



Anesthesia Market Overview

Marc Koch, MD, MBA, MSc. (mekoch@somnainc.com)

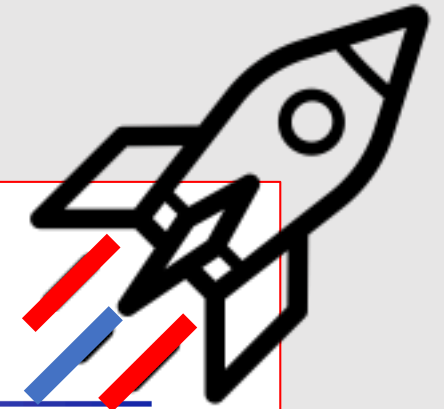
- MD: Perioperative Medicine | Anesthesiology
- MBA: Financial analyst and operations
- CEO for Somnia since 1997 (1000 Clinicians, 13 States, Hospitals, ASCs, OBSF)

Marc Koch, MD MSc. MBA

Medical Anesthesiology	Yale
MBA Finance	Fordham
MSc.	UCL London (PeriOperative Medicine)

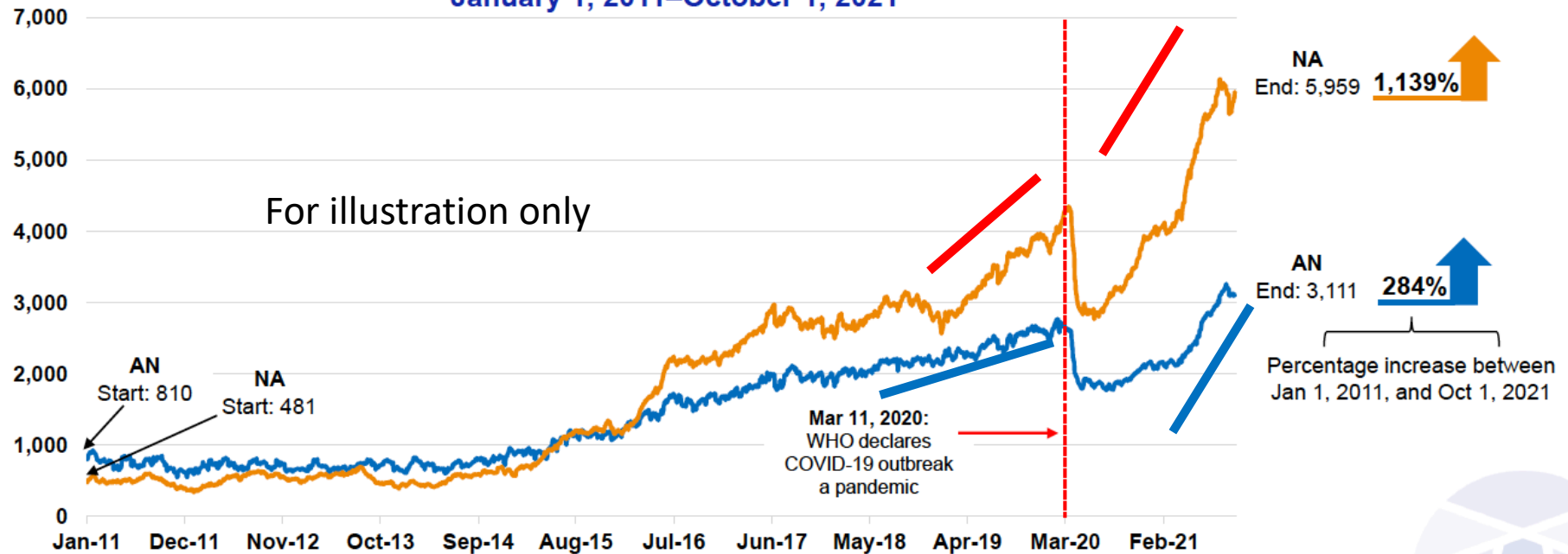
- President and CEO | Somnia Inc. for 25 years
Anesthesia services for OBSF, ASC, Hospitals
Metro NY and 15 other states
1,000 clinicians
- PeriOperative Medicine and Population Health
- 1,873 Hospitals, ASC and OBSF

MD CRNA Demand Data



GasWork Job Postings, 2011–2021

Job Posting Trends for Anesthesiologists (AN) and Nurse Anesthetists (NA)
January 1, 2011–October 1, 2021



Source: www.GasWork.com, an anesthesia employment resource, January 1, 2011–October 1, 2021.

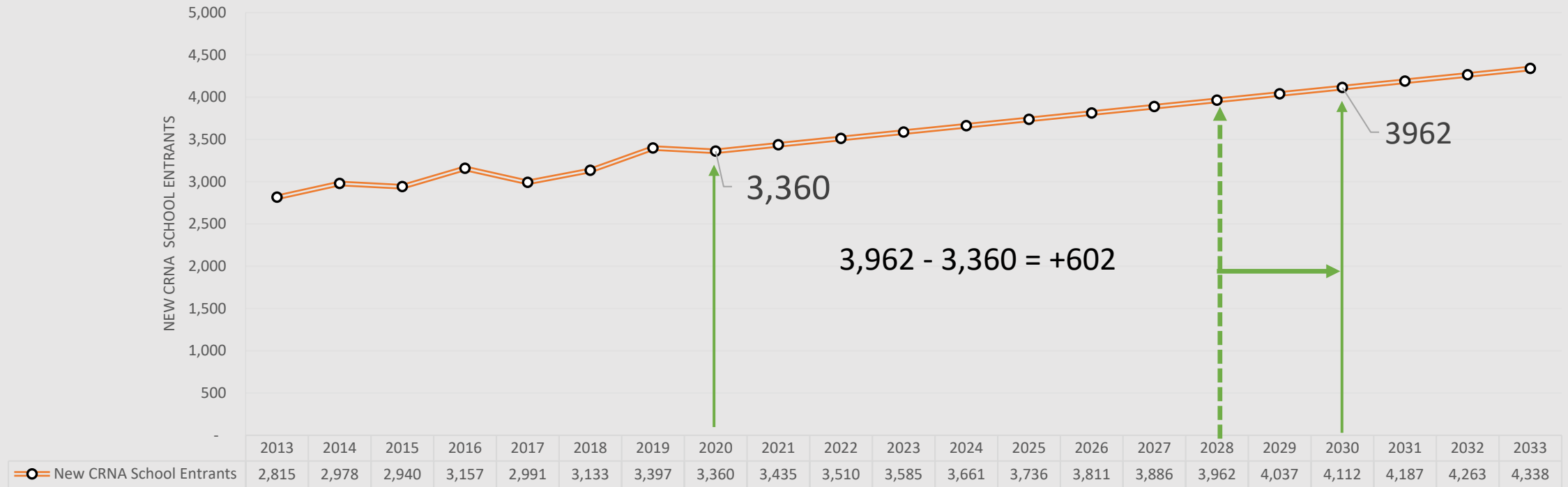
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CRNA Workforce Predictions

~602 Additional CRNA annually entering the market 2020)

| **does not bake in attrition** |

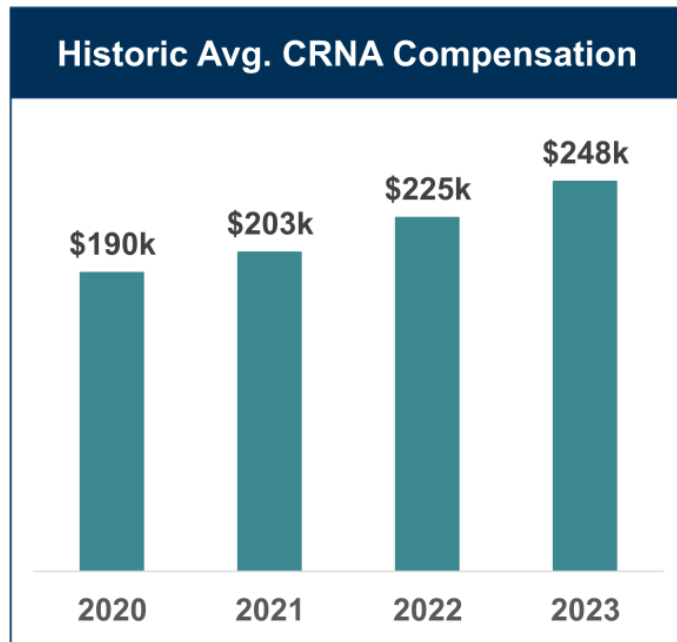
CRNA STUDENT PROJECTIONS



602/10 years= adding an avg 60 addition CRNA year-over-year

CRNA Labor Dynamics

Rising Workforce Costs Coupled with Decreasing Volumes Creating Imbalance



30%

Average overall CRNA expense increase
(includes premium labor and locum use)

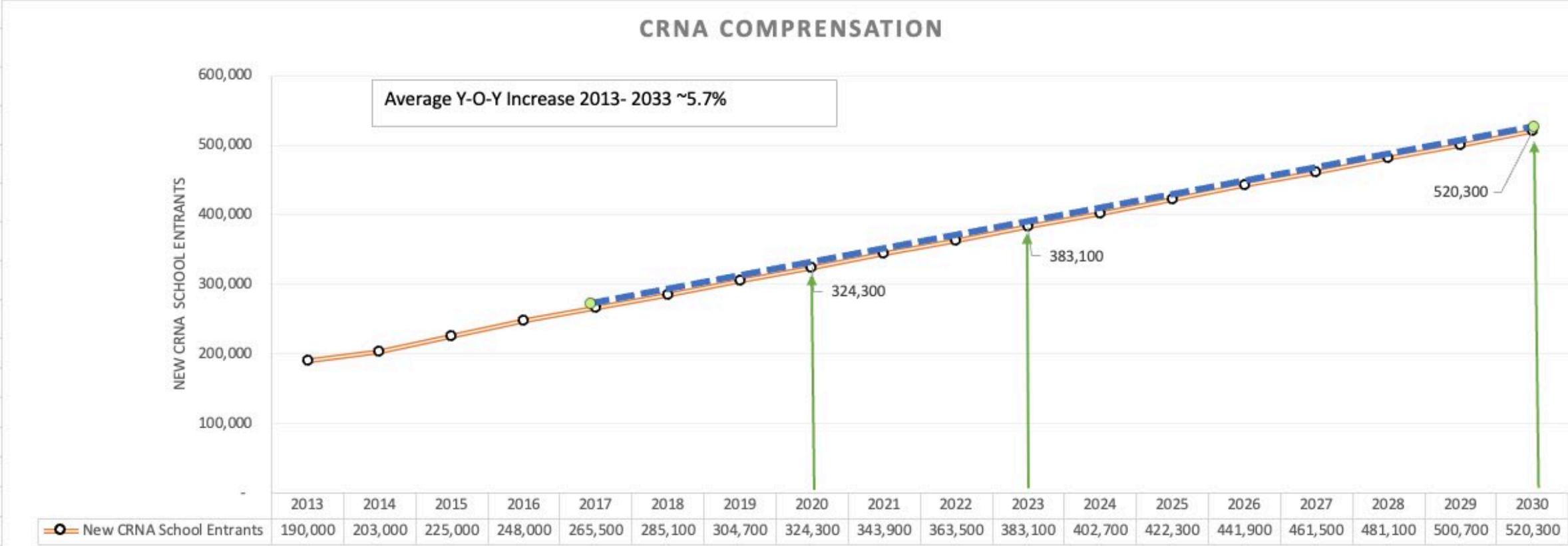
Source: US Bureau of Labor Statistics

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AANA2023

CRNA Compensation Predictions

2020 → 2030 Compensation 383K to 525K



190K in 2019 → 383K* in 2023 → 520K in 2030

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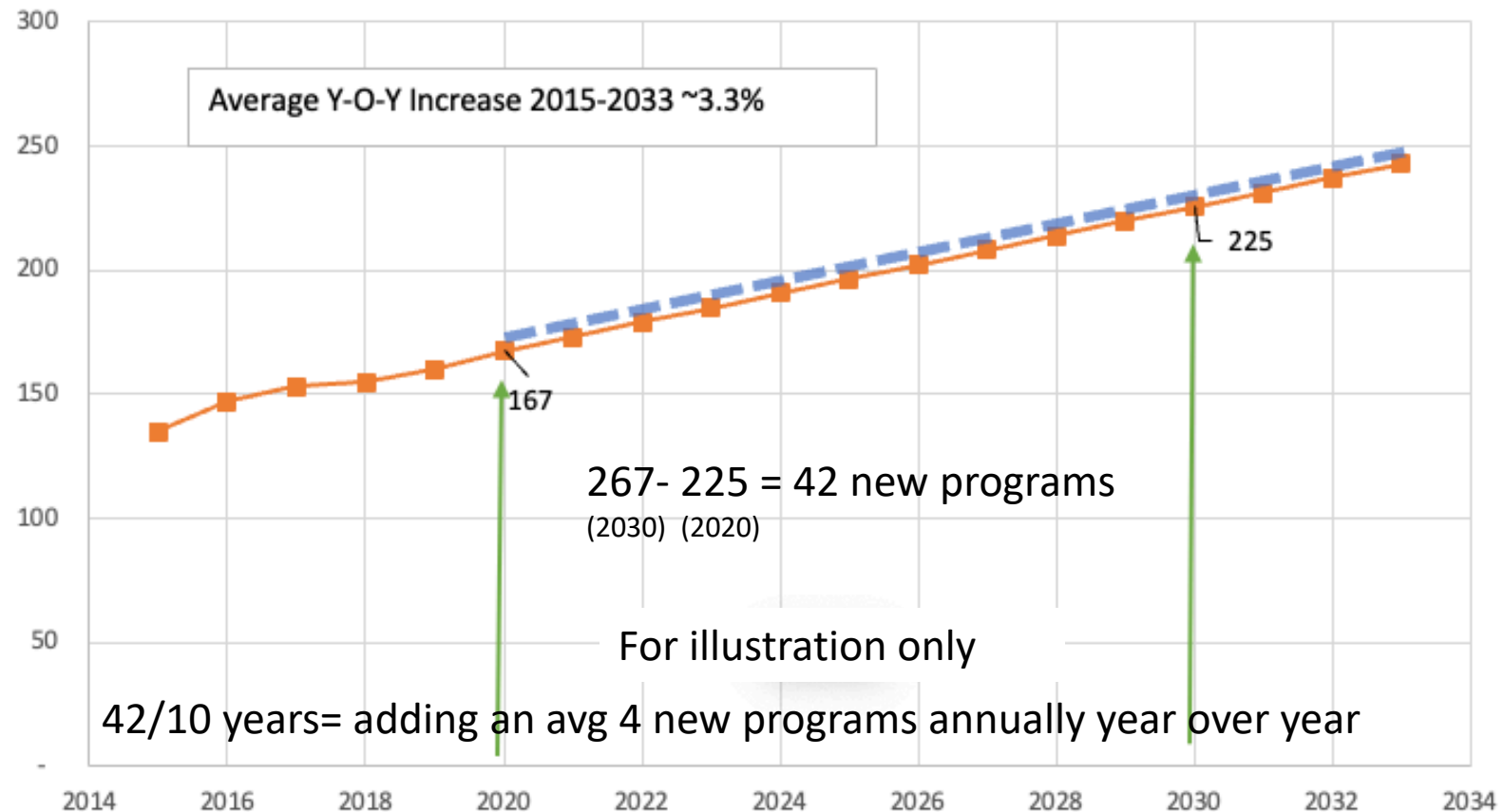
Residency Program Predictions

~ = 42 over next 10 years | **does not bake in attrition**



Specialty	Academic Year					5-Year Change	
	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	#	%
	#	#	#	#	#		
Anesthesiology	135	147	153	155	160	25	18.5%

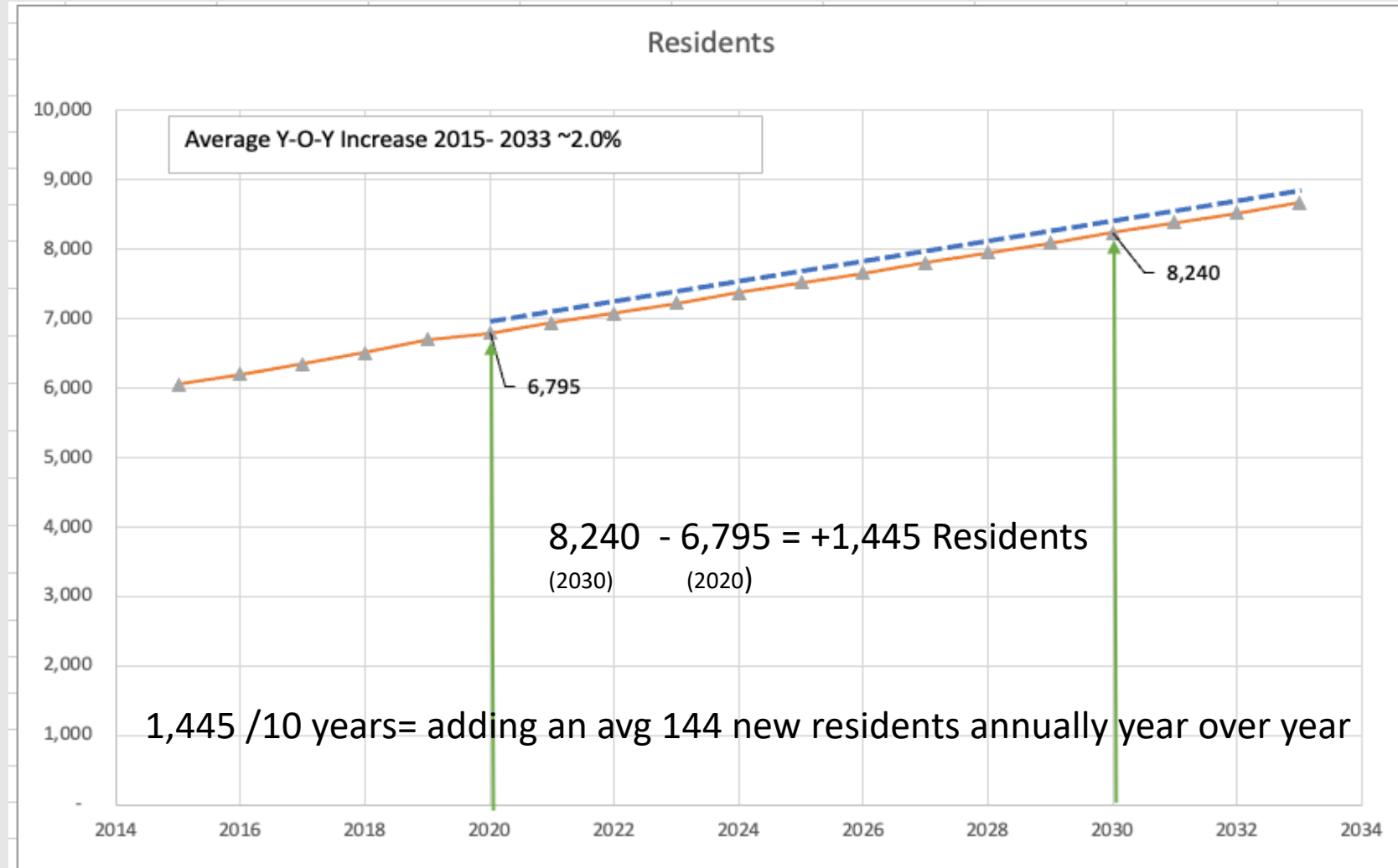
Residency Programs



MD Anesthesiology Workforce Predictions

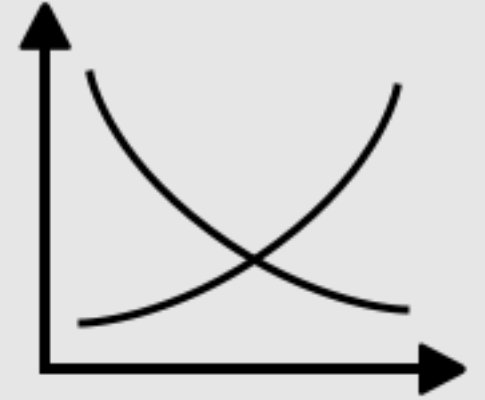
$\approx 1,445$ over next 10 years (Average 144/year) |

$\approx 1,445$ Additional MD annually coming into the market 2020 to 2030 | **does not bake in attrition**



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Supply Summary 2020→2030



By 2030.....

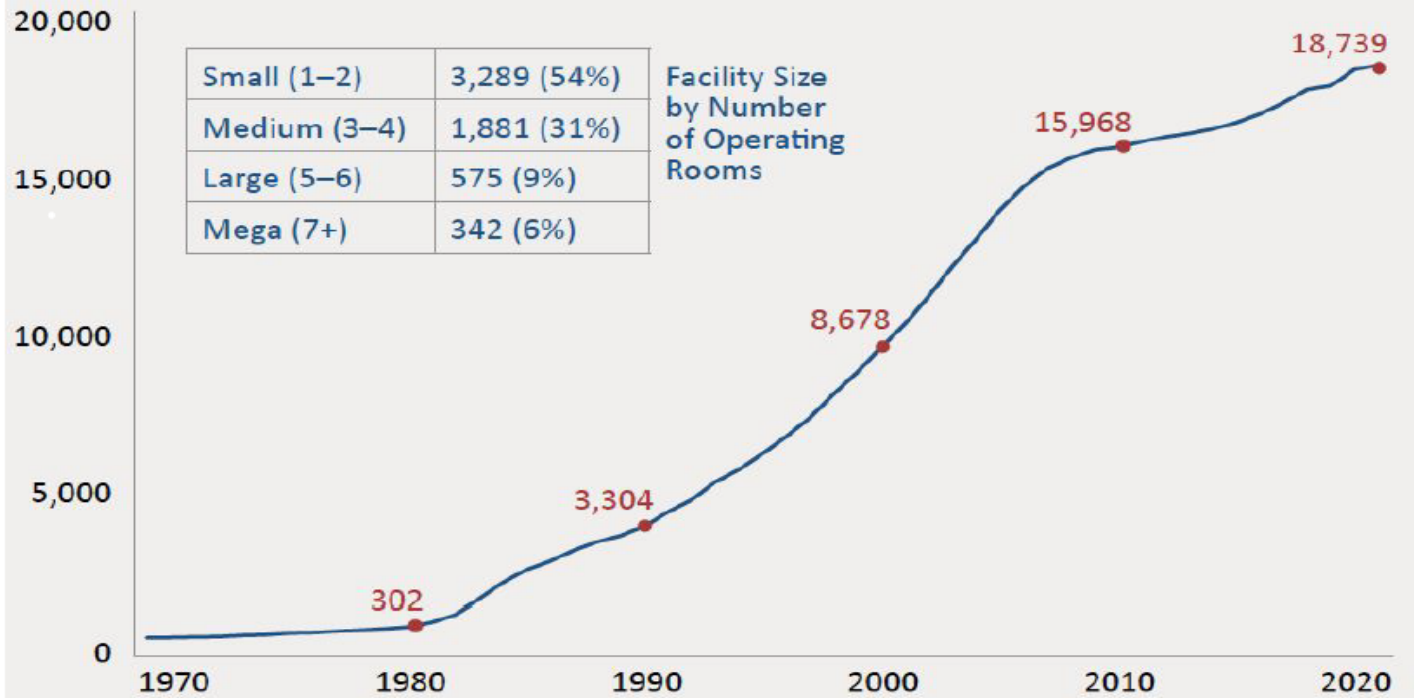
- ~ 600 additional CRNA on a year over year basis
- ~1,450 additional MD on a year over year basis
- ~2,050 additional year over year workforce additions 2020→2030
- Does not consider attrition d/t, for example, program closure

Market Growth

As the number of ASCs in the country grow, so too has the number of ORs in ASCs.

The majority of current ASCs are considered “Small” or “Medium” sized, with fewer than 4 operating rooms.

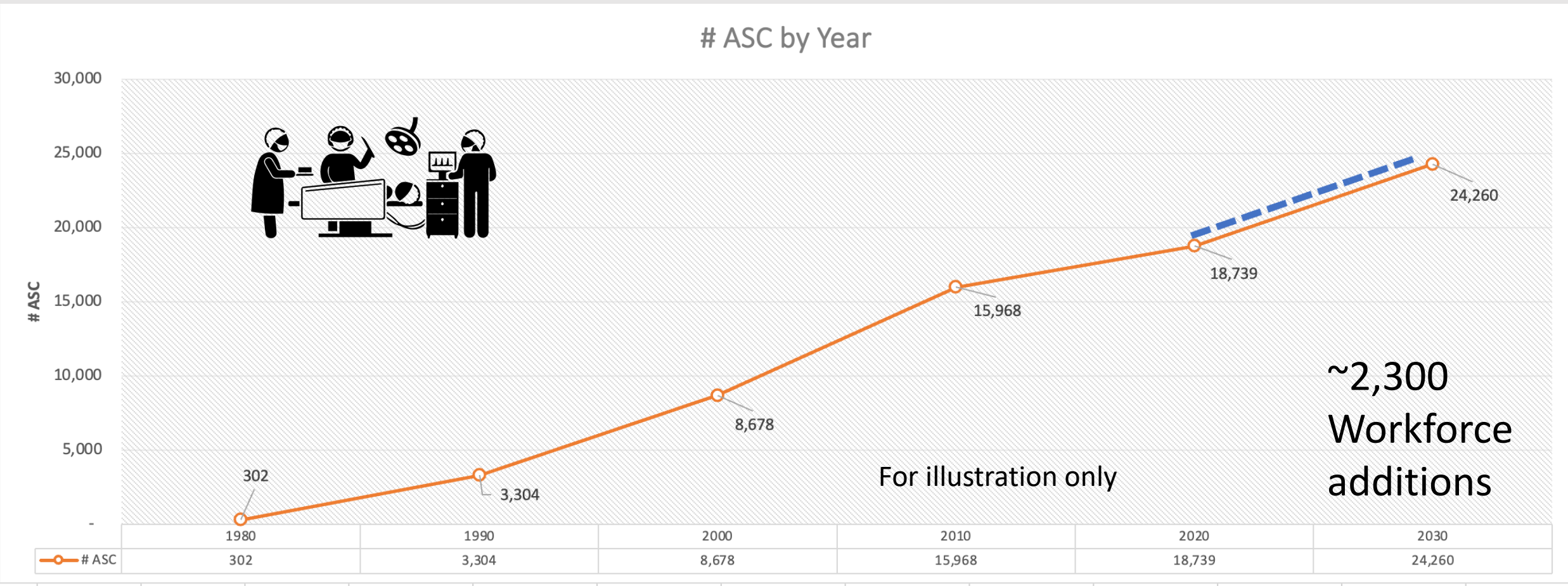
Number of ORs in ASCs per Year



Note: This group reflects the most recent reported number of operating rooms per ASC and does not account for changes in number of operating rooms since the ASC has opened.

Source: ASC Data, Q4 2022 Report

Incrementally, > 5,500 New ASC from 2020 to 2030
 $24,260 - 18,739 = 5,521$



These Additional ASC Add Operating Rooms Average

Weighted Average OR/ASC = 2.81 OR / ASC

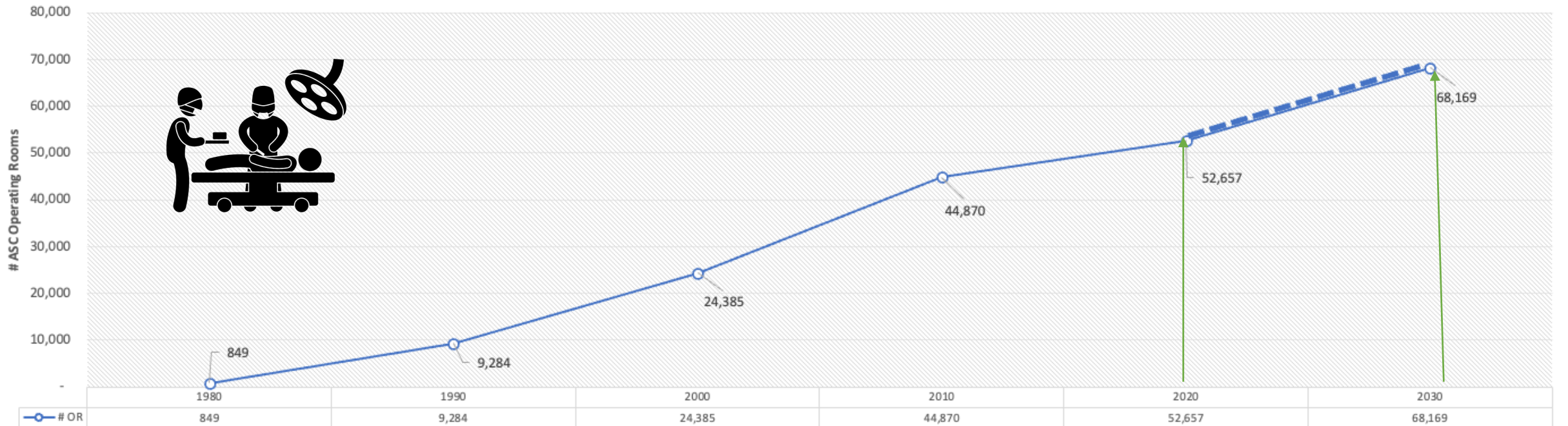
ASC Size	# OR	Percent	
Small	1.5	54%	0.81
Medium	3.5	31%	1.085
Large	5.5	9%	0.495
Mega	7	6%	0.42
Weighted average--->			2.81

Incrementally, > 15,500 New ASC OR 2020→2030

68,169- 52,657 = +15,512 additional OR



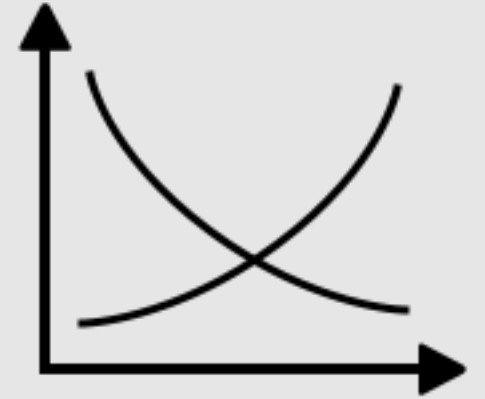
ASC Operating Rooms by Year



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Demand Summary 2020 → 2030

- Currently, Weighted Average # ASC OR = 2.81
- New ASC from 2020 to 2030 = 5,521
- New Operating Rooms from 2020 to 2030 = 15,512
- Does not consider attrition, for example, ASCs that might shut down



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Situation Could be Worse than Predicted

- 2020 to 2030 = ~2,050 New Providers Y-O-Y
- 2020 to 2030 = ~15,512 New ASC OR
- We will have ~2,050 new providers for ~15,500 new ASC OR
- Calculations do NOT consider those leaving profession
- Calculation do NOT consider other providers sinks (Hospital OR + Office-Based)



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Macro Efforts to Mitigate: Helpful?

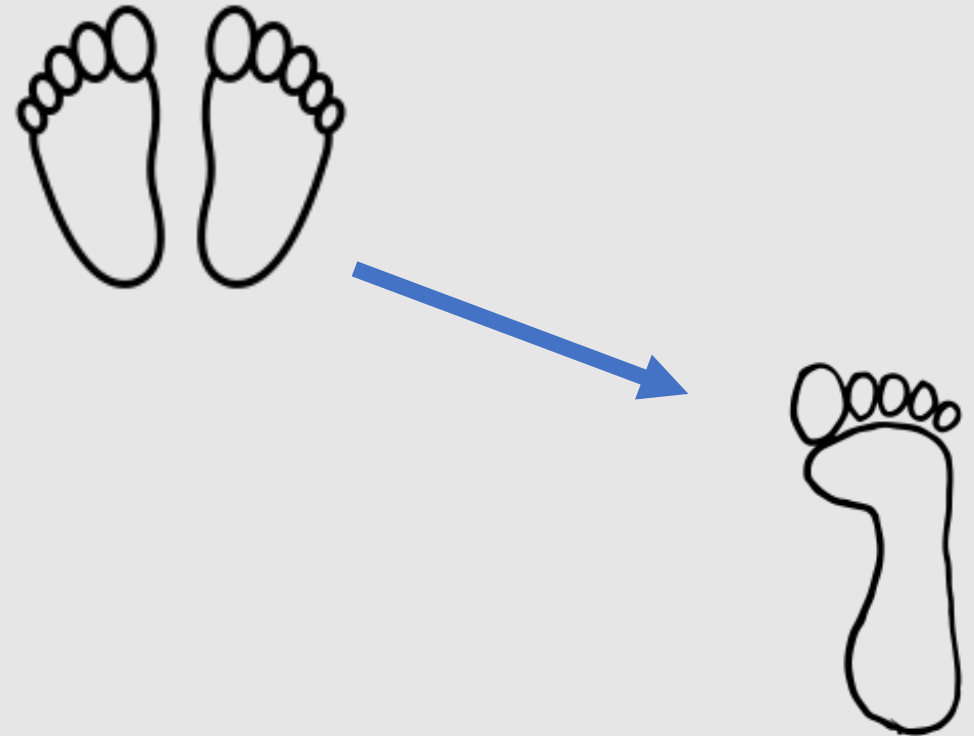
- Contraction of coverage footprint through improved OR utilization
- ACGME NST Fellowships (J1)
- Anesthesia Assistants
- Alternate sedation providers (Anesthesiologist, CRNA, AA, RN, NP, PA, MD)

Compounding Factors>>>> Mitigating Factors

Local Efforts

- Improve utilization coverage heat maps → efficient scheduling

Room	OR 1	OR 2	OR 3	OR 4
Av. Case Mins	77	308	123	71
Turnover	30	30	30	30
7:00	2%	11%	12%	3%
8:00	16%	29%	22%	28%
9:00	24%	34%	31%	31%
10:00	23%	30%	31%	27%
11:00	21%	26%	26%	24%
12:00	24%	24%	22%	29%
13:00	19%	23%	19%	19%
14:00	12%	18%	17%	16%
15:00	8%	16%	18%	10%
16:00	6%	11%	19%	4%



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What and when are we staffing

- By changing hours of location, utilization rises
- By changing number of locations, overall utilization rises

Approximate Current								Optimized Forecast							
Utilization for rooms: []								Utilization for rooms: []							
Common Specialties: URO, Gen, Ca, Vasc, Hybrid								Common Specialties: URO, Gen, Ca, Vasc, Hybrid							
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		Mon	Tue	Wed	Thu	Fri	Sat	Sun
7A-3P															
ORs	7	7	7	7	7	1	1	ORs	6	7	7	5	5	1	1
3P-11P OR															
3p-5p	7	7	7	7	7	1	1	3p-5p	4	4	4	4	4	1	1
5p-7p	3	3	3	3	3	1	1	5p-7p	3	3	3	3	3	1	1
7p-9p	2	3	2	2	2	1	1	7p-9p	2	3	2	2	2	1	1
9p-11p	1	1	1	1	1	1	1	9p-11p	1	1	1	1	1	1	1
11P - 7A	1	1	1	1	1	1	1	11P - 7A	1	1	1	1	1	1	1
Turnover	30		# Cases: 2362		Av. Cases/OR: 337			Turnover	30		# Cases: 2362		Av. Cases/OR: 394		
# Cases	449	535	536	372	410	30	30	# Cases	449	535	536	372	410	30	30
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		Mon	Tue	Wed	Thu	Fri	Sat	Sun
7A-3P															
ORs	50%	61%	60%	40%	45%	13%	16%	ORs	59%	61%	60%	55%	63%	13%	16%
3P-11P															
3p-5p	32%	34%	30%	31%	28%	16%	21%	3p-5p	57%	59%	53%	54%	49%	16%	21%
5p-7p	53%	41%	38%	38%	34%	14%	14%	5p-7p	53%	41%	38%	38%	34%	14%	14%
7p-9p	41%	14%	20%	19%	20%	14%	6%	7p-9p	41%	14%	20%	19%	20%	14%	6%
9p-11p	15%	9%	8%	6%	10%	6%	2%	9p-11p	30%	18%	17%	12%	20%	13%	5%
11P - 7A	4%	5%	3%	1%	3%	5%	0%	11P - 7A	4%	5%	3%	1%	3%	5%	0%

Goals ?

- Reduce rooms
- Utilization 65-85%+
- Patient access
- Surgeon access

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Operationalization

- By reducing footprint of coverage, utilization rises
 - Overall: Reduce # of OR | Reduce hours of operation
- PeriOperative Medicine Clinic can be helpful
 - Per OR basis: schedules into surgeon block
- Alternative Providers
 - RN, NP, PA, MD



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Results

- Leveraging tenure
- 100% Coverage
 - Alternative providers
 - Utilization
 - PeriOperative Medicine Clinics

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