

Smart decisions. Lasting value.™

Crowe Healthcare Webinar Series

Give Your Data Purpose: Strategies for Managing Healthcare Information

Presented by: Alex Garrison, Bryan Rector, & Thor Peterson

© 2018 Crowe Horwath LLP

Agenda

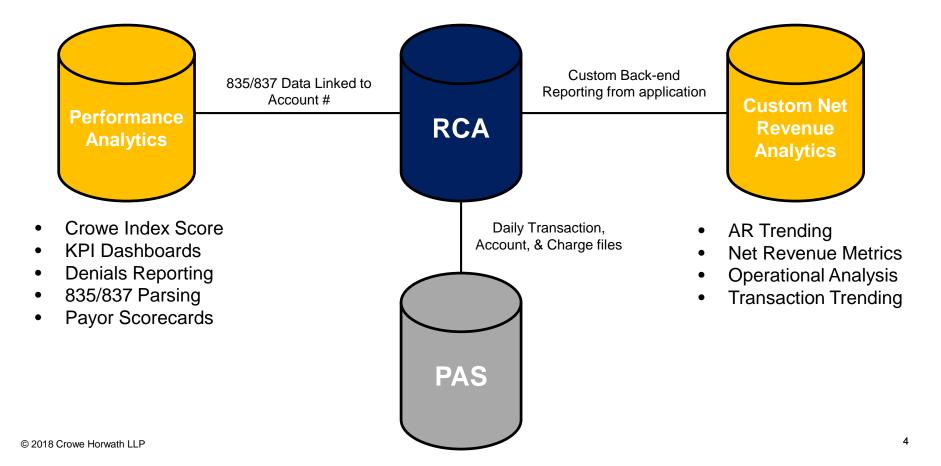
- Data Sources
- Revenue Cycle
- Finance & Net Revenue Reporting
- Bridging the Gap of Data Sources
- Converting Data to Insights



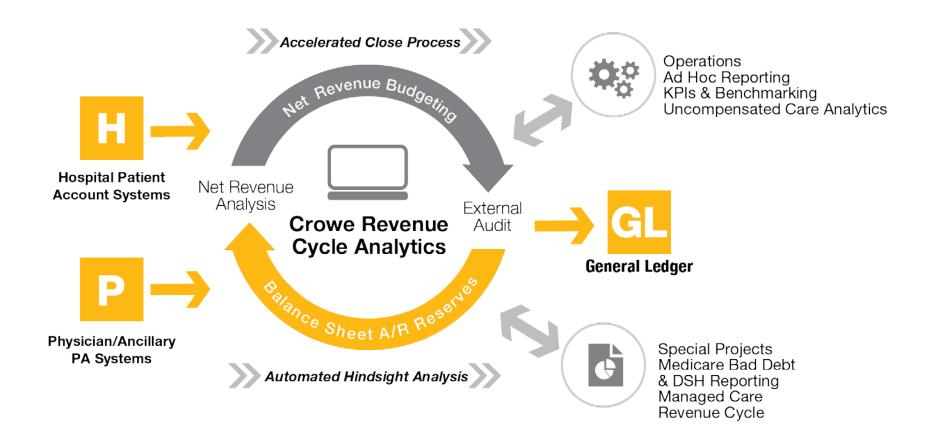
Data Sources Overview

Integrity Around a Single Source of Truth

Understand YOUR source of truth around the warehousing of data. Although using several products/vendors, understanding the linkage to your single source of truth will help ensure integrity and performance transparency



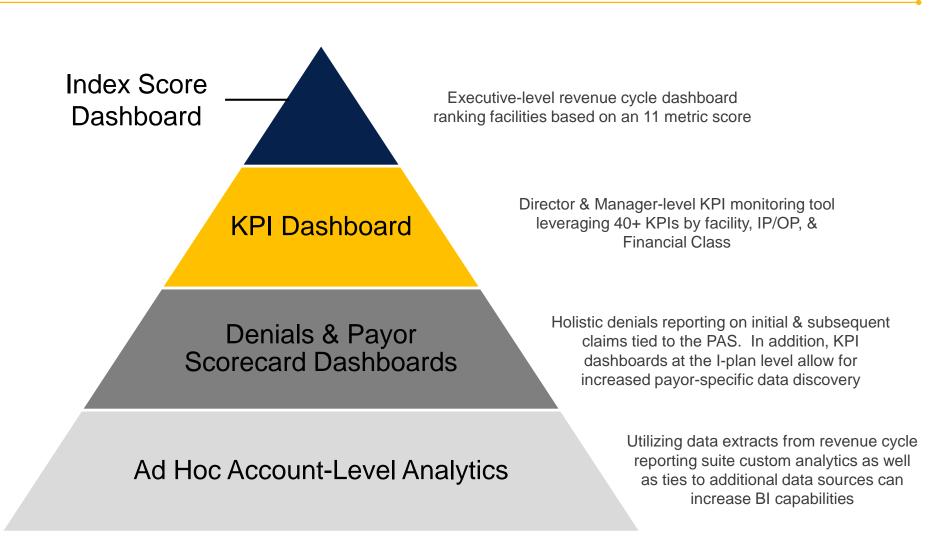
The single source of truth for net revenue





Revenue Cycle & Performance Analytics Overview

Dashboard Strategy & Hierarchy



Crowe Revenue Cycle Index Score

"I need to understand how we compare with our " Crowe Index Score: peers... St. Mary's Hospital 73.69 SIMILAR National ranking: COMPARISONS 20 Quarterback rating FICO score Peer grouping: 150-300 beds 740 Facilities in grouping: 99

Deels	Facility Name	Deda	Crowe Index
Rank	Facility Name	Beds	Score
1		160	93.81
2		165	84.12
3		215	81.19
4		184	80.97
5		150	80.26
6		300	79.69
7		226	78.18
8		152	77.47
9		236	77.28
10		298	77.02
11		184	76.85
12		200	76.45
13		195	76.07
14		227	75.64
15		291	75.33
16		171	75.18
17		295	74.85
18		172	74.62
19		175	74.06
20	St. Mary's Hospital	178	73.69
21		180	72.74
22		155	72.73
23		220	72.62
24		151	72.04
25		211	71.95
	Mean Performance		70.82
26		155	70.69
27		225	70.15
28		224	70.15
29		201	68.86

Crowe Revenue Cycle Index Score (Cont.)

St. Mary's Hospital

Your Crowe Index Score: 73.69

	Overall Performance Bands						
KPI (* = Uses 835 data)	Best Practice	Good	Average	Below Avg	Poor		
Bad Debt (% of GPSR)		1.0%-1.6%					
Credit Days				0.8-1.3			
DNFB Days			6.4-8.4				
Initial Denial Rate *							
Insurance Payment Gap - Denied vs. Non-Denied *							
Late Charges (% of GPSR)			3.1%-5.1%				
POS Cash Collections (% of Patient Payments)					< 3.7%		
Six-Month Lagged Cash to Net Revenue			103%-105.9%				
SPAI Patient Collection Rate *							
True AR > 90 Days		22.3%-28.6%					
True AR Days		43.0-50.1					

KPI Metric List

Volumes

- IP Net Revenue Per Case
- OP Net Revenue Per Case
- IP Admissions (Volume)
- OP Visit (Volume)
- Medicare Net Revenue per IP Day

Accounts Receivable

- Cash/60 Day Lagged Net Revenue
- Six Months Cash Lag to Net Revenue
- TRUE AR days
- Net AR Days
- TRUE AR > 90 Days
- % AR > 90 Days Medicare
- % AR > 90 Days Medicaid
- % AR > 90 Days Commercial
- % AR > 90 Days Self-Pay
- % AR > 90 Days Other
- Late Charge % of GPSR
- Credit Days
- Credit Liability % of Credit AR

HIM

• DNFB Days

Payment Compliance

- Time to Insurance Payment Overall
- Time to Insurance Payment Medicare & Managed Medicare
- Time to Insurance Payment Commercial Managed Care
- Time to Insurance Payment Medicaid & Managed Medicaid
- Time to Insurance Payment Other
- Time to Insurance Payment Gap Denied vs. Non-Denied
- Insurance Payment Gap Denied vs. Non-Denied
- Final Denial Write-Offs
- Initial Denial Rate
- Initial Denial Rate Medicare & Managed Medicare
- Initial Denial Rate Commercial Managed Care
- Initial Denial Rate Medicaid & Managed Medicaid
- Initial Denial Rate Other Payor
- Initial Denial Rate Auth/Precert
- Initial Denial Rate Billing/Claim Issue
- Initial Denial Rate Coordination of Benefits
- Initial Denial Rate Coverage/Eligibility
- Initial Denial Rate Duplicate
- Initial Denial Rate Medical Necessity
- Initial Denial Rate Non-Covered Services
- Initial Denial Rate Request for Information
- Initial Denial Rate Timely Filing
- Initial Denial Rate Other

Registration

- Patient Responsibility % of GPSR
- Patient Collection Rate Managed Care/Commercial
- Patient Responsibility Managed Care/Commercial (% of allowed amount)
- POS Cash Collections % of Patient
 Cash
- Inpatient Self-Pay Conversion Rate

Uncompensated Care

- Uncompensated Care % of GPSR
- Bad Debt % of GPSR
- Charity % of GPSR
- Charity % of Uncompensated Care
- Self-Pay After Insurance Bad Debt % of Total Bad Debt
- Self-Pay After Insurance Uncompensated Care % of Total Uncompensated Care

Tableau Demo



How does your organization utilize dashboards to measuring performance?

- A. Patient Accounting System-Based
- B. Bolt-on Products

C. Homegrown Analytics & Reporting D. All of the above



Finance & Net Revenue Reporting Overview

It's Complicated...

Current Period Revenue						
Commercial Contract Changes	Acuity (CMI)	In / Out Shift				
Governmental Rate Changes	 LOS / Avoidable Days 	Medical Manpower				
Pricing Changes	OP Service Mix	Other Operational Issues				

Change in Prior Period Estimates							
AR Aging	Normal Write-Offs	Large Balance Accounts					
Actual vs. Estimate	Rev Cycle Operations	Policy Triggers					
Change in Prorations	Change in MRA Settings	Payor Delays					

Non RCA / Other							
Revenue Accruals	Professional Revenue	Capitation Revenue					
PY Cost Report Settlements	CY Cost Report Accruals	Other Third-Party					
 Topside Adjustments / QOE 	Lab / Retail Pharmacy	Homecare / Hospice					

What factors are least likely to materially drive net revenue?

- A. Changes in contract modeling tables
- B. Large Balance Accounts

C. Changes in OP Surgery volumes D. Jimmy's 40th Birthday

Analyzing and Interpreting Net Revenue

Basic	Intermediate
Utilizing standard GL reporting	Trended [Rate / Mix / Volume / Change in Prior]
Basic comprehension of Rate / Mix / Volume	Ability to turn analytics into action
Basic comprehension of out of period impact	 Collaboration between roles (Revenue Cycle / Finance / Managed Care / Field Ops)
General ability to explain reserve model inputs (ZBA / history)	Net revenue reconciliations from G/L to detailed reporting schedules
Understanding of B/S and I/S	Per unit analysis (NR / discharge or OP case)

• Holes within staffing may exist

•	Limited	"topside"	out of	model	adjustments
---	---------	-----------	--------	-------	-------------

	Advanced
•	Standard / Automated Net Revenue Package
•	Ability to analyze and project net revenue
•	Ability to drill into budget to actual variances
•	Service Line / Service Mix / Case Mix analytics
•	Use of 835 / 837 data to analyze denials
•	Net revenue is "final" with 3-4 days

Sources of Net Revenue

Net Revenue	Outside	of	RCA

Gross	Revenue
-------	---------

- RCA Gross Revenue Variances
- Professional / Ancillary Revenue
- Other facilities

Deductions

- Cost Report Settlements / Accruals
- Professional / Ancillary
- Professional Judgment

	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
Gross Revenue Reconciling Items						
Per RCA	39,483,051	39,659,850	43,033,228	40,109,881	40,856,885	39,658,686
Accrued Revenue	552,763	555,238	602,465	561,538	571,996	555,222
Prof Fees - Anesthesiologist	269,863	250,973	250,973	250,973	268,541	268,541
Physician Practices	343,503	345,041	374,389	348,956	355,455	345,031
Hospitalist & IP Pall Care Rev	85,876	86,260	93,597	87,239	88,864	86,258
Subtotal Gross Reconciling	1,252,004	1,237,512	1,321,424	1,248,706	1,284,856	1,255,051
Total Gross Revenue RCA + Reconciling	40,735,055	40,897,362	44,354,652	41,358,587	42,141,741	40,913,737
Gross Revenue per G/L	40,720,111	40,906,456	44,356,921	41,362,779	42,153,537	40,925,839
Unexplained Variance	14,944	(9,094)	(2,269)	(4,192)	(11,796)	(12,102)
Revenue Deduction Reconciling Items						
Per RCA	(32,500,306)	(32,324,205)	(34,284,516)	(33,198,833)	(33,404,849)	(32,725,476)
CY Cost Report Settlement	0	0	26,045	0	0	64,856
PY Cost Report Settlements	0	0	0	0	0	2,152,635
Accrued Revenue Deductions	(469,848)	(471,952)	(512,095)	(477,308)	(486,197)	(471,938)
Anesthesia Physician Deduction	(202,398)	(188,230)	(188,230)	(188,230)	(201,406)	(201,406)
Physician Practice Allow	(209,537)	(210,475)	(228,377)	(212,863)	(216,827)	(210,469)
Hospitalist & IP Pall Care Deductions	(46,373)	(46,580)	(50,543)	(47,109)	(47,986)	(46,579)
Judgementals	225,000	(175,000)	100,000	175,000	425,000	(225,000)
Subtotal Deduction Reconciling	(703,155)	(1,092,237)	(853,200)	(750,509)	(527,417)	1,062,099
Total Deductions RCA + Reconciling	(33,203,461)	(33,416,443)	(35,137,716)	(33,949,342)	(33,932,266)	(31,663,377)
Total Deductions per G/L	(33,203,461)	(33,416,443)	(35,137,716)	(33,949,342)	(33,932,266)	(31,654,732)
Unexplained Variance	0	0	0	0	0	(8,645)
Total RCA Net Revenue	6,982,746	7,335,645	8,748,712	6,911,048	7,452,035	6,933,210
Total Reconciling Net Revenue	548,849	145,274	468,224	498,197	757,439	2,317,150
Total Net Revenue Per GL	7,516,651	7,490,013	9,219,206	7,413,437	8,221,271	9,271,107
Total Unexplained Variance	14,944	(9,094)	(2,269)	(4,192)	(11,796)	(20,747)
GLRealization	18.46%	18.31%	20.78%	17.92%	19.50%	22.65%
RCA Realization	17.69%	18.50%	20.33%	17.23%	18.24%	17.48%
Variance	-0.77%	0.19%	-0.45%	-0.69%	-1.26%	-5.17%
GL vs. RCA Variance \$	(315,126)	76,209	(201,385)	(286,511)	(532,734)	(2,116,371)

Current Period Net Revenue

Comparisons:

- Budget
- Prior Month
- Prior Month Fiscal Year to Date
- Trend (3,6,12 months)

Volume Statistics:

- Discharges
- Adjusted Discharges
- OP Cases
- OP Equivalent Discharges

		Volume	Rate	Mix	Chng in Prior			
Nov Gross/Net Revenue vs. Prior Month FYD								
	Δ in Gross	Net Impact of Δ in	Net Impact of Δ in	Net Impact of Δ in	∆ in Change in	Total Impact		
Payor	Revenue	Gross Revenue	Deduction Rates	Payor Mix	Prior Period			
Charity	(24,954)		(35)	(1,239)	758			
Commercial	28,081		26,101	8,908	48,811			
Legal/Liability	89,212		(93,487)	74,104	19,578			
Managed Care	176,121		(137,009)	165,821	(402,283)			
Medicaid	307,677		(45,135)	33,214	46,653			
Medicaid Managed Care	(17,852)		622	(2,645)	1,978			
Medicaid Pending	2,109		(15,809)	1,660	22,466			
Medicare	(2,148,877)		(25,092)	(190,619)	236,743			
Medicare Managed Care	(534,356)		(13,064)	(65,003)	131,069			
Medicare-Rehab	(221,792)		9,261	(17,848)	51,737			
No Plan	1,324,502		(124,372)	290,834	14,629			
Tricare/ Champus	(132,814)		2,322	(15,662)	30,831			
Trouble Insurance	(2,335)		(2)	(17)	74			
Uninsured	(680,674)		(17,531)	(34,204)	185,242			
Workers Comp	(6,208)		(13,184)	(6,975)	15,526			
Total	(1,804,745)	(350,164)	(445,038)	246,076	407,964	(141,162)		

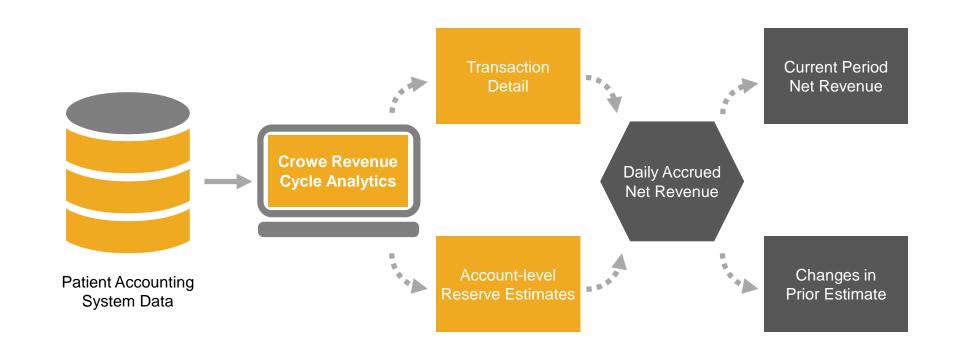
Change in Prior Period Estimates

Payor	Theme	In / Out
Facility	Adjustment Type	Transaction based

Change in Prior Period Estimates	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Nov CIP vs. Oct CIP	Nov CIP vs. PY CIP	PM FYD Avg CIP	Nov CIP vs. PMFYD CIP
Change in Prior Theme (Total)									
Impact on Accounts moving in/out of 3((32,953)	51,491	(23,304)	(72,664)	54,785	127,449	121,648	(79,988)	134,773
Large Balance Account Activity	28,564	744,424	(408,580)	257,633	(127,713)	(385,347)	13,088	(283,290)	155,577
Impact on Time of Billing Accounts	30,318	28,046	54,250	47,215	745	(46,470)	(47,068)	22,972	(22,227)
Impact on Always Use Trending	10,049	13,750	4,871	15,726	27,568	11,841	13,013	(12,519)	40,087
Full Write Off No Payment in Current M	(157,792)	(214,344)	(204,831)	(181,549)	(310,050)	(128,501)	474,649	(285,262)	(24,788)
Secondary Account Balance Adj	55,345	31,100	41,630	33,964	34,584	620	680	16,524	18,061
Debit Balance to Credit Balance	57,201	36,480	9,827	20,217	18,357	(1,860)	(3,904)	22,720	(4,363)
Impact on Credit Balances	39,617	18,069	(12,805)	30,269	8,844	(21,426)	160	12,238	(3,395)
Impact on Inactive Accounts	61,130	128,129	78,202	12,516	137,051	124,534	112,399	50,118	86,932
Unbilled to Billed (Time of Billing)	28,173	19,417	30,703	27,510	23,045	(4,465)	12,726	18,580	4,465
Total Change in Prior	120,154	857,520	(424,211)	191,452	(130,910)	(322,361)	771,357	(538,874)	407,964

Change in Prior by Payor (Total)									
Charity	(8,552)	27,356	(10,001)	(3,050)	(2,921)	129	128,395	(3,679)	758
Commercial	(80,675)	(69,584)	(28,833)	(70,199)	(5,714)	64,485	(7,974)	(54,525)	48,811
Legal/Liability	43,492	532,299	(400,149)	(100,497)	(964)	99,533	4,220	(20,541)	19,578
Managed Care	189,753	244,590	80,462	542,941	(340,889)	(883,829)	(977,446)	61,394	(402,283)
Medicaid	111,939	167,750	62,777	50,347	66,530	16,183	220,699	19,876	46,653
Medicaid Managed Care	1,600	(6,293)	(4,128)	1,798	(456)	(2,254)	(5,142)	(2,434)	1,978
Medicaid Pending	(8,260)	1,685	(2,537)	(107,397)	(7,655)	99,742	(22,795)	(30,121)	22,466
Medicare	29,724	86,273	(150,230)	(110,307)	56,312	166,618	701,626	(180,431)	236,743
Medicare Managed Care	(89,684)	(45,659)	106,563	19,466	113,074	93,609	356,031	(17,995)	131,069
Tricare/ Champus	692	8,347	5,346	3,606	13,753	10,147	31,035	(17,078)	30,831
Uninsured	(84,104)	(136,612)	(78,224)	(68,847)	(66,780)	2,067	280,855	(252,022)	185,242
Workers Comp	21,281	16,730	28,340	13,954	21,543	7,589	15,484	6,017	15,526
Total Change in Prior	120,154	857,520	(424,211)	191,452	(130,910)	(322,361)	771,357	(538,874)	407,964

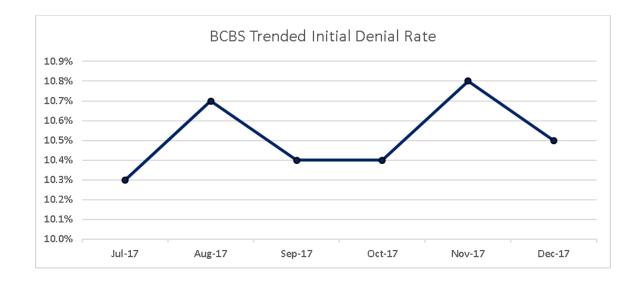
Analyzing Prior Period Adjustments...

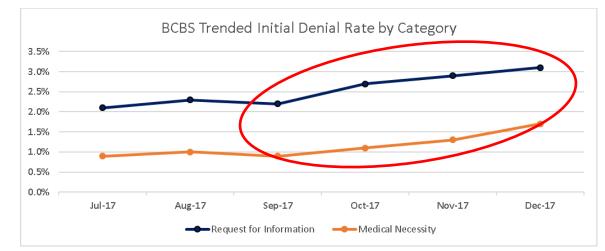




Bridging the Gap of Data Sources

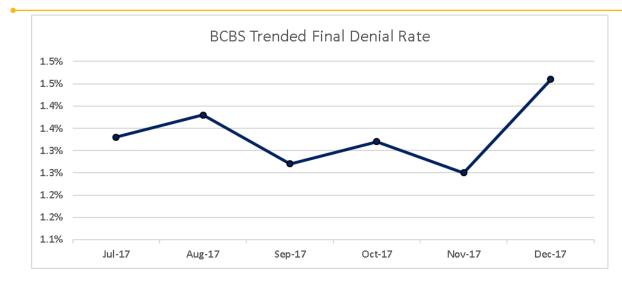
BCBS Initial Denial Trends

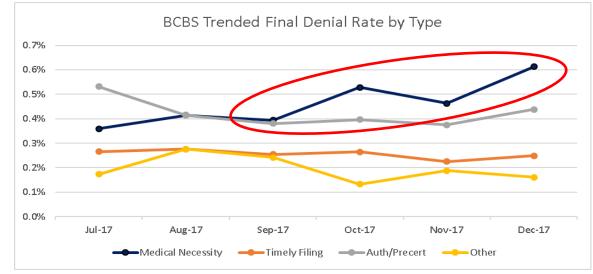




- Overall initial denial rate trends for BCBS looks uneven but a noticeable upward trend is not obvious.
- When observing additional trends by denial categories, it's evident the makeup of the denials is changing.
- Both request for information and medical necessity denials have steadily increased. Specifically, this increase is being noticed in inpatient accounts

BCBS Final Denial Trends





- Overall final denial rate for BCBS had been trending slightly downward before seeing a spike in December 2017.
- Similar to initial denials, when observing additional trends by denial types, it's evident the makeup of the denials is changing.
- Specifically, we have seen a gradual increase in medical necessity related write-offs which appears to correlate with the initial denial trends from the previous page.

BCBS AR Stratification with Denials

October 2017 BCBS Aging By Category														
Most Recent Denial	UB		0-30		30-90		90-180		180-365		365+		Total	% of Total
Auth/Precert		\$	65,130	\$	264,592	\$	162,826	\$	101,766	\$	30,530	\$	624,844	3.1%
Billing/Claim Issue		\$	56,989	\$	370,429	\$	227,956	\$	142,473	\$	42,742	\$	840,588	4.1%
Coverage/Eligibility		\$	73,272	\$	370,429	\$	227,956	\$	142,473	\$	42,742	\$	856,871	4.2%
Coordination of Benefits		\$	8,141	\$	211,674	\$	130,261	\$	81,413	\$	24,424	\$	455,912	2.2%
Duplicate		\$	325,652	\$	1,058,368	\$	651,303	\$	407,065	\$	122,119	\$	2,564,506	12.6%
Medical Necessity		\$	97,695	\$	793,776	\$	488,477	\$	305,298	\$	91,590	\$	1,776,837	8.7%
Non-Covered Services		\$	97,695	\$	952,531	\$	586,173	\$	366,358	\$	109,907	\$	2,112,665	10.4%
Request for Information		\$	89,554	\$	582,102	\$	358,217	\$	223,885	\$	67,166	\$	1,320,924	6.5%
No Response	\$1,017,661	\$	7,327,161	\$	687,939	\$	423,347	\$	264,592	\$	79,378	\$	9,800,078	48.2%
Total	\$1,017,661	\$	8,141,290	\$	5,291,839	\$	3,256,516	\$	2,035,323	\$	610,597	\$2	0,353,225	
% of Total	5.0%		40.0%		26.0%		16.0%		10.0%		3.0%			-

December 2017 BCBS Aging By Category															
Most Recent Denial		UB	0-30		30-90		90-180		180-365		365+		Total		% of Total
Auth/Precert			\$	63,143	\$	276,250	\$	157,857	\$	131,548	\$	39,464	\$	668,263	2.5%
Billing/Claim Issue			\$	55,250	\$	368,334	\$	210,476	\$	184,167	\$	55,250	\$	873,477	3.3%
Coverage/Eligibility			\$	71,036	\$	460,417	\$	263,096	\$	184,167	\$	55,250	\$	1,033,965	3.9%
Coordination of Benefits			\$	7,893	\$	368,334	\$	210,476	\$	105,238	\$	31,571	\$	723,513	2.8%
Duplicate			\$	315,715	\$	1,565,418	\$	894,525	\$	526,191	\$	157,857	\$	3,459,706	13.2%
Medical Necessity			\$	94,714	\$	2,025,836	\$	1,157,620	\$	394,643	\$	118,393	\$	3,791,206	14.4%
Non-Covered Services			\$	94,714	\$	1.197.085	\$	684.048	\$	473,572	\$	142,072	\$	2,591,491	9.9%
Request for Information			\$	86,822	\$	1,933,752	\$	1,105,001	\$	289,405	\$	86,822	\$	3,501,801	13.3%
No Response	\$	526,191	\$	7,103,579	\$	1,012,918	\$	578,810	\$	342,024	\$	102,607	\$	9,666,129	36.7%
Total	\$	526,191	\$	7,892,866	\$	9,208,343	\$	5,261,910	\$	2,630,955	\$	789,287	\$2	26,309,552	
% of Total		2.0%		30.0%		35.0%		20.0%		10.0%		3.0%	ļ		

 Noticeable increases in BCBS aged 30-180 AR have been seen in both Medical Necessity & Request for Information cases. Given final denials has not seemed to trend upward until December, BCBS agings support what has been observed within revenue cycle.

Bringing It All Together: Where do we go from here?

- By bringing two data sources together, finance and revenue cycle have isolated the cause for increased BCBS aged AR. After further discussions finance can decide whether to make and accrual or wait for accounts to settle.
- Additionally, revenue cycle now has data tied to the account level to hold discussions with other stakeholders in the process such as Managed Care & HIM.
- In this cases intervention from Managed Care may assist in the resolution of these accounts. Given that all parties can utilize the same data, things are less likely to be lost in translation.
- In the event of a breakdown in the middle revenue cycle around statuses or coding of these cases, this information can also be tied out to the DRG & Diagnosis codes that appeared on the EDI (835 & 837) data for these accounts.
 - Additional root cause analysis by drilling into these accounts may yield process breakdowns that can correct this issue going forward.
- Regardless of which tools or data warehouses being utilized, having a consensus strategy around solving problems and understanding YOUR single source of truth is integral in turning data into insights.

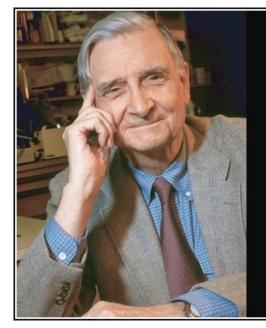
How would you describe your ability to solving questions timely in data trends across multiple stakeholders in your organization?

- A. Non-existent
- B. Could be better

- C. Reasonably Appropriate
- D. Best in class



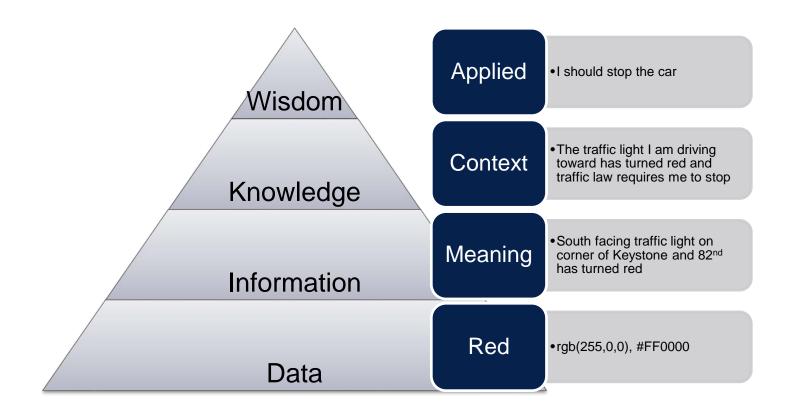
Converting Data to Insights



We are drowning in information, while starving for wisdom. The world henceforth will be run by synthesizers, people able to put together the right information at the right time, think critically about it, and make important choices wisely.

— E. O. Wilson —

Wisdom Hierarchy



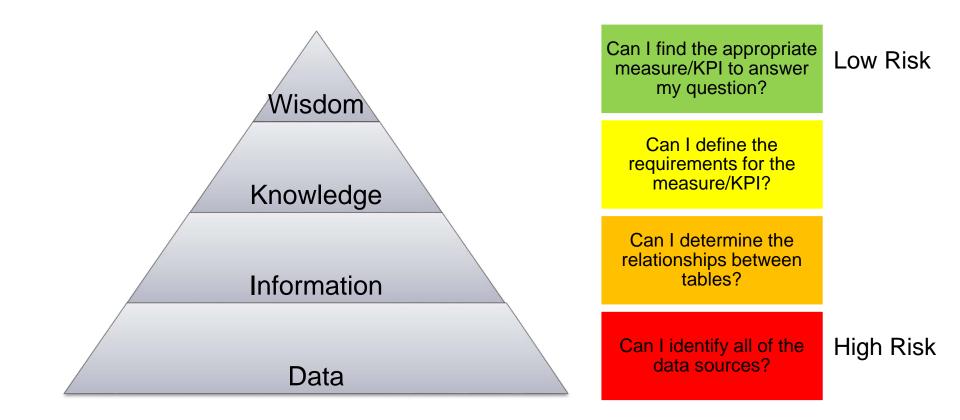
Polling Question #X

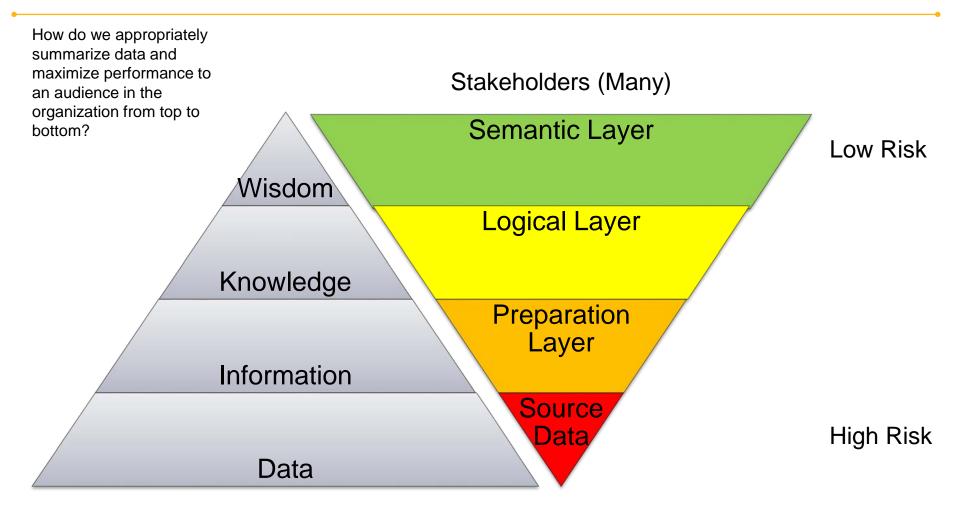
Which of the following is not a component of the Wisdom Hierarchy?

- A. Wisdom
- B. Data

C. Knowledge D. Wealth

Example: CFO building budget for next FY





Data Architects (Few)

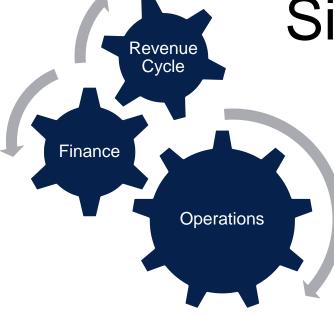
Ideal Outcome

Common Platform

Easily Accessible

Understandable Single Source of Truth

Timely Updates Readily Available





Thank you

Alex Garrison Phone 630.575.4240 Alex.Garrison@crowehorwath.com

Bryan Rector

Phone 317.706.2628 Bryan.Rector@crowehorwath.com

Thor Peterson

Phone 317.706.2606 Thor.Peterson@crowehorwath.com

In accordance with applicable professional standards, some firm services may not be available to attest clients.

This material is for informational purposes only and should not be construed as financial or legal advice. Please seek guidance specific to your organization from qualified advisers in your jurisdiction. © 2016 Crowe Horwath LLP, an independent member of Crowe Horwath International crowehorwath.com/disclosure