



Creating an Ambulatory and Physician Office Market Development Strategy



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Outline/Agenda

- This educational session will take insights from market experts with differing points of view to dive into core tenets of strategy development and their specific impact on the ambulatory market.
- Learning Objectives
 1. Attendees will review how outpatient measurement and management has been developed across an entire state and individual facility levels.
 2. Attendees will review innovative data insights and the analytics health systems are utilizing to support their ambulatory strategy development.
 3. Attendees will review specific examples and tactics (provider placement, patient access, service capability development, etc.) on how to develop an ambulatory market strategy.

Starter Question



Our organization feels we have access to the **data and analytics we need to make meaningful strategic growth decisions** for the outpatient and ambulatory/physician office environment.

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Market Challenges

Outpatient Growth & Access Points

- The American Hospital Association forecasts project a 19% increase in HOPD volumes and 25% in ASC volumes over the next 6 years.¹
- Office-based diagnostics, imaging, and labs expected to increase by 20+%.¹



1 PRIMARY CARE PATIENTS

How loyal are our
established patients
on our primary care
provider panels?



2 EMERGENCY DEPARTMENT PATIENTS

Where do our ED
patients receive care
after receiving services
at our facilities?



3 URGENT/IMMEDIATE CARE PATIENTS

What opportunities exists
to maximize retention of
patients utilizing our urgent
care locations?

Being able to measure and manage success for outpatient access is extremely challenging, especially since the loyalty of patients utilizing each access point differs greatly.

Market Challenges

Provider Recruitment & Retention

- American Association of Physician Leadership - 2019 survey found 20% of doctors plan to make a career change within 12 months. As many as 70% change jobs within their first two years.²
- 25% of the U.S. population lives in rural areas, yet less than 10% of the country's doctors practice there.²
- In 2022, 60% of doctors attributed their burnout to administrative tasks, such as filling out insurance and billing forms.³

Outpatient Data Challenges

- Hospital Association Perspective
 - Lack of data for hospitals
 - How to use the data
- Health System Perspective
 - Timeliness
 - Resource-intensive
 - Comparison over time
 - Buy-in
- 3rd Party / Consulting Perspective
 - General lack of data: health systems don't know what they don't know
 - Over-complication of outpatient data
 - Letting perfect get in the way of progress; analysis paralysis

Outpatient Market Share KPI Development

Measure	&	Manage
<ul style="list-style-type: none">• What's our current state (benchmark)?• What are the trends over time?• What are the critical issues that my team needs to deal with?• Are we getting a return on investments for time and resources allocated?		<ul style="list-style-type: none">• Ensure reporting mechanisms are optimized to define opportunities for improvement and drill-down• Engage providers in root cause discussions• Build a plan and execute• Dig into areas showing issues

Goal: Create a repeatable system or program that keeps your organization focused on incremental improvement.

Outpatient Market Share KPI Development

Statewide Hospital Association

Patient Service Counts by **Cardiovascular** Sub-Service Lines

	2019		2020		2021 Q1	
	Count	Percent	Count	Percent	Count	Percent
Medical Cardiology	158,065	50.9%	143,376	51.3%	143,116	51.2%
Cardiovascular Imaging	96,836	31.2%	83,220	29.8%	83,448	29.9%
Other Cardiovascular Procedures	21,395	6.9%	17,857	6.4%	17,597	6.3%
Cardiac EP	11,795	3.8%	13,782	4.9%	14,113	5.0%
Vascular Catheterization	12,818	4.1%	12,493	4.5%	12,333	4.4%
Diagnostic Cardiac Catheterization	6,714	2.2%	5,836	2.1%	5,953	2.1%
Interventional Cardiac Catheterization	3,046	1.0%	2,887	1.0%	2,960	1.1%
Grand Total	310,669	100.0%	279,451	100.0%	279,520	100.0%

Patient Service Counts by **Imaging** Sub-Service Line

	2021 Q1		2021 Q2		2021 Q3		2021 Q4	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
X-Ray	98,940	41.5%	107,106	41.6%	107,754	42.4%	110,105	43.1%
Ultrasound	47,804	20.0%	52,084	20.2%	50,214	19.8%	49,365	19.3%
CT	47,246	19.8%	50,101	19.4%	48,955	19.3%	49,475	19.4%
Mammography	22,510	9.4%	24,299	9.4%	23,692	9.3%	23,379	9.2%
MRI	14,521	6.1%	15,898	6.2%	15,394	6.1%	15,419	6.0%
Other Imaging	7,539	3.2%	8,193	3.2%	7,871	3.1%	7,517	2.9%
Grand Total	238,560	100.0%	257,681	100.0%	253,880	100.0%	255,260	100.0%

Ambulatory and Physician Office **Imaging** Market Share by Billing Organization (Top 5 Shown for Each Sub-Service Line)

	2019		2020		2021 Q1	
	Count	Percent	Count	Percent	Count	Percent
X-Ray	46,926	12.6%	31,327	10.0%	29,834	9.9%
	33,961	9.1%	33,226	10.6%	35,309	11.8%
	38,116	10.2%	28,383	9.1%	25,125	8.4%
	23,636	6.3%	22,939	7.3%	20,113	6.7%
	21,606	5.8%	19,696	6.3%	18,303	6.1%

**Top 5 Billing
Organizations**

KPI Metric Components

- Overall share and share by patient county,
- Priority Service Line (Cardiovascular, Orthopedics, Oncology, Neurosciences, Physical Therapy/Rehab) and Top Billing Organizations and Sub-Service Line Billing Organization Breakdowns
- Procedural Cross Service Line Market Share; Top Procedural Volume Providers Identified
- Imaging Cross Service Line Market Share; Top Sub-Service Line Organization Breakdowns

Outpatient Market Share KPI Development

Statewide Hospital Association

Primary Care Market Share by Billing Organization (Top 20 Shown)								
Count and Percentage of Patient Services with an Internal Medicine or Family Medicine Physician								
Billing Organization (Top 20 Shown)	2021 Q1		2021 Q2		2021 Q3		2021 Q4	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
	15,276	8.2%	16,110	8.4%	16,086	8.8%	16,084	9.1%
	8,363	4.5%	8,626	4.5%	8,559	4.7%	8,465	4.8%
	7,697	4.1%	6,903	3.6%	6,074	3.3%	5,930	3.3%
	6,775	3.6%	7,011	3.6%	6,545	3.6%	5,973	3.4%
	7,054	3.8%	6,666	3.5%	5,996	3.3%	5,877	3.3%
	5,707	3.1%	6,472	3.4%	6,735	3.7%	6,462	3.6%
	6,083	3.3%	6,698	3.5%	6,041	3.3%	4,367	2.5%
	7,336	3.9%	7,990	4.1%	7,696	4.2%		
	8,222	4.4%	7,129	3.7%	4,796	2.6%	2,138	1.2%
	5,938	3.2%	5,681	2.9%	5,178	2.8%	5,370	3.0%
	5,384	2.9%	5,472	2.8%	5,013	2.7%	4,918	2.8%
	3,937	2.1%	4,245	2.2%	4,471	2.4%	4,761	2.7%
	5,062	2.7%	4,330	2.2%	3,163	1.7%	2,897	1.6%
	3,858	2.1%	4,294	2.2%	4,008	2.2%	3,085	1.7%
	3,602	1.9%	3,828	2.0%	3,706	2.0%	4,004	2.3%
	4,814	2.6%	4,855	2.5%	4,523	2.5%		
	3,348	1.8%	3,481	1.8%	3,344	1.8%	3,244	1.8%
	178	0.1%	2,400	1.2%	3,999	2.2%	4,947	2.8%
	2,705	1.5%	2,882	1.5%	2,879	1.6%	2,669	1.5%
	2,435	1.3%	2,766	1.4%	2,863	1.6%	2,881	1.6%
ALL OTHER	72,048	38.8%	74,809	38.8%	72,135	39.2%	83,361	47.0%
Grand Total	185,822	100.0%	192,648	100.0%	183,810	100.0%	177,433	100.0%

Top 20 Primary Care Provider Billing Organizations

Primary Care Market Share by Rendering Provider (Top 35 Shown)								
Count and Percentage of Patient Services with an Internal Medicine or Family Medicine Physician								
Rendering NPI (Top 35)	2021 Q1		2021 Q2		2021 Q3		2021 Q4	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
	8,546	4.6%	7,842	4.1%	7,012	3.8%	6,790	3.8%
	5,344	2.9%	4,606	2.4%	3,470	1.9%	3,223	1.8%
	3,811	2.1%	4,243	2.2%	4,104	2.2%	3,980	2.2%
	4,402	2.4%	4,162	2.2%	3,813	2.1%	3,436	1.9%
	3,661	2.0%	3,886	2.0%	3,762	2.0%	3,692	2.1%
	3,501	1.9%	3,644	1.9%	3,656	2.0%	3,598	2.0%
	3,163	1.7%	3,449	1.8%	3,537	1.9%	3,757	2.1%
	2,690	1.4%	3,648	1.9%	3,615	2.0%	2,837	1.6%
	3,197	1.7%	3,216	1.7%	3,128	1.7%	3,196	1.8%
	3,093	1.7%	3,166	1.6%	3,119	1.7%	3,037	1.7%
	3,434	1.8%	3,808	2.0%	3,070	1.7%	2,012	1.1%

Top 35 Primary Care Providers Servicing the Patient Population

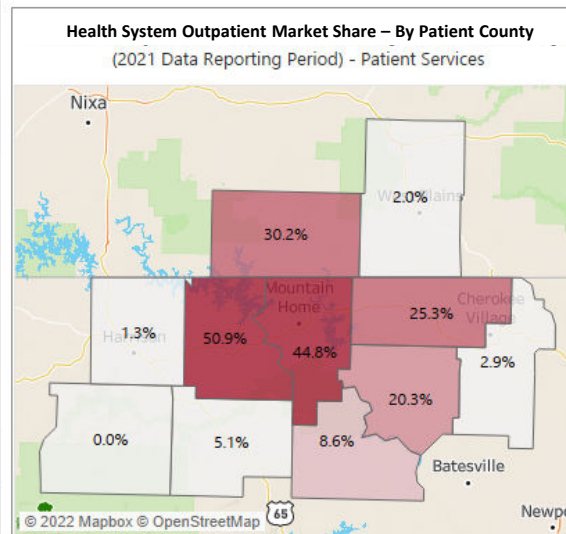
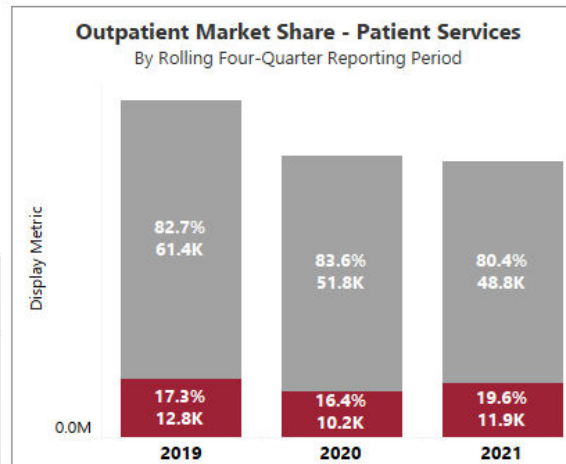
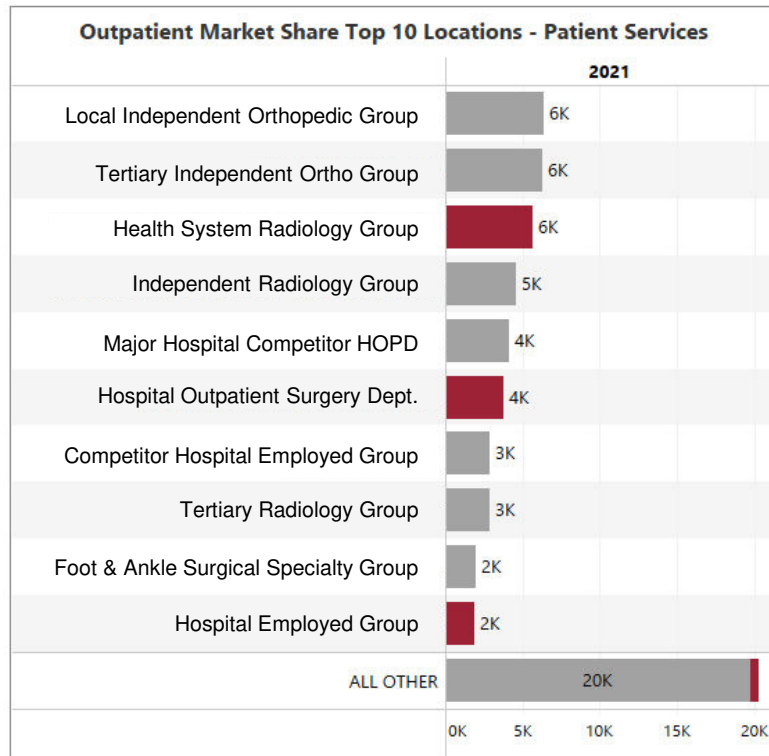
KPI Metric Components

- Provider-level market share – top billing entities and providers by specialty and sub-specialty.
- Focal point on primary care to start

Outpatient Market Share KPI Development

Health System

Health System Outpatient and Ambulatory / Physician Office Market Share for Patients in Primary & Secondary Service Area – **Orthopedics**



KPI Metric Components

- Snapshot in time (how are we performing today) plus ability to trend share over time, by patient geography.
- Total outpatient service volumes (hospital outpatient, ASC, physician office, and ancillaries – imaging, labs, etc.).
- Understand competitive dynamics for non-inpatient services and regional penetration of larger competitors.

Outpatient Market Share KPI Development

Health System

	2019		2020		2021		2019 - 2021 Difference
	Share	Display Metric	Share	Display Metric	Share	Display Metric	
Medical Cardiology	34.9%	75,639	36.6%	57,753	40.2%	58,029	5.3%
Cardiovascular Ultrasound	38.8%	37,354	40.2%	30,090	43.0%	29,120	4.2%
Medical Cardiology Procedures	55.3%	7,976	61.4%	5,839	61.3%	5,526	5.9%
Cardiovascular Other Imaging	57.8%	6,893	63.6%	5,073	62.7%	4,791	5.0%
Cardiac EP	25.3%	5,794	24.9%	5,364	30.1%	4,685	4.8%
Diagnostic Cardiac Catheterization	42.7%	4,382	38.3%	3,082	47.8%	3,062	5.1%
Vascular Catheterization	36.3%	2,582	38.7%	1,993	35.9%	1,758	-0.4%
Interventional Cardiac Catheterization	55.2%	1,839	51.4%	1,233	59.9%	1,284	4.6%
Vascular Surgery	16.0%	181	18.7%	91	16.0%	106	0.0%

KPI Metric Components

- Total service volumes at the sub service line, cross service line, and procedural levels.
- Service line and sub service line volumes trended over time with associated health system capture rates.

	2019		2020		2021		2019 - 2021 Difference
	Share	Display Metric	Share	Display Metric	Share	Display Metric	
County A	83.2%	41,275	81.6%	33,512	83.0%	35,271	-0.2%
County B	3.9%	23,744	4.0%	20,228	5.8%	20,390	1.9%
County C	3.2%	18,792	4.8%	13,147	5.5%	12,367	2.3%
County D	9.7%	16,893	9.3%	12,021	12.2%	9,309	2.5%
County E	11.9%	11,190	13.3%	8,256	13.0%	8,526	1.0%
County F	79.9%	8,625	82.7%	7,144	85.0%	6,996	5.1%
County G	41.4%	8,601	46.6%	6,203	48.4%	5,999	7.0%
County H	60.4%	5,024	62.8%	3,670	64.2%	3,914	3.8%
County I	28.5%	3,114	27.3%	2,537	28.1%	2,281	-0.3%
County J	2.6%	3,121	2.9%	2,088	3.5%	1,873	1.0%
County K	56.5%	2,330	63.4%	1,759	74.4%	1,502	17.9%
Grand Total	38.3%	142,709	39.8%	110,565	42.9%	108,428	4.7%

Note: "ALL OTHER" includes all Counties with a Display Metric count of <100 across all time periods.

Outpatient Market Share KPI Development

Health System

Interventional Cardiology Sample

Outpatient Market Share by Billing Organization - All Services Rendered by Selected Specialty - Top 10 Billing Organizations						
Top 10 Naming	2019		2020		2021	
	% of Total	Display Metric	% of Total	Display Metric	% of Total	Display Metric
Employed Medical Group	74.8%	22,033	76.7%	20,907	77.4%	23,770
Health System Hospital A	15.9%	4,693	14.9%	4,072	14.4%	4,422
Health System Hospital B	1.7%	500	1.5%	404	1.5%	470
Competitor Employed Medical Group	1.7%	501	1.6%	436	1.4%	437
Health System Hospital C	1.3%	395	0.8%	215	0.9%	285
Competitor Hospital A	0.7%	220	0.8%	231	0.9%	274
Tertiary Competitor Employed Medical Group	0.7%	199	0.7%	186	0.5%	157
Competitor Hospital B	0.2%	64	0.5%	139	0.8%	233
Health System Hospital D	0.5%	142	0.4%	102	0.3%	77
Small Independent Cardiology Group	0.2%	49	0.2%	47	0.4%	115
ALL OTHER	2.3%	667	1.9%	508	1.5%	454
Grand Total	100.0%	29,463	100.0%	27,247	100.0%	30,694

Outpatient Market Share by Provider - All Services Rendered by Selected Specialty - Top 10 Rendering Providers						
Top 10 Providers Naming	2019		2020		2021	
	% of Total	Display Metric	% of Total	Display Metric	% of Total	Display Metric
Interventional Cardiologist A	19.5%	5,752	20.0%	5,446	17.8%	5,471
Interventional Cardiologist B	12.5%	3,687	12.2%	3,311	12.8%	3,925
Interventional Cardiologist C	12.2%	3,595	9.3%	2,544	12.7%	3,908
Interventional Cardiologist D	9.4%	2,779	10.7%	2,925	12.5%	3,849
Interventional Cardiologist E	11.5%	3,383	11.4%	3,101	9.2%	2,828
Interventional Cardiologist F	11.0%	3,252	11.4%	3,100	9.5%	2,901
Interventional Cardiologist G	10.6%	3,117	10.5%	2,873	10.0%	3,078
Interventional Cardiologist H	7.6%	2,244	9.0%	2,448	10.5%	3,211
Interventional Cardiologist I	1.0%	282	1.1%	293	0.8%	246
Interventional Cardiologist J	0.7%	210	0.6%	165	0.4%	120
ALL OTHER	3.9%	1,162	3.8%	1,041	3.8%	1,157
Grand Total	100.0%	29,463	100.0%	27,247	100.0%	30,694

KPI Metric Components

- Capabilities to look at any specialty and determine top billing entities and/or physicians servicing the specific patient population.
- Understanding provider dynamics in the ambulatory environment is critical to developing meaningful marketing and business development strategies to support overall organizational objectives.

Polling Question



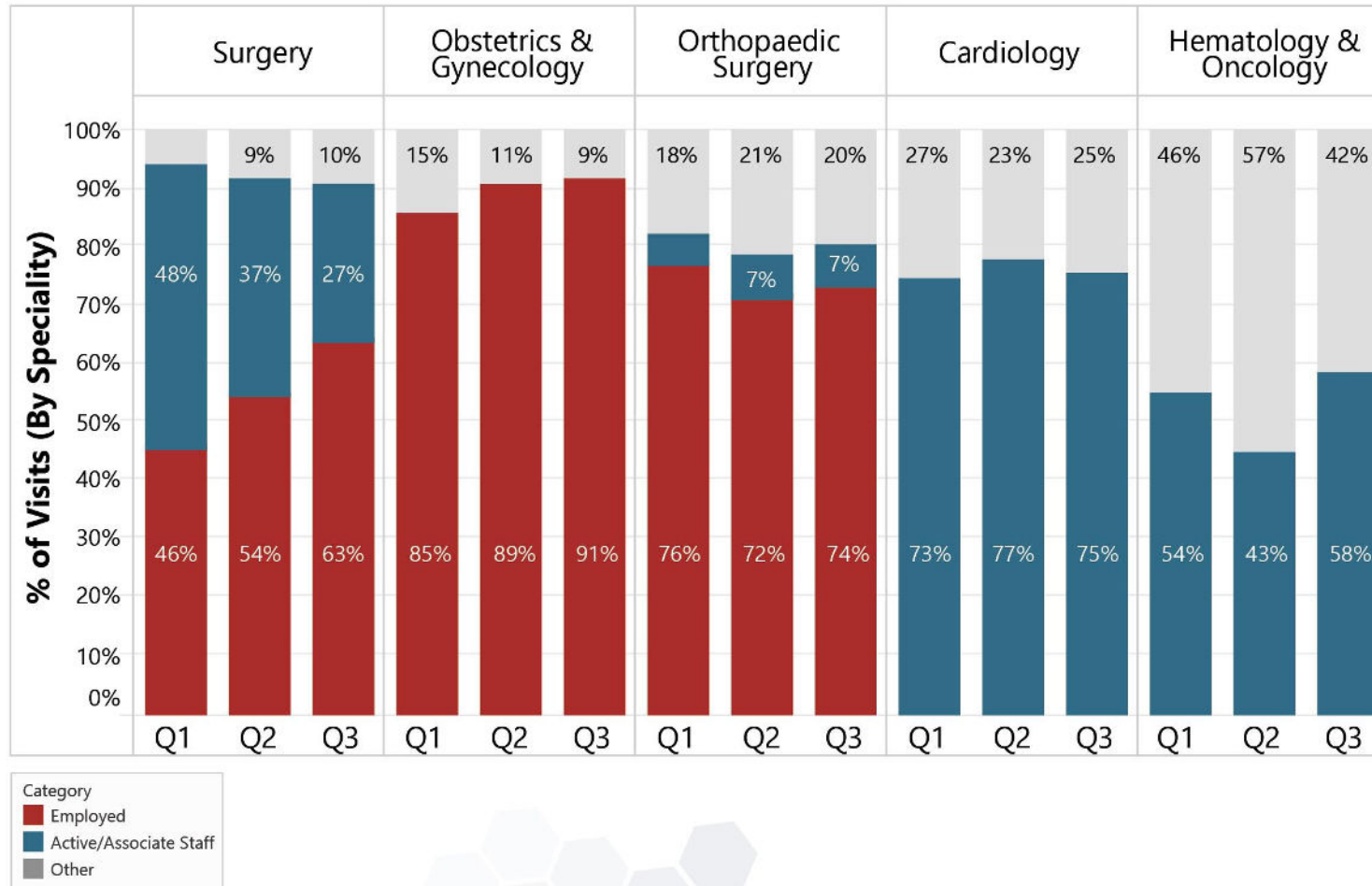
On a scale of 1 to 5, how effective are your organizational KPIs for measuring success of your outpatient strategy development and execution?

① Start presenting to display the poll results on this slide.

Additional Data Elements for Strategy Development

Patient Leakage Measurement

90-DAY PATIENT FLOW FROM EMPLOYED PRIMARY CARE TO EMPLOYED/ACTIVE MEDICAL STAFF SPECIALISTS



- How strong is our ability to retain patients in our primary care practices to our specialists?
- With physicians and advanced practice providers being the keystone to the ambulatory environment, patient leakage identification provides the most immediate opportunity to tactically shift your outpatient share.

Additional Data Elements for Strategy Development

Patient Leakage Measurement

90-DAY PATIENT FLOW FROM EMPLOYED PRIMARY CARE TO EMPLOYED/ACTIVE MEDICAL STAFF SPECIALISTS – BY INDIVIDUAL PCP

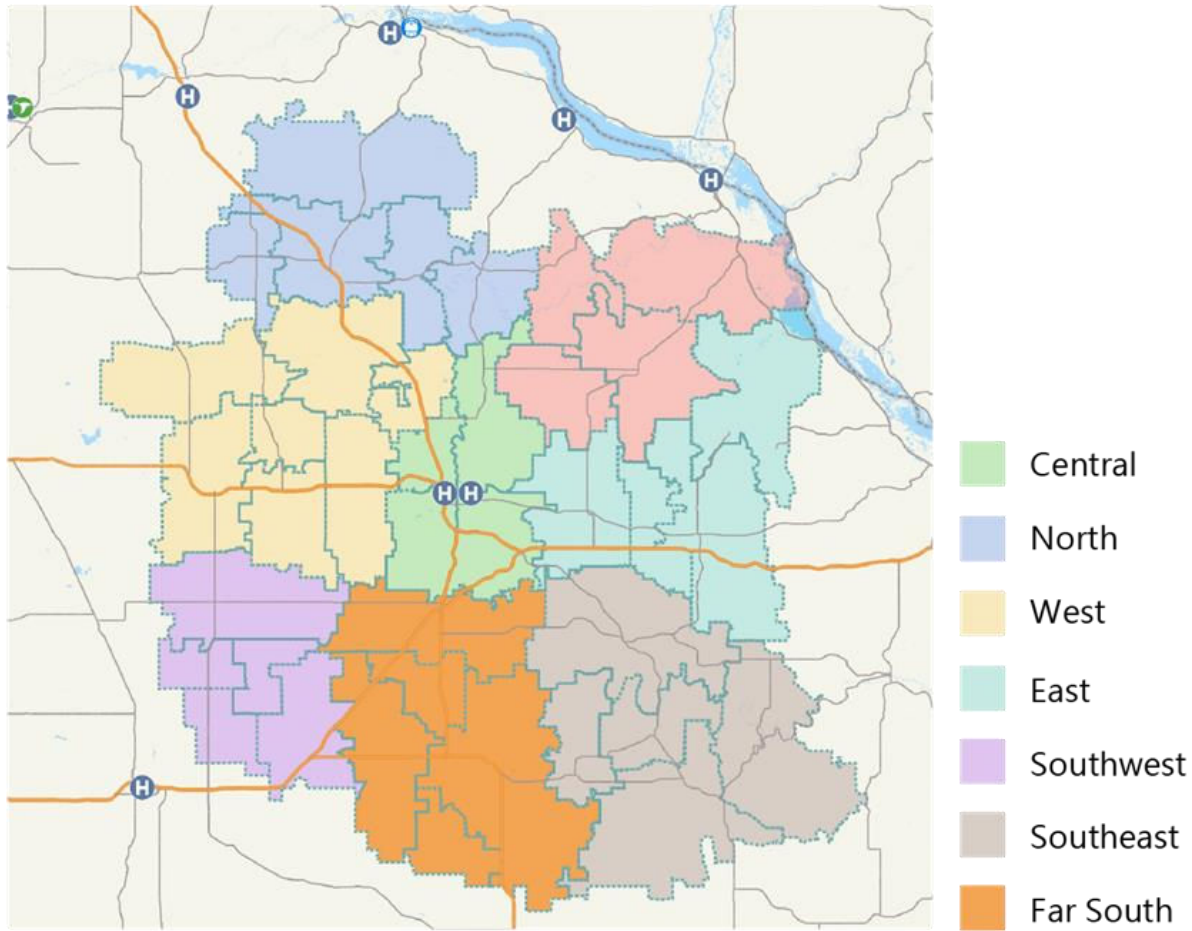
Provider Drill Down Example Visits to Key Specialties occurring within 90 days of a patient interaction with a client employed primary care provider. Grouped by primary care provider. Shown as percent of total, grouped by employment and medical staff status of specialist. <div> Category ■ Employed ■ Active/Associate Staff ■ Other </div>	Source Provider Name	Obstetrics & Gynecology	Orthopaedic Surgery	Surgery	Cardiology	Hematology & Oncology	N
	PCP #1	83% 17%	91% 9%	93% 7%	48% 52%	93% 7%	595
	PCP #2	97% 3%	76% 23% 1%	60% 17% 23%	75% 25%	73% 27%	551
	PCP #3	88% 12%	83% 9% 8%	81% 8% 11%	77% 23%	25% 75%	443
	PCP #4	98% 2%	61% 39%	90% 10%	43% 57%	83% 17%	435
	PCP #5	100%	63% 37%	83% 12% 4%	50% 50%	87% 13%	355
	PCP #6	97% 3%	81% 19%	67% 27% 6%	89% 11%	100%	344
	PCP #7	85% 15%	79% 21%	98% 2%	84% 16%	76% 24%	337
	PCP #8	60% 40%	94% 6%	94% 6%	91% 9%	36% 64%	224
	PCP #9	98% 2%	93% 7%	45% 45% 9%	78% 22%	82% 18%	217
	PCP #10	61% 39%	73% 27%	89% 11%	78% 22%	100%	145
	PCP #11	100%	87% 13%	100%	100%		75

- Measurement needs to be very specific (**practice and individual provider levels**) to maximize ROI on business developing and marketing efforts.

Additional Data Elements for Strategy Development

Strategic Market Definitions

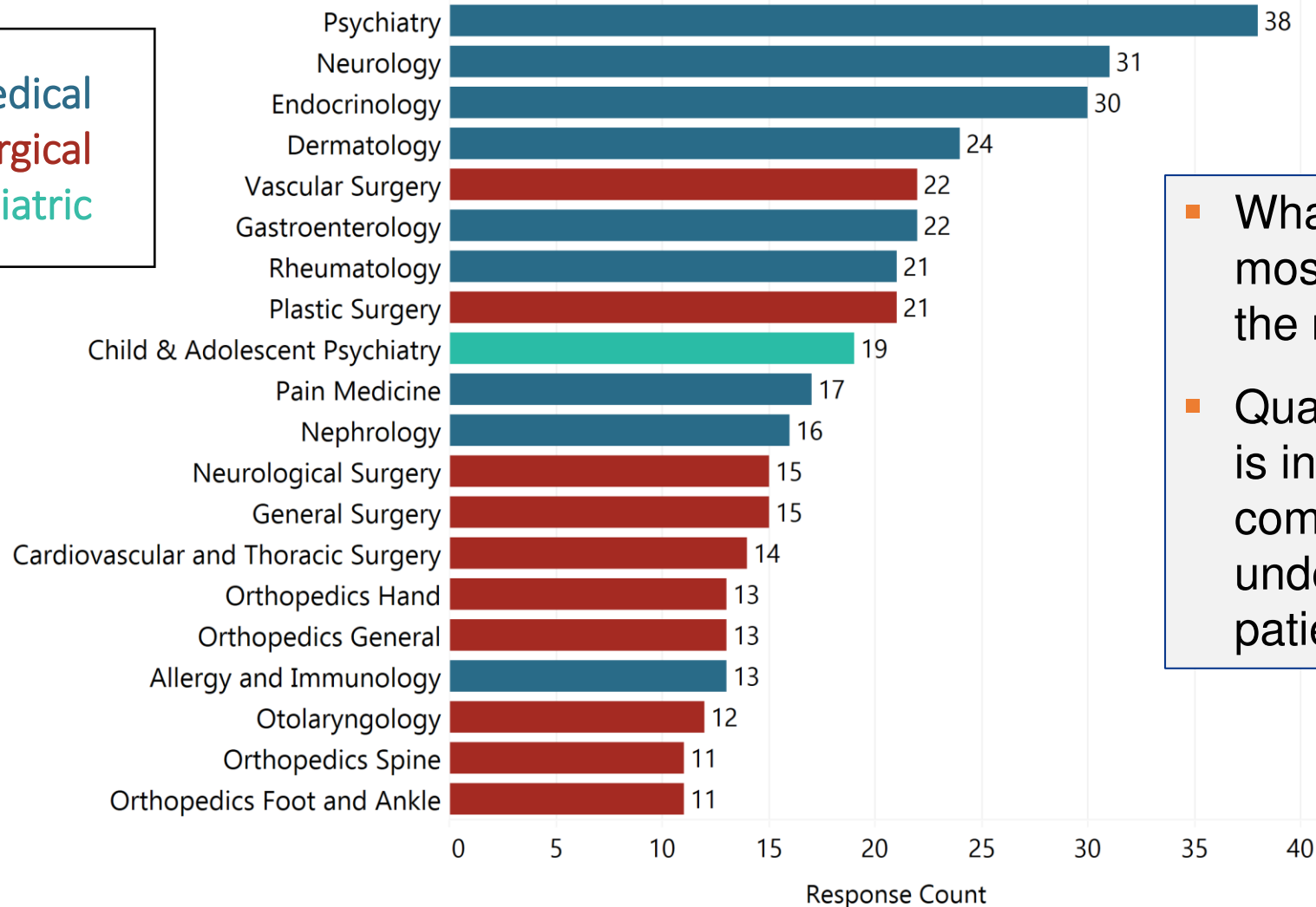
STRATEGIC SUBMARKETS SAMPLE



- **Submarket Definitions should be based on:**
 - Common Routes of Travel
 - Historic Penetration
 - Demographically-similar groups
 - Common Competitive Threats
 - Strategic Priority
- **This allows for:**
 - Targeted geographic footprint decision-making for access points and competitive action plans
 - Prioritization of opportunities

Additional Data Elements for Strategy Development

Provider Need

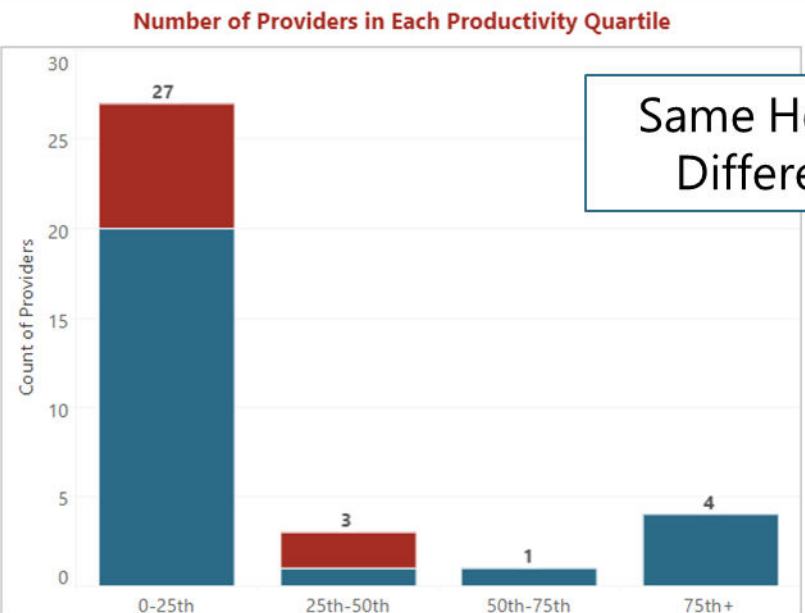


- What specialties are needed most in the market to support the needs of our patients?
- Qualitative input from providers is incredibly useful in compliance support and also in understanding pain points for patient referral access.

Additional Data Elements for Strategy Development

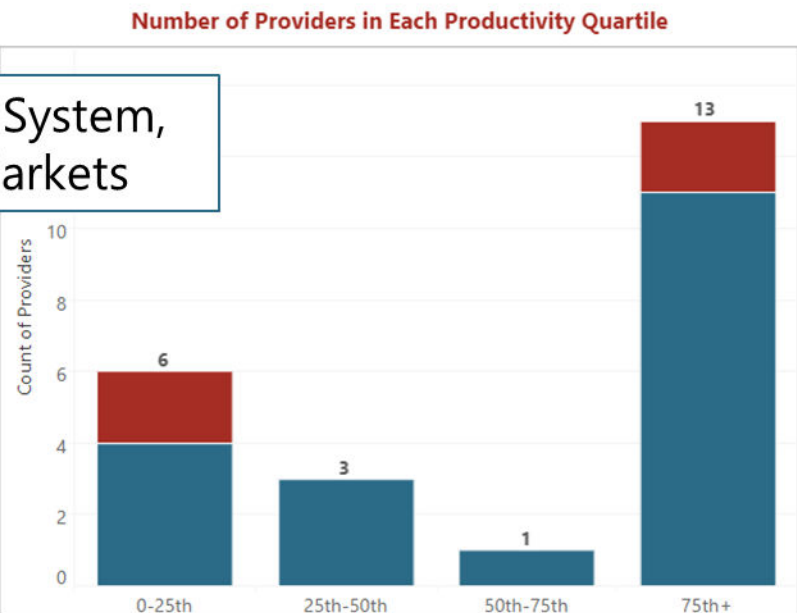
Employed Provider Productivity

Market A Primary Care



Same Health System,
Different Markets

Market B Primary Care



Provider Type	0-25th	25th-50th	50th-75th	75th+	Total
Physician	20	1	1	4	26
APP	7	2			9
Grand Total	27	3	1	4	35

Provider Type	0-25th	25th-50th	50th-75th	75th+	Total
Physician	4	3	1	11	19
APP	2			2	4
Grand Total	6	3	1	13	23

- Incorporating productivity data by specialty can provide a strong proxy for capacity for growth.
- Tying productivity and access data to regional recruitment decisions can give insight into where access is a challenge.

Additional Data Elements for Strategy Development

Advanced Practice Provider Utilization

- Given projected shortages in most key physician specialties, maximizing APP recruitment and utilization is and will continue to be a major strategic driver of care delivery and patient access.
- APP recruitment, contracting, and retention should evolve away from operational/at-will to strategic/contracted.
 - Incentive structure should largely mirror physician incentives

Specialty	Ideal Utilization
Primary Care	<ul style="list-style-type: none">• Initial - Same day access; preventative/wellness services• Expanded – Chronic Stable patients; proactive population health• Practice delivery model consistent with PCMH principles for clinical practice transformation• Models promoting 1:2 to 1:4 physician to APP ratios abound
Behavioral Health	<ul style="list-style-type: none">• In-Office – Medication Management• Inpatient – Admission H&Ps, discharge summaries, chronic medical management• Psychiatrist:APP ratios of 1:2 or more can safely and effectively increase access
Orthopedics	<ul style="list-style-type: none">• Initial Evaluation, Completion of Visit, Patient Education• Splinting/casting• Perioperative assessment; post-operative interval• Orthopedist:APP ratios of 1:2 can be highly efficient
Cardiology	<ul style="list-style-type: none">• In-office - Testing; Patient education; Secondary/tertiary prevention efforts• Inpatient and Outpatient - Initial patient evaluation; patient follow-up• Current rate of 1.5:1 may be adequate for general cardiology but may be able to move closer to 1:1
Neurology	<ul style="list-style-type: none">• In-Office - Intake assessments; Monitoring established plan of care; Same day access for new or established patients• Subject matter expert (e.g., concussion management; headache syndromes)• Inpatient - Admission H&Ps, initial consultations, daily rounding assistance, discharge summaries• General neurology rate can approach 2:1 or even 1:1

Key Take-Aways

- Collaboration among organizations (internal and external) along with strategic partnerships (State, Health System, 3rd Party) should be pursued to optimize measurement capabilities.
- Develop an Outpatient KPI that your organization can report regularly to key organizational stakeholders. Don't let perfect get in the way of progress.
- Involve providers and team in growth planning.

Questions



Audience Q&A Session

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Thank you!

Please be sure to complete the session evaluation on the mobile app!



Speaker Biography(s)

Melanie Landrum, VP, Data and Health Information Services

Kentucky Hospital Association

mlandrum@kyha.com



Ms. Landrum has worked at Kentucky Hospital Association (KHA) for 12 years serving in leadership roles within the KHA Data Program and as part of the quality team at KHA. As vice president of data and health information services, Ms. Moch ensures that member hospitals have access to a variety of data including inpatient, outpatient, physician, census, and quality data in order to successfully look at market share and other business aspects of the hospital.

Ms. Moch holds a Bachelor of Science degree from Western Kentucky University. Ms. Moch is also certified as a professional coder from the American Academy of Professional Coders.

Speaker Biography(s)

Katie Arnett, VP, Chief Experience Officer

King's Daughters Health

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Mrs. Arnett has worked at King's Daughters Medical Center for over 14 years serving in various leadership roles within Finance, Support Services, Process Improvement and Strategy prior to her current role as Chief Patient Experience Officer. Her current responsibilities include executive oversight of Patient Experience, Strategy, Supply Chain, Cost Accounting, Food/Nutrition Services, Biomedical Engineering and Welcome Centers.

Mrs. Arnett holds a Bachelor's of Science degree in Health Administration/ Health Management from the University of Phoenix, Phoenix, Arizona, Surgical Technologist Certification from Collins Career Center in Chesapeake, Ohio, Chief Quality Officer Certification through the Institute of Health Care Improvement, Lean/Six Sigma Practitioner Certifications from Tech Solve Health Care Solutions and Aveta Business Institute.



Speaker Biography(s)

DJ Sullivan, Managing Director of Claims Data Analytics

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Mr. Sullivan has worked in healthcare for 10+ years providing consulting services to partner healthcare organizations. He has partnered with clients to provide ongoing support in defining optimal areas for geographic growth and development, identifying physician needs within markets, developing service line specific strategies and tactics, building long-term plans to achieve organizational objectives, and optimizing network integrity among providers within health system networks through the utilization of claims-based analytics.

Mr. Sullivan obtained his Master's of Business Administration and Master's of Healthcare Administration degrees from the David Eccles School of Business at University of Utah. He holds a Bachelor's of Science in Pre-Medicine from Brigham Young University.

Bibliography/References

- 1- <https://www.aha.org/aha-center-health-innovation-market-scan/2021-06-15-3-ways-prepare-coming-shifts-care-delivery>
- 2- <https://www.physicianleaders.org/news/effectively-recruiting-and-retaining-physicians-a-strategic-approach-for-2020>
- 3- <https://www.forbes.com/sites/robertpearl/2022/04/26/physician-burnout-is-increasing-gender-inequality-is-making-it-worse/?sh=4fb1253d6eab>