

Negotiating a Service Agreement

Kevin K. Tremper, PhD, MD

Robert B. Sweet Professor and Chair
Department of Anesthesiology



I'm afraid we may refer to **now**,
as the good old days



I'm afraid we may refer to **now**,
as the good old days

Financial pressures for all
make **cooperation** more
important than ever



Livonia Surgicenter
4 ORs

**Cardiovascular
Center** 8 ORs

**East Ann Arbor
Surgicenter**
6 ORs

Cancer Center
2 ORs

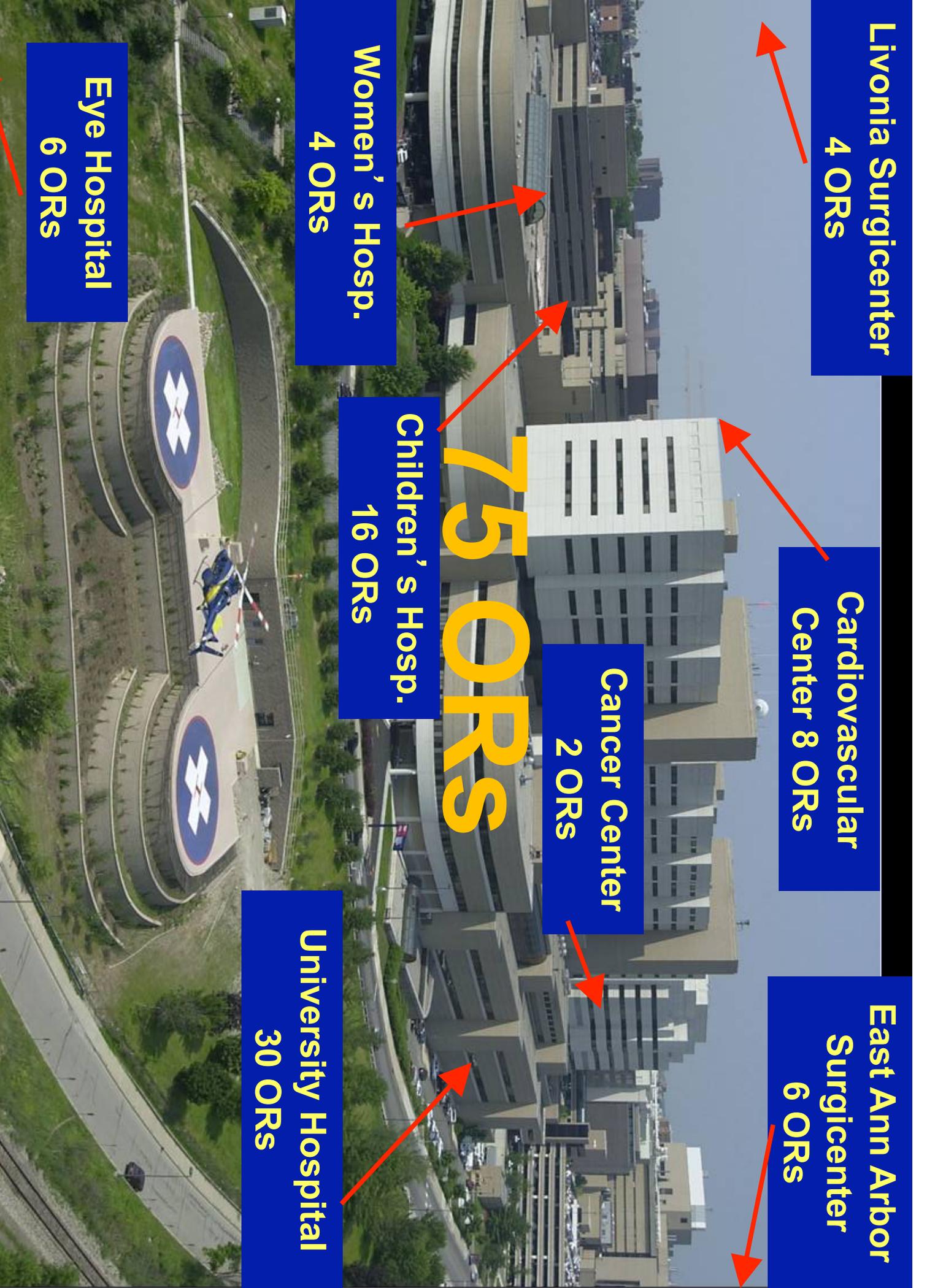
75 ORs

Women's Hosp.
4 ORs

Children's Hosp.
16 ORs

University Hospital
30 ORs

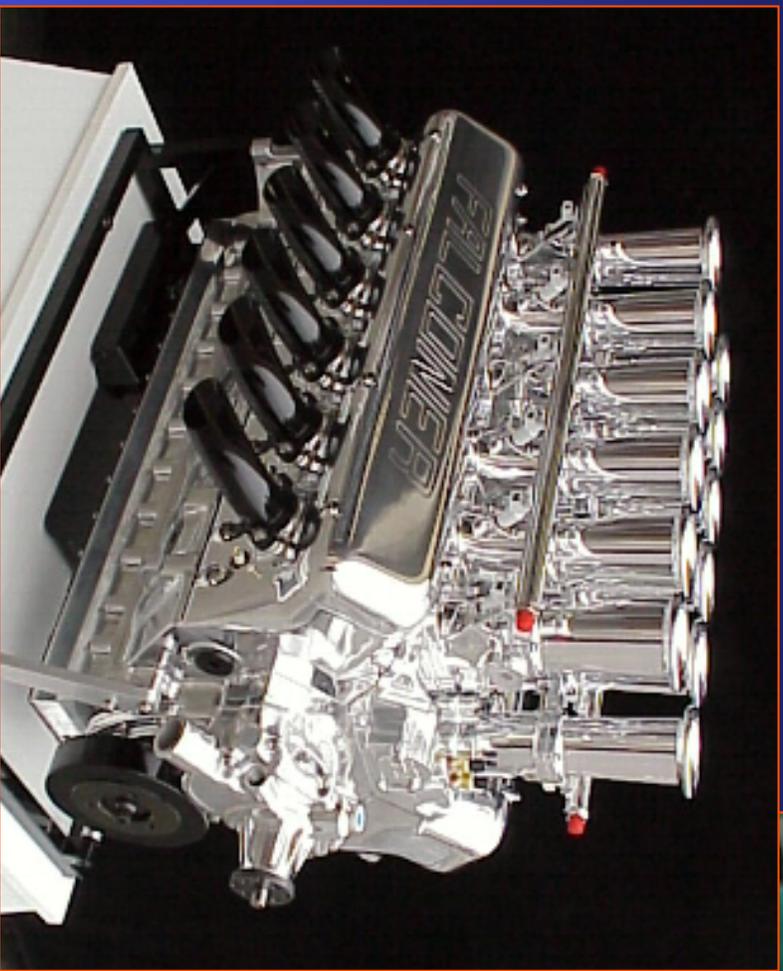
Eye Hospital
6 ORs



We are a High Performance Gas Guzzler, \$3 Billion Budget



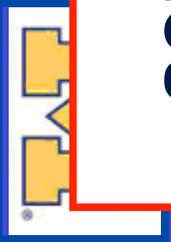
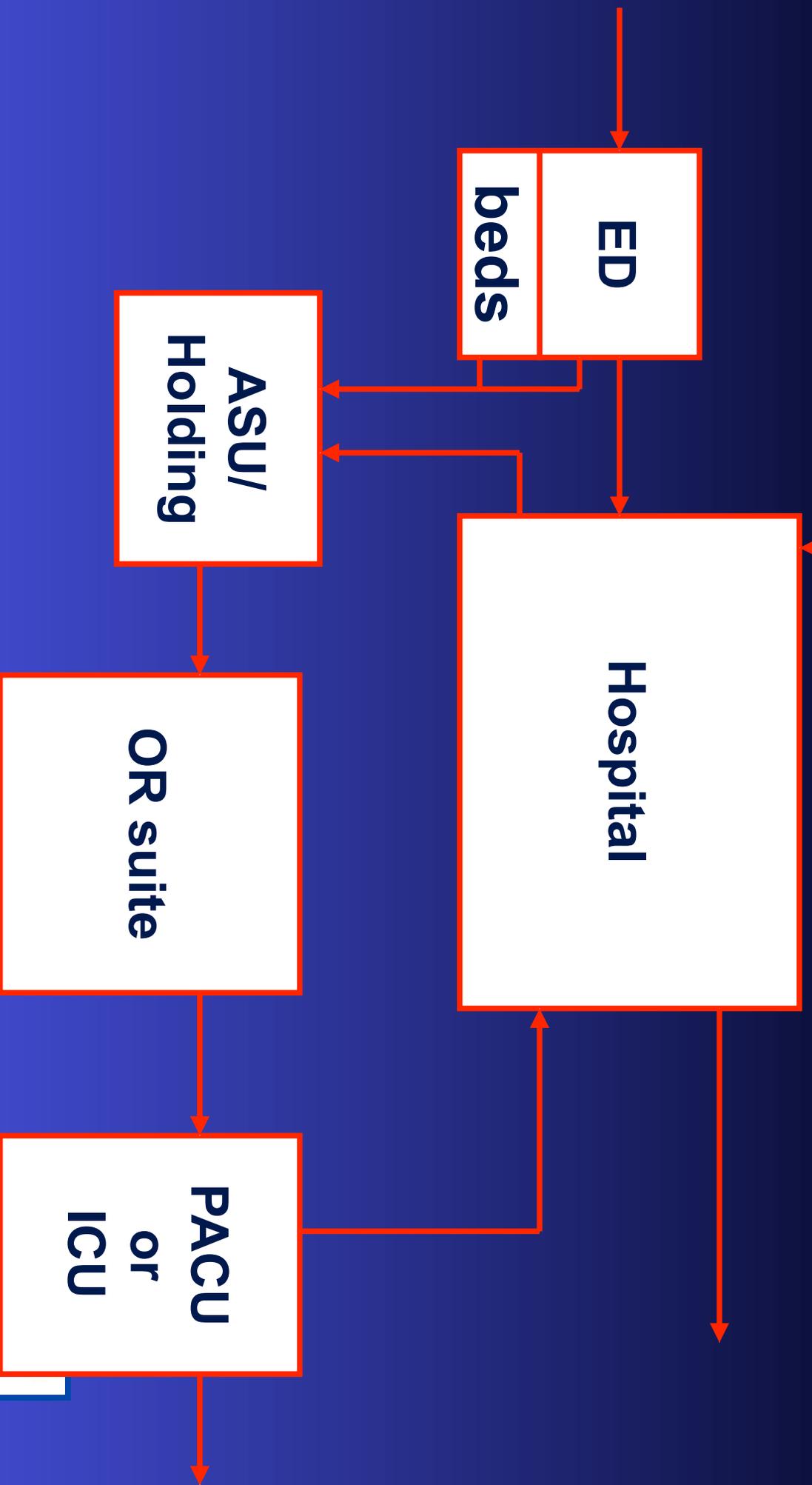
The OR is the Financial Engine of the Clinical Enterprise



**\$80 Million in Profit
(FY 2010)**



Basics of process analysis





GO BREW!

REGULARS		EXTRAS	
Espresso	1.50	Espresso	1.50
Latte	2.50	Flavored Syrup	0.20
Cappuccino	2.50	Vanilla, Caramel, Raspberry	
Mocha	3.00	Hot Cocoa, Sugar Free Vanilla	
Hot Chocolate	2.50		
Smoothie	3.50		
Smoothie (Large)	4.00		
Smoothie (Tall)	4.50		
Smoothie (X-Tall)	5.00		
Smoothie (XX-Tall)	5.50		
Smoothie (XXX-Tall)	6.00		
Smoothie (XXXX-Tall)	6.50		
Smoothie (XXXXX-Tall)	7.00		
Smoothie (XXXXXX-Tall)	7.50		
Smoothie (XXXXXXX-Tall)	8.00		
Smoothie (XXXXXXXX-Tall)	8.50		
Smoothie (XXXXXXXXX-Tall)	9.00		
Smoothie (XXXXXXXXXX-Tall)	9.50		
Smoothie (XXXXXXXXXX-Tall)	10.00		
Smoothie (XXXXXXXXXX-Tall)	10.50		
Smoothie (XXXXXXXXXX-Tall)	11.00		
Smoothie (XXXXXXXXXX-Tall)	11.50		
Smoothie (XXXXXXXXXX-Tall)	12.00		
Smoothie (XXXXXXXXXX-Tall)	12.50		
Smoothie (XXXXXXXXXX-Tall)	13.00		
Smoothie (XXXXXXXXXX-Tall)	13.50		
Smoothie (XXXXXXXXXX-Tall)	14.00		
Smoothie (XXXXXXXXXX-Tall)	14.50		
Smoothie (XXXXXXXXXX-Tall)	15.00		
Smoothie (XXXXXXXXXX-Tall)	15.50		
Smoothie (XXXXXXXXXX-Tall)	16.00		
Smoothie (XXXXXXXXXX-Tall)	16.50		
Smoothie (XXXXXXXXXX-Tall)	17.00		
Smoothie (XXXXXXXXXX-Tall)	17.50		
Smoothie (XXXXXXXXXX-Tall)	18.00		
Smoothie (XXXXXXXXXX-Tall)	18.50		
Smoothie (XXXXXXXXXX-Tall)	19.00		
Smoothie (XXXXXXXXXX-Tall)	19.50		
Smoothie (XXXXXXXXXX-Tall)	20.00		
Smoothie (XXXXXXXXXX-Tall)	20.50		
Smoothie (XXXXXXXXXX-Tall)	21.00		
Smoothie (XXXXXXXXXX-Tall)	21.50		
Smoothie (XXXXXXXXXX-Tall)	22.00		
Smoothie (XXXXXXXXXX-Tall)	22.50		
Smoothie (XXXXXXXXXX-Tall)	23.00		
Smoothie (XXXXXXXXXX-Tall)	23.50		
Smoothie (XXXXXXXXXX-Tall)	24.00		
Smoothie (XXXXXXXXXX-Tall)	24.50		
Smoothie (XXXXXXXXXX-Tall)	25.00		
Smoothie (XXXXXXXXXX-Tall)	25.50		
Smoothie (XXXXXXXXXX-Tall)	26.00		
Smoothie (XXXXXXXXXX-Tall)	26.50		
Smoothie (XXXXXXXXXX-Tall)	27.00		
Smoothie (XXXXXXXXXX-Tall)	27.50		
Smoothie (XXXXXXXXXX-Tall)	28.00		
Smoothie (XXXXXXXXXX-Tall)	28.50		
Smoothie (XXXXXXXXXX-Tall)	29.00		
Smoothie (XXXXXXXXXX-Tall)	29.50		
Smoothie (XXXXXXXXXX-Tall)	30.00		
Smoothie (XXXXXXXXXX-Tall)	30.50		
Smoothie (XXXXXXXXXX-Tall)	31.00		
Smoothie (XXXXXXXXXX-Tall)	31.50		
Smoothie (XXXXXXXXXX-Tall)	32.00		
Smoothie (XXXXXXXXXX-Tall)	32.50		
Smoothie (XXXXXXXXXX-Tall)	33.00		
Smoothie (XXXXXXXXXX-Tall)	33.50		
Smoothie (XXXXXXXXXX-Tall)	34.00		
Smoothie (XXXXXXXXXX-Tall)	34.50		
Smoothie (XXXXXXXXXX-Tall)	35.00		
Smoothie (XXXXXXXXXX-Tall)	35.50		
Smoothie (XXXXXXXXXX-Tall)	36.00		
Smoothie (XXXXXXXXXX-Tall)	36.50		
Smoothie (XXXXXXXXXX-Tall)	37.00		
Smoothie (XXXXXXXXXX-Tall)	37.50		
Smoothie (XXXXXXXXXX-Tall)	38.00		
Smoothie (XXXXXXXXXX-Tall)	38.50		
Smoothie (XXXXXXXXXX-Tall)	39.00		
Smoothie (XXXXXXXXXX-Tall)	39.50		
Smoothie (XXXXXXXXXX-Tall)	40.00		
Smoothie (XXXXXXXXXX-Tall)	40.50		
Smoothie (XXXXXXXXXX-Tall)	41.00		
Smoothie (XXXXXXXXXX-Tall)	41.50		
Smoothie (XXXXXXXXXX-Tall)	42.00		
Smoothie (XXXXXXXXXX-Tall)	42.50		
Smoothie (XXXXXXXXXX-Tall)	43.00		
Smoothie (XXXXXXXXXX-Tall)	43.50		
Smoothie (XXXXXXXXXX-Tall)	44.00		
Smoothie (XXXXXXXXXX-Tall)	44.50		
Smoothie (XXXXXXXXXX-Tall)	45.00		
Smoothie (XXXXXXXXXX-Tall)	45.50		
Smoothie (XXXXXXXXXX-Tall)	46.00		
Smoothie (XXXXXXXXXX-Tall)	46.50		
Smoothie (XXXXXXXXXX-Tall)	47.00		
Smoothie (XXXXXXXXXX-Tall)	47.50		
Smoothie (XXXXXXXXXX-Tall)	48.00		
Smoothie (XXXXXXXXXX-Tall)	48.50		
Smoothie (XXXXXXXXXX-Tall)	49.00		
Smoothie (XXXXXXXXXX-Tall)	49.50		
Smoothie (XXXXXXXXXX-Tall)	50.00		





Why is there
always a line?



$$\text{Delay} = \frac{1}{\text{cap}} \frac{\rho}{1 - \rho} V$$

$$\rho = \frac{\text{Time demanded (hrs/day)}}{\text{Time available (hrs/day)}} = \text{Utilization}$$

ρ = Utilization V = Variability





$$\text{Delay} = \frac{1}{\text{cap}} \frac{\rho}{1 - \rho} V$$

$$\rho = \frac{\text{Time demanded (hrs/day)}}{\text{Time available (hrs/day)}} = \text{Utilization}$$

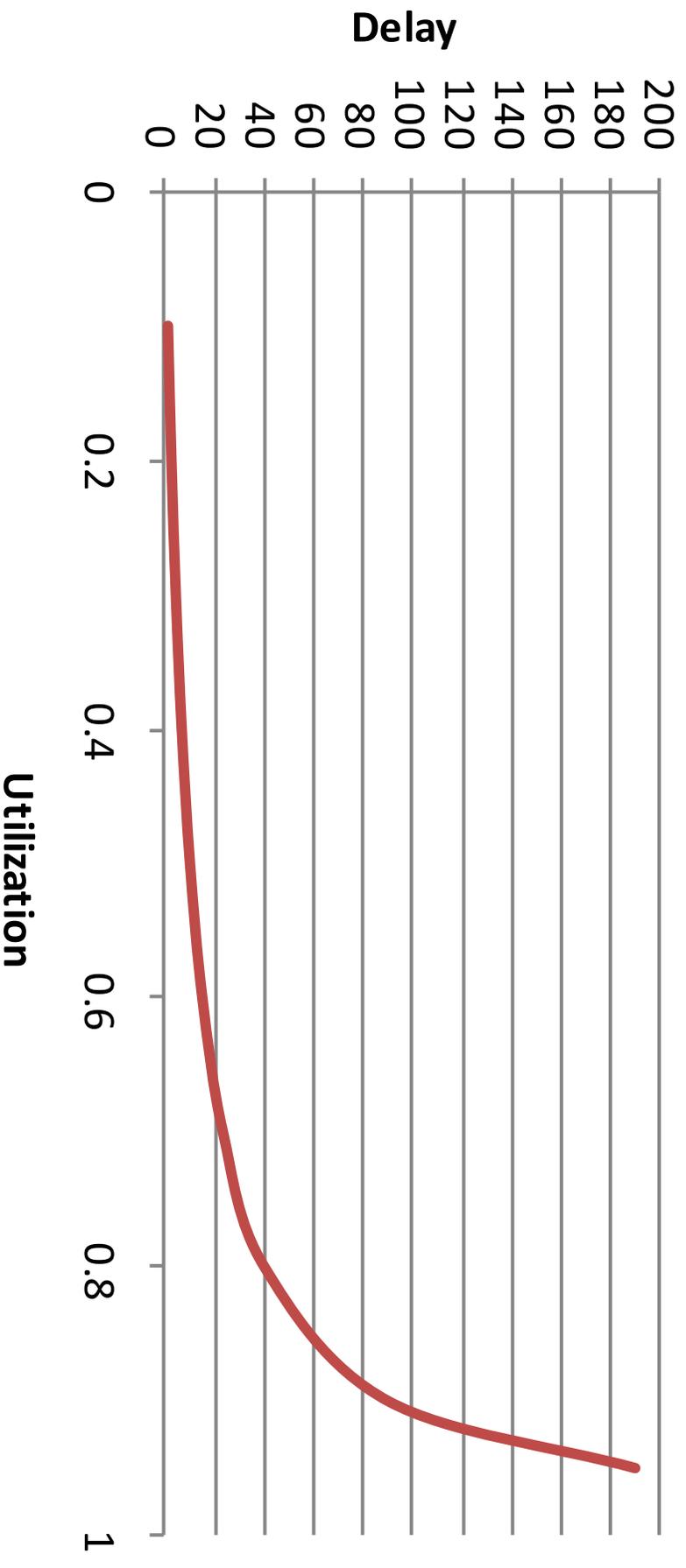
ρ = Utilization

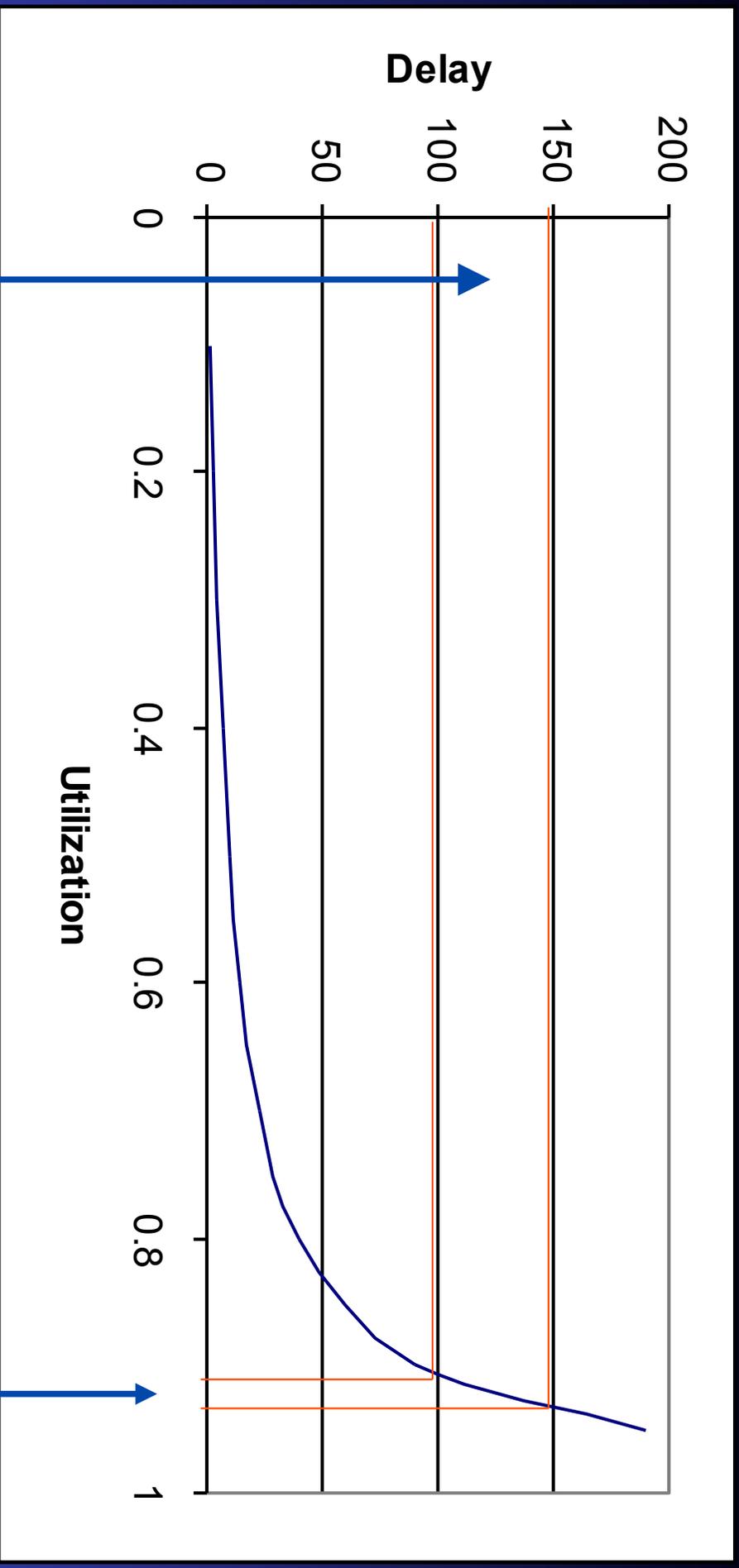
V = Variability





$$Delay = \frac{1}{cap} \frac{\rho}{1 - \rho}$$

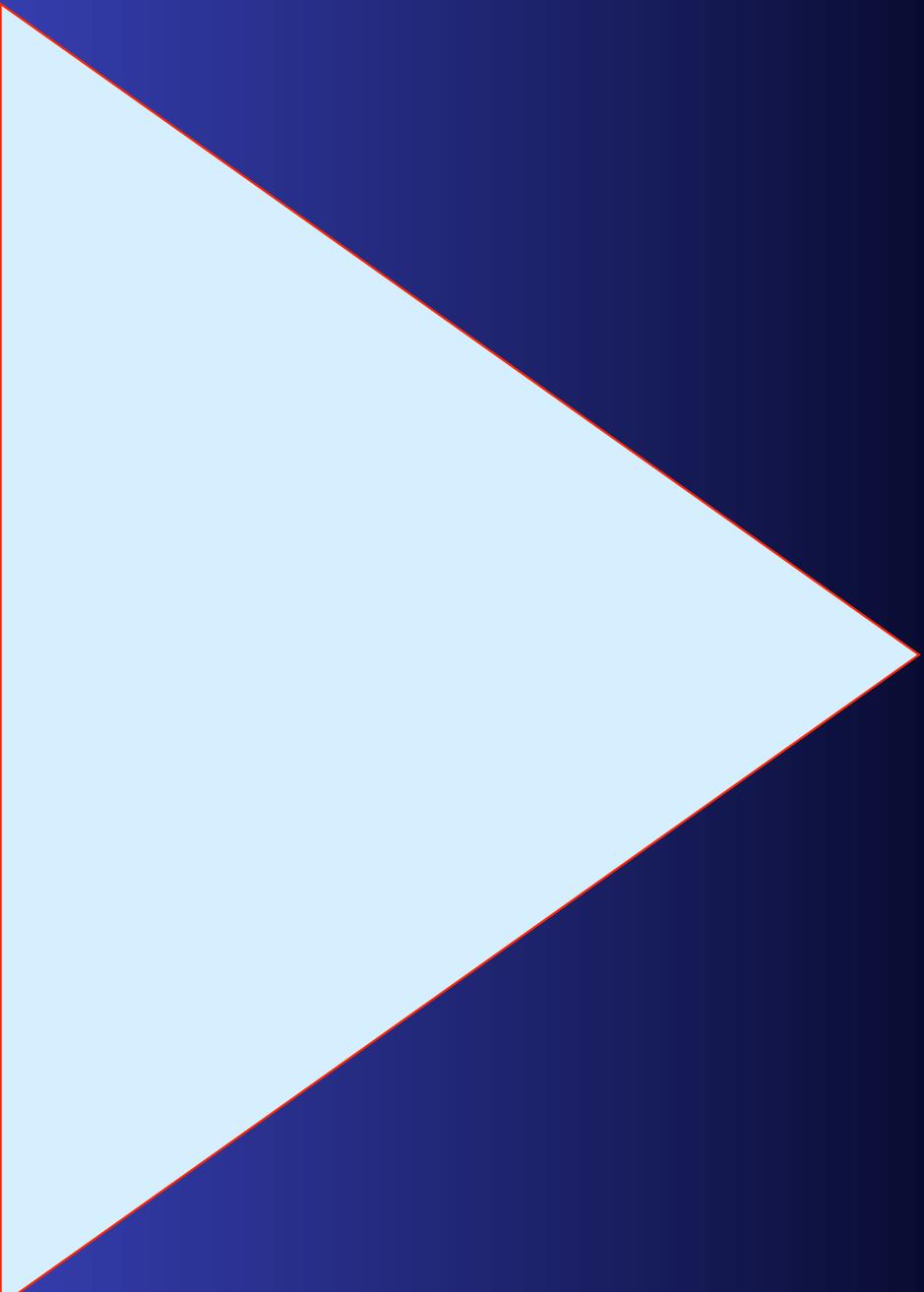




When you are highly congested a small change in utilization will translate into a large change in performance



Capacity

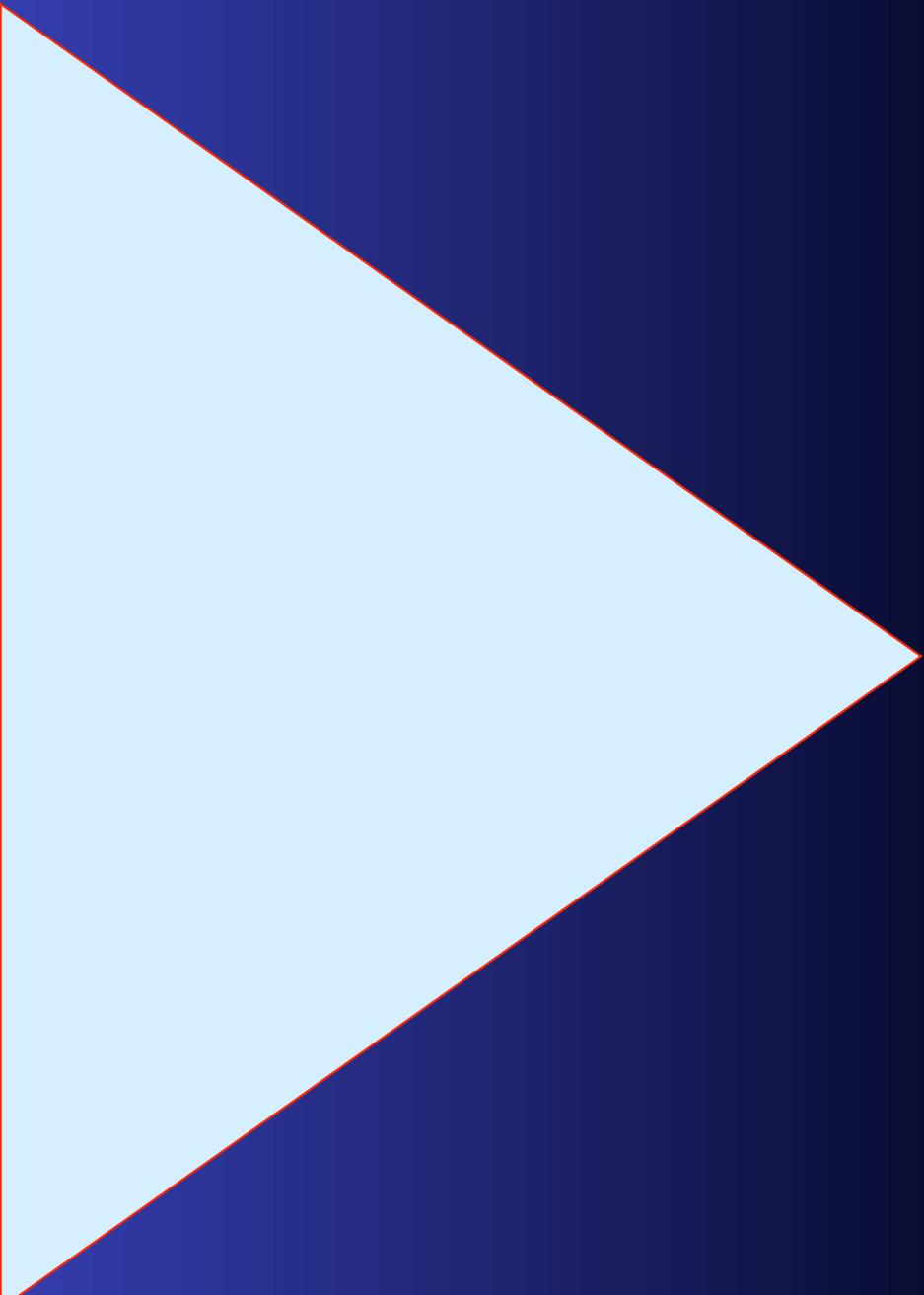


Variability

Delay/Quality



Capacity



Variability

Delay/Quality



Principles: Joint Service Providers

- Anesth Costs **Parallel** Hosp Costs
- Anesth Revenues **Parallel** Hosp Revenues
- High Utilization: **win /win**
- Requesters Have no **“Skin in the Game”**
- **Variability** is a Killer



Principles: Joint Service Providers

- Anesth Costs **Parallel** Hosp Costs
- Anesth Revenues **Parallel** Hosp Revenues
- High Utilization: **win /win**
- Requesters Have no **“Skin in the Game”**
- **Variability** is a Killer
- Bad Outcomes are **Expensive**



Anesthesiology Dept.



The Offensive Line of the Hospital



Start: Describe Your Needs

Educational → Strong Residency

Research → Strong Faculty



Discuss Hospital Service Needs

Clinical & Admin Services

- ORs : Coverage & Management
- OB
- Off Sites
- ICUs
- APS
- Sedation
- Preop Clinic
- JCAHO/SCIP/etc **Help**



Areas of Difficulty

- **CRNA Costs**
- **Offsite Services**
- **Academic Costs (time)**
- **Poor Utilization**



Areas of Difficulty

- CRNA Costs
- Offsite Services
- Academic Costs (time)
- Poor Utilization

Too Many ORs



The Hospital May think in Terms of Activity/Utilization..



The Hospital May think in Terms of Activity/Utilization.. You Need to Staff Coverage



FP



**Be Completely Open with
your Costs**

**Be Willing to Provide Services at
Costs (total costs)**



Be Completely Open with your Costs

Be Willing to Provide Services at
Costs (total costs)

- Salaries from AAAMC & SAAC
- Add Admin/Academic Support
- And All Overhead

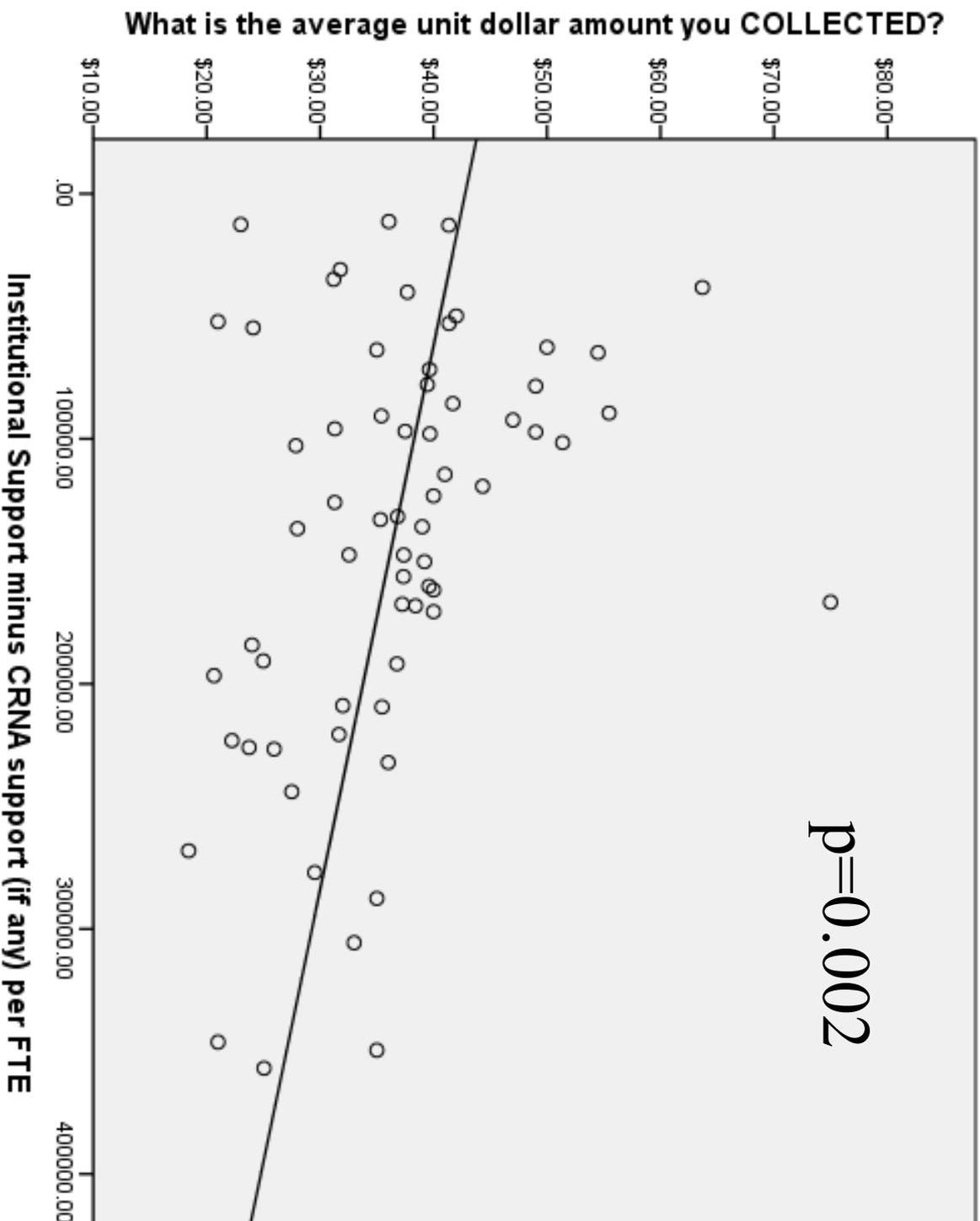


SAAA Salary Survey

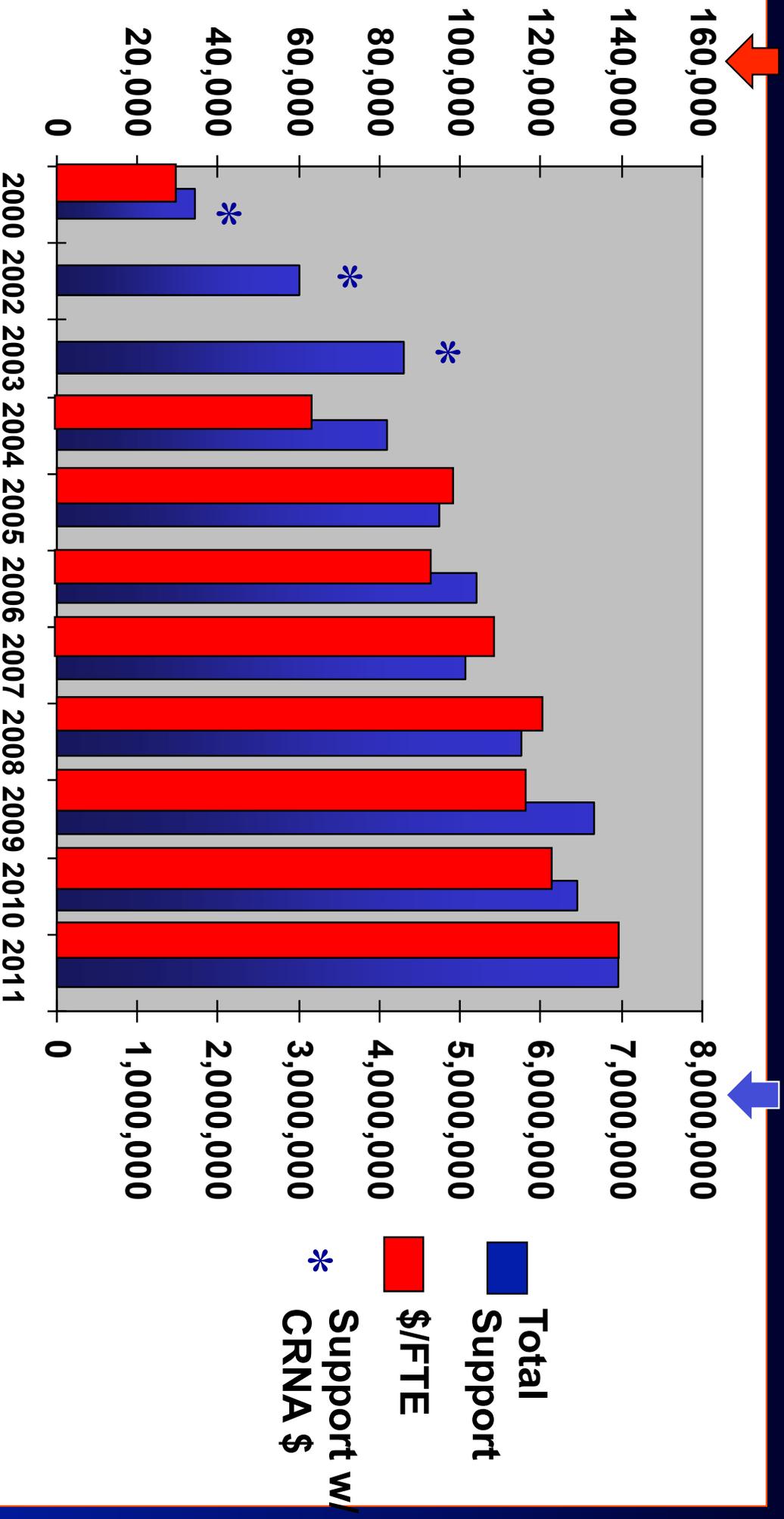
National Average (50th %)

	2010	2011	2007	2008	2009	2010	2011
	2000		2007	2008	2009	2010	2011
INST	144,250	281,500	256,182	259,500	271,146	281,500	269,000
ASST	183,000	305,250	273,920	288,000	299,203	305,250	306,145
ASSC	210,000	337,000	300,781	315,679	328,725	337,000	334,289
PROF	239,182	350,305	311,163	323,600	339,209	350,305	348,550

Support/faculty vs \$/unit



Total Department Support (without CRNA Support)



New Calculation

Sites Covered = OR Covered (38) + Non ORs (9) +

of Faculty/day:

OB = 1.3

ICU = 1.4

Acute pain = 1.1

Pain clinic = 2.0

Preop clinic = 1.0

Other faculty = $\frac{0.8}{54.6}$

“Sites Covered” = 54.6

Faculty = 54.5

“Average” Department Clinical Coverage

- ORs = 37.5

- Offsites = 9.1

$$\frac{\text{Faculty}}{\text{Sites}} = \frac{54.5}{53.4} = 1.02$$

- OB = 1.3

Sites = 53.4

- ICU = 1.4

- APS = 1.1

$$\frac{\text{Res/CRNA}}{\text{Sites}} = \frac{85.6}{53.4} = 1.60$$

- Pain = 2.0

- Preop = 1.0

53.4



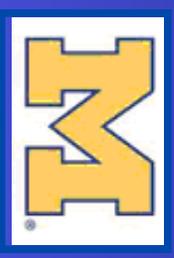
Determining Support Required

$$\frac{\text{Expenses/yr.}}{\text{Units Billed/yr.}} = \$ \quad X \quad \text{Exps/Unit}$$

$$\text{Avg \$ collected/unit} = \$ \quad Y \quad \underline{\hspace{1cm}}$$

$$\text{\$ needed \$/unit} = \$ \quad \underline{\hspace{1cm}}$$

$$\text{\$ needed/FTE} = \$ \quad \underline{\hspace{1cm}}$$



“Average” Department

57.3 Faculty 11,109 units/faculty

Total Expense	<u>\$35,281,498</u>	= \$59.99/unit
Total Units	588,092	(needed)

\$/unit needed \$59.99

\$/unit collected \$35.75

\$/unit support \$24.44/unit

Support \$24.44 x 588,092 = \$14,372,968
or \$250,837/faculty



Your Goal

**Provide the Safest most Cost-Effective
& Efficient Anesthesia Care**



Your Goal

**Provide the Safest most Cost-Effective
& Efficient Anesthesia Care**

Competitive Academic Salary

Competitive Academic Environment



Good Luck !

