	1.75	1.85	1.83	1.78	1.87	1.89	1.90	1.92	1.89	1.89	0.8%
Essentia	1.77	1.78	1.77	1.84	1.97	1.80	1.82	1.87	1.80	1.87	0.6%
Sanford Fargo	1.89	1.86	1.89	1.96	2.07	2.04	2.13	2.13	2.13	2.14	1.4%
Altru	1.72	1.68	1.70	1.86	1.84	1.82	1.81	1.79	1.84	/a	0.9%
Trinity	1.64	1.69	1.68	1.67	1.65	1.65	1.80	1.90	1.87	1.87	1.5%
Weighted Average	1.81	1.82	1.83	1.88	1.94	1.90	1.94	1.96	1.96	/a	1.0%
	Year-to Year Growth Rate										
St Alexius		3.5%	-0.7%	-0.4%	0.3%	-3.4%	0.2%	-1.2%	2.4%	-5.9%	
Sanford Bismarck		5.4%	-1.1%	-2.7%	5.4%	1.2%	0.3%	0.8%	-1.1%	-0.2%	
Essentia		0.7%	-0.5%	4.1%	6.6%	-8.6%	1.2%	3.0%	-4.1%	4.0%	
Sanford Fargo		-1.7%	1.4%	3.8%	5.7%	-1.4%	4.5%	-0.2%	0.2%	0.4%	
Altru		-2.4%	1.6%	9.2%	-1.1%	-1.2%	-0.4%	-1.0%	2.9%	/a	
Trinity		3.1%	-0.4%	-0.2%	-1.3%	-0.3%	9.3%	5.6%	-1.7%	0.0%	
Weighted Average		0.5%	0.5%	3.1%	2.7%	-1.9%	2.4%	0.6%	0.4%	/a	

Source: HCRIS data RAND vintage 11-4-2019 and vintage 11-1-2020. Additional Calculations and Tabulation by Horizon Government Affairs.

Note: Weighting is a custom blend of inpatient and outpatient utilization by HGA.

/a Data may be missing for 2019. Average annual growth from 2010 to last year shown, 2018 or 2019, depending on data availability.

Medicare Findings

- Medicare patient revenues **per enrollee** in North Dakota were 2nd highest in the nation in 2017 and 2018.
- Medicare inpatient revenues in North Dakota grew by 4.5 percent annually between 2010 and 2018. The national average of 1.2 percent per year is almost 4 times less than the North Dakota average.
- Medicare inpatient revenue ranked 6th in the U.S.
- On a per-discharge basis, Medicare inpatient revenue **per discharge** in North Dakota grew by 3.9 percent per year between 2010 and 2018. The national average rate of 2.7 percent.
- Medicare inpatient revenues **per discharge** in North Dakota ($12,926) remained slightly below the national average of ($13,767) in 2018.
- North Dakota's **outpatient** revenues from Medicare grew by 12.6 percent per year in the 2010-2017 period, higher than the national average growth rate of 7.9 percent a year. **Ranks 1st in the nation based on 2018 data.**
- On a per-enrollee basis, Medicare reimbursement to North Dakota hospitals for outpatient care were **highest in the nation** in both 2010 and 2017 and were the **2nd fastest growing** in the 2010-2017.

Hospital Price Disclosures Are Necessary:

In general, consumer-facing price disclosures by hospitals are too complicated or obscure to be useful, particularly if the prices disclosed are full charges or so-called “chargemaster” amounts or if the price quotes are based on discrete (often obscure) technical codes instead of commonly known procedures, such as hip replacement or appendectomy. These amounts often have little resemblance to actual reimbursements by insurers. In order for a price disclosure to be useful to a consumer, it must meet certain criteria:

1. The disclosure must be **actionable**. Disclosures that are delivered at the time of service don’t allow the consumer to shop.
2. The disclosure must be **personal**. General pricing disclosures don’t reflect the likely costs based on the consumer’s insurance plan or other service variables. This may mean that the referring or treating physician be required to provide billing codes.
3. The disclosure must be **understandable**. The consumer needs to understand what is covered by the price disclosure. Since most hospital-based physicians bills separately, the consumer should be made aware of other possible bills that may accompany the disclosed amount.

Large Pharmacy Claims Growth

Pharmaceutical Benefit Claims, Net of Rebates, Grew Faster Than Non-Pharmacy Costs. Based on the NAIC data, net pharmacy claims grew more rapidly than non-pharmacy costs in all markets. For example, in the individual market, net pharmacy claims grew by **11.8 percent per year**, compared with average annual growth of 6.0 percent for non-pharmacy claims over the 2010-2019 period.

Benefits Costs, By Type, NAIC Data **DRAFT**
(costs in millions)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*	Average Annual Growth 2010-2019
Non-Pharmaceutical Claims											
Individual Market	107	105	117	120	148	181	188	183	179	181	6.0%
Small Group Market	222	168	199	230	209	212	216	207	238	243	1.0%
Large Group Market	361	447	483	517	540	563	577	582	620	672	7.1%
Pharmaceutical Claims											
Individual Market	15	16	17	20	28	37	45	47	50	51	14.7%
Small Group Market	33	26	27	31	31	40	42	43	47	55	5.8%
Large Group Market	57	68	78	87	104	119	122	124	141	152	11.5%
Rebates											
Individual Market	1	1	1	2	1	5	5	7	10	13	35.2%
Small Group Market	2	2	2	2	2	6	6	7	10	14	25.7%
Large Group Market	2	3	6	7	8	15	20	22	28	39	37.0%
Net, Pharmaceutical Claims											
Individual Market	14	15	16	18	27	32	40	40	39	38	11.8%
Small Group Market	32	24	25	29	29	34	35	36	37	42	3.1%
Large Group Market	55	65	72	80	96	104	103	102	113	113	8.4%
Total, Incurred Claims											
Individual Market	121	120	133	138	175	213	227	226	223	222	7.0%
Small Group Market	254	192	225	259	239	245	251	247	281	290	1.5%
Large Group Market	416	512	555	597	635	667	680	689	739	791	7.4%

Source: Horizon Government Affairs, data from NAIC.
Note: Claims costs do not sum exactly to totals for 2017-2019.
* Preliminary

Solution: Better Manage Chronic Conditions

Health care policy analysts have long touted the potential for wellness and preventive care to help Americans avoid disease. Gaps in coverage remain for many individuals managing a chronic health condition or conditions. While preventive care is provided at no cost on almost all health plans, those managing chronic medical conditions may have significant medical expenses. Consumers with chronic medical conditions should be incentivized to manage their own care.

How do you manage care?

Care management has long been a buzz word in public policy circles. It holds the promise of delivering better care and , better health outcomes, at a lower cost. Too often, the programs haven't delivered on that outcome. In some cases, consumers rebelled against tightly managed care protocols. In other cases, we simply did not have the information or ability to properly manage patient care on a population basis.

With provider consolidation, hospital system owned health plans, electronic health records and other healthcare changes, we are seeing increasing interest in finding new ways to better manage care. One of the key potential wins is in the area of medication optimization.

Solutions: Better Manage Chronic Conditions

While most estimates cite approximately $300 billion as how much medication non-adherence costs the health care system in the United States annually, a more recent study found the potential impact of optimization to be more than $500 billion dollars:

> However, the cost associated with drug use reaches beyond the purchase of prescribed medications to encompass additional medical costs of morbidity and mortality resulting from medication regimens that are not optimized to effectively treat the indication resulting in a treatment failure (TF), where the resolvable medical problem is not adequately treated, a new medical problem (NMP), where a newly prescribed medication causes or contributes to an incident clinical symptom or syndrome, or both a TF and NMP. This cost has most recently been estimated as $290 billion equating to 13% of total annual US medical costs in 2008. Although widely misdescribed in the published literature and policy documents as the cost associated with "patient nonadherence to medications," this estimate and the preceding estimates ($76.6 billion in 1995 and $177.4 billion in 2000) actually reflect medical resource utilization caused by TFs and NMPs that arising from nonoptimized medication use. Nonadherence to the indicated medication regimen is just one of multiple potential causal factors leading to a TF, resulting in downstream health services use.*

Source: Watanabe JH, Mcinnis T, Hirsch JD. Cost of prescription drug-related morbidity and mortality. *Ann Pharmacother.* 2018;1060028018765159. doi: 10.1177/1060028018765159.

Solution: Medication Optimization and Prevention of Dangerous Dispensing

A 2016 Chicago Tribune study highlighted concerns with patients who were prescribed multiple medications and filled the prescriptions at their local pharmacy:

The Tribune reporter walked into an Evanston CVS pharmacy carrying two prescriptions: one for a common antibiotic, the other for a popular anti-cholesterol drug.

Taken alone, these two drugs, clarithromycin and simvastatin, are relatively safe. But taken together they can cause a severe breakdown in muscle tissue and lead to kidney failure and death.

When the reporter tried to fill the prescriptions, the pharmacist should have warned him of the dangers. But that's not what happened. The two medications were packaged, labeled and sold within minutes, without a word of caution.

Source: https://www.chicagotribune.com/investigations/ct-drug-interactions-pharmacy-met-20161214-story.html

Solution: Medication Optimization and Prevention of Dangerous Dispensing cont.

Certainly, this raises public health concerns. The problem is that multiple drug interactions are common for individuals with chronic health conditions. One chronic condition may lead to co-morbid conditions – diabetes and heart disease for example. Managing these conditions and their medications together is important for the consumer to manage their own health. The articles goes on to say:

Dangerous drug combinations are a major public health problem, hospitalizing tens of thousands of people each year. Pharmacists are the last line of defense, and their role is growing as Americans use more prescription drugs than ever. One in 10 people take five or more drugs — twice the percentage seen in 1994.

Some pharmacists who were tested got it right, coming to the counter to issue stern warnings. "You'll be on the floor. You can't have the two together," said one pharmacist at a Walgreens on Chicago's Northwest Side. Said a Kmart pharmacist in Rockford: "I've seen people go to the hospital on this combination."

But in test after test, other pharmacists dispensed dangerous drug pairs at a fast-food pace, with little attention paid to customers. They failed to catch combinations that could trigger a stroke, result in kidney failure, deprive the body of oxygen or lead to unexpected pregnancy with a risk of birth defects.

Solution: Medication Optimization and Adherence to reduce claims and improve health

It is well known that medication nonadherence and the related hospital admissions and emergency department visits are a significant cost driver of health care costs, particularly under fee-for-service insurance arrangements. For example, a comprehensive population study of Medicare beneficiaries in the fee-for-service program with diabetes, heart failure, hypertension, or hyperlipidemia found that avoidable healthcare costs due to medication nonadherence totaled nearly $30 billion. Aligning the interests of the insurer, consumer and medical provider are key to this effort.

North Dakota should (1) mitigate risk, (2) analyze and deploy a medication adherence and disease management strategy of investing targeted resources in the comorbid populations (two or more disease states and six or more medications), and (3) re-evaluate pricing structures. These efforts will lead to a measurable return on investment and measurably better health outcomes for North Dakotans.

Lloyd JT, Maresh S, Powers CA, Shrank WH, Alley DE. How Much Does Medication Nonadherence Cost the Medicare Fee-for-Service Program?. Med Care. 2019;57(3):218-224. doi:10.1097/MLR.0000000000001067

What are Next Steps?

Address Rapid Growth of Pharmaceutical Benefit Claims, Net of Rebates

Develop & Prepare **a medication optimization study** to:

- review of implementation of clinical pharmacist-led medication optimization programs (HEDIS & CAHPS)
- facilitation of enrollment procedures
- standards of care
- consistent documentation of clinical and economic outcomes
- Prepare an outcome reporting system for medication optimization programs
- Review of implementation of medication optimization courses for pharmacy and medical schools
- Review of which North Dakota laws and administrative rules would need to be amended and created to implement effective medication optimization, and
- Review of the authority of the insurance commissioner to promulgate rules regarding medication optimization

What **data** should be analyzed?

- data regarding medication optimization and the clinical and economic outcomes
- clinical medication optimization's effects on claims/encounter, hospital admissions, physician visits, emergency department admissions, all cause readmissions, unplanned readmissions
- the use of unnecessary and inappropriate medications,
- other metrics as defined in disease management programs and patient medication adherence and compliance percentages

Who will be impacted (and required to provide data deemed necessary)?

- the department of health
- the board of pharmacy, the board of medicine
- the board of nursing, insurers
- hospitals

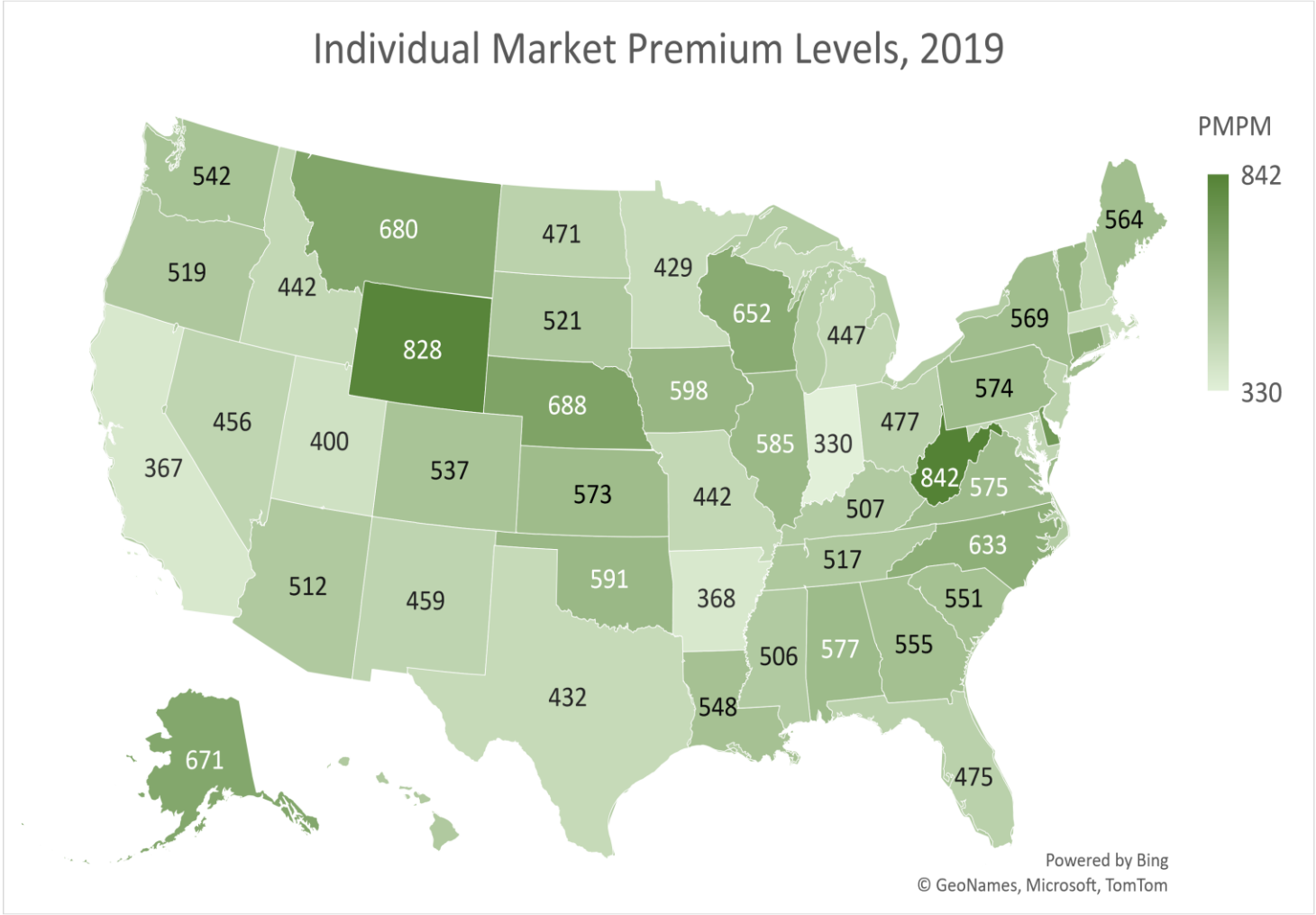
Insurance Market Findings

- Individual Market Premiums – The NDID, NAIC, and CMS Data are in Rough Agreement on Overall Market Sizes and Trends
- Premiums per Member Grew Rapidly in the Individual Market; Slower in Group Markets
- Administrative Costs Grew Rapidly in the 2010-2018
- Pharmaceutical Benefit Claims, Net of Rebates, Grew Rapidly
- Individual Market Baseline Reconstruction for 2019 and 2020

Baseline Enrollment Model

Primary Coverage for Acute Care	2019	2020	2021	2022	2023	2024	Change 2019-2024
			Number of Covered Lives				
Individual Market	43,747	41,547	41,538	41,581	41,673	41,810	-1,937
Small Group Employer	61,351	59,314	58,531	57,173	55,846	54,550	-6,801
Large Group Employer	156,685	152,178	152,365	152,553	153,504	154,461	-2,224
Large Group ERISA	201,187	197,551	195,957	196,335	196,713	197,093	-4,094
Medicaid	73,767	75,170	76,599	78,056	79,540	81,053	7,286
Medicare	114,549	116,803	119,102	121,447	123,837	126,274	11,726
Military and Other	29,745	28,932	28,164	27,439	26,754	26,106	-3,639
Uninsured	49,969	60,915	61,565	60,654	58,788	56,728	6,759
Total Population	731,000	732,410	733,822	735,237	736,655	738,076	7,076

Source: Horizon Government Affairs.


Individual Market Premium Levels, 2019
PMPM
842
330
542
519
680
442
828
471
521
429
652
447
564
569
574
598
688
585
330
477
456
400
537
573
442
842
575
507
367
633
517
512
459
591
368
551
506
577
555
548
432
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475
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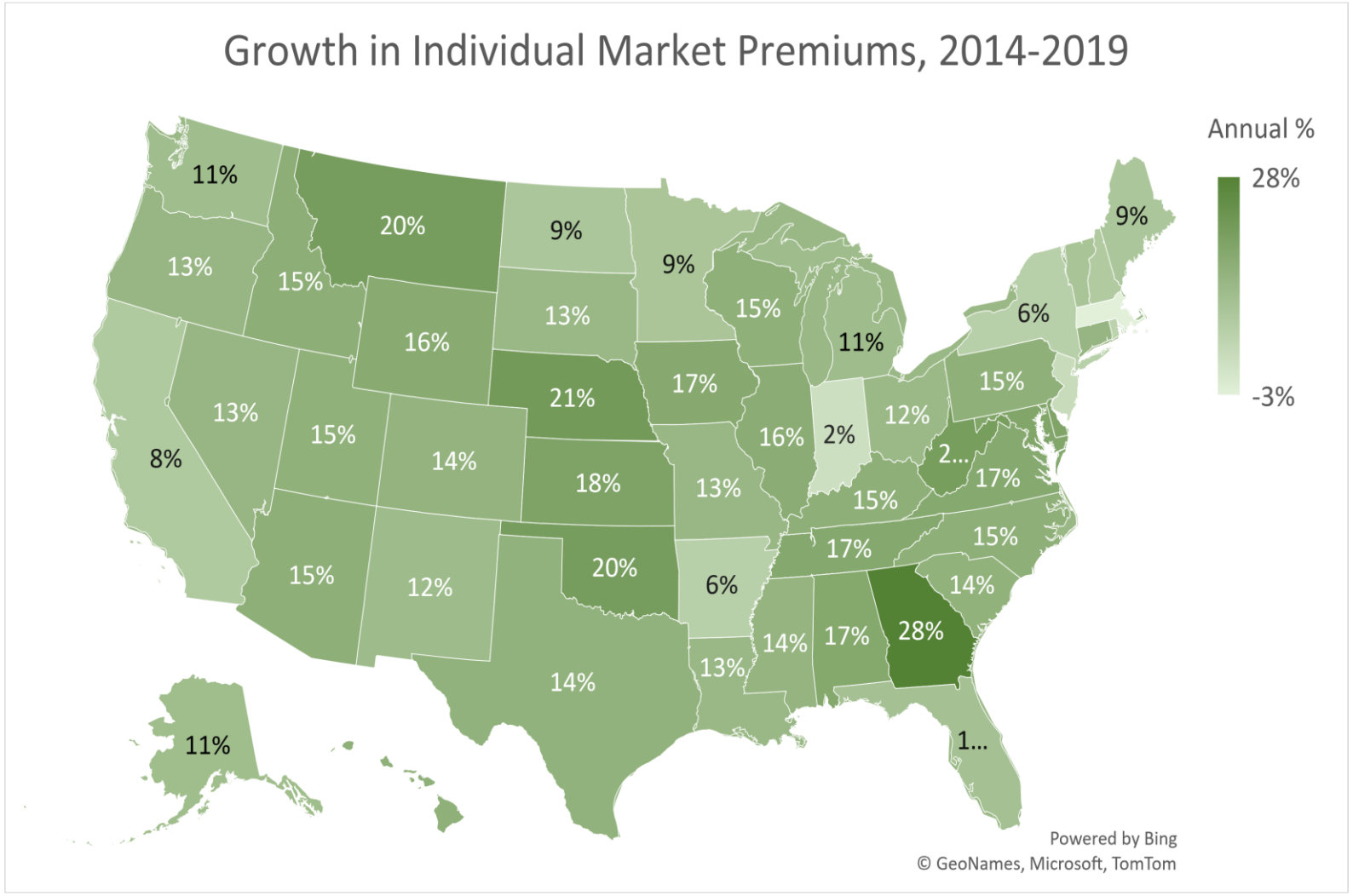
Growth in Individual Market Premiums, 2014-2019
Annual %
28%
-3%
11%
13%
15%
20%
9%
9%
15%
11%
6%
9%
13%
16%
21%
17%
16%
2%
12%
15%
13%
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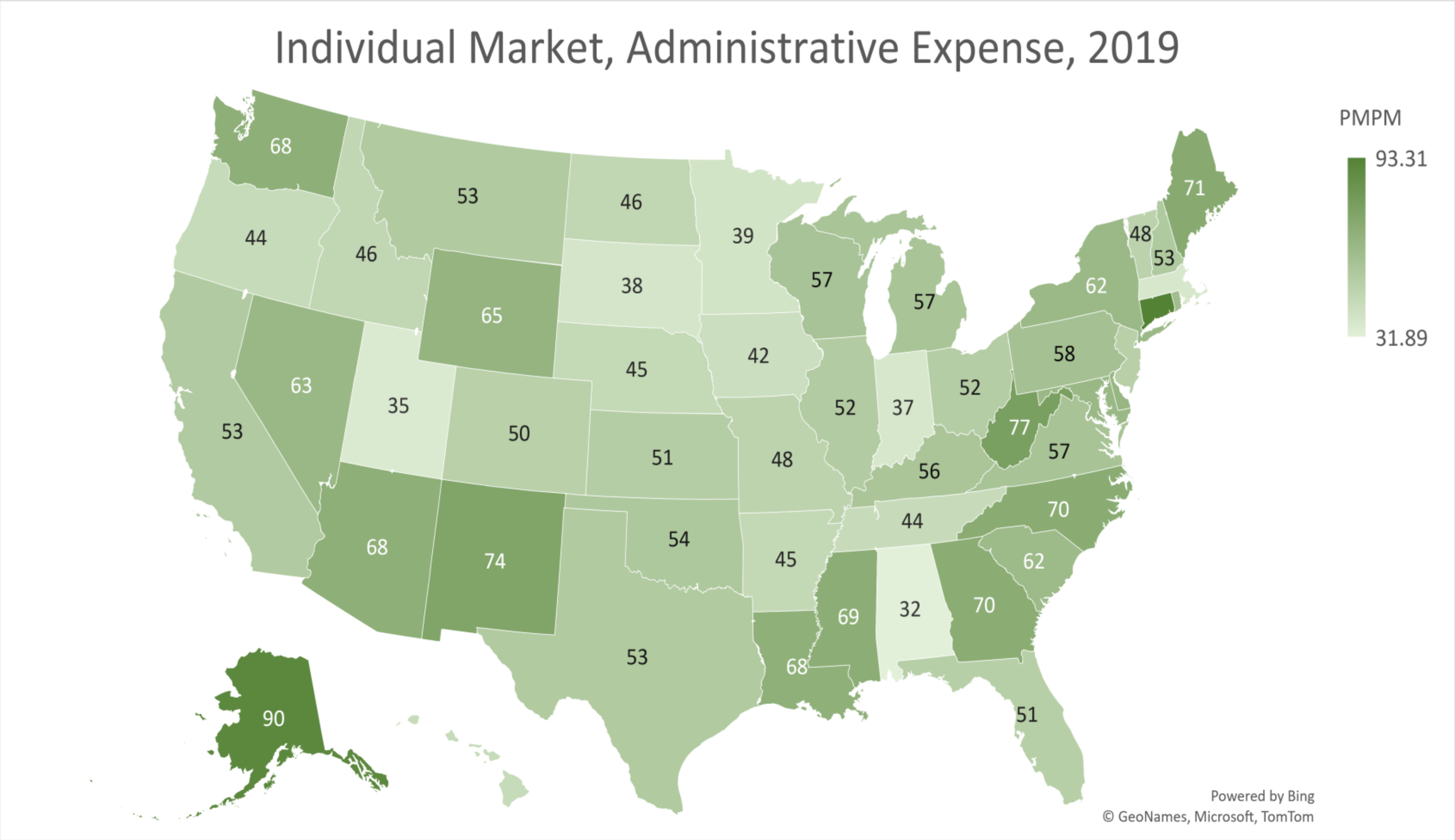
Individual Market, Administrative Expense, 2019
PMPM
93.31
31.89
68
44
46
53
46
39
38
65
57
57
71
48
53
62
42
45
35
63
53
50
52
37
52
58
77
57
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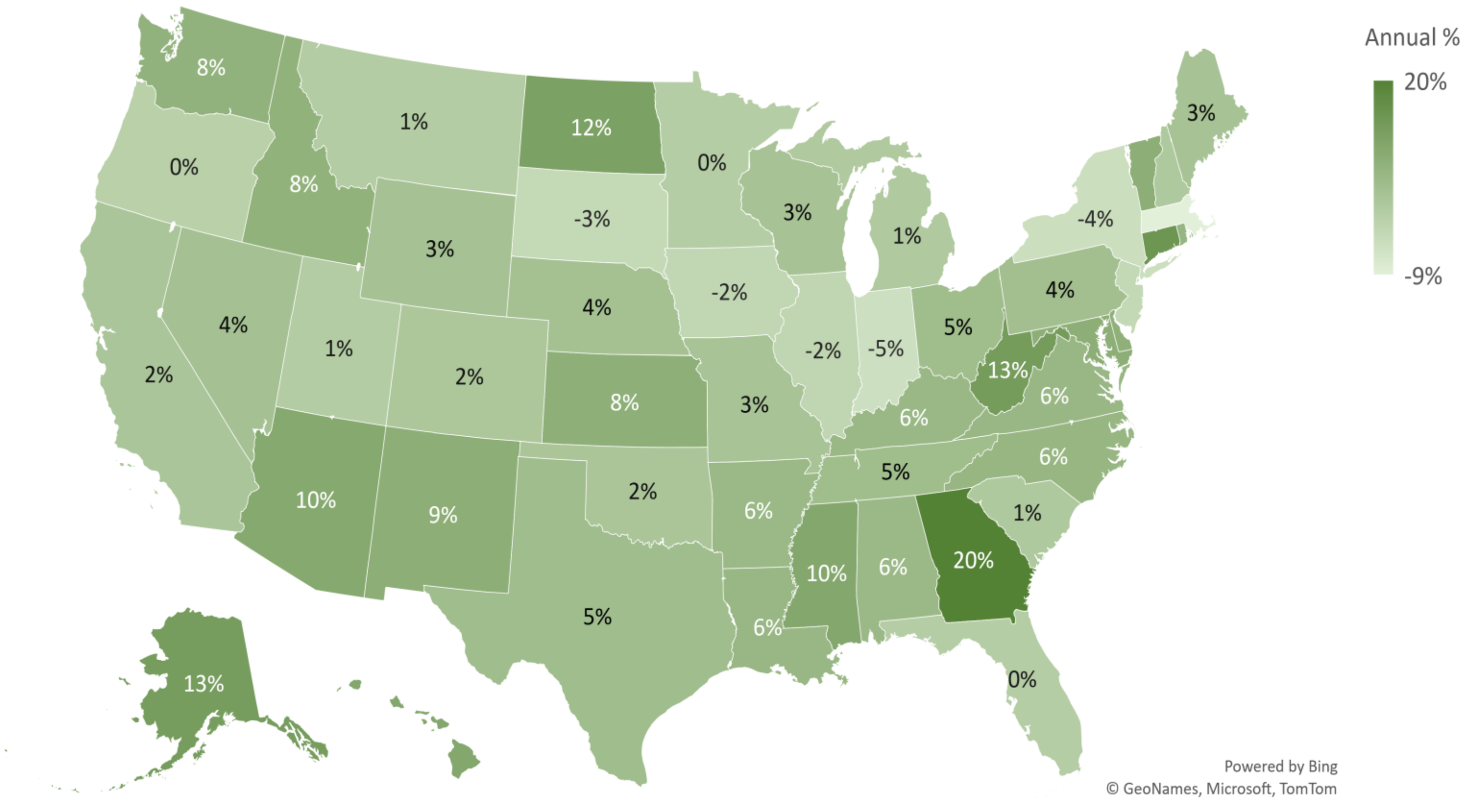
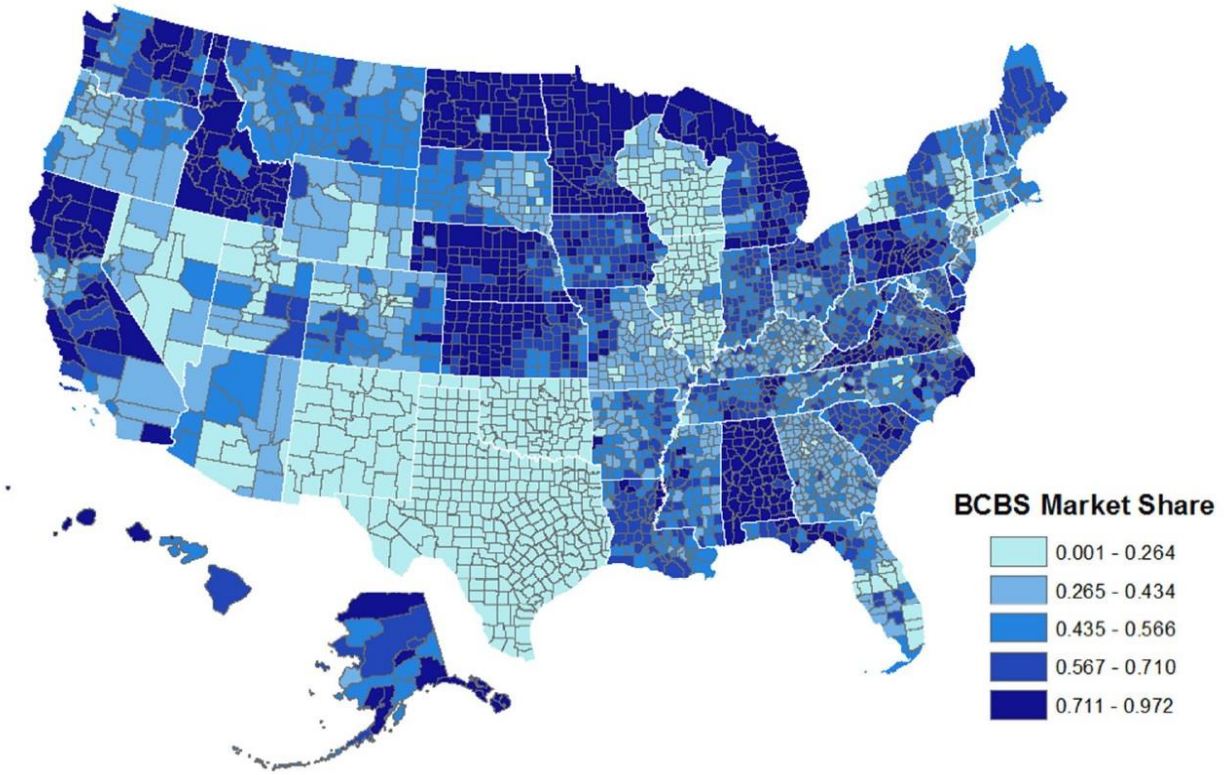
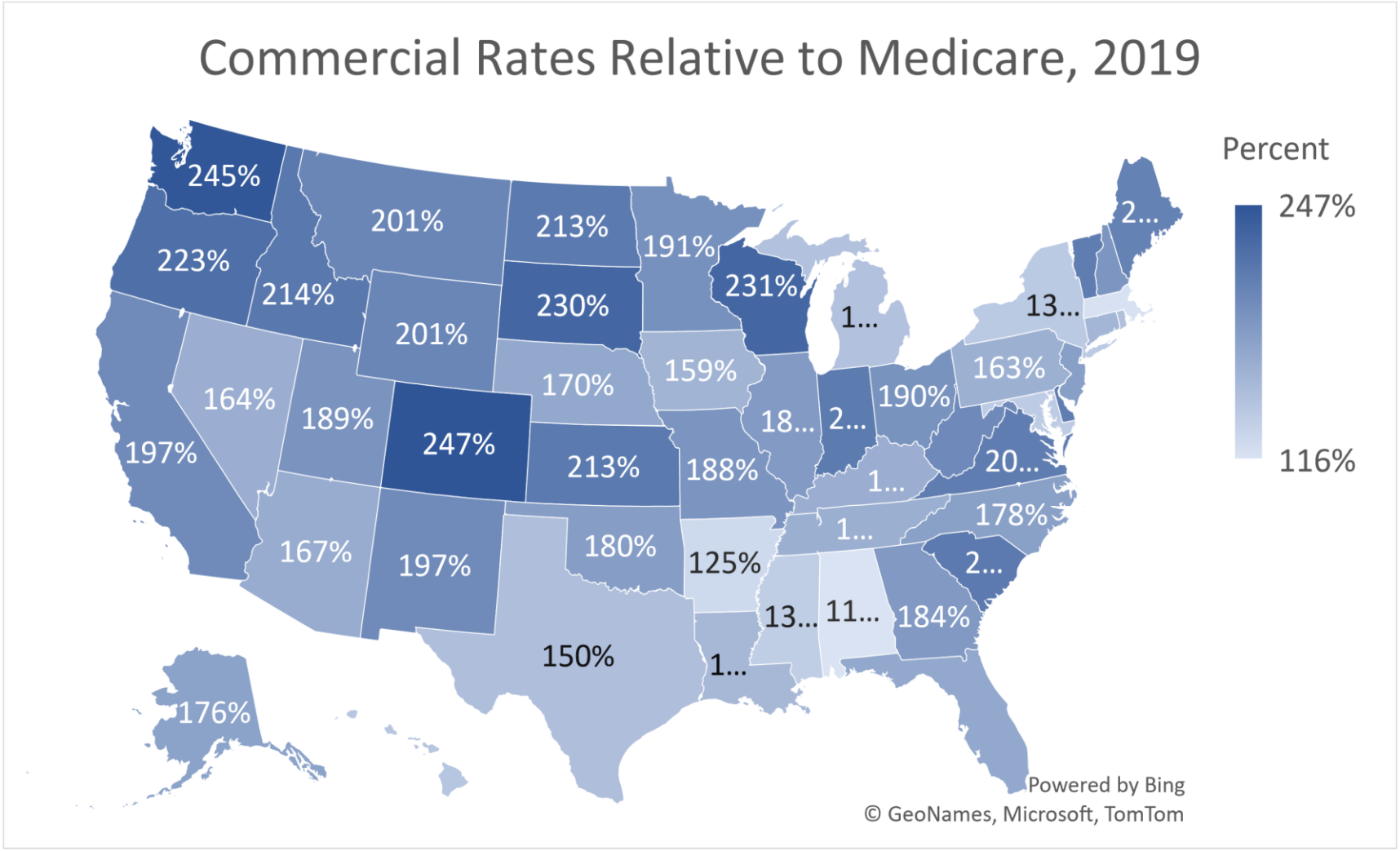
Individual Market, Admininistrative Expense, Growth 2014-2019

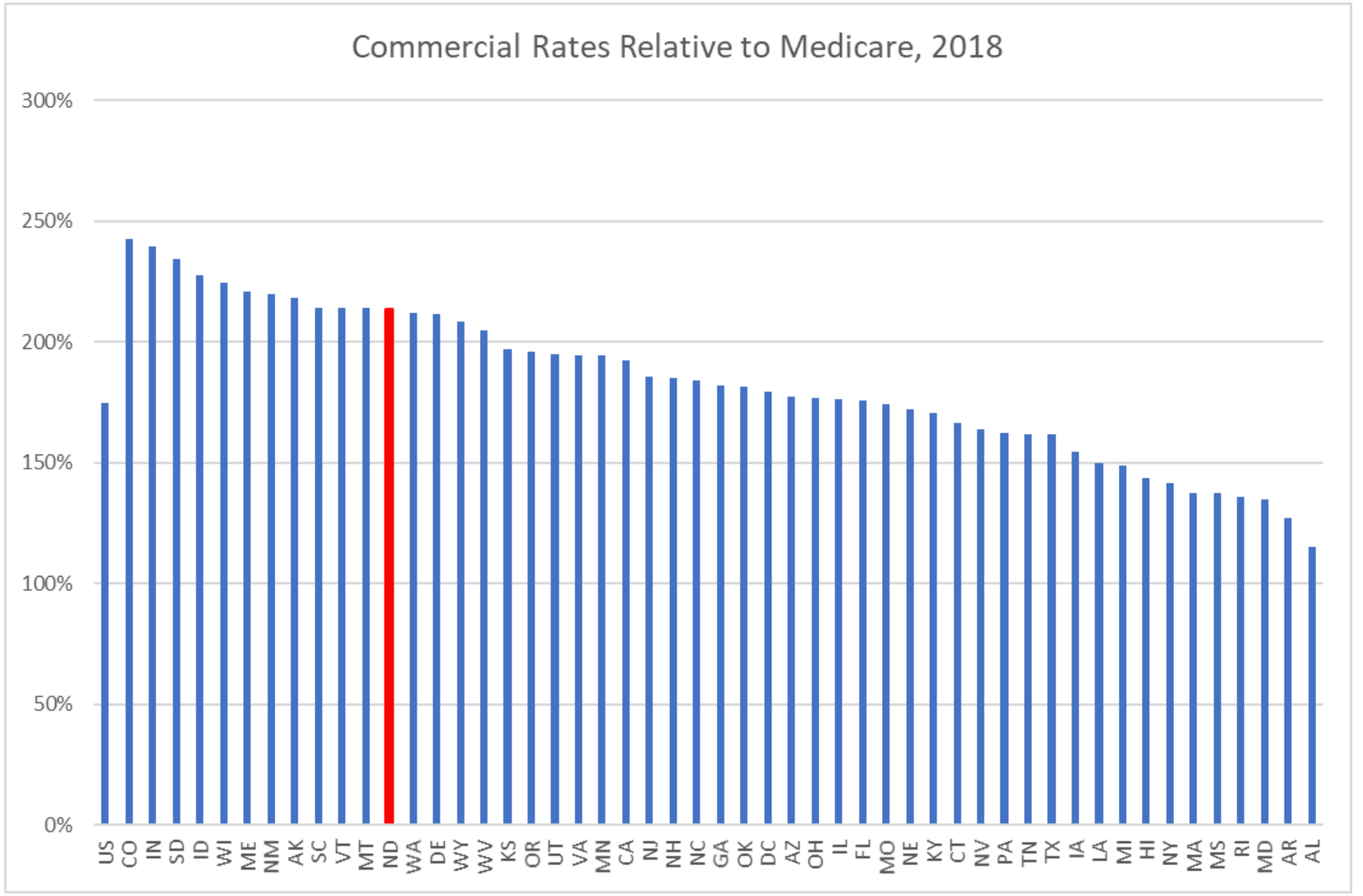


BCBS Market Share is Significant



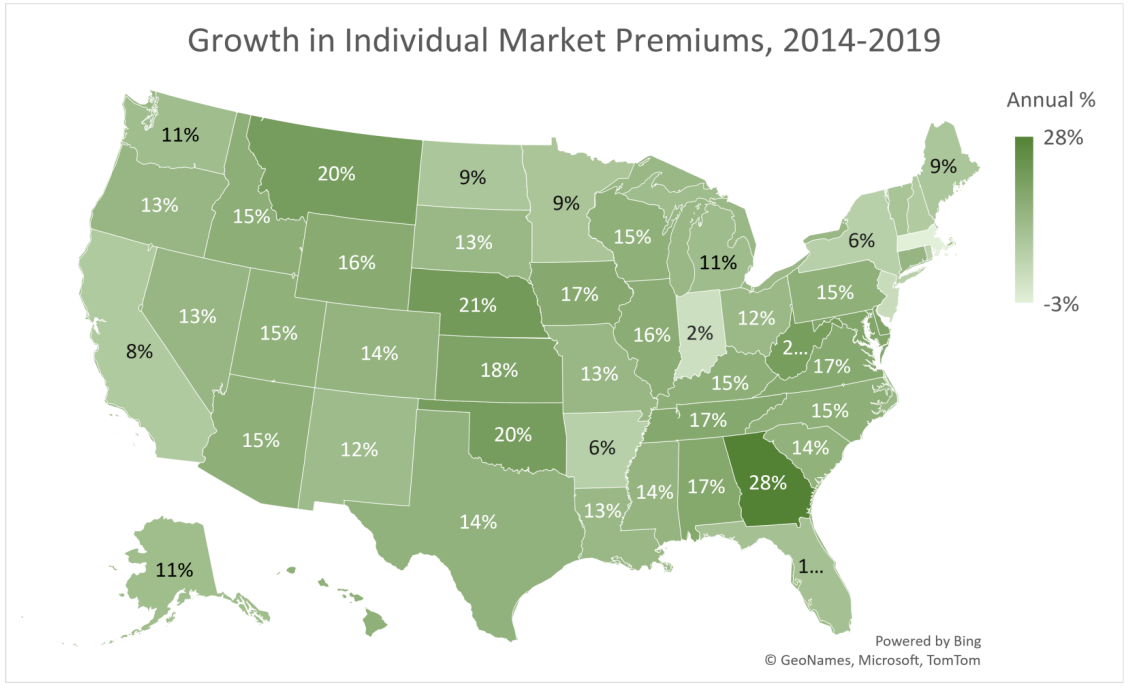
Commercial Payment Rates Grew From about 170% to Over 200% of Medicare's Rates

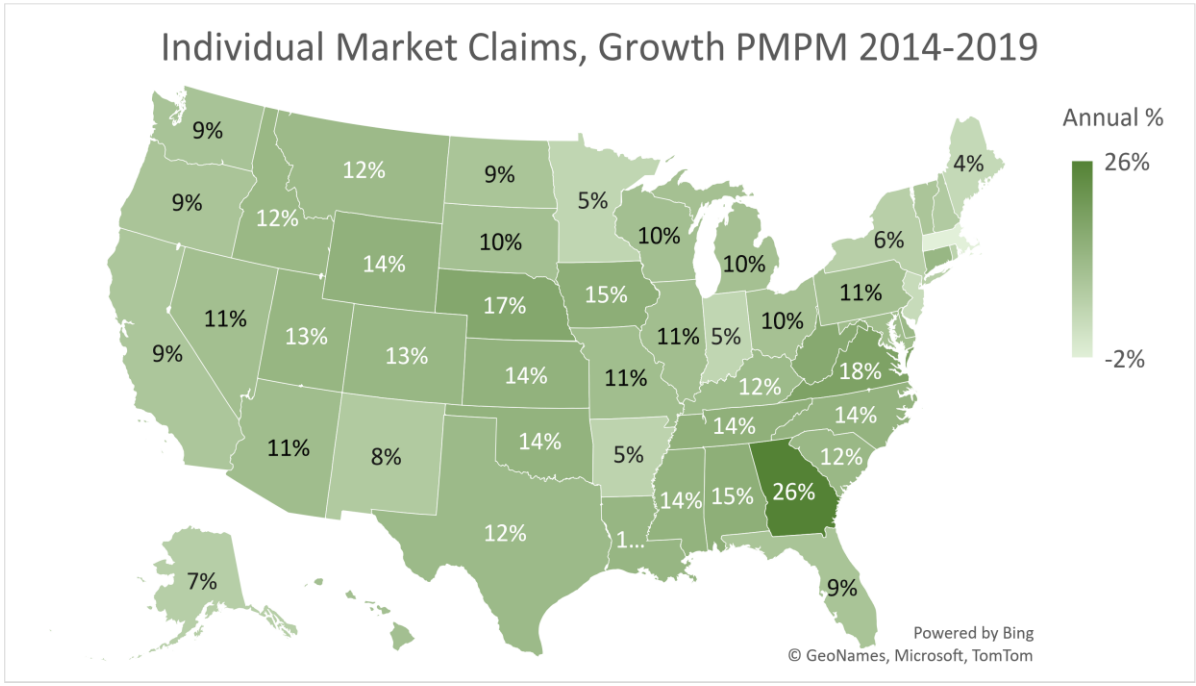



Commercial Rates Relative to Medicare, 2018
300%
250%
200%
150%
100%
50%
0%
US CO IN SD ID WI ME NM AK SC VT MT ND WA DE WY WV KS OR UT VA MN CA NJ NH NC GA OK DC AZ OH IL FL MO NE KY CT NV PA TN TX IA LA MI HI NY MA MS RI MD AR AL

Premiums and Claims Steady

Despite North Dakota's relatively high and rapidly growing hospital and pharmaceutical costs, North Dakota's statewide premiums and claims per member month are about average, in the individual, small group, and large group markets.





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North Dakota
INSURANCE
DEPARTMENT
PROTECTING THE PUBLIC GOOD
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