Meaningful Data Analysis in the Healthcare Delivery Sector

March 2025

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UofL Health

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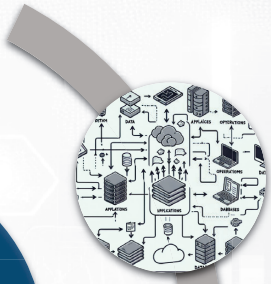
Agenda



Know your data

Value in using your data

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Know Your Data

Objective 1: Participants will come away with a better understanding of the critical importance of knowing your data and any limitations with completeness, accuracy, and/or timeliness.

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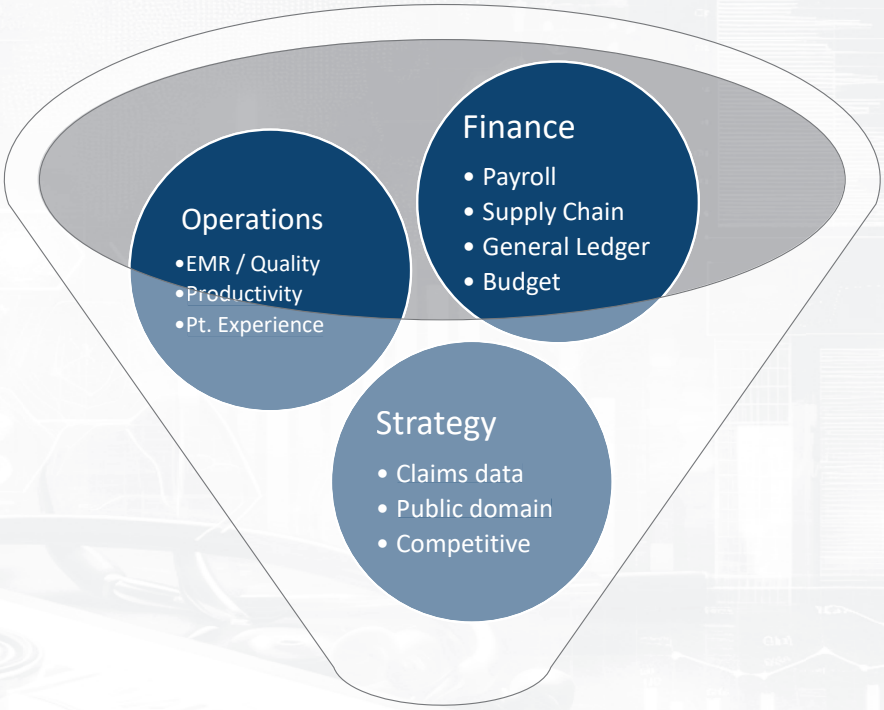
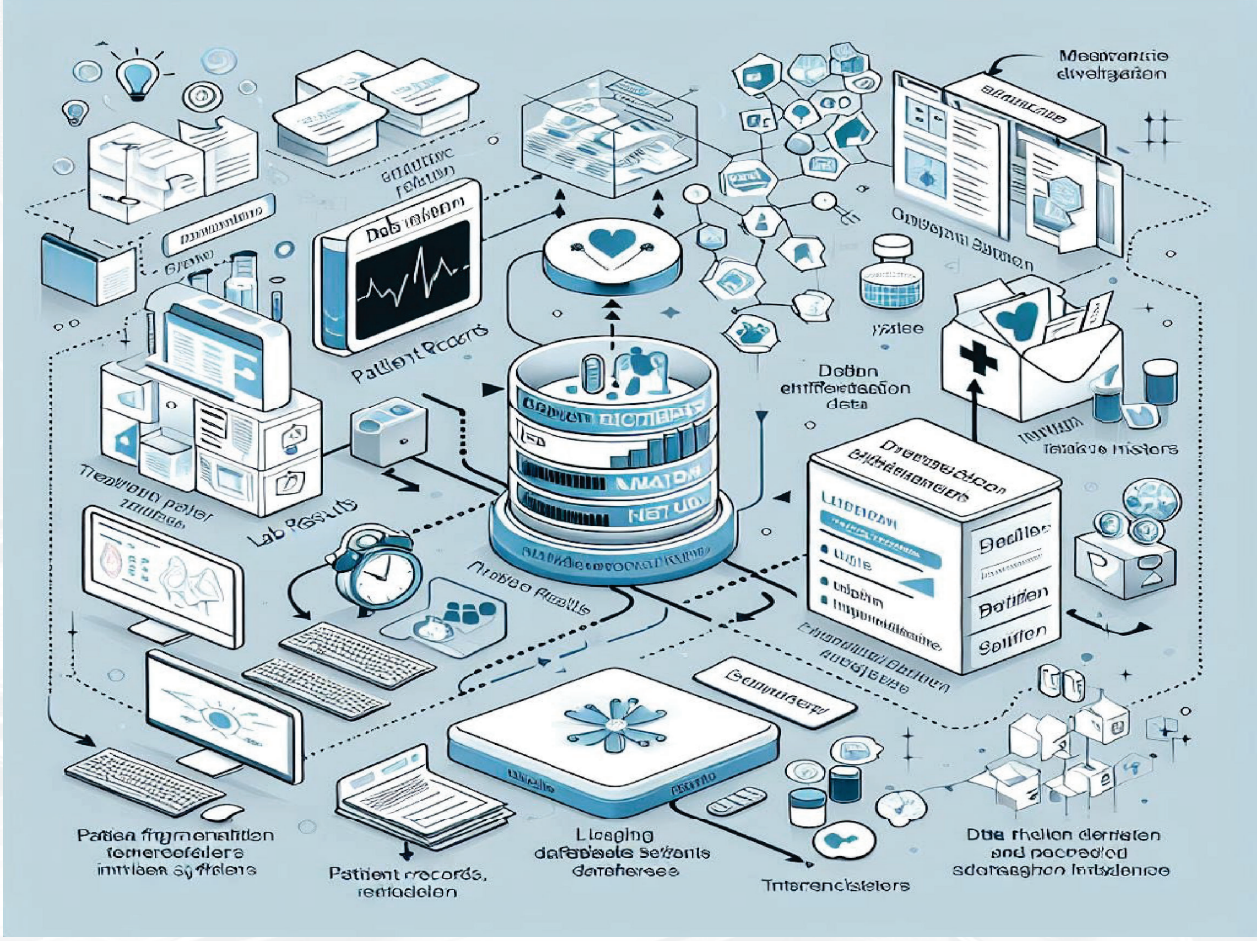
Knowing your data spans these and more …

Common Sources of Data



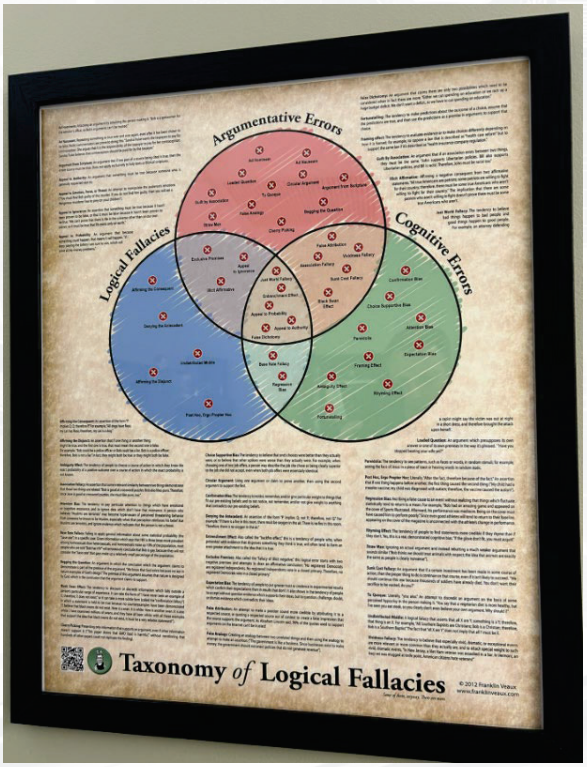
Data Lake (e.g., MSFT, AWS, et al)

Common Sources of Data



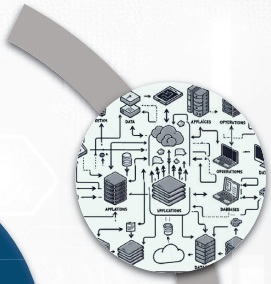
Common Sources of Data

Fragmented Systems + Poor Data Literacy = Risk of Argumentative Errors, Logical Fallacies, and Cognitive Errors in Decision Making



Above: Picture from Abe's office wall

Agenda



Know your data

Value in using your data

Configuring Strategic Insights

Objective 2: Participants will come away with a better understanding of how to generate value from payor price transparency data, claims data, and quality data.

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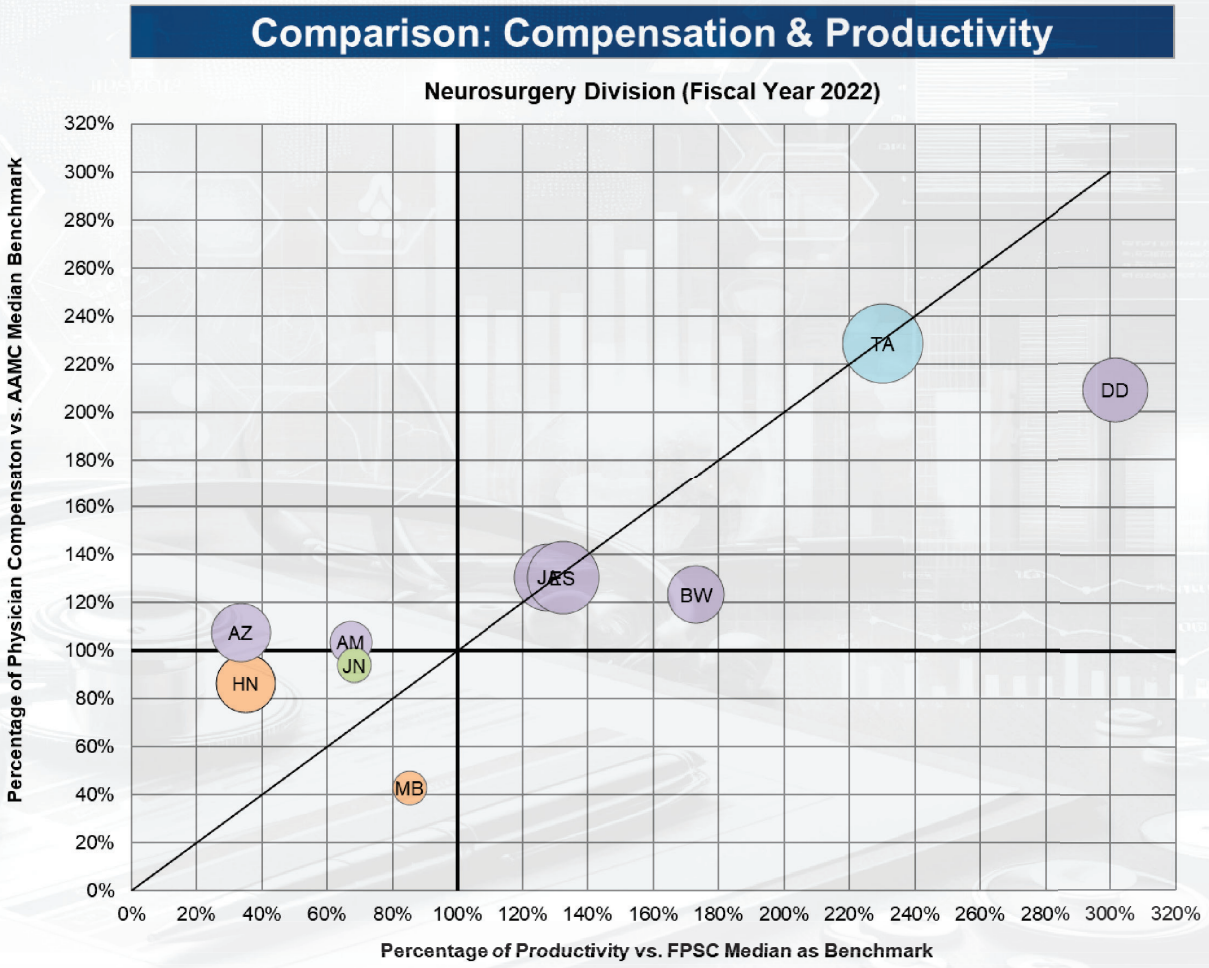
High Value Strategic Data:

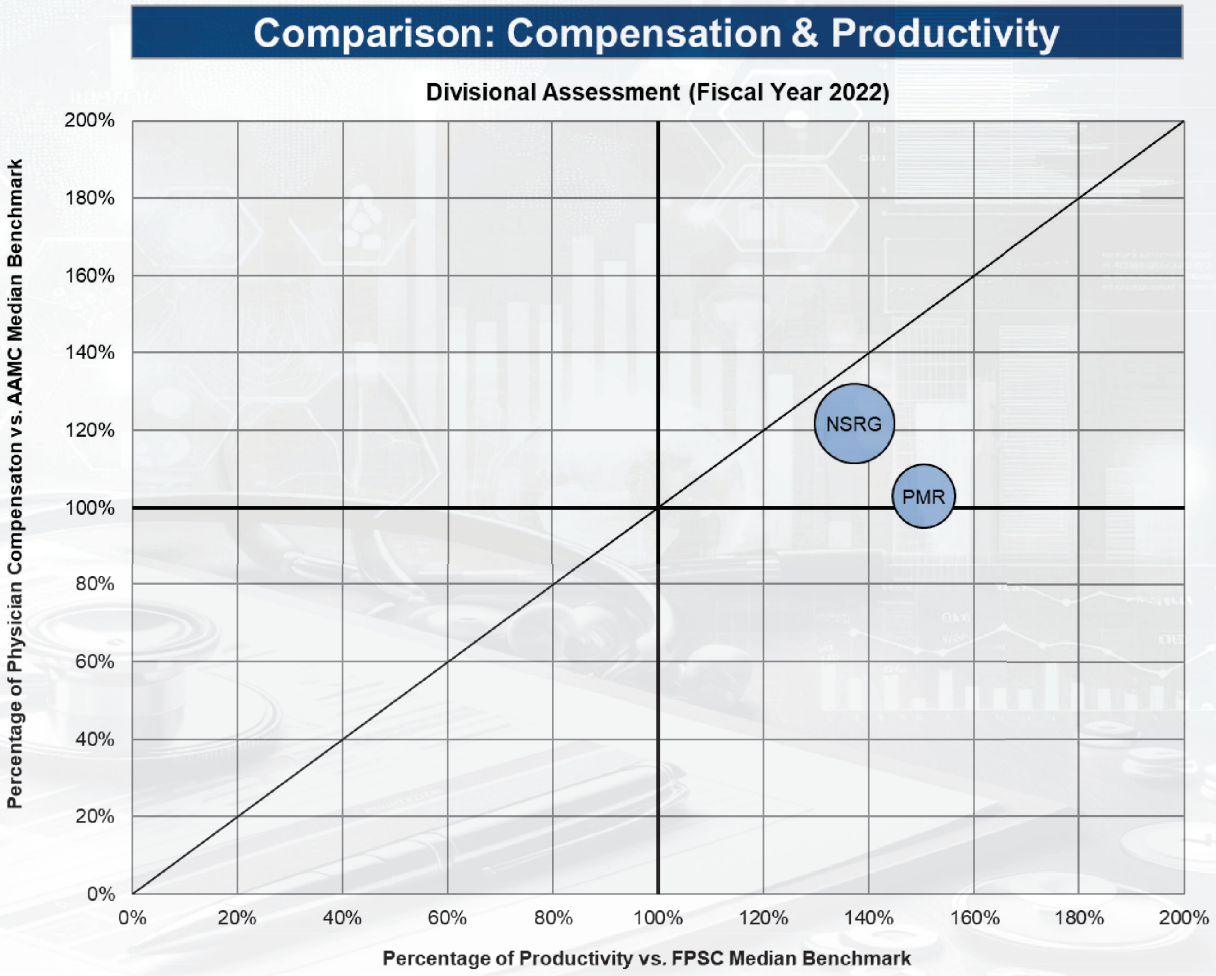
- Proprietary service maturity matrices/indices (e.g., service line specific matrices for categorization—CPTs, DRGs, etc.)
- Publicly available census, **quality**, bond issuance, disease prevalence, etc.
- Many vendors willing to sell data and insights from data – be careful
- Advisory Board Suite of Tools – Market Scenario Planner, et al
- **KHA Claims Data (IP and OP Hospital Data)**
- **Payor Price Transparency Data**


Productivity
Compensation

Bubble Chart Assessment: Productivity & Compensation



Bubble Chart Assessment: Productivity & Compensation

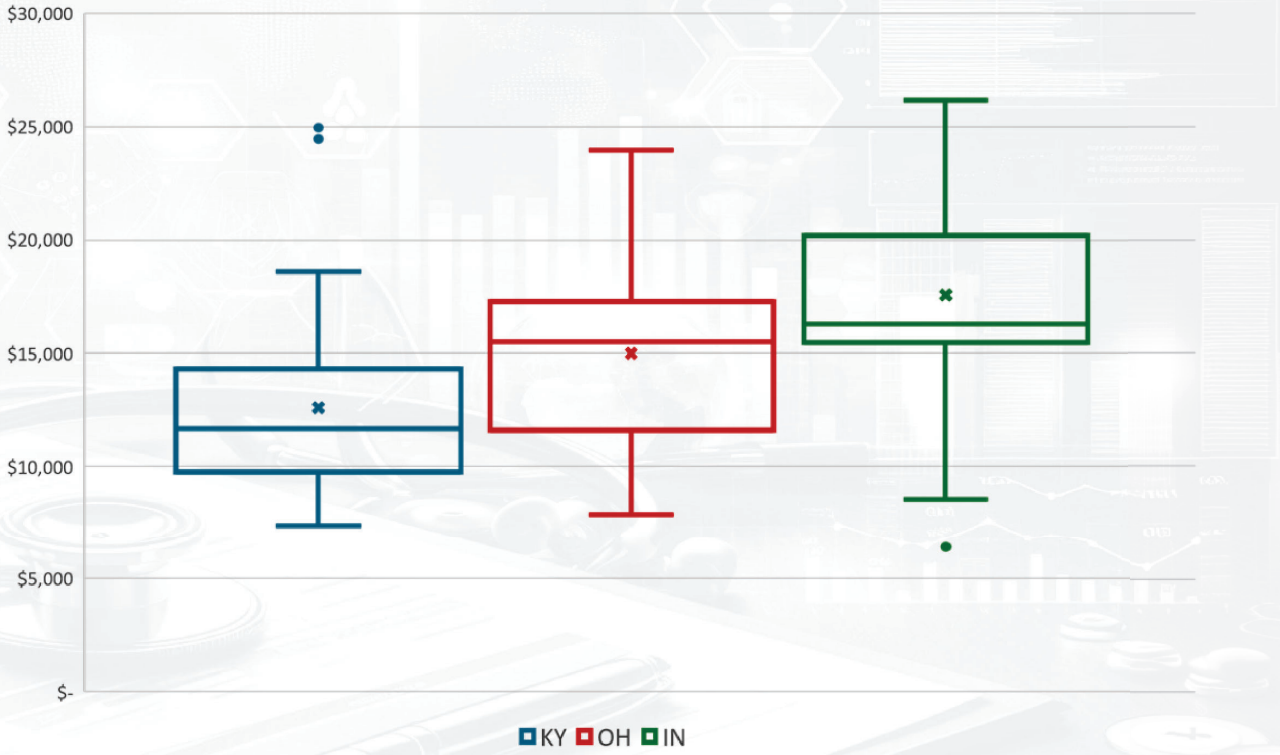



Quality
Price
Transparency

Quality + Payor Price Transparency = Actionable Insights

Average Negotiated In-Network MS-DRG Base Rates with Anthem by State

(Spine DRGs only | Anthem July 2024 PPO MRFs | n = 217 General Acute Care Hospitals)



For statistical work conducted in the presentation, exclusively used Microsoft Excel's "Analysis ToolPak" found in the Excel Ad-ins section of the application options menu. To ascertain whether the expected average in-network negotiated base rate differences were statistically significant amongst the various segments tested (e.g., BCBSA "Distinction" and "Distinction+" vs. null) author used "F-Test Two-Sample for Variances" and subsequently used the appropriate t-Test pending the results of the F-Test (e.g., "t-Test: Two-Sample Assuming Equal Variances" and "t-Test: Two-Sample Assuming Unequal Variances) as noted in the "Quality a Possible Driver" slide. For regression testing, author used "Regression" tool with outputs found in "Quality vs. State More Significant" and "Metro Area Regression Findings" slides. Data obtained and used for testing were from the individual machine-readable files released by Anthem for the PPO plans available for sale in Indiana, Kentucky, and Ohio for the month of July 2024 and included the in-network negotiated rates for the 11 spine DRGs for 217 general acute care ("GAC") hospitals that had contracts with Anthem. A manual NPI lookup was used to ascertain "GAC" status for inclusion of the statistical testing. CMS table 5 for the appropriate fiscal year was used to derive the base rate for the 11 spine DRG codes noted thusly: 453, 454, 455, 456, 457, 458, 459, 460, 471, 472, and 473.

Quality + Payor Price Transparency = Actionable Insights

Average In-Network Negotiated MS-DRG Base Rates with Anthem (Indiana, Kentucky, & Ohio)

Spine DRGs only | Anthem July 2024 PPO MRFs | n=217 General Acute Care Hospitals, 55 with BCBSA Distinction or Distinction+ in Spine Care

F-Test Two-Sample for Variances

	Mean Base Rate	*Mean Base Rate*
Mean	17462.77686	14669.50449
Variance	20597470.32	18293322.4
Observations	55	162
df	54	161
F	1.125955683	
P(F<=f) one-tail	0.282940972	**0.565881943**
F Critical one-tail	1.417498626	

t-Test: Two-Sample Assuming Equal Variances

	Mean Base Rate	*Mean Base Rate*
Mean	17462.77686	14669.50449
Variance	20597470.32	18293322.4
Observations	55	162
Pooled Variance	18872038.62	
Hypothesized Mean Difference	0	
df	215	
t Stat	4.120148434	
P(T<=t) one-tail	**0.00002702**	
t Critical one-tail	1.651971748	
P(T<=t) two-tail	0.00005403	
t Critical two-tail	1.971059122	

Average In-Network Negotiated MS-DRG Base Rates with Anthem (Kentucky only)

Spine DRGs only | Anthem July 2024 KY PPO MRF | n = 49 General Acute Care Hospitals, 14 with BCBSA Distinction or Distinction+ in Spine Care

F-Test Two-Sample for Variances

	Mean Base Rate	*Mean Base Rate*
Mean	16046.77273	11215.06494
Variance	34941736.15	7204163.254
Observations	14	35
df	13	34
F	4.850214372	
P(F<=f) one-tail	0.000104618	**0.000209236**
F Critical one-tail	2.020663866	

t-Test: Two-Sample Assuming Unequal Variances

	Mean Base Rate	*Mean Base Rate*
Mean	16046.77273	11215.06494
Variance	34941736.15	7204163.254
Observations	14	35
Hypothesized Mean Difference	0	
df	15	
t Stat	2.939573937	
P(T<=t) one-tail	0.00507305	
t Critical one-tail	1.753050356	
P(T<=t) two-tail	**0.01014610**	
t Critical two-tail	2.13144955	

For statistical work conducted in the presentation, exclusively used Microsoft Excel's "Analysis ToolPak" found in the Excel Ad-ins section of the application options menu. To ascertain whether the expected average in-network negotiated base rate differences were statistically significant amongst the various segments tested (e.g., BCBSA "Distinction" and "Distinction+" vs. null) author used "F-Test Two-Sample for Variances" and subsequently used the appropriate t-Test pending the results of the F-Test (e.g., "t-Test: Two-Sample Assuming Equal Variances" and "t-Test: Two-Sample Assuming Unequal Variances) as noted in the "Quality a Possible Driver" slide. For regression testing, author used "Regression" tool with outputs found in "Quality vs. State More Significant" and "Metro Area Regression Findings" slides. Data obtained and used for testing were from the individual machine-readable files released by Anthem for the PPO plans available for sale in Indiana, Kentucky, and Ohio for the month of July 2024 and included the in-network negotiated rates for the 11 spine DRGs for 217 general acute care ("GAC") hospitals that had contracts with Anthem. A manual NPI lookup was used to ascertain "GAC" status for inclusion of the statistical testing. CMS table 5 for the appropriate fiscal year was used to derive the base rate for the 11 spine DRG codes noted thusly: 453, 454, 455, 456, 457, 458, 459, 460, 471, 472, and 473.

Quality + Payor Price Transparency = Actionable Insights

Average In-Network Negotiated MS-DRG Base Rates with Anthem (Indiana, Kentucky, & Ohio)

Spine DRGs only | Anthem July 2024 PPO MRFs | n = 217 General Acute Care Hospitals, 55 with BCBSA Distinction or Distinction+ in Spine Care

SUMMARY OUTPUT - USING INDIANA AS BASE CASE

Regression Statistics	
Multiple R	0.521110789
R Square	**0.271556455**
Adjusted R Square	0.261296686
Standard Error	$ 3,869.36
Observations	217

		Coefficients	*Standard Error*	*t Stat*	*P-value*		*Lower 95%*		*Upper 95%*
Intercept	$	16,950.81	453.4137787	37.38485429	0.000000000	$	16,057.06	$	17,844.56
BCBSA Quality	$	3,220.77	607.2294959	5.304047192	0.000000283	$	2,023.83	$	4,417.72
KY	**$**	**(5,275.48)**	707.6115543	-7.455328077	**0.000000000**	$	(6,670.29)	$	(3,880.66)
OH	$	(2,889.52)	601.4497442	-4.80426431	0.000002923	$	(4,075.08)	$	(1,703.97)

Both quality and location are statistically significant in predicting a hospital's spine DRG base rate in Indiana, Kentucky, and Ohio → But… those two variables only explain 27% of the variance…

For statistical work conducted in the presentation, exclusively used Microsoft Excel's "Analysis ToolPak" found in the Excel Ad-ins section of the application options menu. To ascertain whether the expected average in-network negotiated base rate differences were statistically significant amongst the various segments tested (e.g., BCBSA "Distinction" and "Distinction+" vs. null) author used "F-Test Two-Sample for Variances" and subsequently used the appropriate t-Test pending the results of the F-Test (e.g., "t-Test: Two-Sample Assuming Equal Variances" and "t-Test: Two-Sample Assuming Unequal Variances) as noted in the "Quality a Possible Driver" slide. For regression testing, author used "Regression" tool with outputs found in "Quality vs. State More Significant" and "Metro Area Regression Findings" slides. Data obtained and used for testing were from the individual machine-readable files released by Anthem for the PPO plans available for sale in Indiana, Kentucky, and Ohio for the month of July 2024 and included the in-network negotiated rates for the 11 spine DRGs for 217 general acute care ("GAC") hospitals that had contracts with Anthem. A manual NPI lookup was used to ascertain "GAC" status for inclusion of the statistical testing. CMS table 5 for the appropriate fiscal year was used to derive the base rate for the 11 spine DRG codes noted thusly: 453, 454, 455, 456, 457, 458, 459, 460, 471, 472, and 473.

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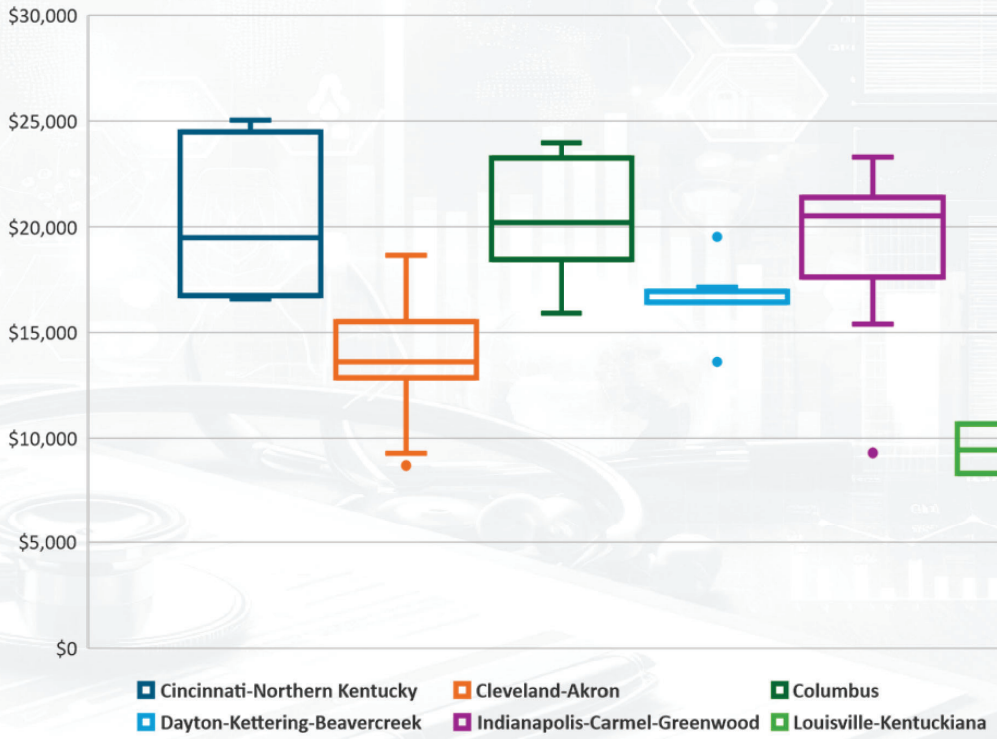
Average Negotiated In-Network MS-DRG Base Rates with Anthem by Major Metro Area

(Spine DRGs only | Anthem July 2024 PPO MRFs | n = 86 General Acute Care Hospitals)



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Average In-Network Negotiated MS-DRG Base Rates with Anthem (Major Metro Areas - Indiana, Kentucky, & Ohio)

Spine DRGs only | Anthem July 2024 PPO MRFs | n = 86 General Acute Care Hospitals, 36 with BCBSA Distinction or Distinction+ in Spine Care

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.84424311
R Square	**71.27%**
Adjusted R Square	69.09%
Standard Error	$ 2,677.70
Observations	86

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	$ 19,226.46	$ 856.69	22.44284938	0.00000000	$ 17,521.27	$ 20,931.65
BCBSA Quality	$ 1,601.37	$ 632.34	2.532445452	0.01330877	$ 342.73	$ 2,860.01
Cleveland-Akron	$ (5,987.78)	$ 933.54	-6.414050049	0.00000001	$ (7,845.95)	$ (4,129.61)
Columbus	$ 822.51	$ 1,137.97	0.722785955	0.47194582	$ (1,442.56)	$ 3,087.58
Dayton-Kettering-Beavercreek	$ (3,489.52)	$ 1,187.54	-2.938450757	0.00432237	$ (5,853.26)	$ (1,125.79)
Indianapolis-Carmel-Greenwood	$ (224.06)	$ 1,023.27	-0.218959972	0.82724593	$ (2,260.83)	$ 1,812.72
Louisville	**$ (10,135.92)**	$ 1,033.72	-9.805315587	**0.00000000**	$ (12,193.48)	$ (8,078.36)

Both quality and metro area are statistically significant in predicting a hospital's spine DRG base rate in the major metropolitan areas in Indiana, Kentucky, and Ohio → and those two variables explain over 70% of the variance in spine base rates

For statistical work conducted in the presentation, exclusively used Microsoft Excel's "Analysis ToolPak" found in the Excel Ad-ins section of the application options menu. To ascertain whether the expected average in-network negotiated base rate differences were statistically significant amongst the various segments tested (e.g., BCBSA "Distinction" and "Distinction+" vs. null) author used "F-Test Two-Sample for Variances" and subsequently used the appropriate t-Test pending the results of the F-Test (e.g., "t-Test: Two-Sample Assuming Equal Variances" and "t-Test: Two-Sample Assuming Unequal Variances) as noted in the "Quality a Possible Driver" slide. For regression testing, author used "Regression" tool with outputs found in "Quality vs. State More Significant" and "Metro Area Regression Findings" slides. Data obtained and used for testing were from the individual machine-readable files released by Anthem for the PPO plans available for sale in Indiana, Kentucky, and Ohio for the month of July 2024 and included the in-network negotiated rates for the 11 spine DRGs for 217 general acute care ("GAC") hospitals that had contracts with Anthem. A manual NPI lookup was used to ascertain "GAC" status for inclusion of the statistical testing. CMS table 5 for the appropriate fiscal year was used to derive the base rate for the 11 spine DRG codes noted thusly: 453, 454, 455, 456, 457, 458, 459, 460, 471, 472, and 473.

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FROM CMS 1785-F | TABLE 5: LIST OF MEDICARE SEVERITY DIAGNOSIS-RELATED GROUPS (MS-DRGS), RELATIVE WEIGHTING FACTORS, AND GEOMETRIC AND ARITHMETIC MEAN LENGTH OF STAY—FY 2024 Final Rule				LINEAR REGRESSION MODEL DERIVED FROM ANTHEM MACHINE READABLE FILES RELEASED JULY 2024 PPO IN-NETWORK NEGOTIATED RATES (IN, OH, KY)		
MS-DRG	MS-DRG Title	Weights - Before Cap	Weights - 10% Cap Applied	Cincinnati Metro Base Rate = $19,226.46	Louisville Metro Base Rate = $9,090.54	Louisville Δ per Encounter
453	Combined anterior and posterior spinal fusion w/ mcc	8.8614	8.8614	$ 170,373.35	$ 80,554.91	$ (89,818.44)
454	Combined anterior and posterior spinal fusion w/ cc	6.1163	6.1163	$ 117,594.80	$ 55,600.47	$ (61,994.33)
455	Combined anterior and posterior spinal fusion w/o cc/mcc	4.6056	4.6056	$ 88,549.38	$ 41,867.39	$ (46,681.99)
456	Spinal fusion except cervical w/ spinal curvature, malignancy, infection or extensive fusions w/ mcc	8.4294	8.4294	$ 162,067.52	$ 76,627.80	$ (85,439.72)
457	Spinal fusion except cervical w/ spinal curvature, malignancy, infection or extensive fusions w/ cc	6.0753	6.0753	$ 116,806.51	$ 55,227.76	$ (61,578.75)
458	Spinal fusion except cervical w/ spinal curvature, malignancy, infection or extensive fusions w/o cc/mcc	4.5310	4.5310	$ 87,115.09	$ 41,189.24	$ (45,925.85)
459	Spinal fusion except cervical w/ mcc	6.6323	6.6323	$ 127,515.65	$ 60,291.19	$ (67,224.46)
460	Spinal fusion except cervical w/o mcc	3.6579	3.6579	$ 70,328.47	$ 33,252.29	$ (37,076.18)
471	Cervical spinal fusion w/ mcc	4.9190	4.9190	$ 94,574.96	$ 44,716.37	$ (49,858.59)
472	Cervical spinal fusion w/ cc	2.9554	2.9554	$ 56,821.88	$ 26,866.18	$ (29,955.70)
473	Cervical spinal fusion w/o cc/mcc	2.4606	2.4606	$ 47,308.63	$ 22,368.18	$ (24,940.44)

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KHA Data
(Claims)
+
Advisory
Board

KHA Data + Advisory Board = Actionable Insights

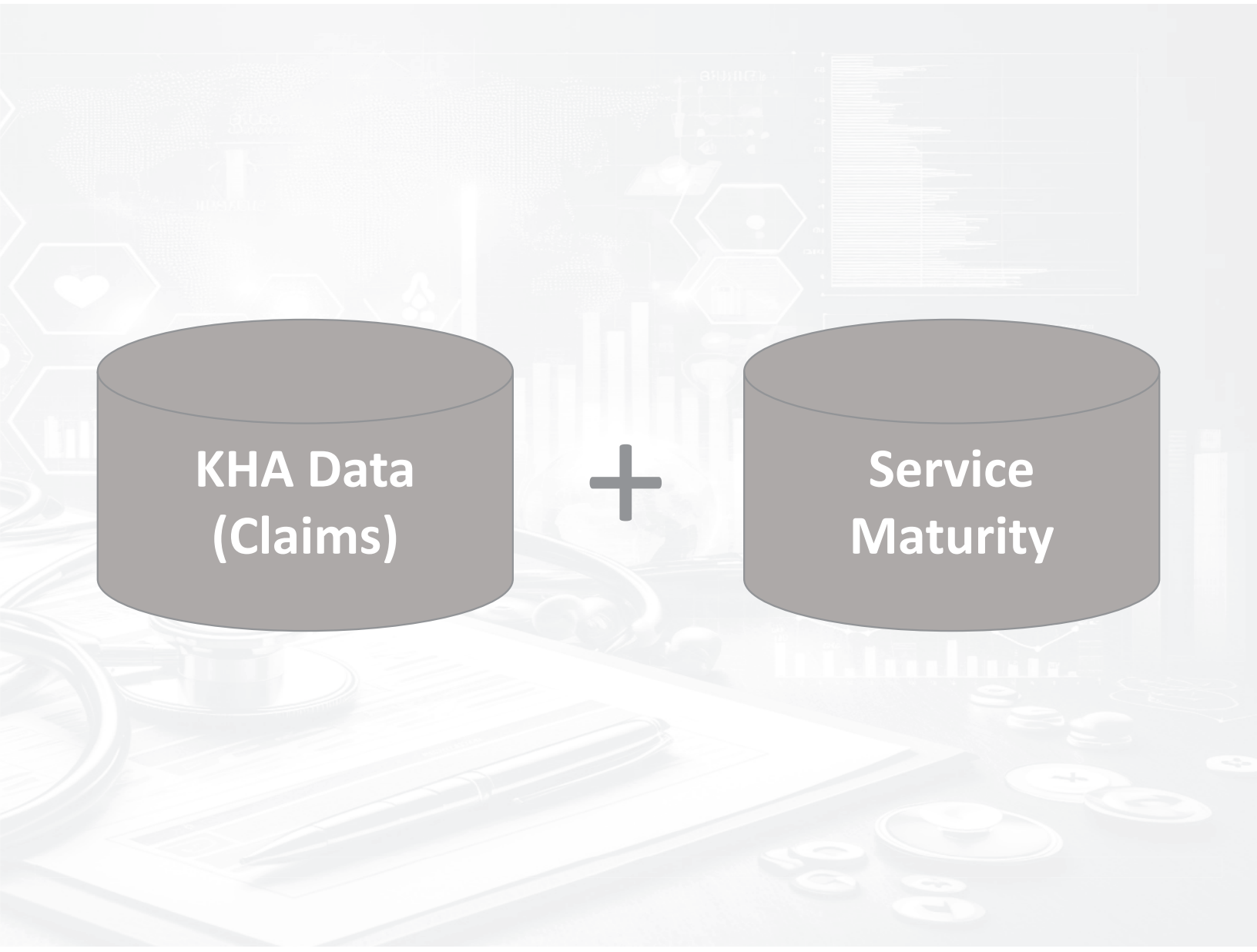
Inpatient Services for Cardiac Service Line Patients Residing in Jefferson County in FY2024

KHA PROGRAMS		SURGERY - CARDIOVASCULAR & THORACIC (71 DRG Codes)									
Subservices per Advisory Board's Market Scenario Planner Tool		Arterial Disease (12 DRGs)	Body Injuries (3 DRGs)	Cardiac Cath (10 DRGs)	Cardiac EP (18 DRGs)	Cardiac Surgery (18 DRGs)	Other Thoracic Surgery (6 DRGs)	Other Vascular (1 DRG)	Pulmonology (2 DRGs)	Venous Disease (1 DRG)	TOTAL
		{A}	{B}	{C}	{D}	{E}	{F}	{G}	{H}	{I}	
FY24 TOTAL KHA Discharges		1683	191	2369	1008	2132	1274	137	747	9	9550
FY24 Total UofL Health Share (% | #)		23.9% | 402	45.0% | 94	25.8% | 611	31.5% | 318	31.5% | 672	17.9% | 228	23.4% | 32	20.3% | 152	33.3% | 3	25.9% | 2478
FY24 KY Resident Discharges		1519	180	2151	920	1846	1152	128	700	7	8603
FY24 Total UofL Health Share (% | #)		22.7% | 344	42.2% | 76	24.9% | 536	31.7% | 292	32.0% | 590	17.8% | 205	21.9% | 28	20.6% | 144	42.9% | 3	25.8% | 2218
BELOW INFORMATION FOR JEFFERSON COUNTY RESIDENTS ONLY											
JEFFERSON COUNTY RESIDENTS ONLY - FISCAL YEAR 2024											
Statistics	Market Discharges (n =)	816	88	1157	501	992	592	84	423	6	4659
	Market Size - Based on ULH Medicare Base Rate of $6,174	$ 16,338,330	$ 661,527	$ 23,274,790	$ 10,265,160	$ 44,451,319	$ 11,740,776	$ 1,693,800	$ 2,989,529	$ 104,657	$ 111,519,886
	5-year Projected Growth {N}	-2.1%	6.5%	15.7%	12.7%	-3.1%	-11.4%	-16.5%	26.1%	-18.6%	6.9%
	10-year Projected Growth {N}	-5.8%	13.6%	23.4%	18.9%	-4.6%	-16.9%	-20.7%	49.5%	-22.8%	11.2%
	Outmigration (% | #)	0.5% | 4	0% | 0	0.3% | 4	1.8% | 9	2.1% | 21	0.5% | 3	1.2% | 1	0.0% | 0	0.0% | 0	0.9% | 42
	HHI {O}	4090	3791	3718	3511	3608	4047	5266	3720	3889	4103
Payor Mix	Commercial - Market	18.6%	13.6%	22.1%	12.2%	26.6%	27.2%	10.7%	20.1%	16.7%	21.0%
	Medicare - Market	61.3%	69.3%	59.2%	76.0%	53.4%	55.9%	59.5%	61.0%	50.0%	60.7%
	Medicaid - Market	15.9%	10.2%	14.1%	10.0%	15.1%	13.2%	22.6%	13.5%	33.3%	14.1%
	Other - Market	4.2%	6.8%	4.6%	1.8%	4.8%	3.7%	7.1%	5.4%	0.0%	4.2%
Market Share											
Hospitals	**UofL Health (% | #)**	25.0% | #2	43.2% | #1	25.5% | #2	30.3% | #2	31.3% | #2	20.1% | #3	25.0% | #2	23.2% | #3	33.3% | #2	27.7% | #2
	University	4.7%	36.4%	2.1%	1.6%	0.5%	5.2%	3.6%	5.7%	0.0%	3.5%
	Jewish	17.5%	0.0%	16.5%	28.5%	30.4%	13.3%	14.3%	8.7%	33.3%	19.5%
	Mary Elizabeth	2.8%	6.8%	6.9%	0.2%	0.3%	1.5%	7.1%	8.7%	0.0%	3.6%
	South	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Shelbyville	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Norton Audubon	34.6%	1.1%	35.9%	23.8%	35.8%	27.5%	26.2%	17.5%	0.0%	30.7%
	Norton Brownsboro	4.2%	8.0%	6.5%	5.2%	0.4%	2.5%	15.5%	12.1%	0.0%	4.8%
	Norton Childrens	1.5%	0.0%	0.1%	1.0%	2.5%	2.4%	1.2%	1.2%	0.0%	1.4%
	Norton Downtown	14.5%	2.3%	7.2%	13.0%	8.9%	13.2%	14.3%	7.3%	50.0%	10.3%
	Norton Womens & Childrens	1.1%	4.5%	0.0%	2.8%	0.0%	9.6%	10.7%	11.1%	0.0%	3.0%
	Baptist Louisville	18.8%	40.9%	24.5%	22.2%	19.1%	24.2%	6.0%	27.7%	16.7%	22.3%

KHA Data + Advisory Board = Actionable Insights

Inpatient Services for Cardiac Service Line Patients Residing in Jefferson County in FY2024

KHA PROGRAMS		MEDICINE - CARDIOVASCULAR DISEASE (37 DRG Codes)				
Subservices per Advisory Board's Market Scenario Planner Tool		Cardiac Cath (2 DRGs) {J}	Medical Cardiology (30 DRGs) {K}	Other Vascular (3 DRGs) {L}	Venous Disease (2 DRGs) {M}	TOTAL
FY24 TOTAL KHA Discharges		1506	11901	570	4	13981
FY24 Total UofL Health Share (% | #)		30.9% | 466	20.3% | 2414	27.9% | 159	25.0% | 1	21.8% | 3043
FY24 KY Resident Discharges		1374	11283	525	3	13185
FY24 Total UofL Health Share (% | #)		30.5% | 419	20.2% | 2274	27.5% | 144	33.3% | 1	21.5% | 2841
BELOW INFORMATION FOR JEFFERSON COUNTY RESIDENTS ONLY						
JEFFERSON COUNTY RESIDENTS ONLY - FISCAL YEAR 2024	Statistics	Market Discharges (n =)	863	6428	319	1	7611
		Market Size - Based on ULH Medicare Base Rate of $6,174	$9,012,069	$46,427,237	$2,294,549	$ 6,753	$ 57,740,608
		5-year Projected Growth {N}	-2.3%	-4.4%	-19.2%	-26.9%	-5.0%
		10-year Projected Growth {N}	-8.9%	-7.0%	-30.0%	-34.1%	-8.4%
		Outmigration (% | #)	1.4% | 12	1.4% | 93	0.6% | 2	0% | 0	1.4% | 107
		HHI {O}	3814	3868	3577	*	3840
	Payor Mix	Commercial - Market	18.9%	12.8%	19.4%	*	13.8%
		Medicare - Market	56.9%	68.5%	60.5%	*	66.9%
		Medicaid - Market	19.4%	14.6%	16.0%	*	15.2%
		Other - Market	4.9%	4.1%	4.1%	*	4.2%
	Market Share						
	Hospitals	**UofL Health (% | #)**	32.7% | #2	25.8% | #2	32.3% | #2	*	26.9% | #2
		University	5.0%	5.1%	5.0%	*	5.1%
		Jewish	16.7%	10.9%	17.6%	*	11.8%
		Mary Elizabeth	10.7%	9.2%	9.4%	*	9.4%
		South	0.3%	0.5%	0.3%	*	0.5%
		Shelbyville	0.0%	0.0%	0.0%	*	0.0%
		Norton Audubon	32.0%	25.0%	19.4%	*	25.6%
		Norton Brownsboro	5.2%	8.6%	6.0%	*	8.1%
		Norton Childrens	0.3%	0.9%	0.3%	*	0.8%
		Norton Downtown	8.3%	8.2%	6.9%	*	8.1%
		Norton Womens & Childrens	3.7%	10.1%	12.9%	*	9.5%
		Baptist Louisville	16.7%	20.0%	21.6%	*	19.7%


KHA Data
(Claims)
+
Service
Maturity

CY22 & CY23 NEURO & SPINE SERVICES FROM HENRY, SPENCER, SHELBY COUNTIES - ALL FACILITIES

Breakout by Service Line Maturity Model

	Basic				Intermediate				Comprehensive				Total Defined Market			
INPATIENT	**CY22**	**CY23**	**Δ**	**% Δ**	**CY22**	**CY23**	**Δ**	**% Δ**	**CY22**	**CY23**	**Δ**	**% Δ**	**CY22**	**CY23**	**Δ**	**% Δ**
Surgery DRGs	104	128	24	23.1%	80	90	10	12.5%	81	90	9	11.1%	265	308	43	16.2%
Medicine DRGs	92	111	19	20.7%	129	155	26	20.2%	143	159	16	11.2%	364	425	61	16.8%
Total IP Services for Patients of Defined Market	196	239	43	21.9%	209	245	36	17.2%	224	249	25	11.2%	629	733	104	16.5%
% of Total Defined Market	31.2%	32.6%			33.2%	33.4%			35.6%	34.0%						
OUTPATIENT																
Neuro Testing	335	394	59	17.6%	55	73	18	32.7%	-	-	-	-	390	467	77	19.7%
Surgery - Musculoskeletal	-	-	-	-	53	52	(1)	-1.9%	3	11	8	266.7%	56	63	7	12.5%
Surgery - Nervous System	1,804	2,109	305	16.9%	49	43	(6)	-12.2%	1	5	4	400.0%	1,854	2,157	303	16.3%
Total OP Services for Patients of Defined Market	2,139	2,503	364	17.0%	157	168	11	7.0%	4	16	12	300.0%	2,300	2,687	387	16.8%
% of Total Defined Market	93.0%	93.2%			6.8%	6.3%			0.2%	0.6%						
Total IP and OP Services from Defined Market	2,335	2,742	407	17.4%	366	413	47	12.8%	228	265	37	16.2%	2,929	3,420	491	16.8%
% of Total Defined Market	79.7%	80.2%			12.5%	12.1%			7.8%	7.7%						

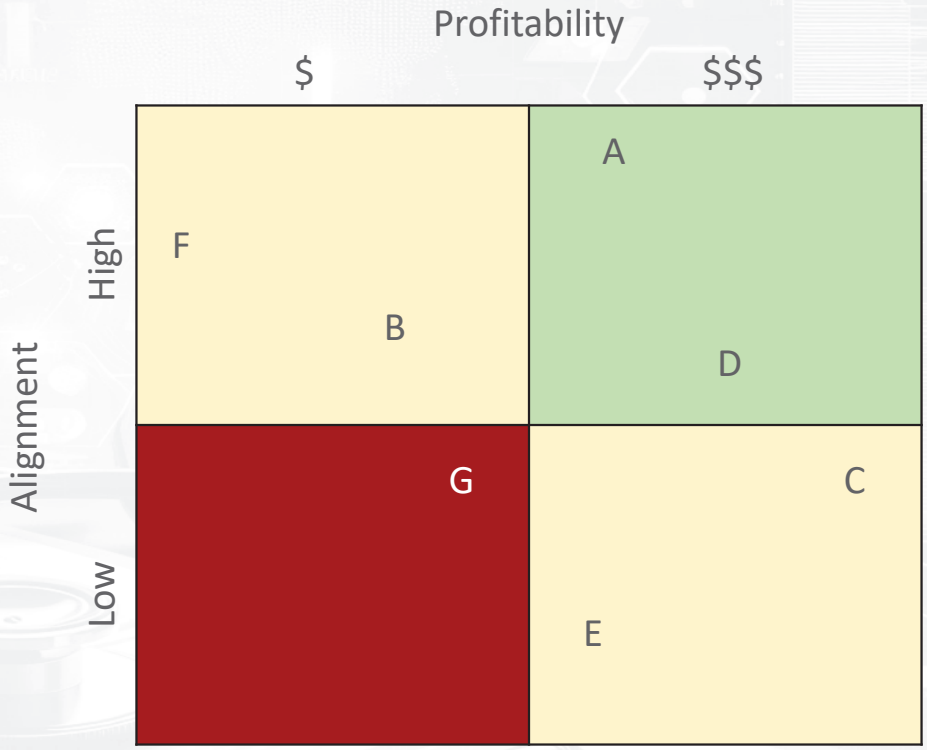
CY22 & CY23 NEURO & SPINE SERVICES FROM HENRY, SPENCER, SHELBY COUNTIES - UofL HEALTH FACILITIES ONLY

Breakout by Service Line Maturity Model

	Basic				Intermediate				Comprehensive				Total UofL Health			
INPATIENT	**CY22**	**CY23**	**Δ**	**% Δ**	**CY22**	**CY23**	**Δ**	**% Δ**	**CY22**	**CY23**	**Δ**	**% Δ**	**CY22**	**CY23**	**Δ**	**% Δ**
Surgery DRGs	28	32	4	14.3%	15	16	1	6.7%	26	22	(4)	-15.4%	69	70	1	1.4%
Medicine DRGs	41	34	(7)	-17.1%	49	57	8	16.3%	38	43	5	13.2%	128	134	6	4.7%
Total IP	69	66	(3)	-4.3%	64	73	9	14.1%	64	65	1	1.6%	197	204	7	3.6%
UL Health Share of IP from Defined Market	35.2%	27.6%			30.6%	29.8%			28.6%	26.1%			31.3%	27.8%		
OUTPATIENT																
Neuro Testing	10	18	8	80.0%	-	-	-	-	-	-	-	-	10	18	8	80.0%
Surgery - Musculoskeletal	-	-	-	-	5	7	2	40.0%	-	1	1	-	5	8	3	60.0%
Surgery - Nervous System	222	295	73	32.9%	21	10	(11)	-52.4%	-	1	1	-	243	306	63	25.9%
Total OP	232	313	81	34.9%	26	17	(9)	-34.6%	-	2	2	-	258	332	74	28.7%
UL Health Share of OP from Defined Market	10.8%	12.5%			16.6%	10.1%			0.0%	12.5%			11.2%	12.4%		
Total UofL Health IP and OP from Defined Market	301	379	78	25.9%	90	90	-	0.0%	64	67	3	4.7%	455	536	81	17.8%
UL Health Share of Defined Market	12.9%	13.8%			24.6%	21.8%			28.1%	25.3%			15.5%	15.7%		

Above summary comes from KHA IP and OP reported data for CY2022 and CY2023 and includes DRG and CPT services rendered on patients whose primary residence is located in Shelby, Spencer, or Henry county. Filtered data for Surgery: Neuro, Surgery: Spine, and Medicine: Neuro mapped DRGs, and for Neuro Testing, Surgery - Musculoskeletal and Surgery-Nervous System mapped CPTs. Noted that for Surgery - Musculoskeletal CPTs we limited to those CPTs relevant to Spine that had at least one outpatient encounter from a patient residing in Henry, Spencer, or Shelby Counties sometime from CY22 - CY23 (e.g., 22551, 22554, 22558, 22600, 22610, 22612, 22630, 22633, 22842, 22850, 22852, 22855, 22856, and 22857). With the assistance of Josh Beardsley (VP Neurosciences), mapped the individual DRGs and CPTs into Basic, Intermediate, and Comprehensive service maturity category based upon drafted service maturity model matrix for Neurosciences.

Project Decision Aid → Alignment Matrix



Questions

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