

2019 Crowe Healthcare Virtual Symposium

Net Revenue Performance Volatility

February 28, 2019

Bryan Rector & Alex Garrison

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Polling Question #1

What is the most typical perceived cause of net revenue volatility within your organization?

- a) Seasonality
- b) Revenue Cycle Activity
- c) Payor Mix Changes
- d) Service Mix Changes



Today's speakers



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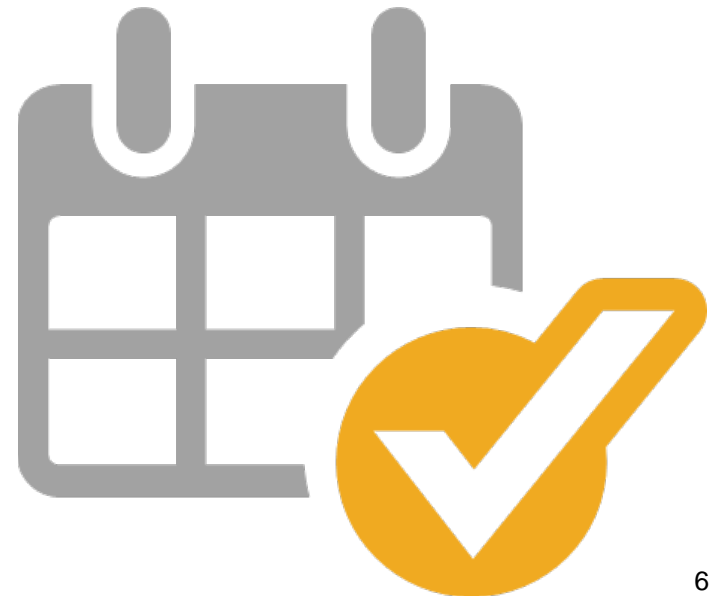


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Agenda

- AR Hindsight Analysis Benchmarks
- Model Settings Recommendations
- Volatile Revenue Cycle Performance Case Study
- Seasonality Trends in Net Revenue Performance





AR Hindsight Analysis Benchmarks

Review of Hindsight Analysis

- AR Snapshot as of a specific point in time (Jan 31, 2012)
- All payments and adjustments posted over a period of time (Feb 1, 2012 – Jan 31, 2013)
- In-House, DNFB, OP Recurring adjusting through a proration algorithm

HINDSIGHT TRENDING Oakbrook Medical	
Analysis Date	01/31/2012
Activity Thru Date	01/31/2013
Gross debit balance A/R	\$97,116,434
Contractual allowances	(\$33,786,066)
Administrative adjustments	\$1,218,581
Denials	(\$547,512)
Charity care	(\$18,042,956)
Bad debt write-offs	(\$6,823,767)
Total Debit Variance	(\$545,421)
Payments	(\$35,350,008)
Total Transactions	(\$93,877,150)
Remaining balances	\$3,239,285

← Debit AR @ 1/31/12

Transactions posted between 2/1/12 and 1/31/13 on 1/31/12 AR

HINDSIGHT TRENDING	
Analysis Date	
Activity Thru Date	
Gross debit balance A/R	\$97,116,434
Contractual allowances	-34.79%
Administrative adjustments	1.25%
Denials	-0.56%
Charity care	-18.58%
Bad debt write-offs	-7.03%
Total Debit Variance	-0.56%
Payments	-36.40%
Total Transactions	-96.66%
Remaining balances	3.34%

Review of Hindsight Analysis

1/31/2012 Analysis Date – Aged Trial Balance Report

Payor	Aged Trial Balance (AR50)						Total
	Unbilled	0-30	31-90	91-180	181-360	361+	
ANTHEM BLUE CROSS	\$1,525,109	\$1,116,512	\$293,922	\$74,091	\$34,157	\$41,018	\$3,084,810
COMMERCIAL	\$625,449	\$1,079,480	\$4,061,447	\$1,065,204	\$0	\$0	\$6,831,580
MEDICAID PENDING	\$314,534	\$806,754	\$1,871,886	\$1,638,100	\$590,576	\$0	\$5,221,851
MANAGED CARE	\$724,098	\$1,002,886	\$260,321	\$62,930	\$24,703	\$5,177	\$2,080,115
MEDICAID	\$657,629	\$526,329	\$524,166	\$486,542	\$283,143	\$718,587	\$3,196,396
MEDICAID HMO	\$953,061	\$1,152,595	\$765,650	\$454,957	\$92,222	\$111,772	\$3,530,257
MEDICARE	\$5,912,105	\$2,581,332	\$421,989	\$626,170	\$174,542	\$25,503	\$9,741,641
MEDICARE HMO	\$3,458,257	\$2,483,649	\$953,426	\$197,023	\$162,054	\$226,969	\$7,481,379
SELF PAY AFTER INSURANCE	\$0	\$42,182	\$913,317	\$566,810	\$230,568	\$107,048	\$1,859,924
SELF PAY	\$1,166,562	\$1,854,187	\$1,554,139	\$564,265	\$251,166	\$13,836	\$5,404,154
TOTAL	\$15,336,804	\$12,645,905	\$11,620,263	\$5,736,092	\$1,843,132	\$1,249,911	\$48,432,106

1/31/2012 Analysis Date – 1/31/2013 Activity Through Date – Hindsight Activity Report

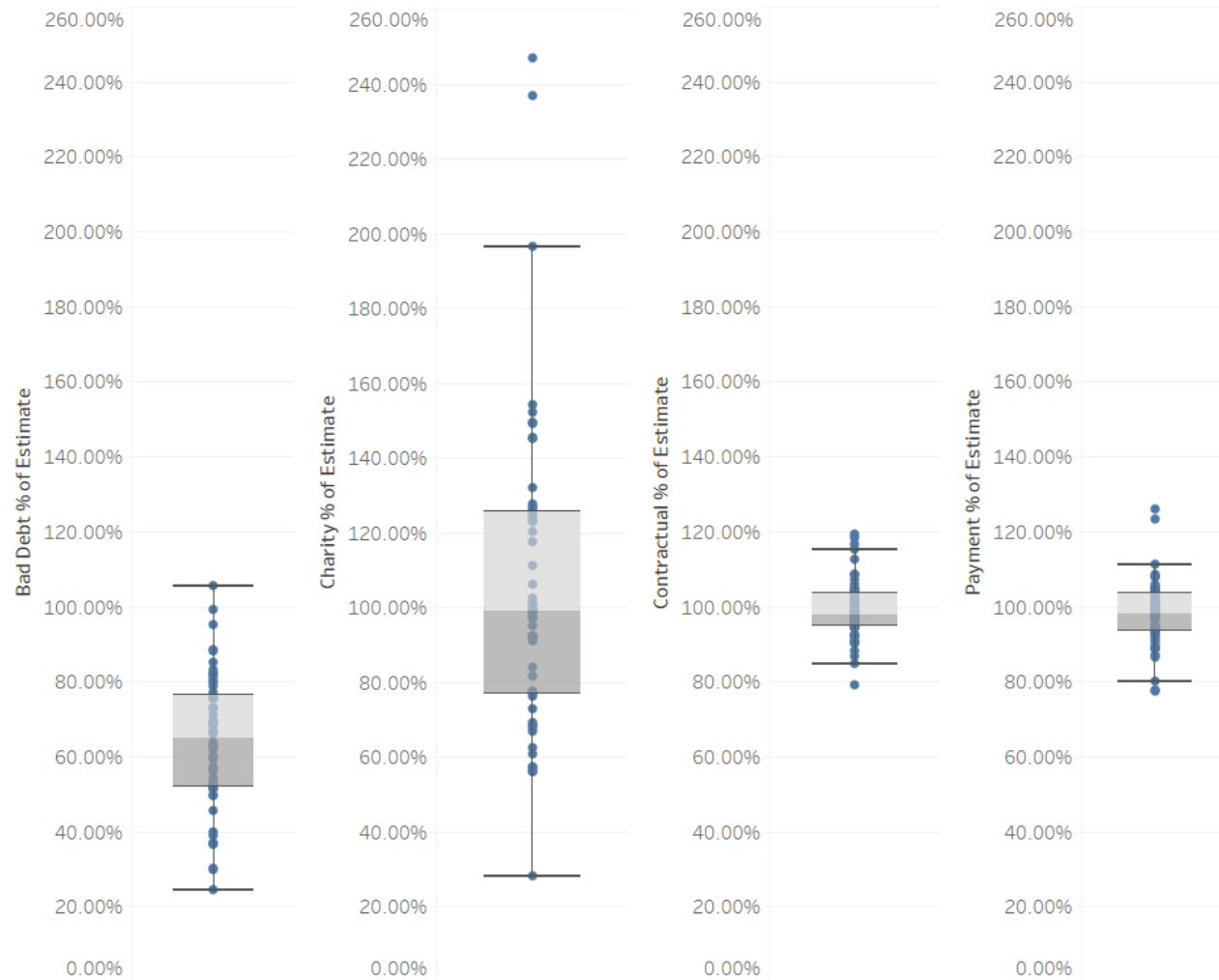
Payor - Anthem Blue Cross	Hindsight Activity (AR51)						Total
	Unbilled	0-30	31-90	91-180	181-360	361+	
Bad Debt	(\$10,138)	(\$26,629)	(\$23,466)	(\$20,951)	(\$14,409)	(\$200)	(\$95,793)
Charity Care	(\$8,006)	(\$20,652)	\$0	\$0	\$0	\$0	(\$28,657)
Contractual	(\$897,103)	(\$25,017)	\$10,779	(\$195)	\$8,929	(\$12,162)	(\$914,769)
Admin Adjustments & Denials	(\$213)	(\$6,260)	(\$1,133)	(\$2,227)	(\$4,978)	(\$11,216)	(\$26,027)
Payments	(\$609,450)	(\$1,036,091)	(\$278,740)	(\$47,593)	(\$19,952)	(\$17,440)	(\$2,009,267)
Variance	(\$199)	(\$1,079)	(\$0)	(\$104)	\$0	\$0	(\$1,382)
Total Transactions	(\$1,525,109)	(\$1,115,729)	(\$292,560)	(\$71,070)	(\$30,410)	(\$41,018)	(\$3,075,895)
Remaining Balance	\$0	\$783	\$1,362	\$3,021	\$3,748	\$0	\$8,915

Actual vs. Estimates in different lookback periods

Metric	% of Estimate	6	12	18
Actual % of Estimated Admin/Denials	2.2%	90.08%	146.44%	167.19%
Actual % of Estimated Bad Debt	14.8%	54.96%	67.27%	69.29%
Actual % of Estimated Charity	5.2%	92.41%	108.20%	112.03%
Actual % of Estimated Contractual	48.0%	92.42%	98.50%	99.77%
Actual % of Estimate Payment	29.8%	89.39%	96.10%	97.65%
End Balance % of Beginning Balance		14.3%	4.7%	0.0%

- Crowe assessed three key hindsight periods for analysis (6, 12, & 18 months). In most cases, 12 month hindsight highlight over 95% of initial balances that are now closed. For most remaining national benchmarks, we'll highlight this time period & hindsight period.
- Overall, contractual & payment variances to estimates show the smallest relative variances while admin/denials stand as the largest.

Industry Volatility of Actual vs. Estimates after 12 Months



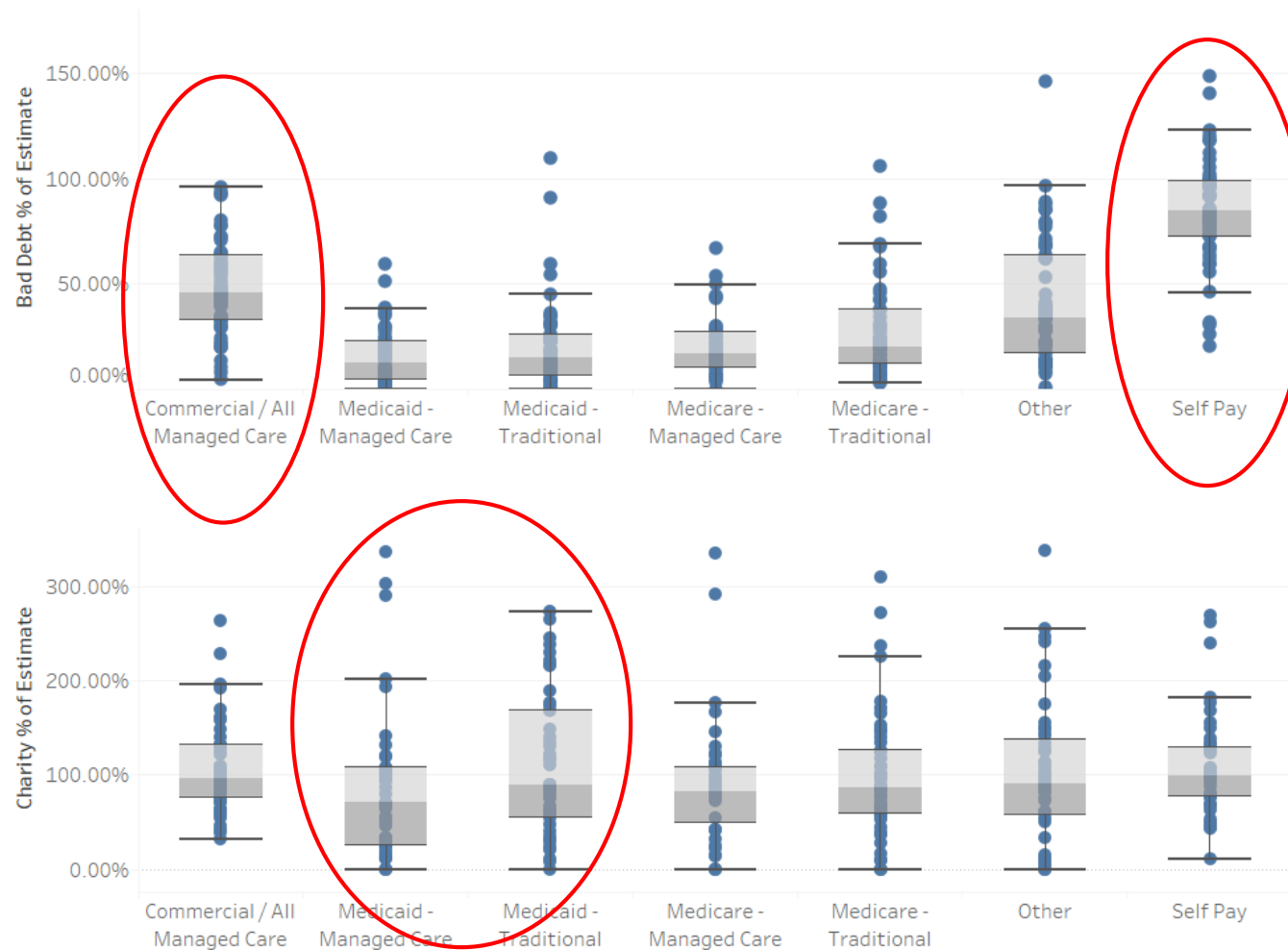
- Bad debt & charity variances see larger volatility across the industry than payment or contractual estimates. This may be due to a variety of factors:
 - Payor Mix Trends
 - Changing Patient Responsibility
 - Smaller Relative Estimate Dollar
 - Financial Assistance Policy Updates
- It is important to understand that while volatility is less in payment and contractual actuals vs. estimates, these two categories represent nearly 80% of initial estimates on open AR. As a result, small percentage variance may result in large effects in an organization

Industry Volatility of Actual vs. Estimates By Payor After 12 Months



- Contractual transactions as a % of estimates show tight bands of variances across most payors, however Other payors show larger variance between the top and bottom quartiles. Other payors is made up of primarily workers comp, TPL, & Tricare.
- When examining payment volatility to estimate, outside of the Other payor group larger quartile upper and lower limits are seen within Medicaid payors. This may be driven by challenges to evolving changes to the reimbursement climate for these types of payors

Industry Volatility of Actual vs. Estimates By Payor After 12 Months (Cont.)



- Bad debt variances show lowest volatility within organizations on Medicaid & Medicare-Managed payors. This would likely correlate with small patient responsibility with these patients. Uninsured & Commercial/Managed Care saw the largest volatility however.
- When examining charity estimates vs actuals, Medicaid payors see the highest volatility. This likely is correlated with higher propensity for changing coverage to uninsured.

12 Month Hindsight Admin & Denials Adjustments % of Estimates by Payor

Crowe Payor	Actual % of Admin/Denials Estimate
Commercial / All Managed Care	166.96%
Medicaid - Managed Care	206.55%
Medicaid - Traditional	128.69%
Medicare - Managed Care	238.33%
Medicare - Traditional	192.06%
Other	120.42%
Self Pay	38.10%

- Governmental Managed Care show the highest variances on estimates vs. actuals for this particular transaction type. Given increased exposure to these payor types across the industry, providers should be particularly sensitive to estimated adjustments.
- In addition, all payors but uninsured appear to underestimate administrative & denials adjustments. Total admin & denials transactions posted in this sample began to exceed the estimates for these categories starting with seven months after initial estimates.

Polling Question #2

Which key payor group does your organization find to be the biggest contributor to net revenue volatility?

- a) Managed Care (Non-Governmental)
- b) Medicare - Traditional
- c) Medicaid - Traditional
- d) Medicare – Managed Care
- e) Medicaid – Managed Care





Model Settings Recommendations

Modeling Assumptions

Allowance Category	Reserve Approach
Contractual allowances	ZBA, unless accounts are contract modeled / discounted at time of bill
Administrative adjustments & denials	ZBA and/or Hindsight (trending) data
Charity Care	Hindsight (trending) data
Bad Debt	Hindsight (trending) data

Most payors are reserved using the above approach with the exception of “High Risk” payors. High Risk payors are reserved using hindsight for all allowance categories. High Risk designation effectively results in these payors being reserved down to their historical payment rate.

“High Risk” Payors
Self Pay
Self Pay After Insurance
Secondary Insurance After Insurance
Medicaid Pending

These payors are often designated as high risk due to (1) a lack of a contractual agreement between the payor and the and provider and/or (2) elongated or irregular payment patterns.

Polling Question #3

When attempting to value to revenue cycle improvement activities, which of the following do you find or would you expect to be the most challenging to value?

- a) Denials Improvement
- b) Outpatient Charge Optimization
- c) Inpatient CDI
- d) Aged AR Cleanup Activities





Volatile Revenue Cycle Performance Case Study

Case Study in Summary

- Northwest Health recently underwent revenue cycle leadership turnover which lead to key initiatives over the post eight months impacting the following areas:
 - POS Collection Improvement
 - Underpayment Recovery Review
 - Denials Improvement
 - Outpatient Charge Capture Optimization
- As a result, the organization has seen the following result of their efforts since implementation began:
 - POS Collections as % of Net Revenue: has risen from **0.4%** to **1.2%** starting in month six of implementation
 - Underpayment Recovery Review: Identified and collected **\$795K** on accounts previously sitting in zero balance over the past eight months
 - Denials Reduction: Denials adjustments as a % of net revenue have declined from **1.9%** to **1.3%** starting in month seven of implementation
 - Outpatient Charge Capture Optimization: gross revenue per case in **emergency & observation** patients starting in month five and having **risen 7%**, and are soon to be impacted by an **additional 3% price increase** next month.

Should you adjust your model?

Considerations

How do you “expect” a specific initiative to impact the P/L

1. **Example: POS Cash Collections**

- Will this improve net revenue – e.g. will the organization collect more cash than it would have without the initiative, or is in effect cash acceleration?
- Use caution when updating your reserve model for cash acceleration activities

2. **Example: Denials Reduction**

- How much history exists to suggest the actual reduction is in line with plan?
- Are other adjustment type moving in an offsetting direction? (e.g. contractals increasing at a similar pace)
- If yes, apply professional judgement to historical admin / denial reserve rates then focus on change in prior period estimates on the P/L
- Use caution when updating your reserve model for initiatives that may create offsetting impact

3. **Example: Outpatient Charge Capture**

- How many payors will see a lift from additional charges?
- Will deductions outpace new cash?
- Generally, net revenue per case will improve while yield goes down. Not adjusting contractual rates assumes a dollar for dollar increase in cash per increase in gross revenue. This is very unlikely.

Polling Question #4

According to Crowe findings, which of the following metrics shows the least relative volatility as a result of seasonality?

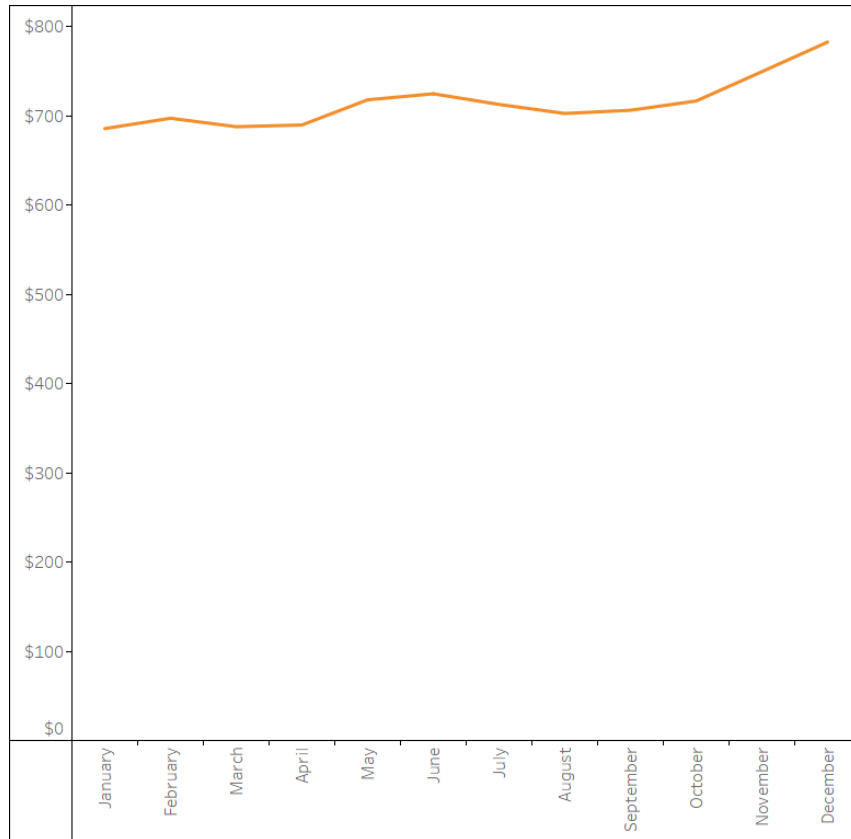
- a) Outpatient Net Revenue per Case
- b) Insured Patient Responsibility as a % of allowable
- c) Inpatient Net Revenue per Case
- d) Final Denial Adjustments as % of Net Revenue





Seasonality Trends in Net Revenue Performance

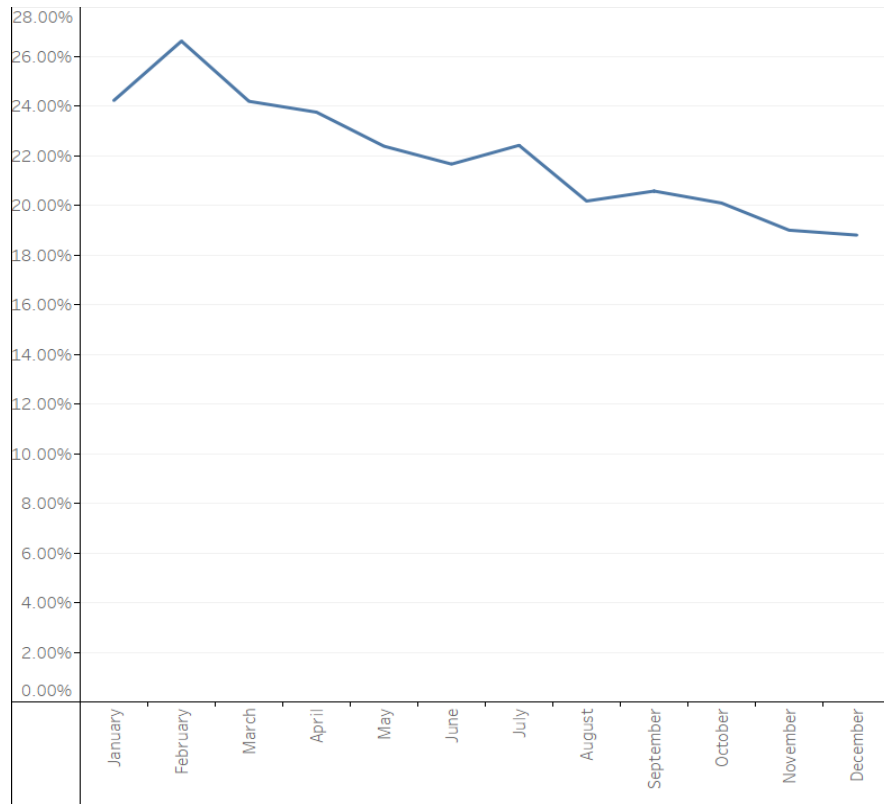
OP Net Revenue Per Case Trends



OP net revenue per case trends consistently show increases from January to December from year to year. Similarly, gross revenue per case trends show a very similar correlation.

As a result, much of the net revenue increases are driven from what would appear to be service mix shifts throughout the year and particularly in the last quarter of the year. Given increases in elective surgeries at the end of the year, this could be a contributing factor in this trend.

Insured Patient Responsibility % of Allowable Trends



As deductibles reset at the end of the calendar year, we generally see an increase in Self Pay After Insurance over calendar Q1 and Q2, then a slide over the remainder of the year.

Managed Care and/or specifically plans with high deductibles tend to start the year with lower patient utilization rates, then increasing throughout the calendar year with Nov and Dec generally showing very strong utilization rates.

	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Gross AR												
Managed Care	17,856,330	18,172,861	19,760,107	21,299,499	21,100,532	20,395,214	17,694,651	20,439,971	20,566,500	20,253,065	22,991,809	22,995,506
Pt Pay After Insurance	8,162,715	9,428,255	9,891,386	9,455,462	8,646,600	8,023,561	8,517,732	7,631,411	7,013,694	6,943,918	6,889,900	6,895,261

Fiscal Year Timing Impact

Northwest Health (12/31 Year End)

Posted Transactions	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Contractual	(126,436,543)	(136,962,539)	(140,202,601)	(137,307,212)	(139,088,624)	(135,680,654)	(133,481,059)	(141,166,760)	(125,010,613)	(135,284,864)	(131,221,947)	(141,863,365)
Bad Debt	(2,503,104)	(2,682,670)	(2,620,865)	(2,899,263)	(3,046,997)	(3,566,582)	(3,184,818)	(3,450,872)	(3,302,979)	(3,097,353)	(4,123,175)	(3,045,102)
Charity	(13,660,571)	(15,072,200)	(13,508,458)	(15,797,140)	(16,392,802)	(13,677,081)	(15,194,359)	(17,147,545)	(12,736,052)	(15,418,666)	(14,262,181)	(11,392,046)
Payments	(43,709,561)	(42,613,855)	(47,718,544)	(46,401,519)	(49,745,740)	(43,208,565)	(48,495,496)	(47,185,490)	(40,358,773)	(44,978,412)	(45,926,713)	(53,473,525)

- While other adjustments are stable (contractuals are posted at time of billing), there is a notable increase in cash collections at the end of the fiscal (calendar) year.
- **How does this impact net revenue?**
 - Depends on the level of conservatism in the model with bad debt, charity, admin / denial
 - More conservative models will tend to see improvements in net revenue in months with high cash collections since non-contractual reserves are released back to the P/L once accounts are fully settled.

Change in Prior by Adj Type (Inpatient)	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
Contractual	658,753	543,166	(719,373)	(514,092)	1,091,015	(1,497,583)	(393,099)	822,943	(231,651)	699,168	305,132	(103,561)
Administrative	(102,171)	(364,853)	(37,768)	5,197	(239,861)	(515,931)	(692,382)	39,638	(757,137)	(83,917)	(228,453)	769,008
Bad Debt	616,324	951,443	664,361	697,681	892,938	9,725	940,772	435,667	54,620	287,236	70,495	1,039,305
Charity	(200,070)	(1,175,502)	836,703	712,282	(1,318,725)	1,562,142	(877,294)	(1,522,453)	26,332	(845,132)	(644,604)	1,301,538
Total Change in Prior	972,836	(45,746)	743,923	901,068	425,366	(441,646)	(1,022,003)	(224,206)	(907,836)	57,356	(497,430)	3,006,290

Thank you

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