

# Operational Benchmarks in Autism and Impact on Financial Performance

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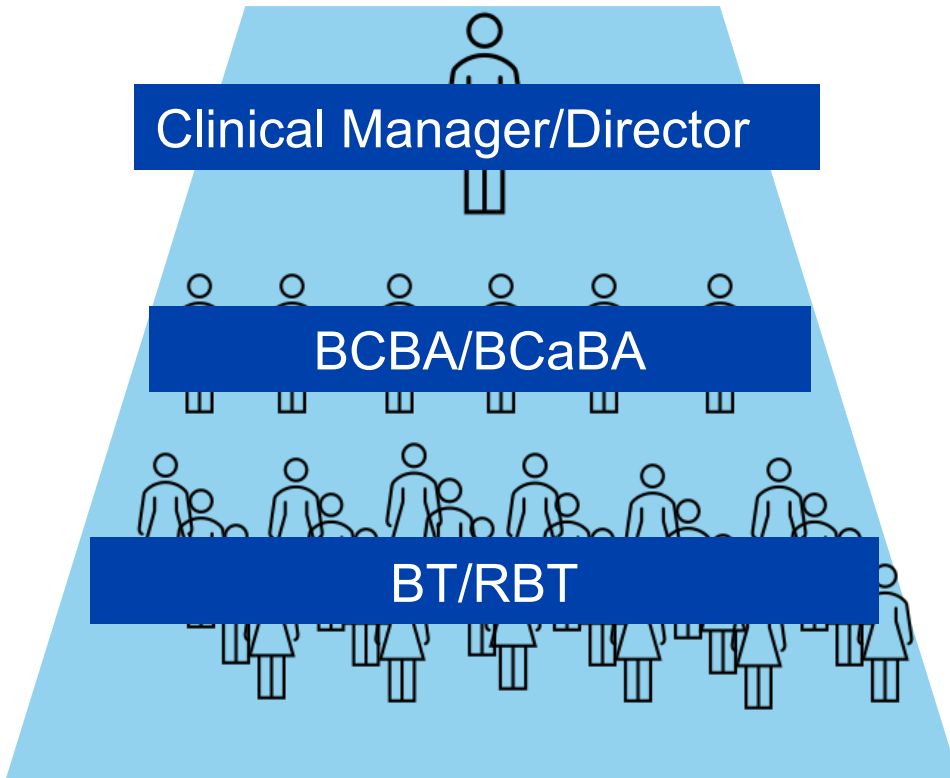
# Discussion overview

- Why do this survey
- Why structure the survey this way
- Who participated
- What did they say
- What does this mean for you/so what (+ case studies)

# How to consider these results

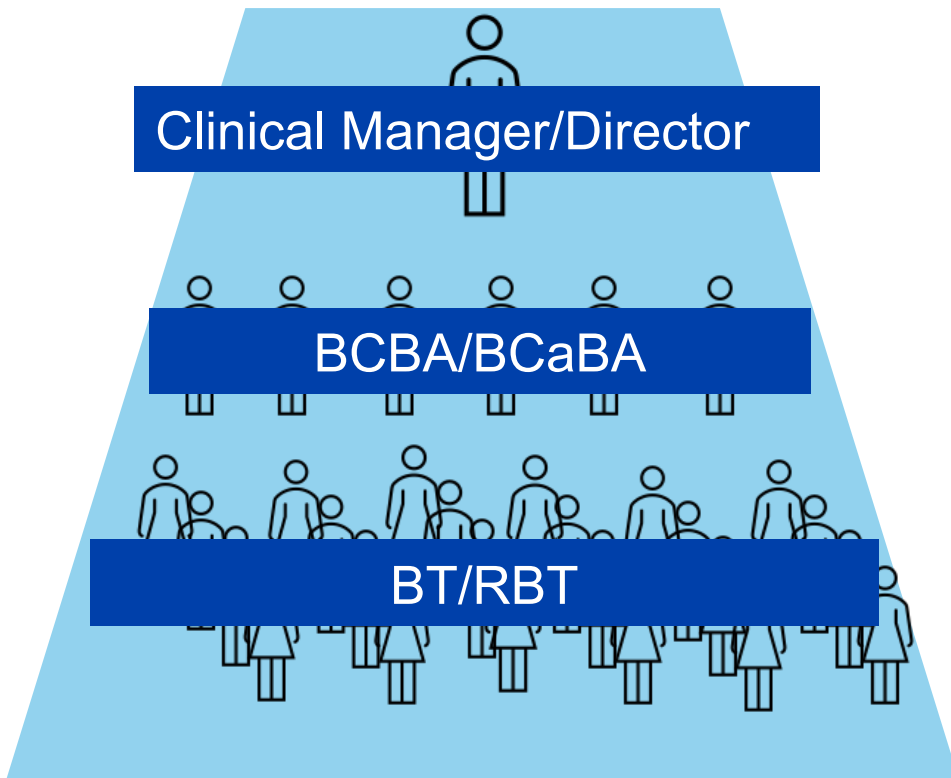
- Surveys will always have noise; focus on the middle 50% of responses
- Where are you versus the median (ideally, 3<sup>rd</sup> Quartile) metrics; any improvement opportunities?
- Decision on operational targets is, of course, individual

# Operational structure – CD “Pyramid”



Billable / Non-Billable  
Expectations?  
How many cases?  
How many supervisees?  
Contractual structure?  
Regulatory structure?  
Reimbursement?  
Compensation systems?

# Focus of survey/what metrics



## **Span of leadership**

- Clinical director span of control

## **Productivity (billable to worked hours)**

- BTs
- Supervisors
- CDs

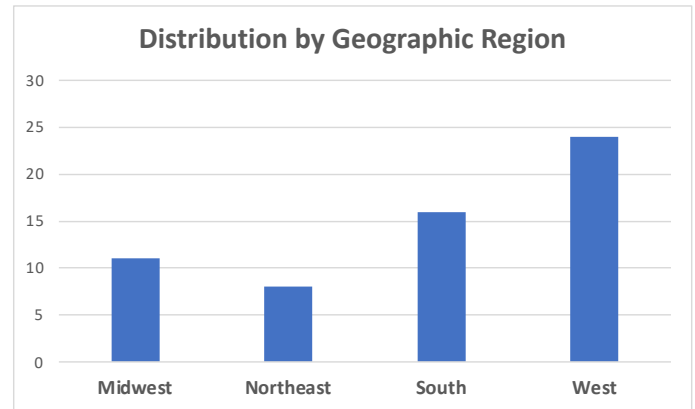
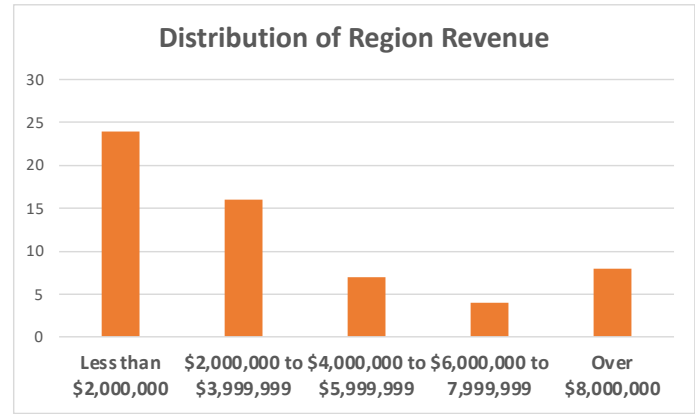
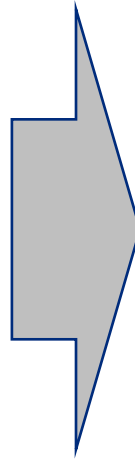
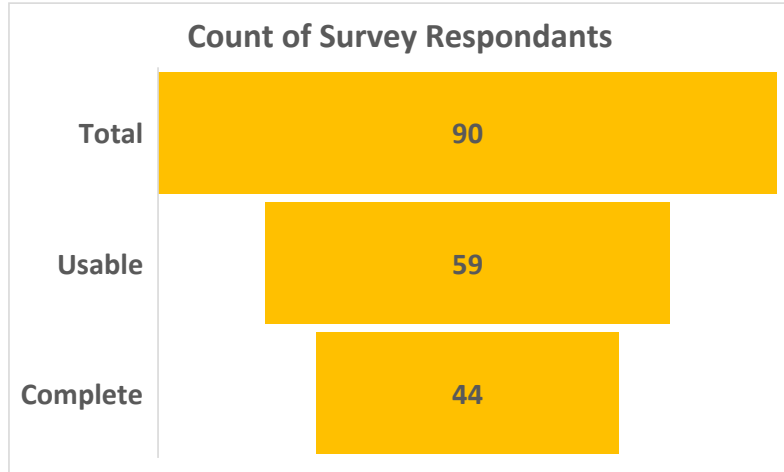
## **Delivered services pyramid**

- Direct service to billable supervisor code hours

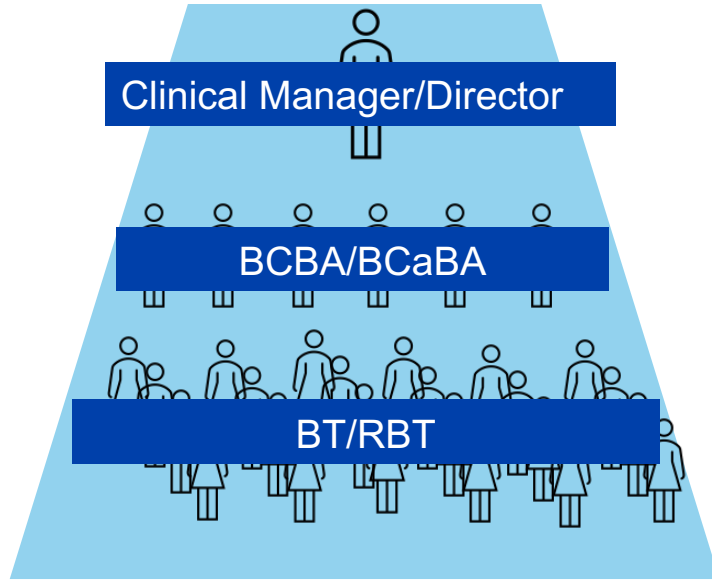
## **Economics – reimbursement to wage ratio**

- BTs
- Supervisors

# Characterization of respondents



# Survey results – the median CD pyramid



## Span of leadership

- Clinical director span of control – 5.0 direct reports

## Productivity (billable to worked hours)

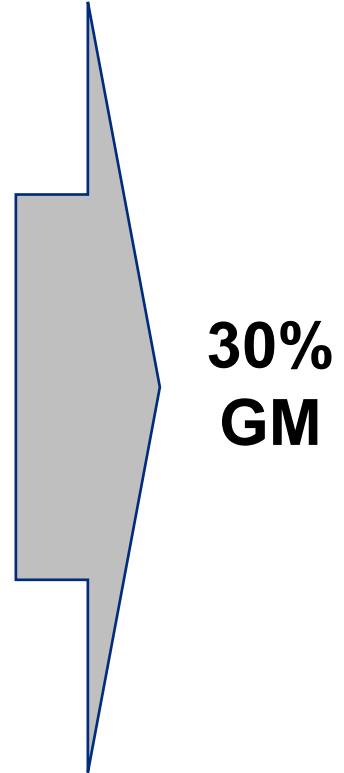
- BTs – 77.5%
- Supervisors – 85 hours a month (~51%)
- CDs – 35 hours a month

## Delivered services pyramid

- 4.0 direct service to billable supervisor code hours

## Economics – reimbursement to wage ratio

- BTs – 2.8
- Supervisors – 2.7



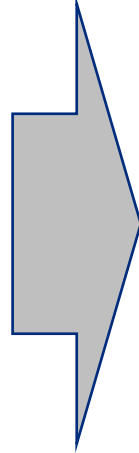
# BT economics

## Hourly Reimbursement

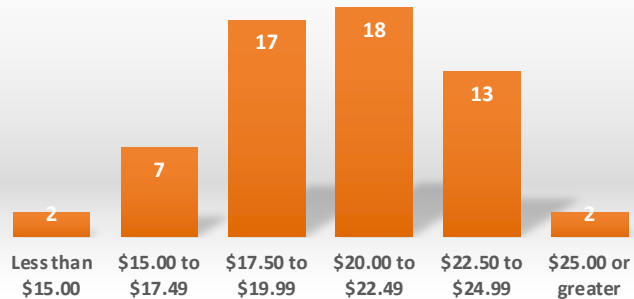


Median: \$57.50  
3<sup>rd</sup> Quartile: \$62.50

Gross Margin impact: Median -> Q3: 7 PP

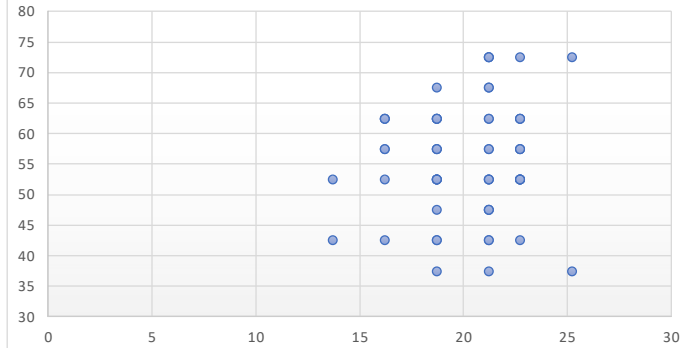


## Hourly Wages

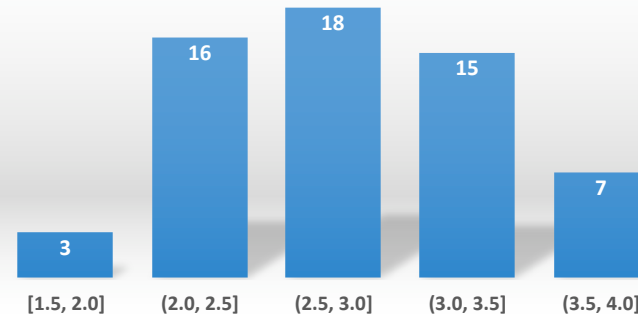


Median: \$21.25  
3<sup>rd</sup> Quartile: \$22.00

## Direct Service Reimbursement Rates to Average Wage Rate Per Hour



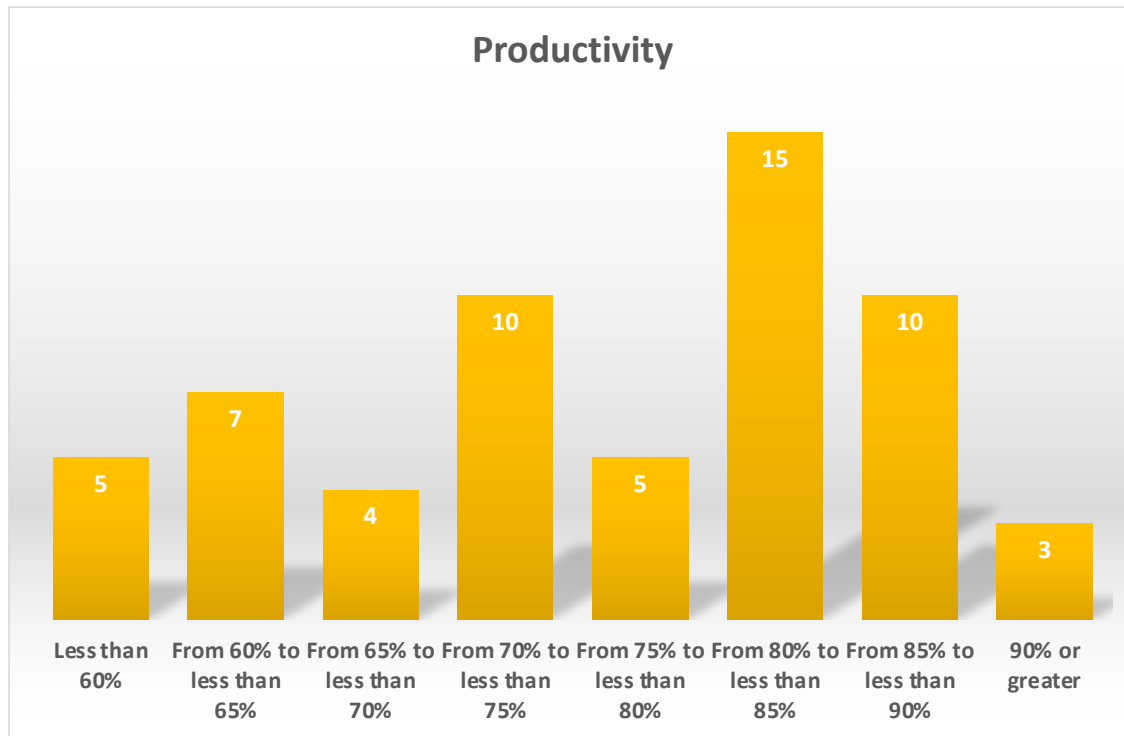
## Reimbursement to Wage Ratio



Median: 2.8  
3<sup>rd</sup> Quartile: 3.2



# ... And productivity



Median: 77.5%  
3<sup>rd</sup> Quartile: 82.5%

**Gross Margin  
impact: Median -  
> Q3: 3 PP**

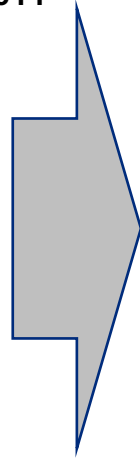
# Supervisor economics

## Hourly Reimbursement

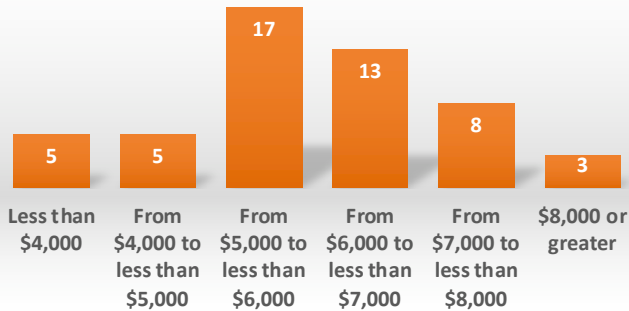


Median: \$85  
3<sup>rd</sup> Quartile: \$105

Gross Margin impact: Median -> Q3: 3 PP

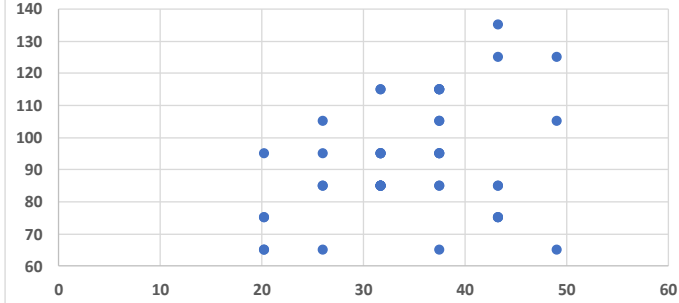


## Monthly Wages

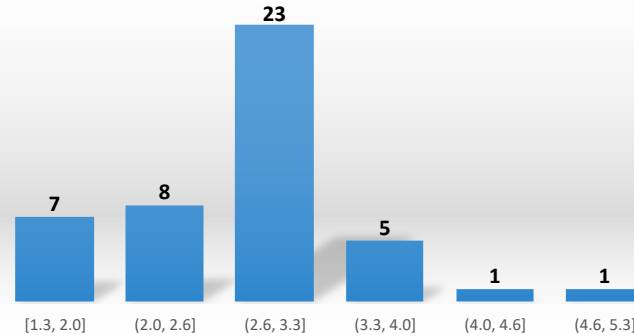


Median: \$5.5K  
3<sup>rd</sup> Quartile: \$6.5K

## Supervisor Reimbursement Rates to Average Wage Rate Per Hour

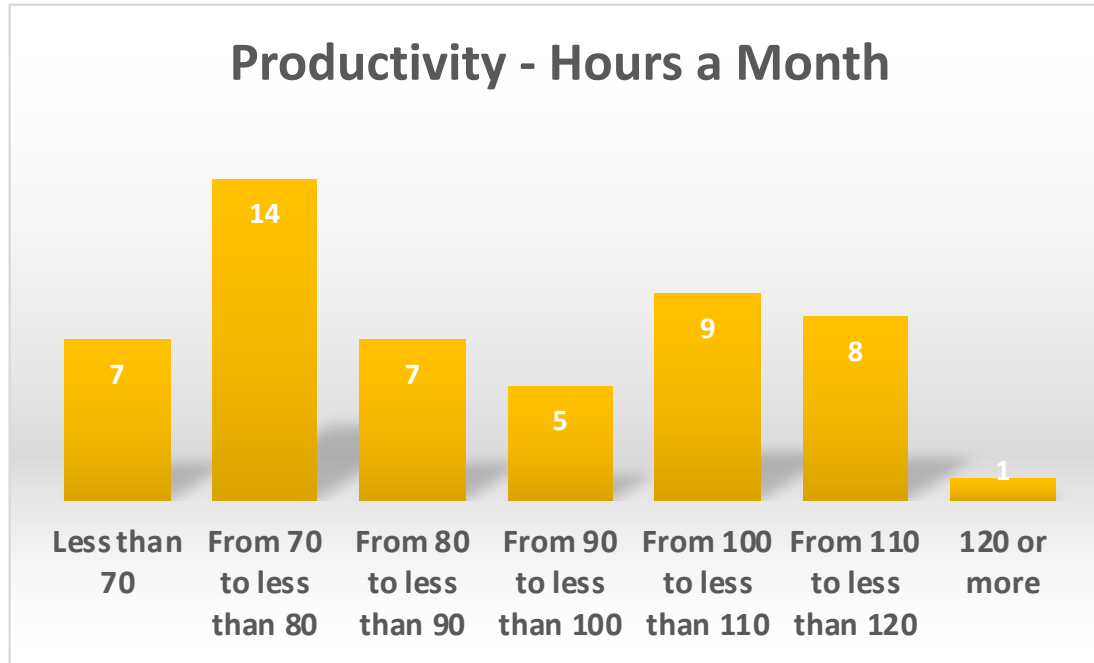


## Reimbursement to Wage Ratio



Median: 2.7  
3<sup>rd</sup> Quartile: 3.1

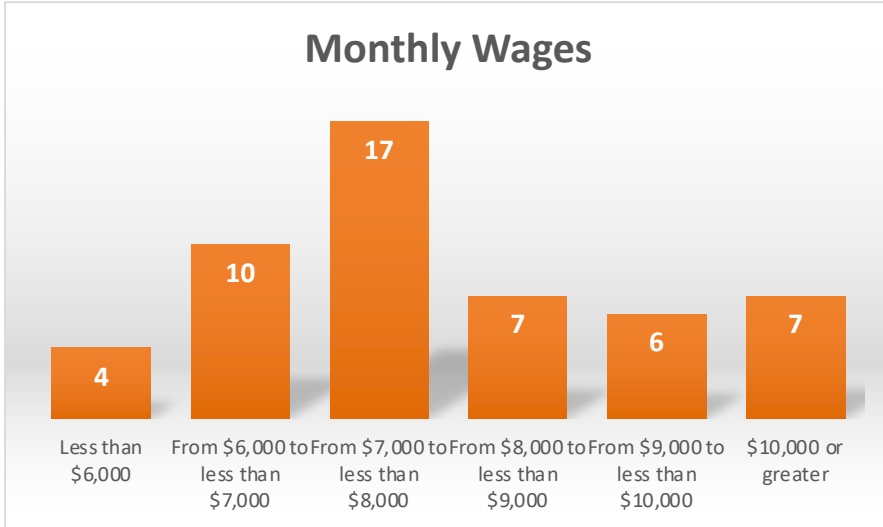
# ... And Productivity



Median: 85 hours  
3<sup>rd</sup> Quartile: 105 hours

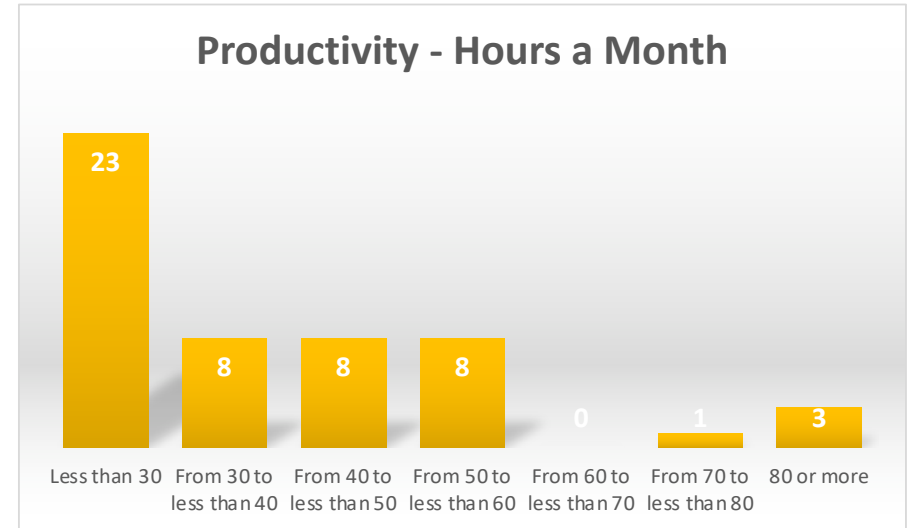
**Gross Margin  
impact: Median ->  
Q3: 4 PP**

# Clinical director operational metrics

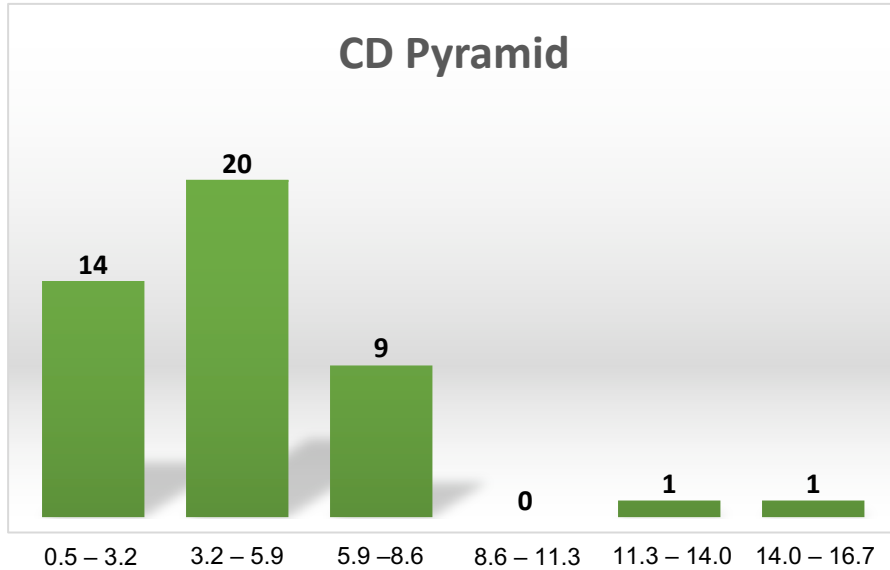


Median: \$7.5K  
3<sup>rd</sup> Quartile: \$9.5K

Median: 35 hours  
3<sup>rd</sup> Quartile: 45 hours

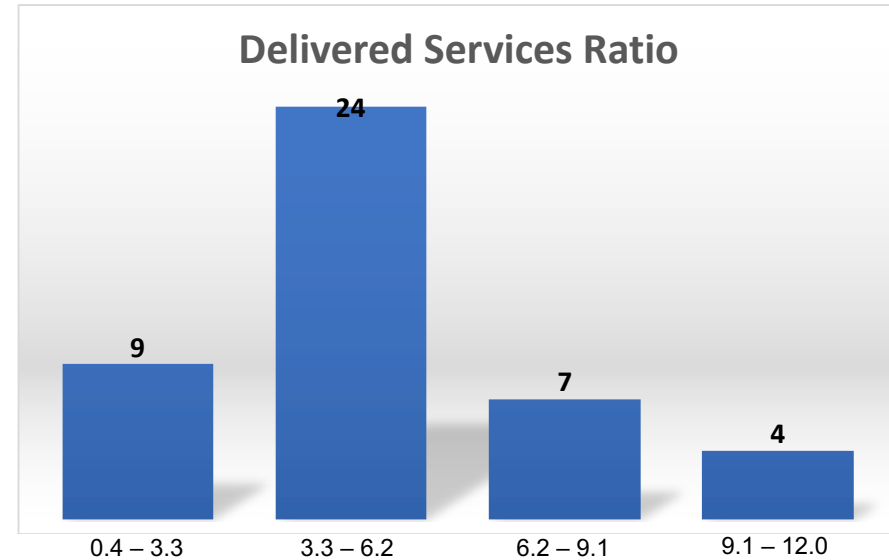


# CD Pyramid and Delivered Services Ratio

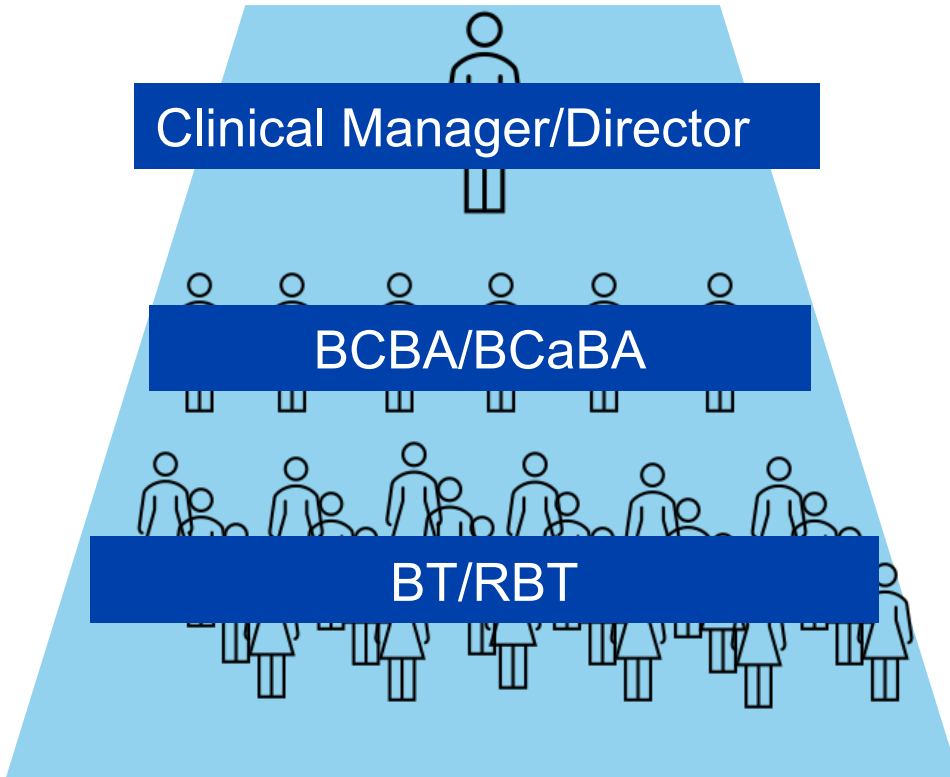


Median: 5.0  
3<sup>rd</sup> Quartile: 5.3

Median: 4.0  
3<sup>rd</sup> Quartile: 5.8  
**Gross Margin impact:**  
**Median -> Q3: 4 PP**



# The median CD pyramid ... reprise



## Span of leadership

- Clinical director span of control – 5.0 direct reports

## Productivity (billable to worked hours)

- BTs – 77.5%
- Supervisors – 85 hours a month (~51%)
- CDs – 35 hours a month

## Delivered services pyramid

- 4.0 direct service to billable supervisor code hours

## Economics – reimbursement to wage ratio

- BTs – 2.8
- Supervisors – 2.7

# CD Pyramid financial summary – from median to 3<sup>rd</sup> quartile metrics

## Unit Economics - CD Pyramid

	Median	3rd Quartile
Revenue Month	\$145K	\$268K
Revenue - Annualized	\$1,741K	\$3,216K
Gross Margin - Month	\$44K	\$129K
Gross Margin - Annualized	\$525K	\$1,545K
- %	30%	48%

# CD Pyramid profitability – from median to 3<sup>rd</sup> quartile metrics

## Monthly Unit Economics

At Median Metrics

	Direct Services	Supervision			Total
		Supervisors	Clinical Director	Aggregate	
Revenue					
Billable Hours	1,843	425	35	460	2,303
(x) Reimbursement Rate	\$57.50	\$85.00	\$85.00	\$85.00	\$62.99
<b>Gross Revenue</b>	<b>\$105,959</b>	<b>\$36,125</b>	<b>\$2,975</b>	<b>\$39,100</b>	<b>\$145,059</b>
Cost of Service - Payroll					
Productivity	78%	51%	21%	46%	68%
Hours Worked	2,378	840	168	1,008	3,386
(x) Effective Rate	\$20.53	\$31.73	\$44.64	\$33.88	\$24.51
Wages	\$48,821	\$26,653	\$7,500	\$34,153	\$82,974
(+) Benefits/Taxes	\$9,764	\$6,663	\$1,875	\$8,538	\$18,302
Labor Costs	\$58,585	\$33,316	\$9,375	\$42,691	\$101,276
<b>Gross Margin</b>	<b>\$47,374</b>	<b>\$2,809</b>	<b>-\$6,400</b>	<b>-\$3,591</b>	<b>\$43,783</b>
	<b>45%</b>	<b>8%</b>	<b>-215%</b>	<b>-9%</b>	<b>30%</b>

At 3rd Quartile (Modified) Metrics

	Direct Services	Supervision			Total
		Supervisors	Clinical Director	Aggregate	
Revenue					
Billable Hours	3,233	525	35	560	3,793
(x) Reimbursement Rate	\$65.90	\$98.15	\$98.15	\$98.15	\$70.66
<b>Gross Revenue</b>	<b>\$213,039</b>	<b>\$51,531</b>	<b>\$3,435</b>	<b>\$54,966</b>	<b>\$268,005</b>
Cost of Service					
Productivity	83%	63%	21%	56%	77%
Hours Worked	3,919	840	168	1,008	4,927
(x) Effective Rate	\$20.53	\$31.73	\$44.64	\$33.88	\$23.26
Wages	\$80,461	\$26,653	\$7,500	\$34,153	\$114,614
(+) Benefits/Taxes	\$16,092	\$6,663	\$1,875	\$8,538	\$24,630
Labor Costs	\$96,553	\$33,316	\$9,375	\$42,691	\$139,244
<b>Gross Margin</b>	<b>\$116,486</b>	<b>\$18,215</b>	<b>-\$5,940</b>	<b>\$12,275</b>	<b>\$128,761</b>
	<b>55%</b>	<b>35%</b>	<b>-173%</b>	<b>22%</b>	<b>48%</b>



# Implication for profitability disaggregated

## Impact from Improved Reimbursement Economics

	From	To	Gross Margin Impact	
			\$ '000s	%
Supervisor	\$85.00	\$98.15	6.1	3%
Behavior Technician	\$57.50	\$65.90	15.5	7%

## Impact from Increased Productivity

	From	To	Gross Margin Impact	
			\$ '000s	%
Supervisor	51%	63%	8.5	4%
Behavior Technician	78%	83%	6.8	3%

## Impact from Increased Span of Control

	From	To	Gross Margin Impact	
			\$ '000s	%
Delivered Services Ratio	4.0	5.8	20.9	4%
CD Pyramid	5.0	5.0	N/A	N/A

# Case Studies

June 21, 2022

# Reimbursement – better to be lucky or good

- You could be a rare example of fantastic reimbursement rates. In which case congratulations (everyone hates you)
- More commonly, reimbursement will be modest, with rates ranging from reasonable to just not viable

Payer	Revenue (\$'000s)	Share of Revenue	Hours	Share of Hours	Average Reimbursement	Est Gross Margin
Payer 1	1,043.3	24%	9,945	15%	\$104.91	56%
Payer 2	1,417.9	33%	25,312	38%	\$56.02	18%
Payer 4	925.2	21%	17,361	26%	\$53.29	9%
Payer 6	557.7	13%	7,808	12%	\$71.42	34%
Payer 8	131.2	3%	2,358	4%	\$55.65	13%
Payer 9	248.8	6%	3,578	5%	\$69.54	32%
	<b>4,324.1</b>		<b>66,363</b>		<b>\$65.16</b>	

Key	
	Prioritize
	Deprioritize and renegotiate
	Deprioritize

Share By Category					
	1,849.8	43%	21,331	32%	\$86.72
	1,417.9	33%	25,312	38%	\$56.02
	1,056.5	24%	19,719	30%	\$53.57

# Reimbursement – tactical considerations

- There is still something to be done
- Of course, renegotiate. But success takes time and outcomes are uncertain
- You can still exert control by identifying the level of the less viable reimbursements your operations can tolerate

Impact From Shift in Hours - 5%			Impact From Shift in Hours - 10%			Impact From Shift in Hours - 15%		
Hours	Client	Revenue	Hours	Client	Revenue	Hours	Client	Revenue
3,318	8.0	\$287,739	6,636	16.1	\$575,478	9,954	24.1	\$863,217
(3,318)	(8.0)	<u>-\$177,767</u>	(6,636)	(16.1)	<u>-\$355,533</u>	(9,954)	(24.1)	<u>-\$533,300</u>
<b>Gross Margin Impact</b>		<b>\$109,972</b>			<b>\$219,944</b>			<b>\$329,917</b>
<i>2.5%</i>			<i>4.8%</i>			<i>7.1%</i>		

# Supervisor productivity (and capacity)

- One clinical director, overseeing 6 supervisors
- Meeting 75% of billable expectations, and 63% of direct service oversight capacity

Job Title	FTE	Billable Expectations/ Day	Min Direct Service Oversight/Day	Billable Expectations/ Month	Min Direct Service Oversight/ Month
Clinical Director	1.0	3.0	15.0	63.0	315.0
Supervisor	1.0	5.0	25.0	105.0	525.0
Supervisor	1.0	5.0	25.0	105.0	525.0
Supervisor	1.0	5.0	25.0	105.0	525.0
Supervisor	1.0	5.0	25.0	105.0	525.0
Supervisor	1.0	5.0	25.0	105.0	525.0
Supervisor	1.0	5.0	25.0	105.0	525.0
	<u>7.0</u>	<u>33.0</u>	<u>165.0</u>	<u>693.0</u>	<u>3,465.0</u>
			<b>Month Actual --&gt;</b>	522.0	2,192.4
			<b>Actual vs Expected --&gt;</b>	75%	63%

# Supervisor productivity (and capacity)

- Options – increase supervisor billables, or reduce capacity
- Impact – increasing supervisor billables: \$10.0K (@ direct service rates) a month; \$120K for the year
- Reduce capacity – \$10.6 (excluding one-off costs); \$128K annually

## Unit Economics - Increasing Supervisor Billables

	Existing Performance				Total
	Direct Services	Supervision			
		Supervisors	Clinical Director	Aggregate	
Revenue					
Billable Hours	2,192	480	42	522	2,714
(x) Reimbursement Rate	\$58.43	\$94.29	\$94.29	\$94.29	\$65.33
<b>Gross Revenue</b>	<b>\$128,102</b>	<b>\$45,259</b>	<b>\$3,960</b>	<b>\$49,219</b>	<b>\$177,321</b>
Cost of Service - Payroll					
Productivity	78%	48%	25%	44%	68%
Hours Worked	2,829	1,008	168	1,176	4,005
(x) Effective Rate	\$20.15	\$34.06	\$45.65	\$35.72	\$24.72
Wages	\$56,998	\$34,332	\$7,669	\$42,002	\$98,999
(+) Benefits/Taxes	\$11,400	\$8,583	\$1,917	\$10,500	\$21,900
Labor Costs	\$68,397	\$42,916	\$9,587	\$52,502	\$120,899
<b>Gross Margin</b>	<b>\$59,705</b>	<b>\$2,344</b>	<b>-\$5,626</b>	<b>-\$3,283</b>	<b>\$56,422</b>
	<b>47%</b>	<b>5%</b>	<b>-142%</b>	<b>-7%</b>	<b>32%</b>

	Optimal Supervisor Productivity				Total
	Direct Services	Supervision			
		Supervisors	Clinical Director	Aggregate	
Revenue					
Billable Hours	2,192	630	63	693	2,885
(x) Reimbursement Rate	\$58.43	\$85.75	\$82.34	\$85.44	\$64.92
<b>Gross Revenue</b>	<b>\$128,102</b>	<b>\$54,024</b>	<b>\$5,187</b>	<b>\$59,211</b>	<b>\$187,313</b>
Cost of Service					
Productivity	78%	63%	38%	59%	72%
Hours Worked	2,829	1,008	168	1,176	4,005
(x) Effective Rate	\$20.15	\$34.06	\$45.65	\$35.72	\$24.72
Wages	\$56,998	\$34,332	\$7,669	\$42,002	\$98,999
(+) Benefits/Taxes	\$11,400	\$8,583	\$1,917	\$10,500	\$21,900
Labor Costs	\$68,397	\$42,916	\$9,587	\$52,502	\$120,899
<b>Gross Margin</b>	<b>\$59,705</b>	<b>\$11,108</b>	<b>-\$4,399</b>	<b>\$6,709</b>	<b>\$66,414</b>
	<b>47%</b>	<b>21%</b>	<b>-85%</b>	<b>11%</b>	<b>35%</b>