



**THE CHARTIS GROUP**  
CHARTIS CENTER FOR RURAL HEALTH

**iVantage**  
HEALTH ANALYTICS



Rural Relevance Chart Book

---

Value Leaders

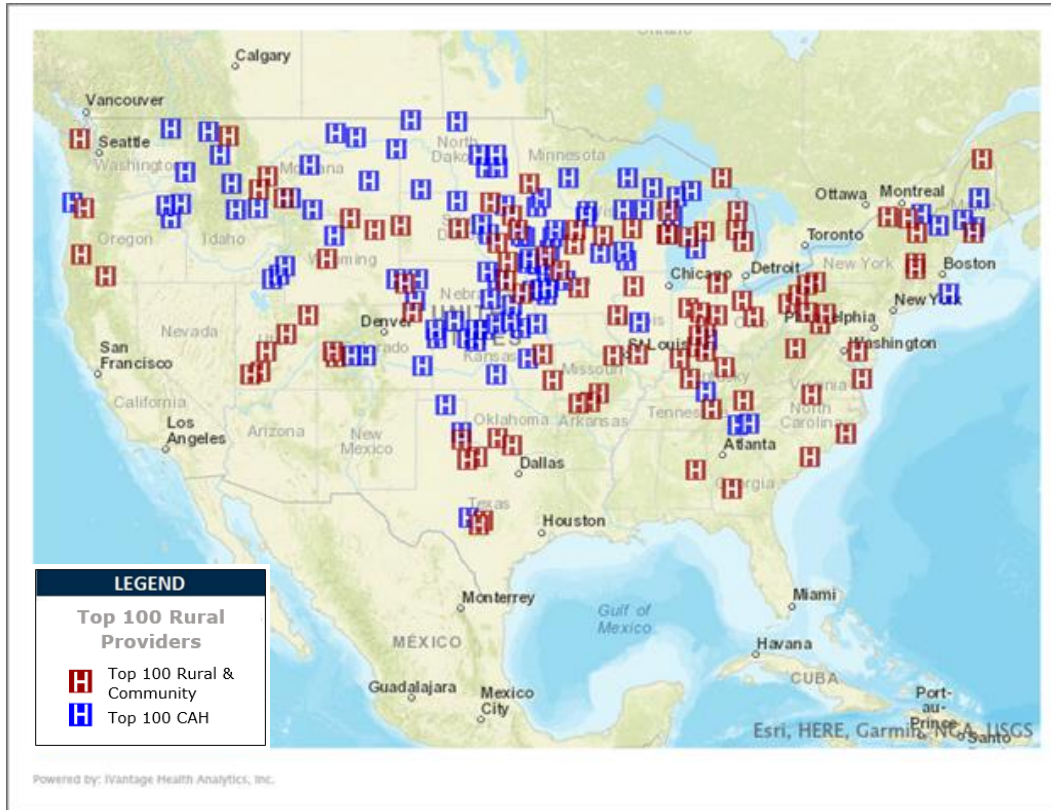




# Rural Relevance Chart Book

## Chapter 3: Value Leaders

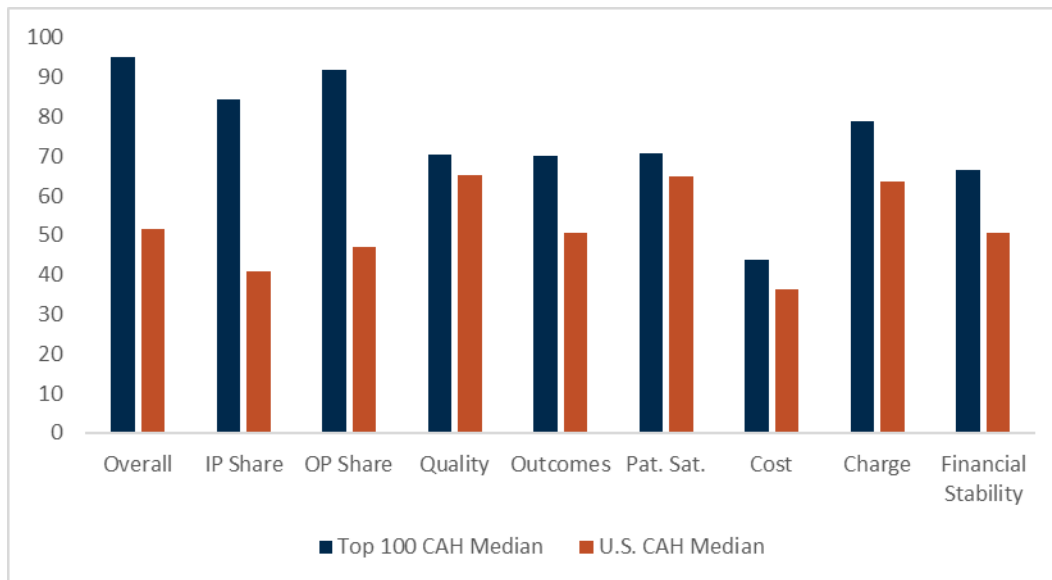
### 2017 Top 100 Rural Providers



Top 100 Critical Access Hospitals and Rural & Community Hospitals. Geographically, these hospitals are in 38 states, with the vast majority of top performing rural hospitals clustered in the upper Midwest. There is a noticeable absence of top performers in California and the Southwest. Montana leads the country with 15 total top performers, followed closely by Iowa (14), Nebraska (13), and South Dakota (12).

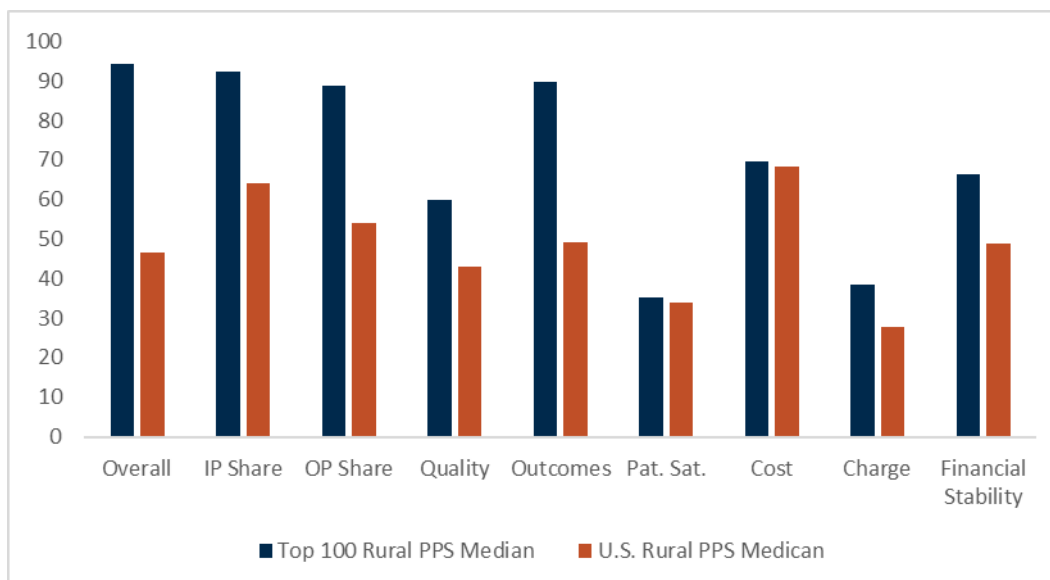


## Top 100 CAH Performance



Top 100 CAHs outperform their CAH peers at the national median across all areas of INDEX performance.

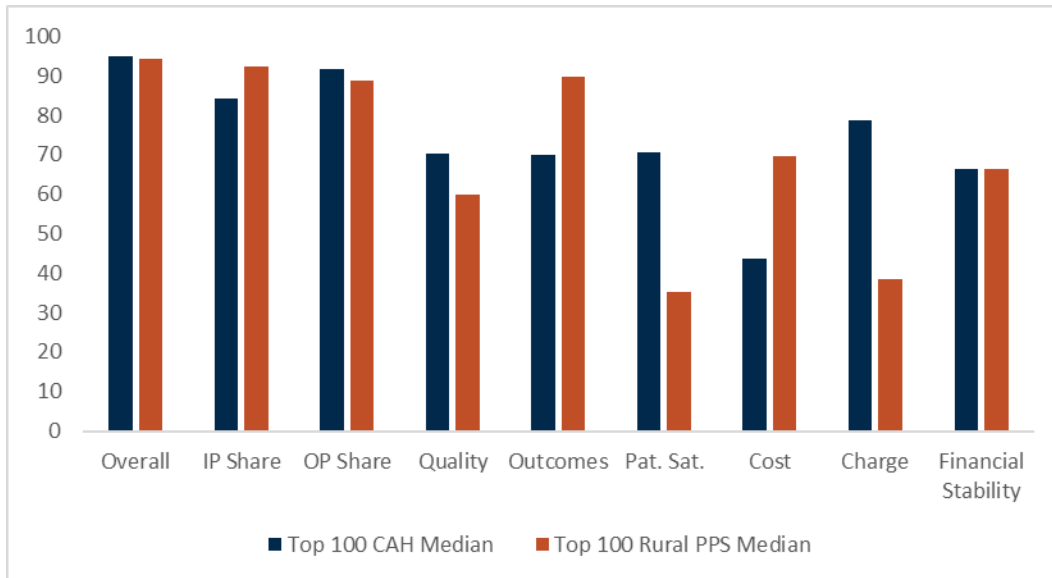
## Top 100 Rural & Community Hospital Performance



Top 100 Rural & Community Hospitals outperform their rural PPS peers at the national median across all areas of INDEX performance.



## Top 100 Comparison Performance



Top 100 CAHs and Top 100 Rural & Community Hospitals demonstrate varying strengths.



## Charge and Cost Comparison: Common Outpatient Procedures

When comparing case mix and wage adjusted charges for several common outpatient procedures, average rural charges are generally lower than average non-rural charges.

The greatest charge differential among the analyzed procedures is for HCPCS codes 99282 ED level II and 99283 ED level III, for which rural hospitals charge almost half as much on a per visit basis compared to non-rural hospitals.

Average Rural and Non-Rural Hospital Charges per Case for Common Outpatient Procedures

HCPCS Code	Rural Average Charge	Non-Rural Average Charge	Rural vs. Non-Rural Charge Difference	Rural vs. Non-Rural percent Charge Difference
99283 ED level III	\$491	\$839	-\$348	-41 percent
99282 ED level II	\$293	\$493	-\$200	-41 percent
71020 Chest X-ray 2 view frontal&latl	\$281	\$366	-\$85	-23 percent
71010 Chest X-ray 1 view frontal	\$246	\$338	-\$92	-27 percent
93005 Electrocardiogram, tracing	\$211	\$268	-\$57	-21 percent
80053 Comprehen metabolic panel	\$186	\$219	-\$33	-15 percent
84443 Assay thyroid stim hormone	\$140	\$145	-\$5	-4 percent
80061 Lipid panel	\$138	\$139	-\$1	-1 percent
80048 Metabolic panel total ca	\$134	\$165	-\$31	-19 percent
83036 Glycosylated hemoglobin test	\$93	\$93	\$0	0 percent
85610 Prothrombin time	\$54	\$61	-\$6	-10 percent



## Charge and Cost Comparison: Common Inpatient Procedures

Average rural hospital case mix and wage adjusted charges are lower than non-rural charges on the inpatient side. Across the common DRGs analyzed here, the greatest charge differential is for DRG 871: Septicemia or severe sepsis w/o MV 96+ hours w MCC, for which rural hospitals charge nearly \$20,000 less per case, on average, than non-rural providers. The lowest relative charge difference is for DRG 470: Major joint replacement w/o CC or MCC, for which rural hospitals charge 11 percent less per case than non-rural hospitals on average.

Average Rural and Non-Rural Hospital Charges per Case for Common Inpatient Procedures

DRG	Rural Average Charge	Non-Rural Average Charge	Rural vs. Non-Rural Cost Difference	Rural vs. Non-Rural percent Cost Difference
470: Major joint replacement w/o CC or MCC	\$51,532	\$57,717	-\$6,185	-11 percent
871: Septicemia or severe sepsis w/o MV 96+ hours w MCC	\$35,698	\$55,508	-\$19,810	-36 percent
190: Chronic obstructive pulmonary disease w MCC	\$24,202	\$35,995	-\$11,793	-33 percent
885: Psychoses	\$22,457	\$30,571	-\$8,114	-27 percent
292: Heart failure & shock w CC	\$19,518	\$29,200	-\$9,682	-33 percent
194: Simple pneumonia & pleurisy w CC	\$19,057	\$29,923	-\$10,866	-36 percent
392: Esophagitis, gastroent & misc digest disorders w/o MCC	\$16,663	\$25,959	-\$9,296	-36 percent
690: Kidney & urinary tract infections w/o MCC	\$14,772	\$24,976	-\$10,204	-41 percent
641: Nutritional & misc metabolic disorders w/o MCC	\$13,738	\$23,328	-\$9,590	-41 percent



## VBP Impact – Critical Access Hospitals

The below figures represent Value-based Purchasing impact for Critical Access Hospitals using the 2018 Program Year Modeling.

State	#CAHs	Average IP withholding	Average Expected VBP Payment	Average Bonus (Expected Withholding)	Average Performance Increase Available
<b>AK</b>	13	\$30,366	\$59,393	\$29,027	\$18,951
<b>AL</b>	4	\$6,311	\$10,123	\$3,812	\$6,159
<b>AR</b>	29	\$35,274	\$53,126	\$17,853	\$37,880
<b>AZ</b>	16	\$20,095	\$34,321	\$14,227	\$17,522
<b>CA</b>	34	\$63,294	\$79,060	\$15,767	\$84,238
<b>CO</b>	29	\$30,101	\$47,875	\$17,774	\$29,786
<b>FL</b>	13	\$39,293	\$58,585	\$19,291	\$42,792
<b>GA</b>	34	\$22,391	\$42,207	\$19,815	\$15,563
<b>HI</b>	9	\$5,325	\$9,651	\$4,325	\$4,089
<b>IA</b>	82	\$32,224	\$53,372	\$21,148	\$29,767
<b>ID</b>	27	\$35,775	\$54,303	\$18,528	\$37,997
<b>IL</b>	51	\$45,712	\$66,914	\$21,202	\$51,023
<b>IN</b>	35	\$58,405	\$71,946	\$13,541	\$78,740
<b>KS</b>	84	\$21,245	\$32,499	\$11,254	\$22,312
<b>KY</b>	29	\$34,197	\$53,452	\$19,255	\$34,775
<b>LA</b>	27	\$31,443	\$62,555	\$31,112	\$18,569
<b>MA</b>	3	\$88,661	\$137,065	\$48,404	\$91,680
<b>ME</b>	16	\$74,085	\$65,054	-\$9,031	\$126,086
<b>MI</b>	38	\$41,086	\$62,055	\$20,969	\$43,946
<b>MN</b>	79	\$36,465	\$55,547	\$19,082	\$38,533
<b>MO</b>	39	\$31,166	\$52,554	\$21,388	\$27,855
<b>MS</b>	34	\$30,972	\$52,618	\$21,646	\$27,290
<b>MT</b>	48	\$19,072	\$28,240	\$9,167	\$20,967
<b>NC</b>	25	\$49,379	\$63,979	\$14,600	\$63,418
<b>ND</b>	36	\$17,651	\$25,269	\$7,618	\$20,270
<b>NE</b>	65	\$24,908	\$40,707	\$15,799	\$23,556
<b>NH</b>	13	\$86,878	\$92,232	\$5,354	\$131,913
<b>NM</b>	9	\$28,622	\$45,007	\$16,385	\$28,838
<b>NV</b>	11	\$29,889	\$41,577	\$11,688	\$35,537
<b>NY</b>	18	\$16,707	\$24,234	\$7,527	\$18,870
<b>OH</b>	34	\$51,469	\$68,678	\$17,208	\$64,113
<b>OK</b>	34	\$18,594	\$39,193	\$20,599	\$8,780
<b>OR</b>	25	\$65,553	\$65,905	\$352	\$103,222
<b>PA</b>	15	\$35,138	\$43,736	\$8,599	\$46,919





<b>SC</b>	5	\$26,947	\$37,724	\$10,777	\$31,799
<b>SD</b>	38	\$15,816	\$29,741	\$13,925	\$11,064
<b>TN</b>	19	\$20,356	\$38,032	\$17,676	\$14,487
<b>TX</b>	83	\$25,245	\$48,833	\$23,588	\$16,298
<b>UT</b>	11	\$14,530	\$32,385	\$17,854	\$5,103
<b>VA</b>	7	\$63,275	\$73,921	\$10,647	\$89,326
<b>VT</b>	8	\$112,515	\$78,765	-\$33,750	\$211,524
<b>WA</b>	39	\$51,170	\$71,266	\$20,096	\$60,753
<b>WI</b>	58	\$49,774	\$74,495	\$24,721	\$53,923
<b>WV</b>	20	\$28,471	\$41,564	\$13,093	\$31,892
<b>WY</b>	16	\$36,671	\$55,504	\$18,833	\$39,107
<b>Total</b>	<b>1,362</b>	<b>\$34,955</b>	<b>\$51,717</b>	<b>\$16,762</b>	<b>\$38,467</b>

VBP Impact for Rural & Community Hospitals based on 2018 VBP Program Year Modeling.

State	# Rural & Community	Average IP Withholding	Average Expected VBP Payment	Average Bonus (Expected - Withholding)	Average Performance Increase Available
<b>AK</b>	5	\$152,052	\$196,851	\$44,799	\$195,444
<b>AL</b>	42	\$114,309	\$103,490	-\$10,819	\$191,428
<b>AR</b>	21	\$212,570	\$148,174	-\$64,396	\$400,258
<b>AZ</b>	12	\$173,488	\$193,716	\$20,227	\$253,884
<b>CA</b>	26	\$288,026	\$284,103	-\$3,923	\$459,003
<b>CO</b>	13	\$146,455	\$144,733	-\$1,721	\$233,120
<b>CT</b>	4	\$348,358	\$200,715	-\$147,644	\$698,049
<b>DE</b>	2	\$780,253	\$538,148	-\$242,105	\$1,474,903
<b>FL</b>	11	\$186,602	\$130,599	-\$56,003	\$350,833
<b>GA</b>	39	\$150,179	\$149,751	-\$429	\$237,712
<b>HI</b>	4	\$223,758	\$281,618	\$57,860	\$295,677
<b>IA</b>	12	\$193,893	\$189,100	-\$4,793	\$311,144
<b>ID</b>	2	\$38,575	\$32,922	-\$5,653	\$66,602
<b>IL</b>	22	\$211,409	\$166,972	-\$44,437	\$378,464
<b>IN</b>	22	\$174,823	\$130,570	-\$44,253	\$320,474
<b>KS</b>	26	\$165,811	\$166,979	\$1,168	\$260,813
<b>KY</b>	37	\$190,635	\$145,188	-\$45,446	\$346,649
<b>LA</b>	29	\$112,567	\$84,539	-\$28,028	\$205,884
<b>MA</b>	2	\$140,100	\$77,373	-\$62,728	\$284,085
<b>MD</b>	5	\$484,662	\$628,931	\$144,269	\$621,496
<b>ME</b>	10	\$173,065	\$193,567	\$20,502	\$252,942
<b>MI</b>	27	\$191,884	\$175,890	-\$15,995	\$319,172
<b>MN</b>	19	\$172,289	\$176,258	\$3,969	\$268,248
<b>MO</b>	26	\$202,255	\$178,213	-\$24,042	\$343,604





<b>MS</b>	36	\$137,612	\$136,469	-\$1,143	\$218,570
<b>MT</b>	7	\$226,500	\$199,062	-\$27,439	\$385,309
<b>NC</b>	34	\$246,760	\$228,218	-\$18,542	\$408,423
<b>ND</b>	2	\$4,685	\$8,405	\$3,720	\$3,683
<b>NE</b>	8	\$387,033	\$175,392	-\$211,642	\$823,154
<b>NH</b>	2	\$414,210	\$191,086	-\$223,124	\$877,576
<b>NM</b>	20	\$118,258	\$131,710	\$13,452	\$173,397
<b>NV</b>	3	\$99,996	\$87,203	-\$12,793	\$170,786
<b>NY</b>	37	\$205,751	\$174,681	-\$31,071	\$356,158
<b>OH</b>	27	\$107,899	\$74,031	-\$33,868	\$204,348
<b>OK</b>	47	\$142,452	\$126,622	-\$15,831	\$240,905
<b>OR</b>	8	\$305,098	\$307,473	\$2,375	\$479,680
<b>PA</b>	34	\$195,818	\$132,249	-\$63,570	\$372,963
<b>SC</b>	20	\$217,715	\$155,609	-\$62,106	\$406,096
<b>SD</b>	12	\$120,994	\$101,002	-\$19,992	\$211,162
<b>TN</b>	41	\$135,165	\$102,670	-\$32,496	\$246,057
<b>TX</b>	84	\$112,349	\$82,684	-\$29,665	\$207,176
<b>UT</b>	10	\$52,738	\$57,661	\$4,923	\$78,404
<b>VA</b>	21	\$149,701	\$125,284	-\$24,417	\$260,944
<b>VT</b>	4	\$272,540	\$150,361	-\$122,179	\$552,792
<b>WA</b>	6	\$268,163	\$239,334	-\$28,829	\$452,526
<b>WI</b>	18	\$168,022	\$177,652	\$9,630	\$255,845
<b>WV</b>	9	\$150,566	\$182,258	\$31,692	\$206,203
<b>WY</b>	9	\$131,011	\$164,887	\$33,876	\$173,122
<b>Total</b>	<b>917</b>	<b>\$171,754</b>	<b>\$148,865</b>	<b>-\$22,888</b>	<b>\$294,259</b>



## About the Hospital Strength INDEX®

The Hospital Strength INDEX is rural healthcare's most comprehensive and objective assessment of rural providers. By assessing performance across more than 50 individual indicators and eight pillars of performance, INDEX brings a rural-relevant perspective to healthcare leaders making strategic and operational decisions. The INDEX is the foundation for many of rural healthcare's most prominent awards (e.g. Top 100 Critical Access Hospitals, NOSORH Performance Excellence Awards) and is used by organizations such as the National Rural Health Association in support of its advocacy and legislative initiatives.

Since its inception, the INDEX has helped more than 750 rural and Critical Access Hospitals integrate sophisticated analytics for benchmarking performance, and has also been used by more than 25 state agencies, state hospital associations, federal grant programs and both the National Rural Health Association (NRHA) and the National Organization of State Offices of Rural Health (NOSORH). INDEX analytics have also informed healthcare industry policy, research and thought leadership.



**THE CHARTIS GROUP**

CHARTIS CENTER FOR RURAL HEALTH

The Chartis Center for Rural Health (CCRH) builds upon the commitment of The Chartis Group and iVantage Health Analytics to deliver expertise, performance management solutions, advisory services and research to the system-supported rural facilities, community hospitals, and Critical Access Hospitals which provide care to more than 60 million Americans.

Pairing iVantage's extensive knowledge of rural healthcare, research and solution portfolio with the healthcare expertise and resources of The Chartis Group, CCRH creates an unparalleled value proposition for rural health leaders and those advocating on their behalf. The Chartis Center for Rural Health provides insight, perspective, analysis and solutions to this important healthcare segment in order to address the biggest challenges and drive performance improvement.

© 2017 The Chartis Group, LLC. All rights reserved. This content draws on the research and experience of Chartis consultants and other sources. It is for general information purposes only and should not be used as a substitute for consultation with professional advisors.