

# Pros and Cons of Selling the Laboratory

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# Pros and Cons of Selling the Laboratory

PRESENTED BY DR. ANDREW FLETCHER

## Agenda

- Market Challenges
- Market Pressures
- Pros and Cons of Different Options
- Alternatives

# Market Challenges

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System and  
physician office  
consolidation

Potential for  
FDA oversight

Increase in  
outpatient care

Disruptive  
technologies

Reimbursement  
reform

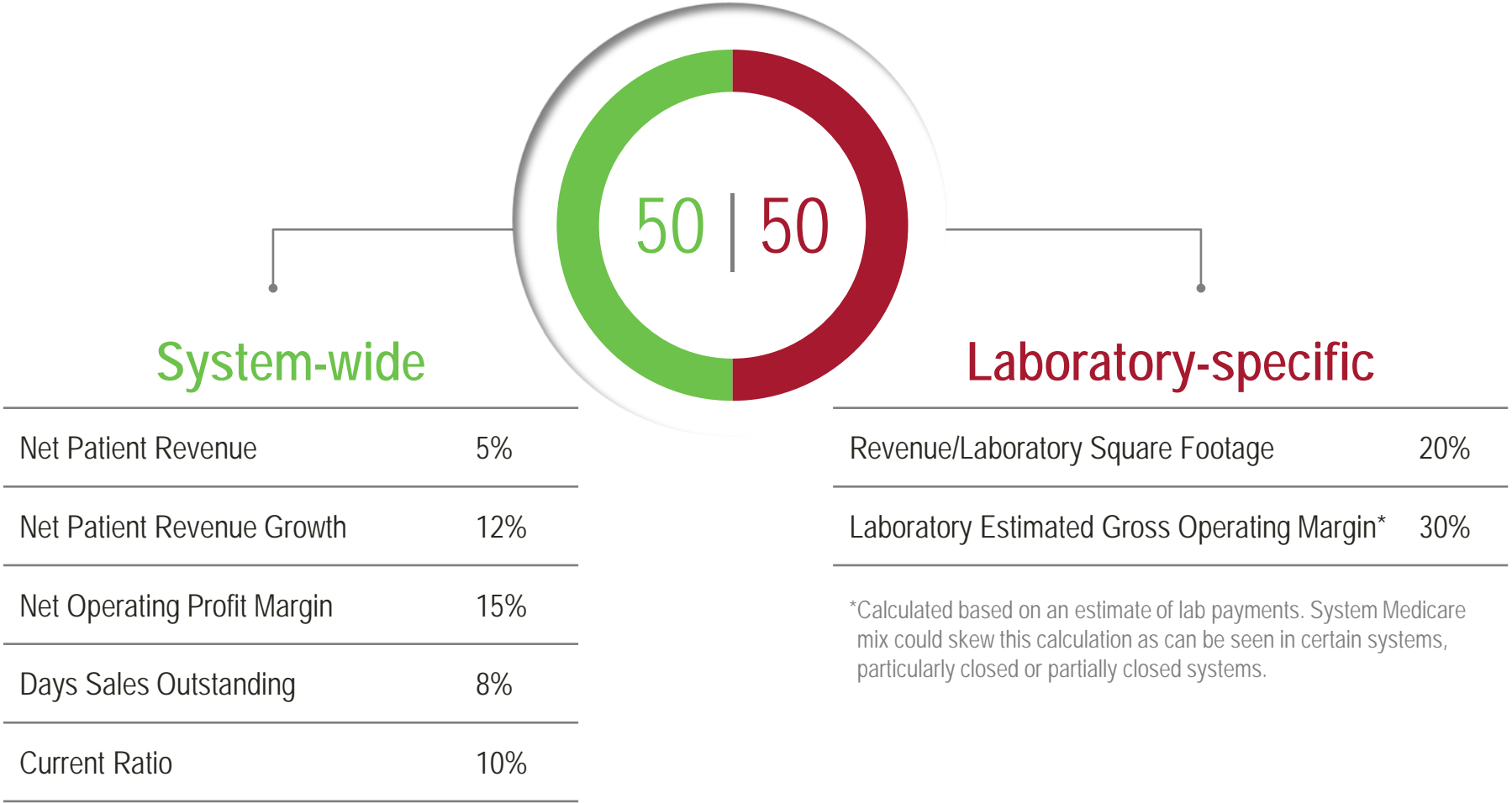
Precision  
medicine

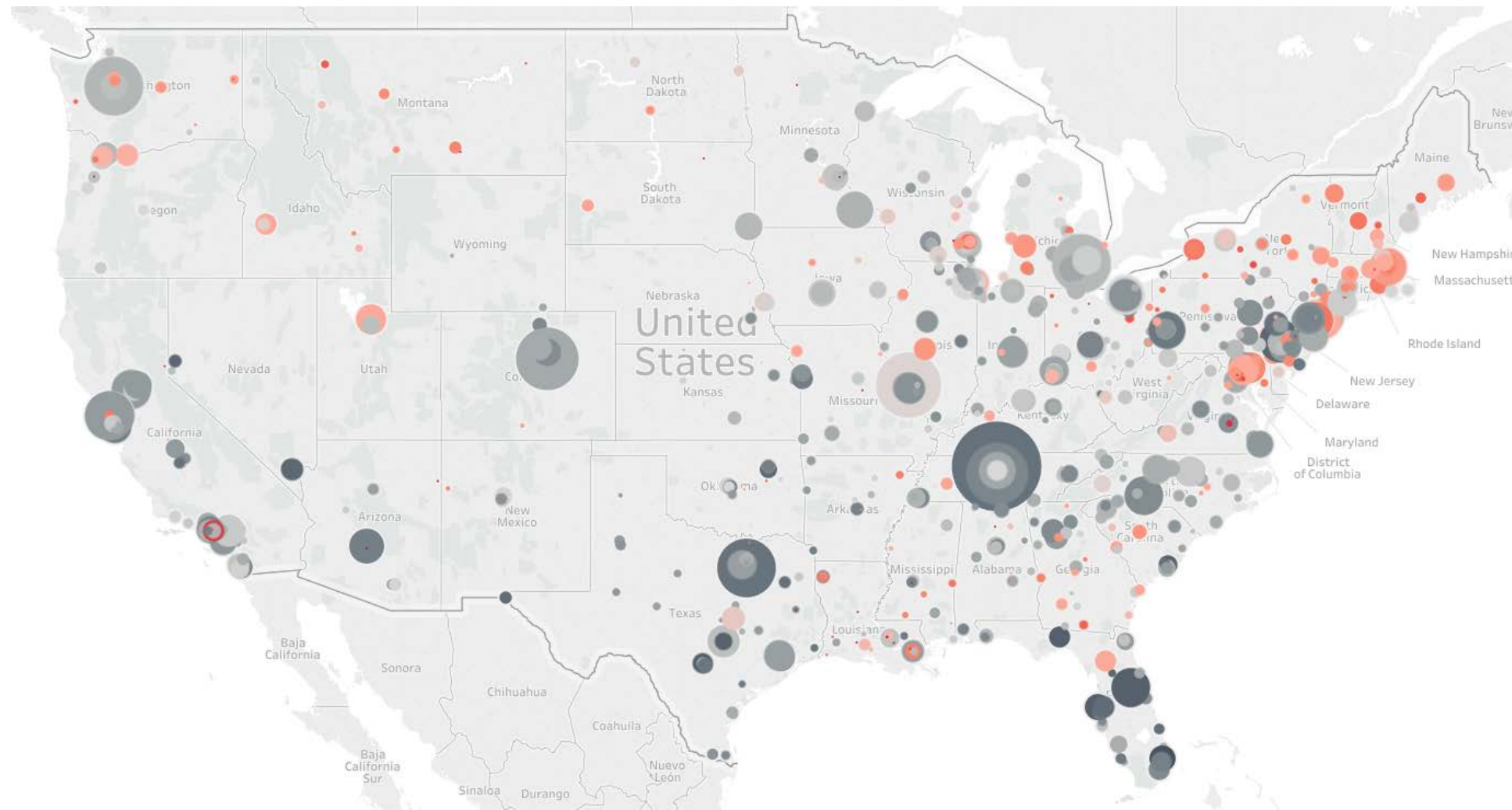
Consumer  
directed care/  
patient  
satisfaction

EHR integration/  
connectivity

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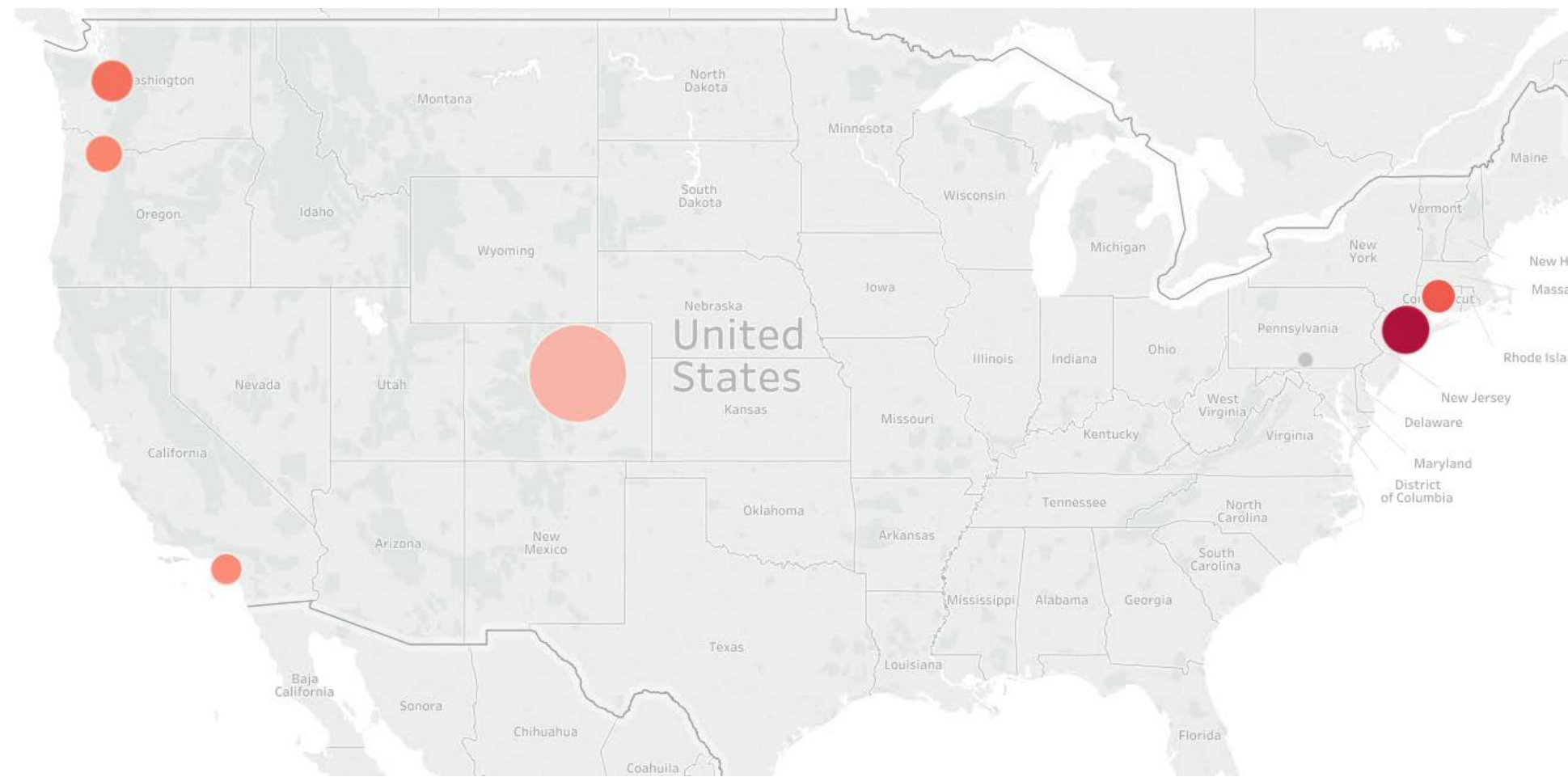
# Scoring Algorithm





This map represents the total score of system and laboratory financial strength among **all health systems** nationwide. The color scale is based on an algorithm that weights system-wide financial health and laboratory-specific metrics. The size of the circle corresponds to the size of the health system as determined by Net Patient Revenue. General regional trends indicate systems with the most laboratory and system financial stress seem to be found in the Northwest and Northeast.

# Recent Lab Acquisitions





# Acquisitions: Laboratory Scores

Health System	Lab Score	Lab Sq Ft	Rev/Lab Sq Ft	%	Lab Gross Margin	%	Affiliated Physician	Revenue/Physician	%	Out Pat %	%
Palmetto Health	22.10	105,597	1,401	31	52%	53	1,718	1,131,327	31	49%	41
Wentworth-McNelly Health System	37.65	55,099	2,917	66	71%	81	965	1,700,410	85	29%	10
Stamford Health	32.28	8,152	4,742	87	50%	50	360	1,106,788	27	73%	87
Wentworth-McNelly Health System	45.97	62,078	6,271	92	82%	92	1,350	1,635,580	81	39%	20
Palmetto Health	12.50	37,910	2,808	63	3%	0	1,440	1,642,530	88	78%	92
Wentworth-McNelly Health System	25.93	2,221,224	262	6	72%	83	2,653	1,357,809	59	62%	70
Wentworth-McNelly Health System	20.06	1,927,569	120	4	60%	64	2,955	1,357,261	59	41%	23
Palmetto Health	18.75	103,445	1,708	39	37%	36	2,440	1,255,903	46	39%	20
Wentworth-McNelly Health System	30.26	635,540	2,619	62	57%	60	13,392	1,250,449	46	47%	37

Impact from the laboratory-specific metrics were mixed, suggesting this is a secondary or tertiary reason for selling, but not always a primary metric in making “sell” decisions. There is one exception, who showed healthy system financial metrics, but here shows relatively poor laboratory-specific financial health.

% = percentile ranking by metric for each system versus all systems

# Acquisitions: Health System Scores

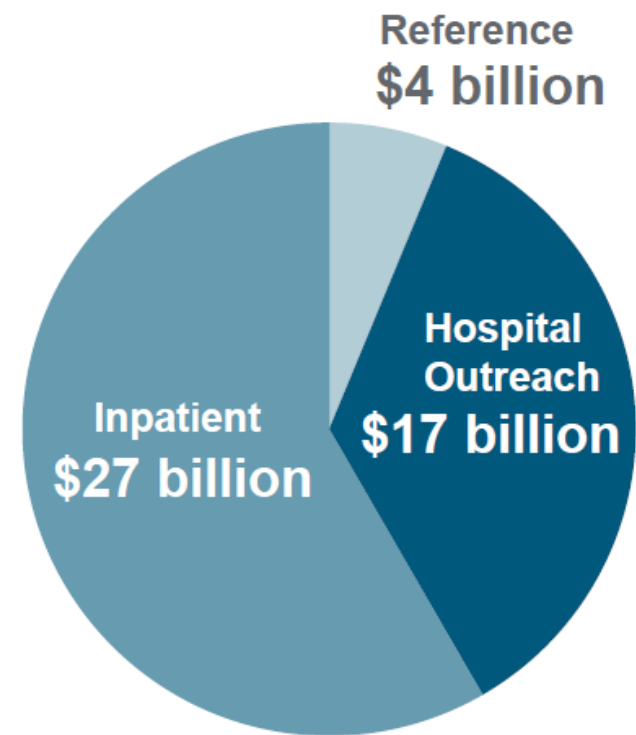
Health System	System Score	Net Patient Revenue	%	Revenue Growth	%	Net O.M.	%	DSO	%	Current Ratio	%
Advent Health	27.02	1,943,619,221	83	5.3%	65	-2.9%	29	47.2	56	2	62
Banner Health	17.01	1,640,895,169	80	-8.9%	5	-2.7%	30	60.0	22	2	62
Centura Health	30.16	398,443,505	35	3.5%	50	11.3%	88	33.6	92	1	19
HCW Acquisition (HCA)	35.82	2,208,033,423	87	3.5%	50	34.5%	100	52.9	39	3	74
Penumbra	32.38	2,365,242,878	50	3.3%	38	11.9%	88	43.3	75	3	63
Northwestern	19.27	3,602,267,075	94	1.0%	29	-24.2%	5	36.4	89	1	32
Northwestern	18.91	4,010,704,953	95	0.0%	23	-8.1%	16	46.9	57	2	45
Providence	32.83	3,064,402,973	92	8.4%	81	-0.7%	40	45.4	63	3	76
Carle Health	28.54	16,746,015,566	100	3.6%	51	0.4%	46	51.9	41	3	73

From a system perspective, most of the acquisitions show a negative net operating margin.

% = percentile ranking by metric for each system versus all systems



# Growth Strategy



Market Characteristics		DGX Opportunity
Reference Testing	~\$4 billion market	Grow reference and advanced diagnostics business
Hospital Outreach	~\$17 billion market	Acquire and/or partner on outreach business
Inpatient	~\$27 billion market	Professional Laboratory Services (PLS)

# From the System's Perspective

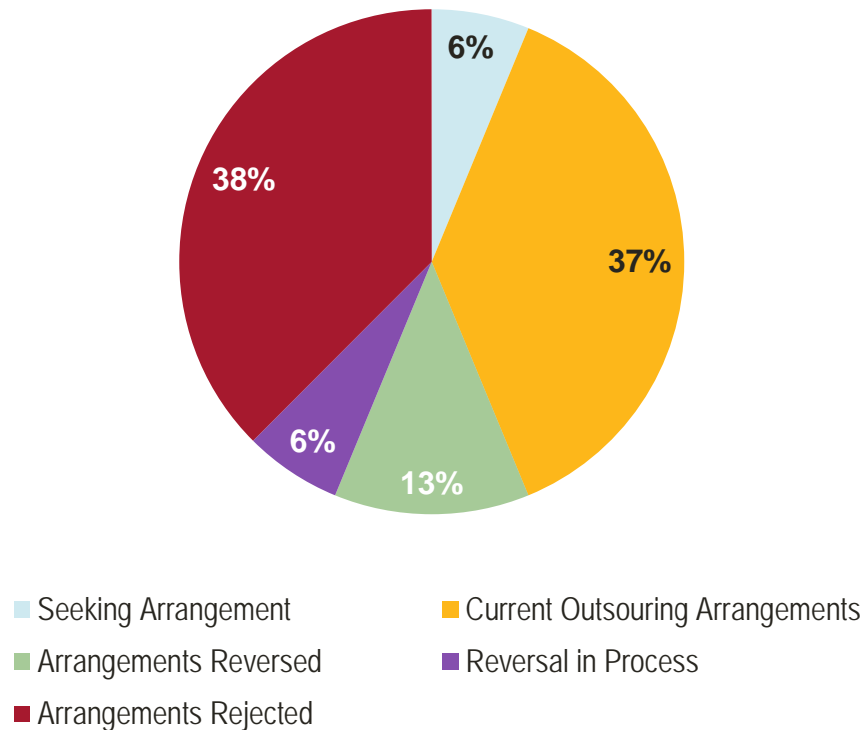
"We've watched carefully as other organizations have [outsourced their laboratories] and obviously we have concerns. I would have concern about alignment of mission. We think the lab is integral to the care of patients, and it will become rapidly more so with personalized medicine and the ability of information systems to deliver data in ever more powerful ways."

—Robert Stallone  
VP Laboratory Medicine, Northwell Health

# Lessons Learned: Association of Pathology Chairs

## FINDINGS FROM SURVEY REGARDING EXPERIENCE WITH OUTSOURCING RELATIONSHIPS

### Outsource Arrangement Status

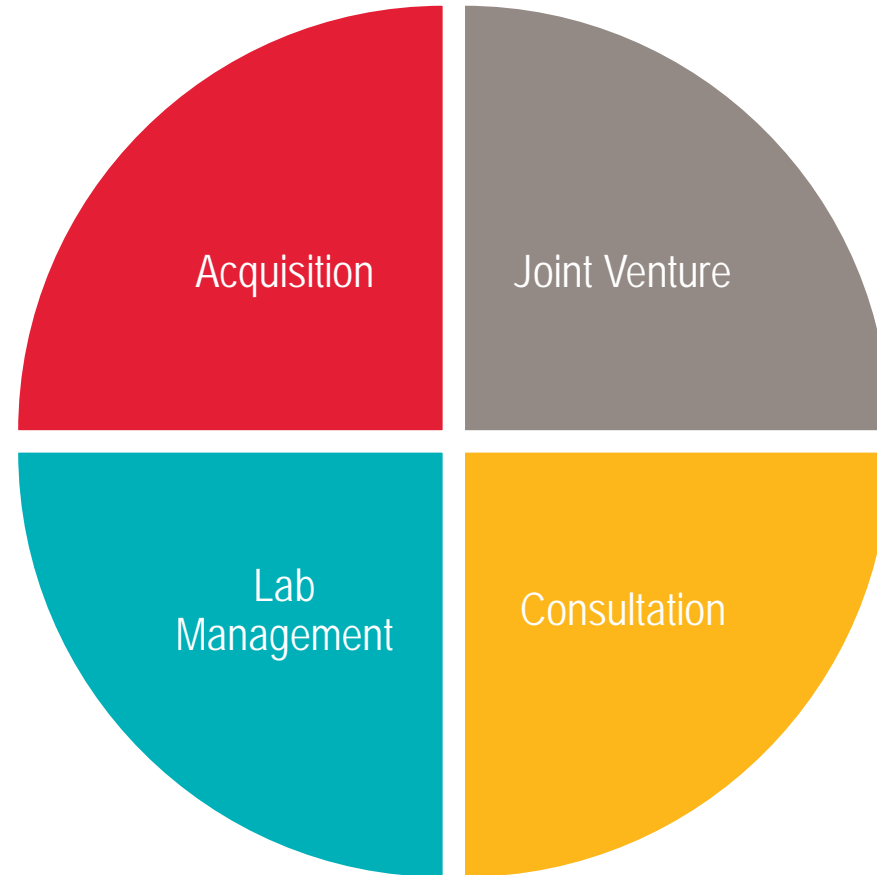


- Most JV arrangements were initiated by private lab and health system CEOs and often did not include input from pathology or laboratory leadership.
- Monetary gain was the major driving factor; however, the financial gains often fell short of expectations
  - Test pricing eventually began to increase
  - Lack of utilization control incentive by outsourced lab
  - On-site lab shrank in size to the detriment of patient satisfaction
  - Lack of clinician satisfaction
- Several systems have begun the process of reversing the decision to outsource laboratory

# Pros and Cons of Different Options



# Potential Partnership Structures



# Acquisition



## Pros:

- Full laboratory process standardization and automation
- Economies of scale
- Immediate cash influx
- Reduction in operating costs

## Cons:

- Hospital gives up ownership and control of laboratory
- Challenge of clinical integration
- Consolidation of testing
- Geographic distance from Hospital to regional testing center
- Reduction in FTE
- Misalignment of mission
- No incentive for Stewardship
- Lost revenue growth from Outreach
- Difficult to reverse



# Joint Venture



## Pros:

- Shared equity of laboratory
- Shared equity of laboratory growth opportunities
- Facilitates proper laboratory stewardship alignment
- Allows for laboratory process standardization
- Opportunities for economies of scale

## Cons:

- Specific terms will dictate willingness of both parties
- Complexities of billing and reimbursement around bundled payments (i.e. DRG and OPPS)
- Interdependencies required for success
- Legal considerations, perceived inducement, etc.
- Fee schedule considerations.

# Lab Management



## Pros:

- Hospital maintains full equity of laboratory
- Allows for laboratory process standardization and best practices
- Ability to achieve laboratory growth opportunities
- Synergistic cost savings opportunities could be realized by both parties including LIS, reagent purchases, and other integral systems

## Cons:

- How are employees managed?
- Benefits, salary, leadership or other levels
- Alignment of mission and incentive
- Staffing and workflow

# Consultative



## Pros:

- Hospital maintains full equity
- Drives improved Stewardship
- Allows for laboratory best practices improving efficiency
- Recommendations on how to achieve laboratory growth opportunities

## Cons:

- No cash influx and possible fee
- May leave unrealized potential opportunities on the table for both entities
- Most of execution burden falls to Hospital

# Financial Impact of Selling the Lab



# Three Focus Areas



Laboratory  
Stewardship



Laboratory  
Efficiencies



Laboratory  
Growth

# Laboratory Stewardship



Hospital	Total Charges	Potential Annual Savings	%
195-bed hospital (Northeast)	\$19,600,111	\$4,128,087	21%
419-bed hospital (Upper Midwest)	\$94,511,717	\$12,804,082	14%
Children's hospital (Upper Midwest)	\$12,635,262	\$1,266,516	10%
237-bed hospital (South)	\$43,047,787	\$10,698,392	25%
161-bed hospital (Southwest)*	\$77,926,758	\$9,942,054	13%
645-bed hospital (Southwest)*	\$211,943,118	\$37,916,511	18%
199-bed hospital (Southwest)*	\$70,251,035	\$15,813,898	23%
535-bed hospital (Southwest)*	\$144,127,890	\$27,008,611	19%
208-bed hospital (Southwest)*	\$56,348,672	\$10,973,516	19%
338-bed hospital (Southwest)*	\$78,046,058	\$13,476,036	17%
Average			18%

This sampling of 10 engagements represent an average of 18% **annual** savings we found from the utilization analysis reports. These are typically the highest opportunities within the hospital, but other smaller opportunities likely exist.

\*All part of one system that collectively also averaged 18% in savings for over \$638.6M in total charges





## Laboratory Efficiencies

### Case Study | 1,660-bed health system in Northeast

- Lab efficiencies not the focus
- Retrospectively found ~10% in potential opportunity

Potential Opportunity

**~10%**

### Case Study | University of Utah

- ARUP was already managing the hospital labs, but the university was managing the clinics.
- Consolidation of Point-of-Care (POC) Oversight
  - Standardize test methodologies
  - Standardize procedures and reporting
  - Standardize regulatory compliance oversight
  - Standardize validation and quality

Annual Savings

**34%**



## Laboratory Growth

### Case Study | National Data Set

Avg. Outreach Revenue	Avg. Total Lab Revenue
\$24,900,000	\$423,178,785

Using the national data set of health systems, we see the average total lab revenue to be just shy of \$425M. Chi Solutions/Accumen has estimated the average outreach program to be \$24.9M of the average total charges of all systems. All systems could benefit up to 6% (at minimum) from an outreach program, but existing programs would have to be considered individually.

### Case Study | Health System in Northeast

Current Outreach Revenues	Addressable Market	Current Share %	Market Opportunity %
\$77,038,830	\$404,874,720	19%	81%

The addressable market was determined using average net monthly revenues of \$6,000 per primary care physician and \$4,000 per specialty care physician. **Note: The market of just affiliated-physician leakage, in this case, represented over \$163M.**

# Potential Savings/Growth Opportunity



Laboratory Stewardship ~16–18%



Laboratory Efficiencies ~6–20%



Laboratory Growth ~6–10%

Potential Total

**~28–48%**

# Overview: Hospital “X”

Lab		
Revenue	\$244	(30% of \$813M charges)
Costs	\$82	
Margin	\$162	(60%)
System		
Revenue	\$1,780	
Costs	\$1,737	
Margin	\$43	(2.4%)
Patient Mix		
52% Inpatient; 48% Outpatient		
Lab % of DRG Charges		
9.5%		

\*All figures in \$ millions

# Laboratory Stewardship Effect at Hospital “X”



	Lab	System
Revenue	\$127 <i>inpatient only</i>	\$1,780
Costs	\$43	\$1,737
Margin	\$84	\$43
After 16% lab stewardship effect		
Revenue	\$107 <i>inpatient only</i>	\$1,780
Costs	\$36	\$1,730
Margin	\$71	\$50
Resulting change in margin		
Margin		\$7M

\*All figures in \$ millions

# Laboratory Stewardship



Blood utilization

Reference Test Formulary

In-house Testing

Ancillary services coordination





# Laboratory Efficiencies Effect



	Lab	System
Revenue	\$244	\$1,780
Costs	\$82	\$1,737
Margin	\$162	\$43
After 15% lab efficiency effect		
Revenue	\$244	\$1,780
Costs	\$70	\$1,725
Margin	\$174	\$55
Resulting change in margin		
Margin		\$12M

\*All figures in \$ millions

# Laboratory Efficiencies - Recommendation



## Centers of Excellence

- Consolidate testing within the system utilizing existing system strengths

## Centralization of Laboratory Services

- Stat and other essential testing only performed at hospitals (UofU model)
- Build/lease new facility or leverage existing laboratory space
- >30% total potential savings
- (note: does not account for details such as LIS, courier, support, etc.)

## Make vs. Buy

- Further evaluation on deciding what to perform vs. send out may net additional growth and savings opportunities

## Laboratory Management

- Aid change management efforts in embracing a new model through the entire system
- Such a model could positively support long-term or short-term interests while avoiding the cons of an outsourced model

# Laboratory Growth Effect



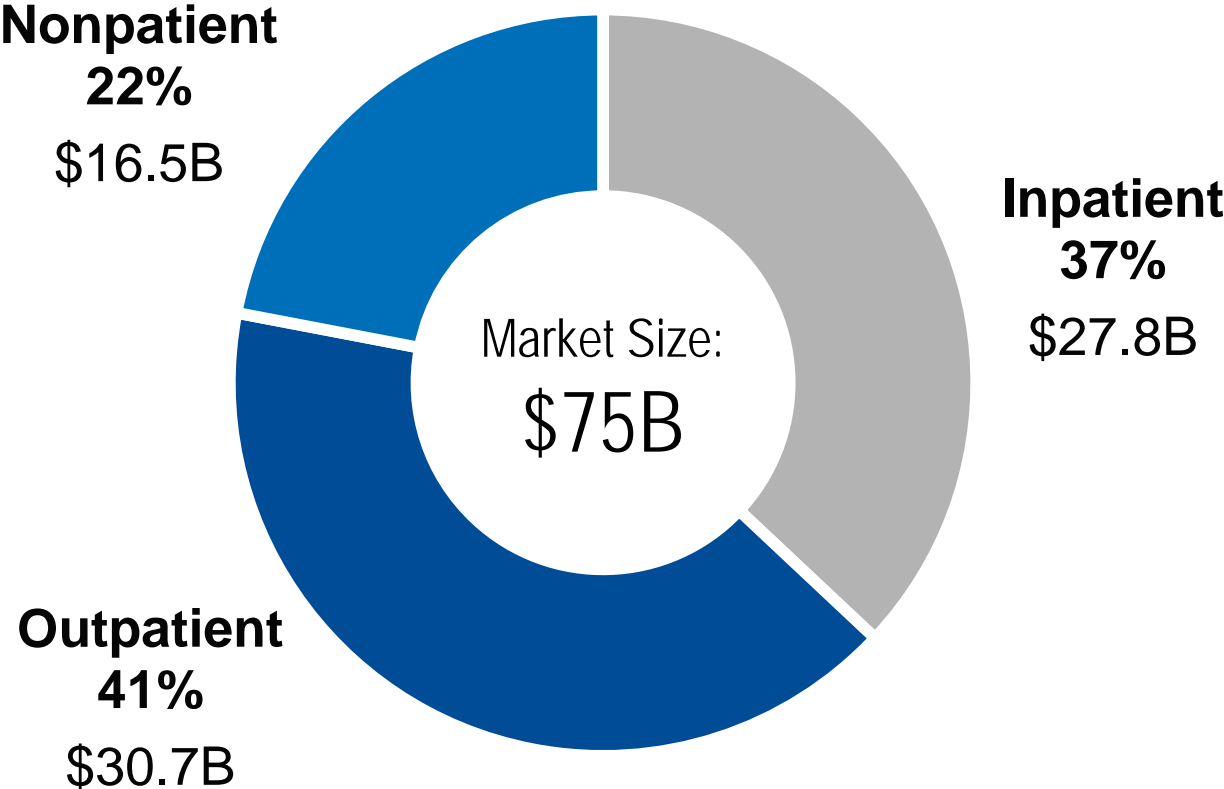
	Lab	System
Revenue	\$117 <i>out/nonpatient</i>	\$1,780
Costs	\$39	\$1,737
Margin	\$78	\$43
After 10% lab growth effect		
Revenue	\$129 <i>out/nonpatient</i>	\$1,792
Costs	\$43	\$1,741
Margin	\$86	\$51
Resulting change in margin		
Margin		

**\$8M**

\*All figures in \$ millions

\*\*Cost improvements are assumed due to lab efficiency effect

# Laboratory Market Size Estimate by Patient Type



# Laboratory Growth—Recommendation



## Planning Tools

- Outreach Infrastructure Evaluation
- Market Opportunity Assessment
- Business Planning Templates




## Operational Tools

- Courier Services
- Outreach Services Development
- Technical Assessments
- Compliance
- Direct Cost Analysis
- Interface

## Marketing & Sales Tools

- Marketing Strategy
- Marketing Collateral
- Sales Management & Training

# Potential Savings/Growth for Hospital “X”

	Laboratory Stewardship	~16–18%	\$7M
	Laboratory Efficiencies	~6–20%	\$12M
	Laboratory Growth	~6–10%	\$8M
Potential Total		~28–48%	\$27M



# Pros and Cons of Selling the Laboratory

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## Review

- Market Challenges
- Market Pressures
- Pros and Cons of Different Options
- Financial impact of selling the lab

# Thank You!

