



Leveraging and Manipulating Hospital Specific Data to Drive Decision Making

John Downes, MBA, LEED AP, Director
Keith Bubblo, Senior Analyst

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Two Sessions

- *The importance of Data in the Decision-Making Process – May 10, 2021*
- How to Manipulate and Leverage Hospital Specific Data – May 24, 2021

Market analyses can drive decisions in many areas

- *Where are the population centers?*
- *Are we located in the right areas?*
- *What's happening with various age cohorts and what does that mean for volumes?*
- *Are some areas of our market growing faster than others (# vs %)?*
- *How does our practice / facility / system fare in competition?*
- From where and to where are our patients traveling?
- What share of the market do we control?
- How many sites / rooms / devices do we need to meet need?

How to Manipulate and Leverage Hospital Specific Data



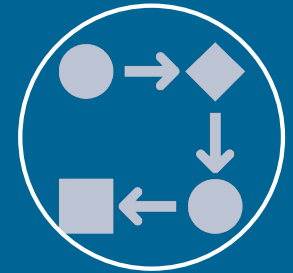
Patient
Origin



Drivetime /
Location
Analysis



Market Share



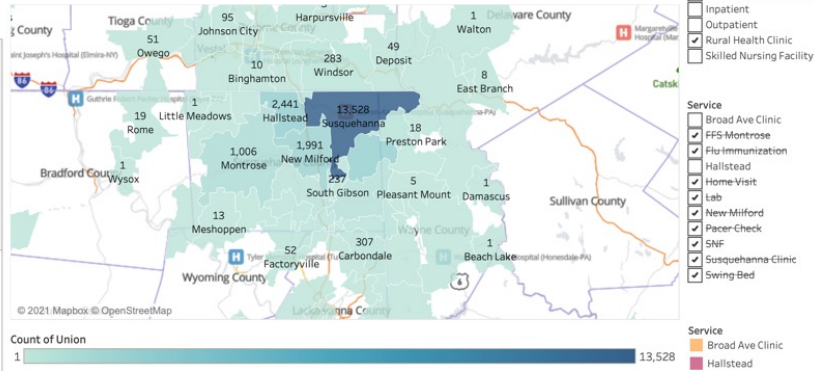
Throughput /
Room Need

Patient Origin – Rural Health Clinic

Patients by Service Area

Service Area	Mapzip	PO Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2017	FY 2018	FY 2019	FY 2020
Grand Total			7,523	6,606	6,096	7,241	100.0%	100.0%	100.0%	100.0%
PSA			5,780	5,034	4,810	5,828	76.8%	76.2%	78.9%	80.5%
Total			5,780	5,034	4,810	5,828	76.8%	76.2%	78.9%	80.5%
18847	Susquehanna		3,751	3,215	3,111	3,451	49.9%	48.7%	51.0%	47.7%
18822	Hallstead		620	569	418	834	8.2%	8.6%	6.9%	11.5%
18465	Thompson		561	506	636	638	7.5%	7.7%	10.4%	8.8%
18834	New Milford		577	502	403	509	7.7%	7.6%	6.6%	7.0%
18821	Great Bend		102	85	83	205	1.4%	1.3%	1.4%	2.8%
18462	Starrucca		92	110	105	158	1.2%	1.7%	1.7%	2.2%
18825	Jackson		77	47	54	33	1.0%	0.7%	0.9%	0.5%
SSA			748	627	505	623	9.9%	9.5%	8.3%	8.6%
Total			748	627	505	623	9.9%	9.5%	8.3%	8.6%
18801	Montrose		320	232	220	234	4.3%	3.5%	3.6%	3.2%
18470	Union Dale		182	154	107	150	2.4%	2.3%	1.8%	2.1%
18826	Kingsley		117	136	80	103	1.6%	2.1%	1.3%	1.4%
18842	South Gibson		57	55	54	71	0.8%	0.8%	0.9%	1.0%
18823	Harford		42	26	25	39	0.6%	0.4%	0.4%	0.5%
18461	Starlight		30	24	19	26	0.4%	0.4%	0.3%	0.4%
Other			995	945	781	790	13.2%	14.3%	12.8%	10.9%
Total			995	945	781	790	13.2%	14.3%	12.8%	10.9%
18421	Forest City		104	75	67	105	1.4%	1.1%	1.1%	1.5%
18365	Windsor		52	72	67	92	0.7%	1.1%	1.1%	1.3%
18407	Carbondale		58	91	85	73	0.8%	1.4%	1.4%	1.0%
18446	Nicholson		66	60	52	52	0.9%	0.9%	0.9%	0.7%
18643	Pittston		26	28	35	43	0.3%	0.4%	0.6%	0.6%
18824	Hop Bottom		33	46	56	37	0.4%	0.7%	0.9%	0.5%
18508	Scranton		3	5	4	30	0.0%	0.1%	0.1%	0.4%
13790	Johnson City		26	26	20	23	0.3%	0.4%	0.3%	0.3%
18623	Laceyville		36	26	24	21	0.5%	0.4%	0.4%	0.3%
13795	Kirkwood		23	12	13	19	0.3%	0.2%	0.2%	0.3%
18612	Dallas			14	18	18		0.2%	0.3%	0.2%
18439	Lakewood		30	35	19	15	0.4%	0.5%	0.3%	0.2%
26505	Morgantown			1	7	14		0.0%	0.1%	0.2%
19446	Lansdale		10	12	12	14	0.1%	0.2%	0.2%	0.2%
18844	Springville		35	23	20	14	0.5%	0.3%	0.3%	0.2%
18510	Scranton		12	14	13	14	0.2%	0.2%	0.2%	0.2%
18419	Factoryville		5	15	18	14	0.1%	0.2%	0.3%	0.2%
13901	Binghamton		20	24	17	14	0.3%	0.4%	0.3%	0.2%
32566	Navarre		12	6	9	13	0.2%	0.1%	0.1%	0.2%
18509	Scranton		12	13	13	11	0.2%	0.2%	0.2%	0.2%
13754	Deposit		13	15	10	11	0.2%	0.2%	0.2%	0.2%
17728	Cogan Station		9	10	14	10	0.1%	0.2%	0.2%	0.1%
90045	Los Angeles		5	3	12	9	0.1%	0.0%	0.2%	0.1%
13905	Binghamton		11	15	11	9	0.1%	0.2%	0.2%	0.1%
13904	Binghamton		13	14	8	9	0.2%	0.2%	0.1%	0.1%

Patients by ZIP Code



Monthly Trend



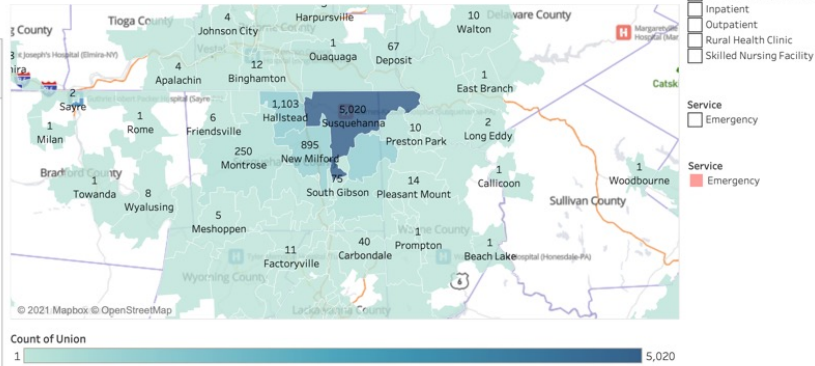
- From where do our patients originate, and does it differ by service?
- Acquire:
 - Visit count by zip
 - Service grouping
- Table
- Heat map
- Trends

Patient Origin – Emergency Department

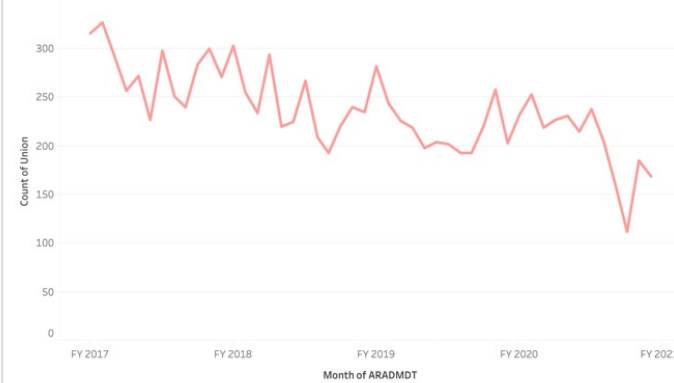
Patients by Service Area

Service Area	Mapzip	PO Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2017	FY 2018	FY 2019	FY 2020
Grand Total			3,335	2,896	2,643	2,448	100.0%	100.0%	100.0%	100.0%
PSA			2,587	2,177	2,075	1,984	77.6%	75.2%	78.5%	81.0%
18847	Susquehanna		1,448	1,251	1,195	1,126	43.4%	43.2%	45.2%	46.0%
18465	Thompson		236	245	228	261	7.1%	8.5%	8.6%	10.7%
18822	Hallstead		334	248	267	254	10.0%	8.6%	10.1%	10.4%
18834	New Milford		272	215	206	202	8.2%	7.4%	7.8%	8.3%
18821	Great Bend		190	143	100	80	5.7%	4.9%	3.8%	3.3%
18462	Starrucca		70	52	57	44	2.1%	1.8%	2.2%	1.8%
18825	Jackson		37	23	22	17	1.1%	0.8%	0.8%	0.7%
SSA			288	270	186	170	8.6%	9.3%	7.0%	6.9%
18470	Union Dale		113	82	65	61	3.4%	2.8%	2.5%	2.5%
18801	Montrose		66	94	50	40	2.0%	3.2%	1.9%	1.6%
18826	Kingsley		49	49	33	33	1.5%	1.7%	1.2%	1.3%
18823	Harford		18	15	8	15	0.5%	0.5%	0.3%	0.6%
18461	Starlight		19	9	6	14	0.6%	0.3%	0.2%	0.6%
18842	South Gibson		23	21	24	7	0.7%	0.7%	0.9%	0.3%
Other			460	449	382	294	13.8%	15.5%	14.5%	12.0%
13865	Windsor		43	64	32	34	1.3%	2.2%	1.2%	1.4%
13754	Deposit		11	20	16	20	0.3%	0.7%	0.6%	0.8%
18421	Forest City		28	40	13	11	0.8%	1.4%	0.5%	0.4%
13795	Kirkwood		16	11	9	11	0.5%	0.4%	0.3%	0.4%
18446	Nicholson		12	6	14	10	0.4%	0.2%	0.5%	0.4%
13901	Binghamton		14	5	6	9	0.4%	0.2%	0.2%	0.4%
13783	Hancock		7	6	7	8	0.2%	0.2%	0.3%	0.3%
Null	Null		1	17	10	7	0.0%	0.6%	0.4%	0.3%
18439	Lakewood		2	2	8	6	0.1%	0.1%	0.3%	0.2%
76706	Waco					5				0.2%
18453	Pleasant Mount		5	1	3	5	0.1%	0.0%	0.1%	0.2%
18407	Carbondale		7	18	10	5	0.2%	0.6%	0.4%	0.2%
30344	Atlanta					4				0.2%
18512	Scranton			2	3	4		0.1%	0.1%	0.2%
18504	Scranton		5	1		4	0.1%	0.0%		0.2%
64503	Saint Joseph					3				0.1%
36609	Mobile		1			3	0.0%			0.1%
32724	Deland			2	3	3		0.1%	0.1%	0.1%
18657	Tunkhannock		1	2	3	3	0.0%	0.1%	0.1%	0.1%
18505	Scranton		3	6	2	3	0.1%	0.2%	0.1%	0.1%
13904	Binghamton		1	5	2	3	0.0%	0.2%	0.1%	0.1%
10003	New York					3				0.1%
32168	New Smyrna Bea...				1	2			0.0%	0.1%
19525	Gilbertsville					2				0.1%
18844	Springville		7	8	2	2	0.2%	0.3%	0.1%	0.1%

Patients by ZIP Code



Monthly Trend



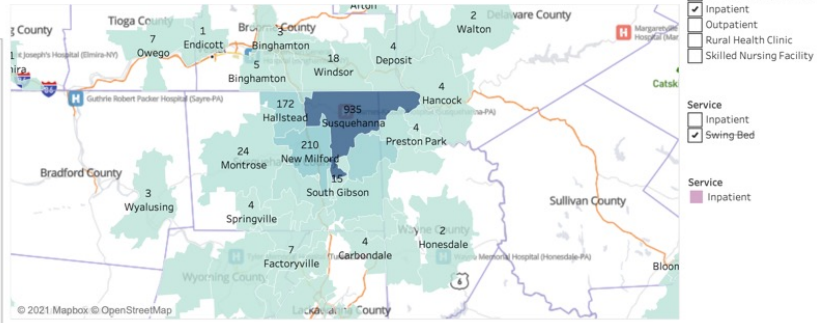
- From where do our patients originate, and does it differ by service?
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Patient Origin – Inpatient

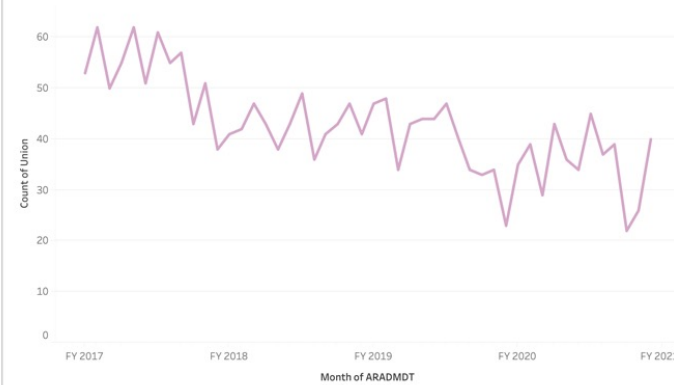
Patients by Service Area

Service Area	Mapzip	PO Name	FY 2017	FY 2018	FY 2019	FY 2020	FY 2017	FY 2018	FY 2019	FY 2020
Grand Total			638	511	471	425	100.0%	100.0%	100.0%	100.0%
PSA	Total		513	397	382	334	80.4%	77.7%	81.1%	78.6%
	18847	Susquehanna	301	233	225	176	47.2%	45.6%	47.8%	41.4%
	18834	New Milford	61	51	44	54	9.6%	10.0%	9.3%	12.7%
	18465	Thompson	41	40	33	44	6.4%	7.8%	7.0%	10.4%
	18822	Hallstead	65	30	43	34	10.2%	5.9%	9.1%	8.0%
	18821	Great Bend	31	24	22	16	4.9%	4.7%	4.7%	3.8%
	18462	Starrucca	10	14	11	9	1.6%	2.7%	2.3%	2.1%
	18825	Jackson	4	5	4	1	0.6%	1.0%	0.8%	0.2%
SSA	Total		56	49	40	42	8.8%	9.6%	8.5%	9.9%
	18826	Kingsley	17	13	10	14	2.7%	2.5%	2.1%	3.3%
	18823	Harford	6	3	4	8	0.9%	0.6%	0.8%	1.9%
	18801	Montrose	6	8	2	8	0.9%	1.6%	0.4%	1.9%
	18470	Union Dale	18	20	14	7	2.8%	3.9%	3.0%	1.6%
	18842	South Gibson	2	1	8	4	0.3%	0.2%	1.7%	0.9%
	18461	Starlight	7	4	2	1	1.1%	0.8%	0.4%	0.2%
Other	Total		69	65	49	49	10.8%	12.7%	10.4%	11.5%
	30344	Atlanta			4	5			0.8%	1.2%
	18446	Nicholson	2	4	5	5	0.3%	0.8%	1.1%	1.2%
	13865	Windsor	4	3	6	5	0.6%	0.6%	1.3%	1.2%
	18844	Springville		1				0.2%		0.7%
	18512	Scranton			1	3			0.2%	0.7%
	Null	Null			2	2			0.4%	0.5%
	18510	Scranton				2				0.5%
	18503	Scranton				2				0.5%
	18431	Honesdale				2				0.5%
	18421	Forest City	3	1	2	2	0.5%	0.2%	0.4%	0.5%
	15229	Pittsburgh				2				0.5%
	13904	Binghamton			1	2			0.2%	0.5%
	77441	Fulshear				1				0.2%
	76706	Waco				1				0.2%
	75061	Irving				1				0.2%
	64503	Saint Joseph				1				0.2%
	63775	Perryville				1				0.2%
	18657	Tunkhannock	2	3	1	1	0.3%	0.6%	0.2%	0.2%
	18455	Preston Park	1	1	1	1	0.2%	0.2%	0.2%	0.2%
	18407	Carbondale	1	1	1	1	0.2%	0.2%	0.2%	0.2%
	13901	Binghamton			1	1			0.2%	0.2%
	13754	Deposit	1	1	1	1	0.2%	0.2%	0.2%	0.2%
	13748	Conklin		2		1		0.4%		0.2%
	11751	Islip				1				0.2%
	07026	Garfield				1				0.2%

Patients by ZIP Code

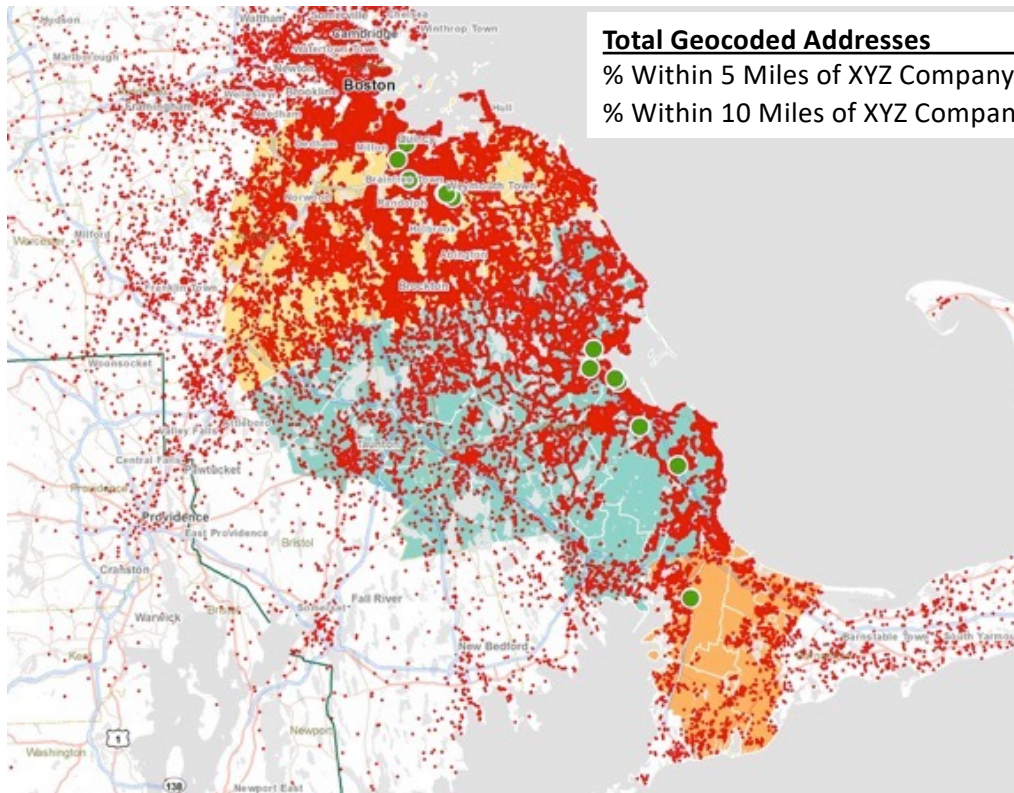


Monthly Trend



- From where do our patients originate, and does it differ by service?
- Acquire:
 - Visit count by zip
 - Service grouping
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Drivetime / Location Analysis



Total Geocoded Addresses	138,808
% Within 5 Miles of XYZ Company Site	48.8%
% Within 10 Miles of XYZ Company Site	77.7%

- Of all XYZ Company patients of South Region facilities (139k addresses), more than 77% are within 10 miles of an XYZ Site. 49% are within 5 miles.
- The question becomes whether we can consolidate practices and not decrease patient access.
- What does it mean for an individual patient or group of patients and how might we “sell” it.

Drivetime / Location Analysis

		GRANITE PATIENTS						
		Braintree	Annex	Granite	Quincy	Weymouth Libbey	Weymouth MRI	Weymouth Woods
Total Time (group1)								
Distinct count of Blinded	Total	20,019	20,019	20,007	20,001	20,004	19,985	19,995
% of Total	Total	100%	100%	100%	100%	100%	100%	100.0%
Distinct count of Blinded	< 10	8,894	8,918	8,213	10,104	6,087	4,473	5,121
	10-20	7,365	7,345	7,493	5,273	10,028	10,926	10,567
	20-30	2,304	2,302	2,514	2,733	2,572	3,249	2,902
	30-40	1,010	1,008	1,295	1,334	787	765	851
	40 +	446	446	492	557	530	572	554
% of Total	< 10	44.4%	44.5%	41.1%	50.5%	30.4%	22.4%	25.6%
	10-20	36.8%	36.7%	37.5%	26.4%	50.1%	54.7%	52.8%
	20-30	11.5%	11.5%	12.6%	13.7%	12.9%	16.3%	14.5%
	30-40	5.0%	5.0%	6.5%	6.7%	3.9%	3.8%	4.3%
	40 +	2.2%	2.2%	2.5%	2.8%	2.6%	2.9%	2.8%
% of Total	< 10	44.4%	44.5%	41.1%	50.5%	30.4%	22.4%	25.6%
	< 20	81.2%	81.2%	78.5%	76.9%	80.6%	77.1%	78.5%
	< 30	92.7%	92.7%	91.1%	90.5%	93.4%	93.3%	93.0%
	< 40	97.8%	97.8%	97.5%	97.2%	97.4%	97.1%	97.2%
	40 +	2.2%	2.2%	2.5%	2.8%	2.6%	2.9%	2.8%
Distinct count of Blinded	< 10	8,894	8,918	8,213	10,104	6,087	4,473	5,121
	< 20	16,259	16,263	15,706	15,377	16,115	15,399	15,688
	< 30	18,563	18,565	18,220	18,110	18,687	18,648	18,590
	< 40	19,573	19,573	19,515	19,444	19,474	19,413	19,441
	40 +	446	446	492	557	530	572	554

- If consolidating from one practice to another, which might make the most sense?
- Acquire:
 - Practice location
 - Provider list by location
 - Patient address
 - Patient provider
- Produce
 - Table utilizing mapping / drivetime software comparing patient address vs practice location

- 41% of Granite patients travel less than 10 minutes, but Quincy would be within 10 min for 50%.
- When evaluating %'s under 30 minutes, the Weymouth sites are best.

Drivetime / Location Analysis

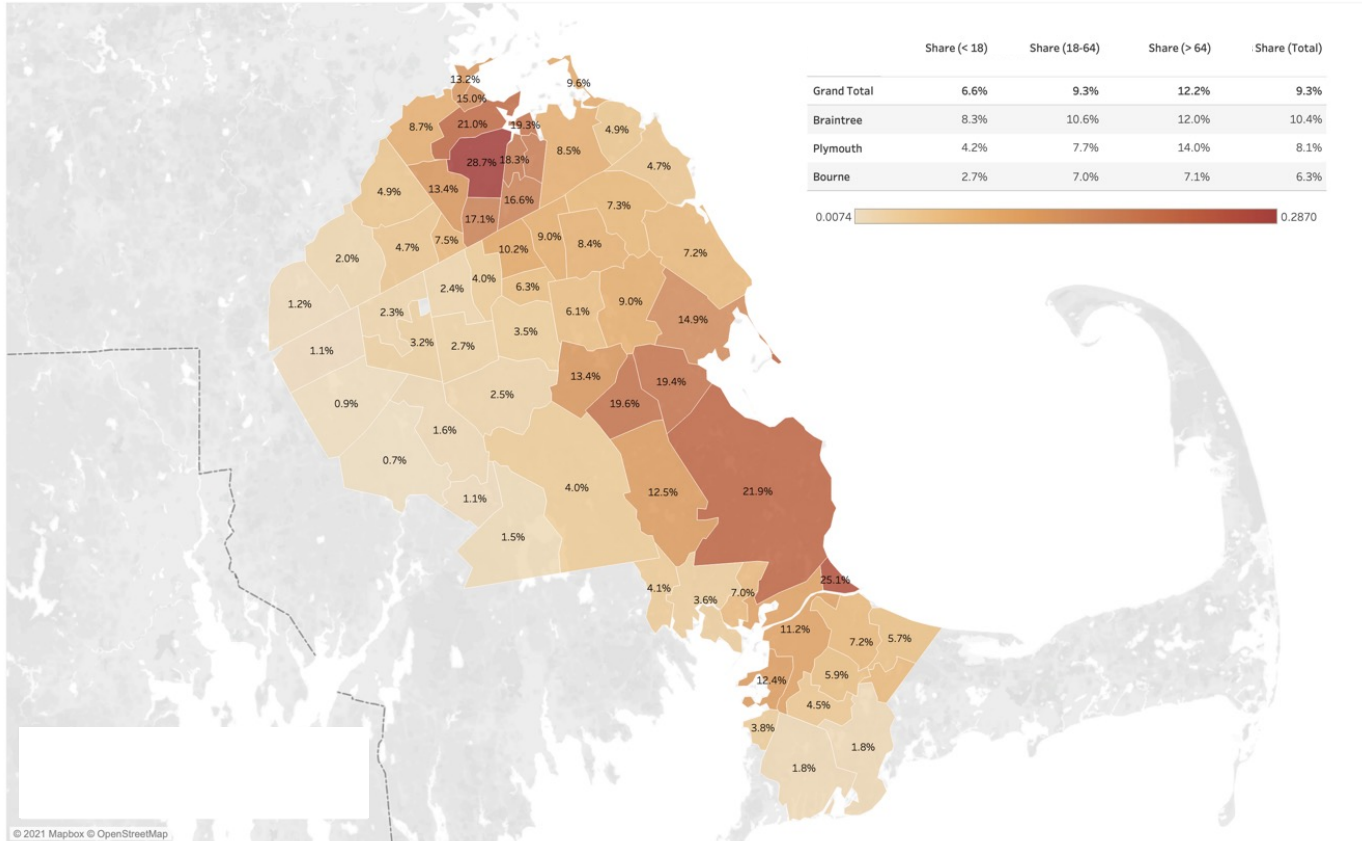
Existing Site A vs Potential sites

	1	2	3	4	5	6	7
	Camp Street	Harley Davidson	Former BoA	471 North Main	Centre Square	Webster Bank	Bikers Edge
Count If Better	2,552	7,605	6,506	6,789	6,457	6,525	6,519
Count of Worse	7,446	2,393	3,492	3,209	3,541	3,473	3,479
% Better	25.5%	76.1%	65.1%	67.9%	64.6%	65.3%	65.2%
% Worse	74.5%	23.9%	34.9%	32.1%	35.4%	34.7%	34.8%

- “If a stiff wind came and blew down our practice...where would the best relocation be?”
- Requires:
 - Existing practice address
 - Patient street address
 - Potential practice addresses
- Produce:
 - Count if better/worse
 - % if better/worse

Primary Care Market Share – All

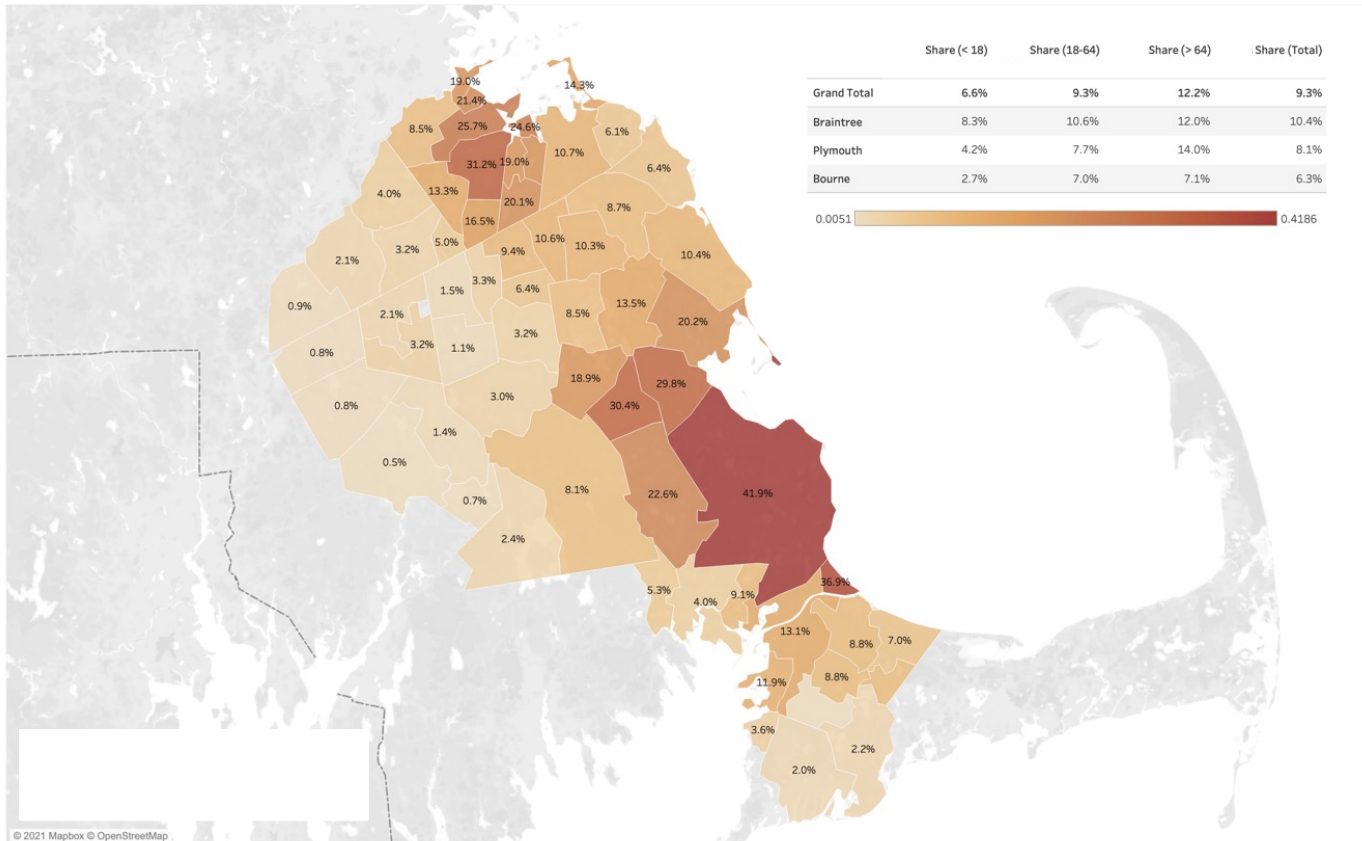
South Region Primary Care Market Share



- What share of the market do we capture?
- Does it vary by service?
- Does it vary by age?
- Acquire:
 - Patient panel list
 - Patient age
 - Patient Zip
 - Current population by age by zip
- Produce
 - Table
 - Heat map

Primary Care Market Share – 65+

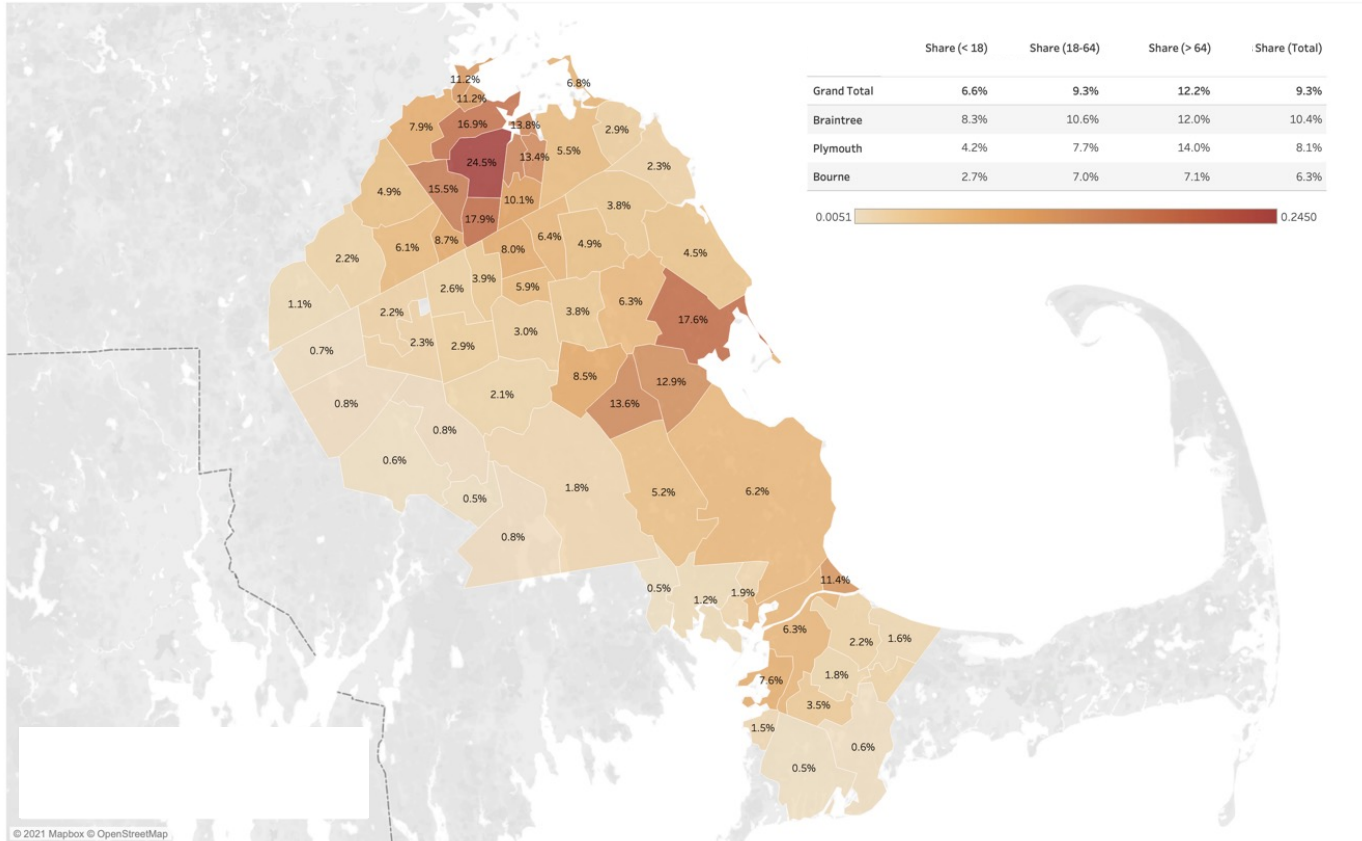
South Region Primary Care Market Share



- What share of the market do we capture?
- Does it vary by service?
- Does it vary by age?
- Acquire:
 - Patient panel list
 - Patient age
 - Patient Zip
 - Current population by age by zip
- Produce
 - Table
 - Heat map

Primary Care Market Share – Under 18

South Region Primary Care Market Share



- What share of the market do we capture?
- Does it vary by service?
- Does it vary by age?
- Acquire:
 - Patient panel list
 - Patient age
 - Patient Zip
 - Current population by age by zip
- Produce
 - Table
 - Heat map

Market Share – Inpatient PSA – High Acuity

Inpatient Market Share by Facility

Facility Name	Discharges			% of Total Discharges		
	2017	2018	2019	2017	2018	2019
Grand Total	726	667	723	100.0%	100.0%	100.0%
John D. Archbold Memorial Hospital	385	366	411	53.0%	54.9%	56.8%
Memorial Hospital and Manor	184	171	158	25.3%	25.6%	21.9%
Phoebe Putney Memorial Hospital	44	27	41	6.1%	4.0%	5.7%
Piedmont Columbus Regional-Northside Campus	18	11	14	2.5%	1.6%	1.9%
Donalsonville Hospital, Inc.	16	14	11	2.2%	2.1%	1.5%
Grady General Hospital	16	14	8	2.2%	2.1%	1.1%
Children's Healthcare of Atlanta At Egleston		5	8		0.7%	1.1%
Doctors Hospital of Augusta	6	7	7	0.8%	1.0%	1.0%
South Georgia Medical Center	2	6	6	0.3%	0.9%	0.8%
Northside Hospital	1	2	6	0.1%	0.3%	0.8%
Children's Healthcare of Atlanta At Scottish Rite	6	5	6	0.8%	0.7%	0.8%
Piedmont Columbus Regional-Midtown Campus		1	4		0.1%	0.6%

Patient Zip (group)

PSA

Tertiary

Secondary

Acuity

High acuity

Low acuity

Product

Null

CARDIOLOGY

DENTISTRY

DERMATOLOGY

ENDOCRINE

GASTROENTEROLOGY

GENERAL MEDICINE

GENERAL SURGERY

GYNECOLOGY

HEMATOLOGY

HIV

NEONATOLOGY

MEDICAL

Patient Zip

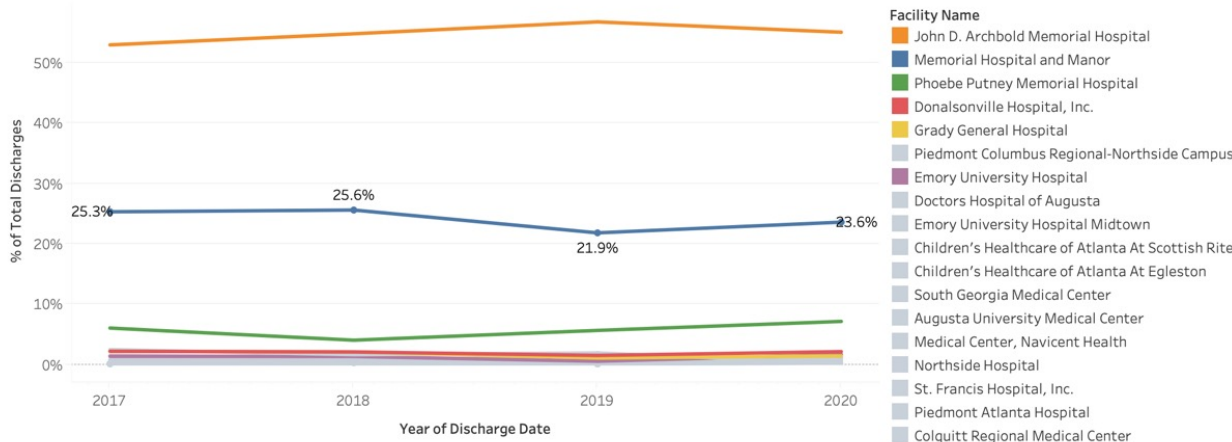
39815

39817

39819

39825

39834



- What share of the inpatient market do we capture?
- Does it vary by acuity?
- Does it vary by product?
- Does it vary by geography?
- Acquire from all payer source:
 - Discharges by hospital by DRG by date
- Produce
 - Table
 - Trends

Market Share – Inpatient PSA – Low Acuity

Inpatient Market Share by Facility

Facility Name	Discharges			% of Total Discharges		
	2017	2018	2019	2017	2018	2019
Grand Total	1,729	1,764	2,196	100.0%	100.0%	100.0%
Memorial Hospital and Manor	1,057	1,044	1,302	61.1%	59.2%	59.3%
John D. Archbold Memorial Hospital	333	351	431	19.3%	19.9%	19.6%
Donalsonville Hospital, Inc.	169	175	234	9.8%	9.9%	10.7%
Grady General Hospital	42	40	65	2.4%	2.3%	3.0%
Phoebe Putney Memorial Hospital	26	39	53	1.5%	2.2%	2.4%
Miller County Hospital	17	16	15	1.0%	0.9%	0.7%
Emory University Hospital	8	7	12	0.5%	0.4%	0.5%
Children's Healthcare of Atlanta At Egleston	4	2	9	0.2%	0.1%	0.4%
Mitchell County Hospital	8	17	7	0.5%	1.0%	0.3%
Medical Center, Navicent Health	2	10	7	0.1%	0.6%	0.3%
Life Brite Community Hospital of Early	2	6	5	0.1%	0.3%	0.2%
Saint Simons By The Sea	5	2	4	0.3%	0.1%	0.2%

Patient Zip (group)

PSA

Tertiary

Secondary

Acuity

High acuity

Low acuity

Product

Null

CARDIOLOGY

DENTISTRY

DERMATOLOGY

ENDOCRINE

GASTROENTEROLOGY

GENERAL MEDICINE

GENERAL SURGERY

GYNECOLOGY

HEMATOLOGY

HIV

NEONATOLOGY

NEUROLOGY

Patient Zip

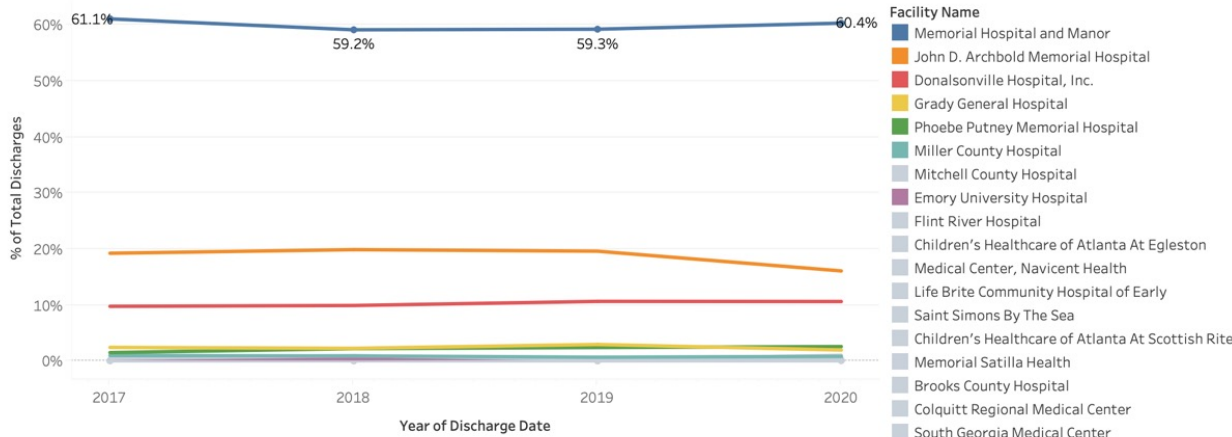
39815

39817

39819

39825

39834



- What share of the inpatient market do we capture?
- Does it vary by acuity?
- Does it vary by product?
- Does it vary by geography?
- Acquire from all payer source:
 - Discharges by hospital by DRG by date
- Produce
 - Table
 - Trends

Market Share – Ambulatory Surgery

Outpatient Market Share by Facility

Facility Name	Discharge Date			Year of Discharge Date		
	2017	2018	2019	2017	2018	2019
Grand Total	6,540	7,024	6,208	100.0%	100.0%	100.0%
John D. Archbold Memorial Hospital	3,299	3,685	3,439	50.4%	52.5%	55.4%
Memorial Hospital and Manor	1,043	1,097	665	15.9%	15.6%	10.7%
Phoebe Putney Memorial Hospital	630	532	449	9.6%	7.6%	7.2%
Donalsonville Hospital, Inc.	458	438	406	7.0%	6.2%	6.5%
Grady General Hospital	323	325	344	4.9%	4.6%	5.5%
Miller County Hospital	290	376	247	4.4%	5.4%	4.0%
Colquitt Regional Medical Center	53	54	94	0.8%	0.8%	1.5%
Smith Northview Hospital--A Campus of South Georgia Medic..	29	103	80	0.4%	1.5%	1.3%
Emory University Hospital	69	102	71	1.1%	1.5%	1.1%
Piedmont Atlanta Hospital	15	18	51	0.2%	0.3%	0.8%
South Georgia Medical Center	81	66	50	1.2%	0.9%	0.8%
Emory University Hospital Midtown	23	8	44	0.4%	0.1%	0.7%
Tift Regional Medical Center	30	7	41	0.5%	0.1%	0.7%

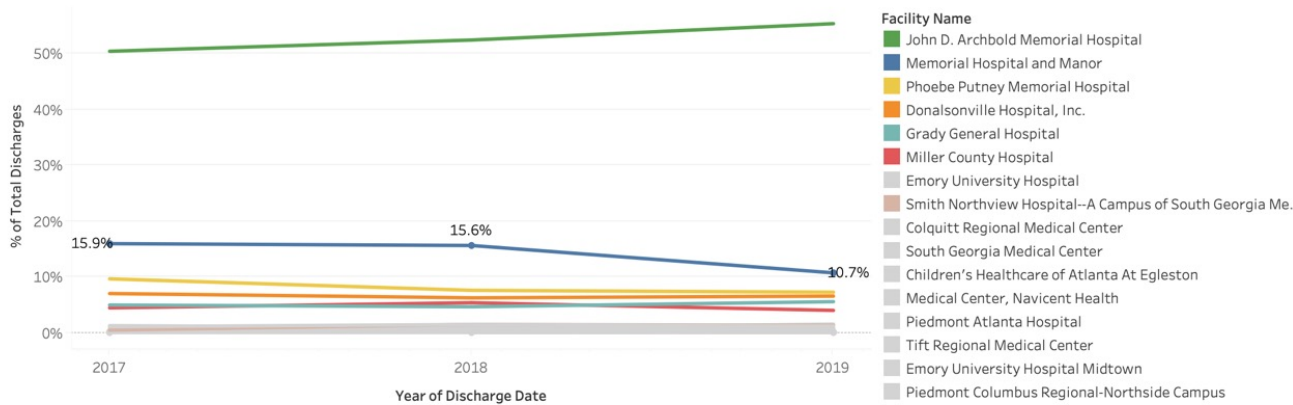
Year of Discharge Date
Multiple values

Service Area
 PSA
 Tertiary
 Secondary

Patient Type Desc
 Ambulatory Surgery
 Emergency Ambulatory Surgery
 Emergency Room
 Other Outpatient

RVC Service
All

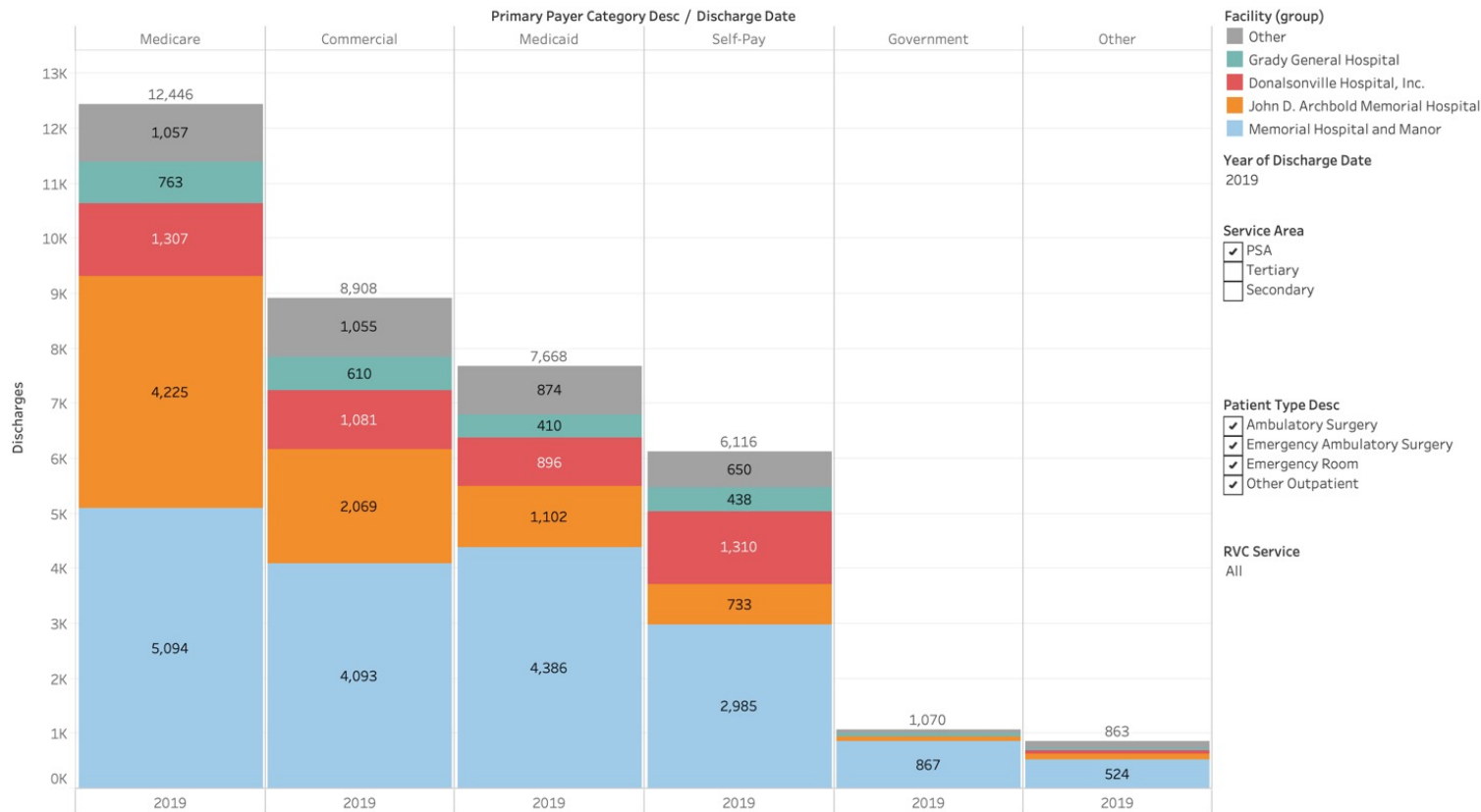
Patient Zip
 39815
 39817
 39819
 39825
 39834



- What share of the ambulatory surgery market do we capture?
- Does it vary by geography?
- Acquire from all payer source:
 - Procedures by hospital by date
- Produce
 - Table
 - Trends

Outpatient Visit Count by Payer by Hospital – PSA

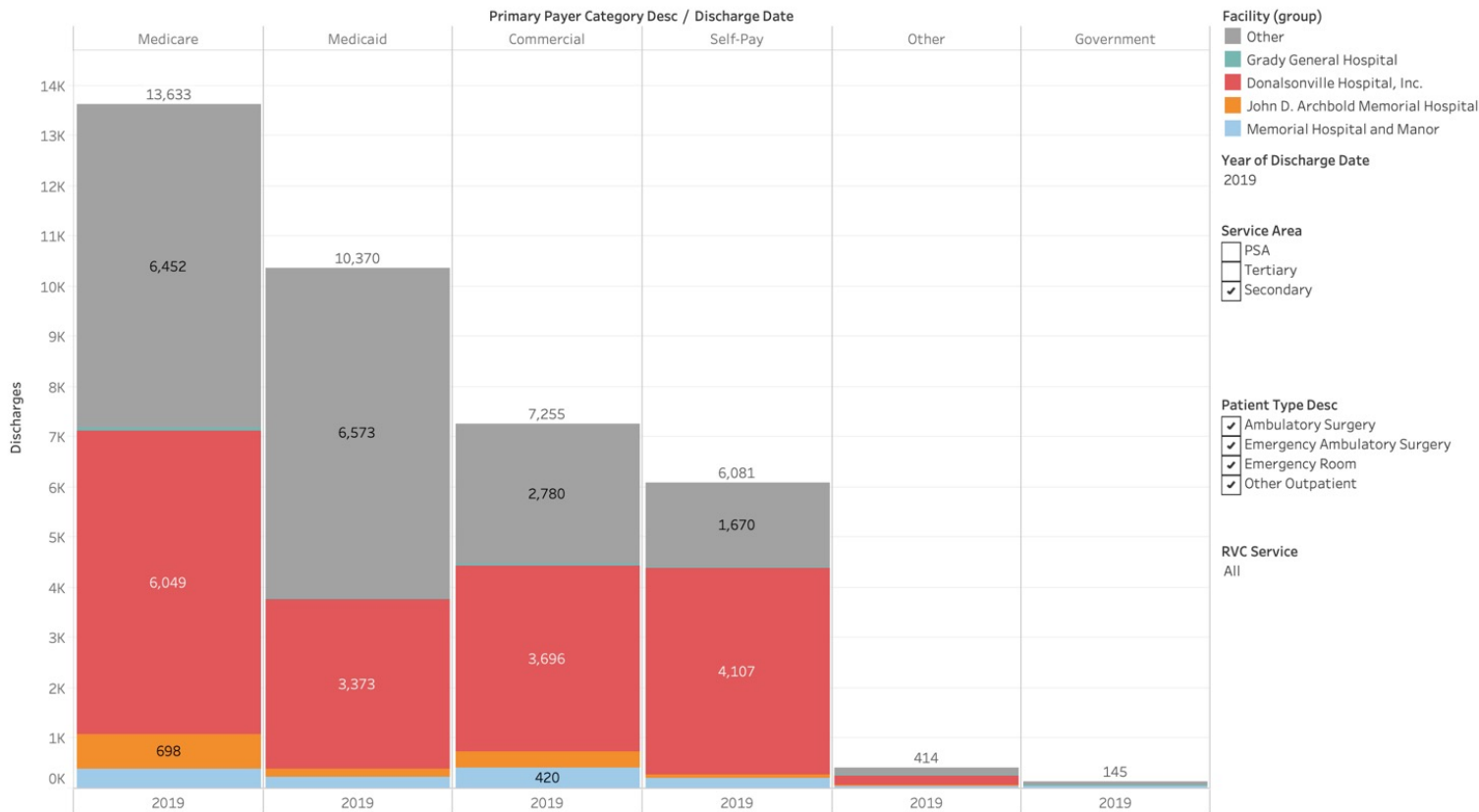
Outpatient Visits by Payer



- What share of each payer type in the outpatient market do we capture?
- Does it vary by geography?
- Acquire from all payer source:
 - OP by hospital by date by payer
- Produce
 - Chart

Outpatient Visit Count by Payer by Hospital – SSA

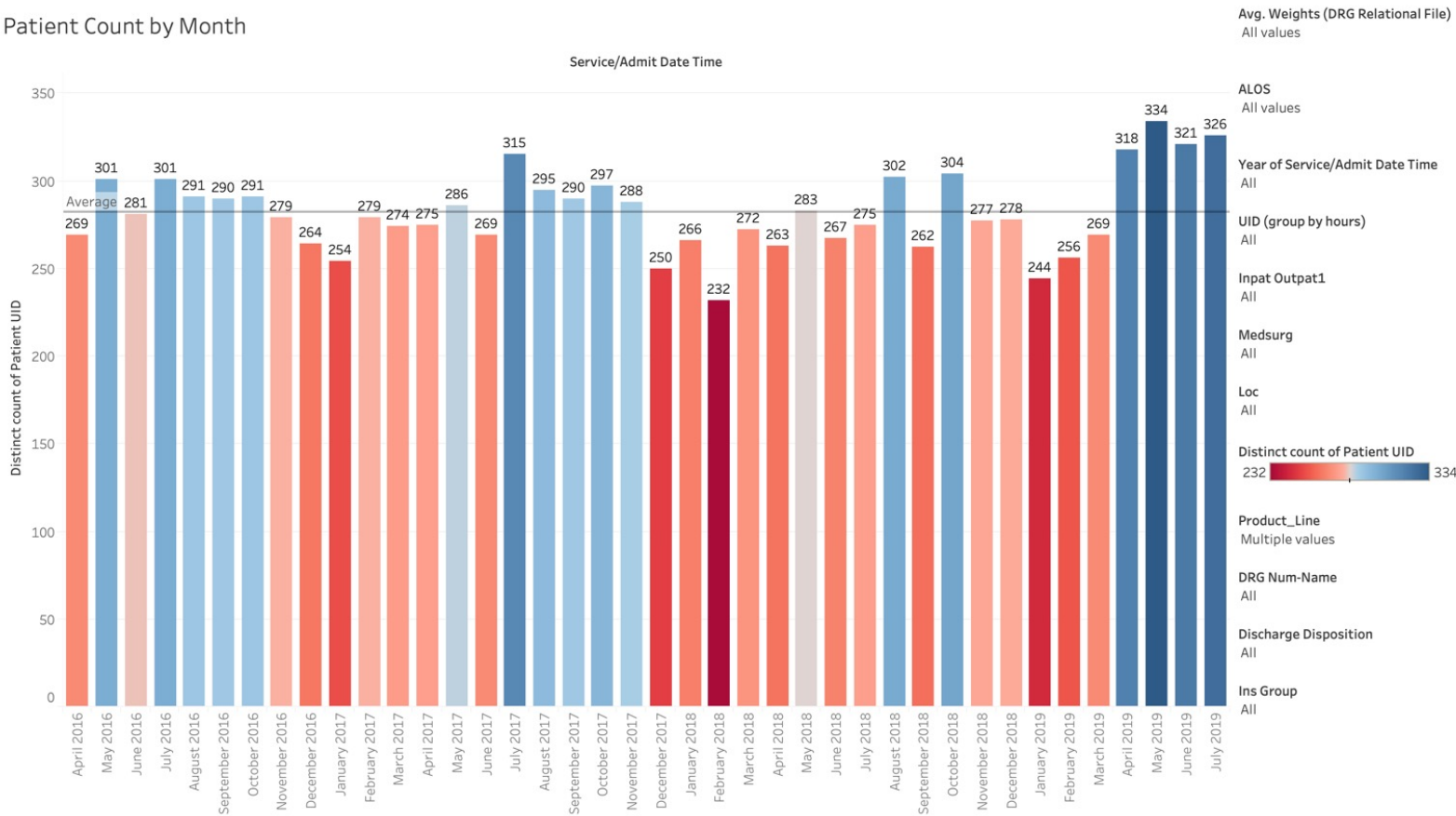
Outpatient Visits by Payer



- What share of each payer type in the outpatient market do we capture?
- Does it vary by geography?
- Acquire from all payer source:
 - OP by hospital by date by payer
- Produce
 - Chart

Throughput – Seasonality Check – All Discharges

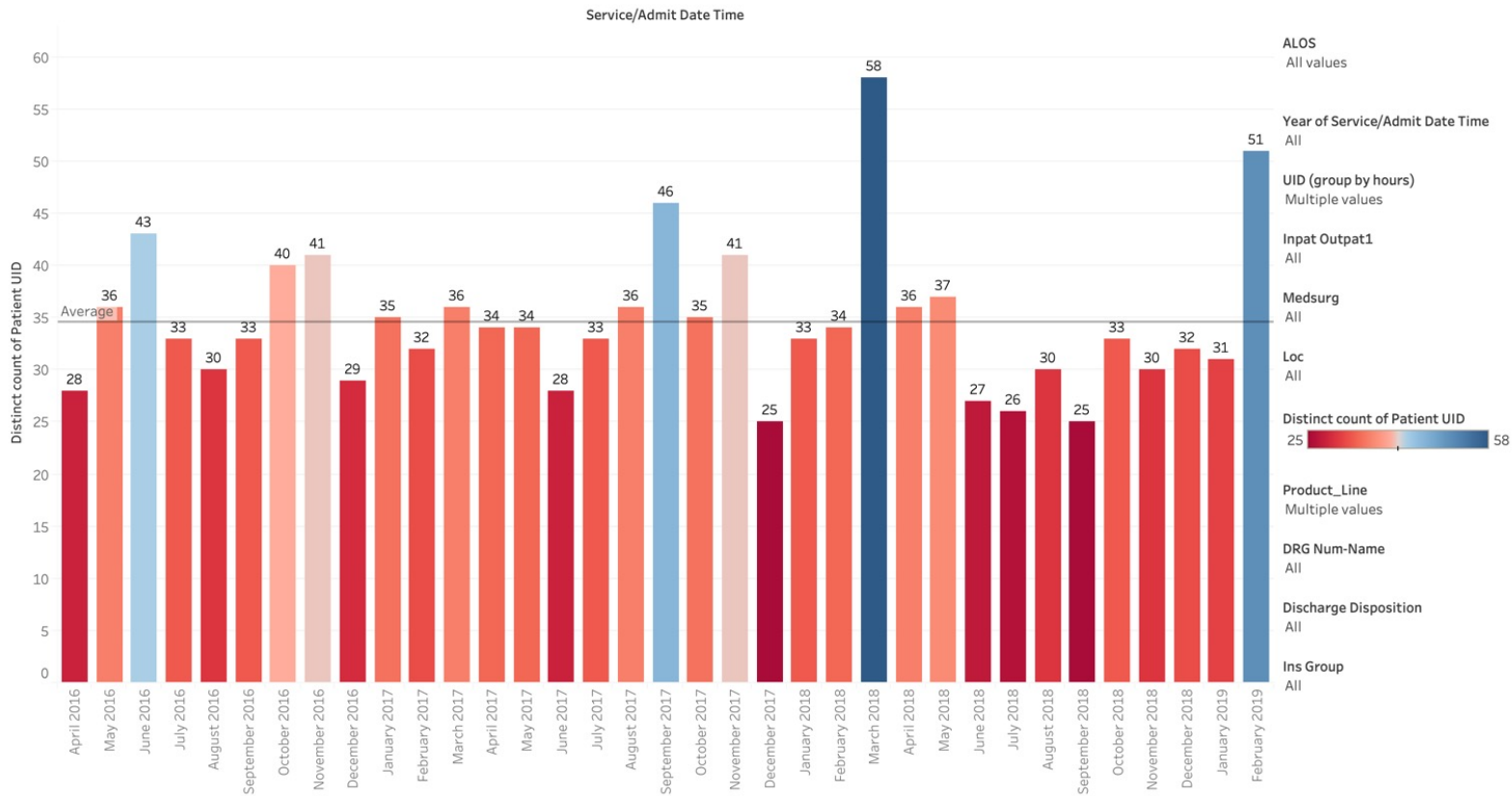
Patient Count by Month



- When evaluating seasonality, and general inpatient utilization.
- Acquire:
 - Admit date, time
 - Discharge date, time
 - Unit
 - DRG
 - Insurance
 - Discharge disposition
- Produce
 - Charts
 - Tables
 - Trends

Throughput – Seasonality Check – Under 48 hour stay

Patient Count by Month

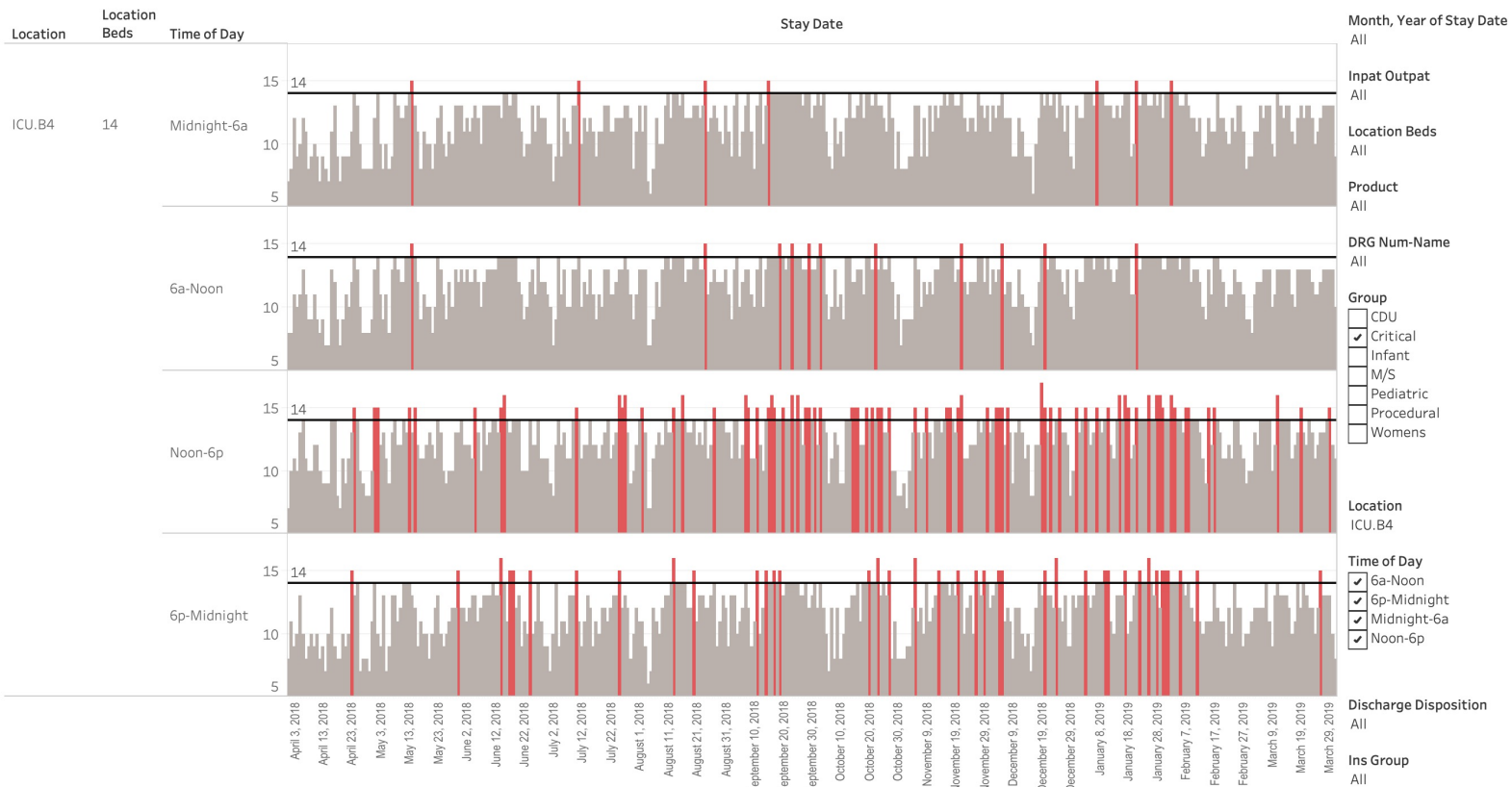


- Avg. Weights (DRG Relational File)
All values
- ALOS
All values
- Year of Service/Admit Date Time
All
- UID (group by hours)
Multiple values
- Inpat Outpat1
All
- Medsurg
All
- Loc
All
- Distinct count of Patient UID
25 58
- Product_Line
Multiple values
- DRG Num-Name
All
- Discharge Disposition
All
- Ins Group
All

- When evaluating seasonality, and general inpatient utilization.
- Acquire:
 - Admit date, time
 - Discharge date, time
 - Unit
 - DRG
 - Insurance
 - Discharge disposition
- Produce
 - Charts
 - Tables
 - Trends

Throughput – Capacity Bottlenecks

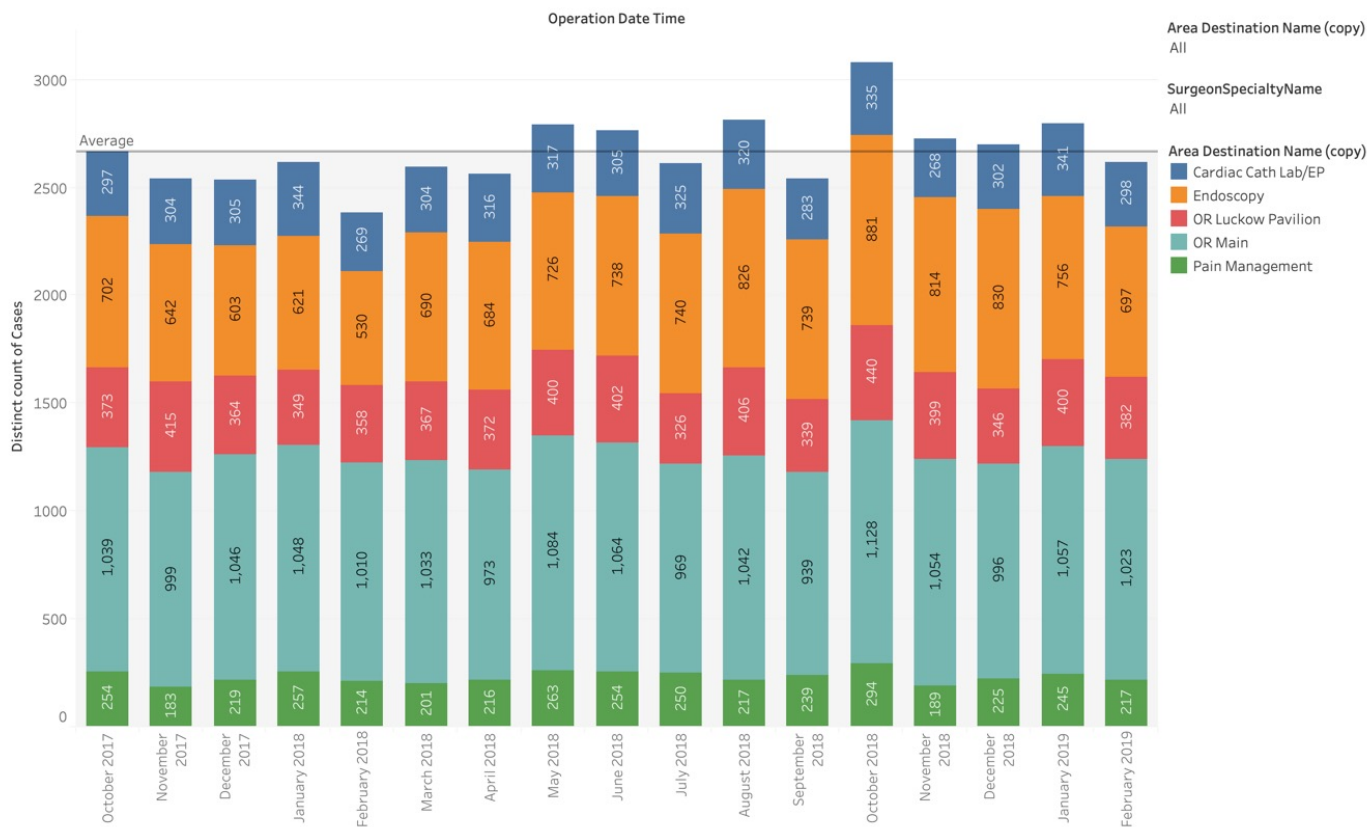
Indiv Loc (On what days did the number of patients exceed the total number of beds?)



- The more granular the data received, the more interesting the analysis can become.
- Discharge time?
- Surgical schedule?
- Transfer staff for moving patients from ICU to MS?

Throughput – Procedural Volume by Month

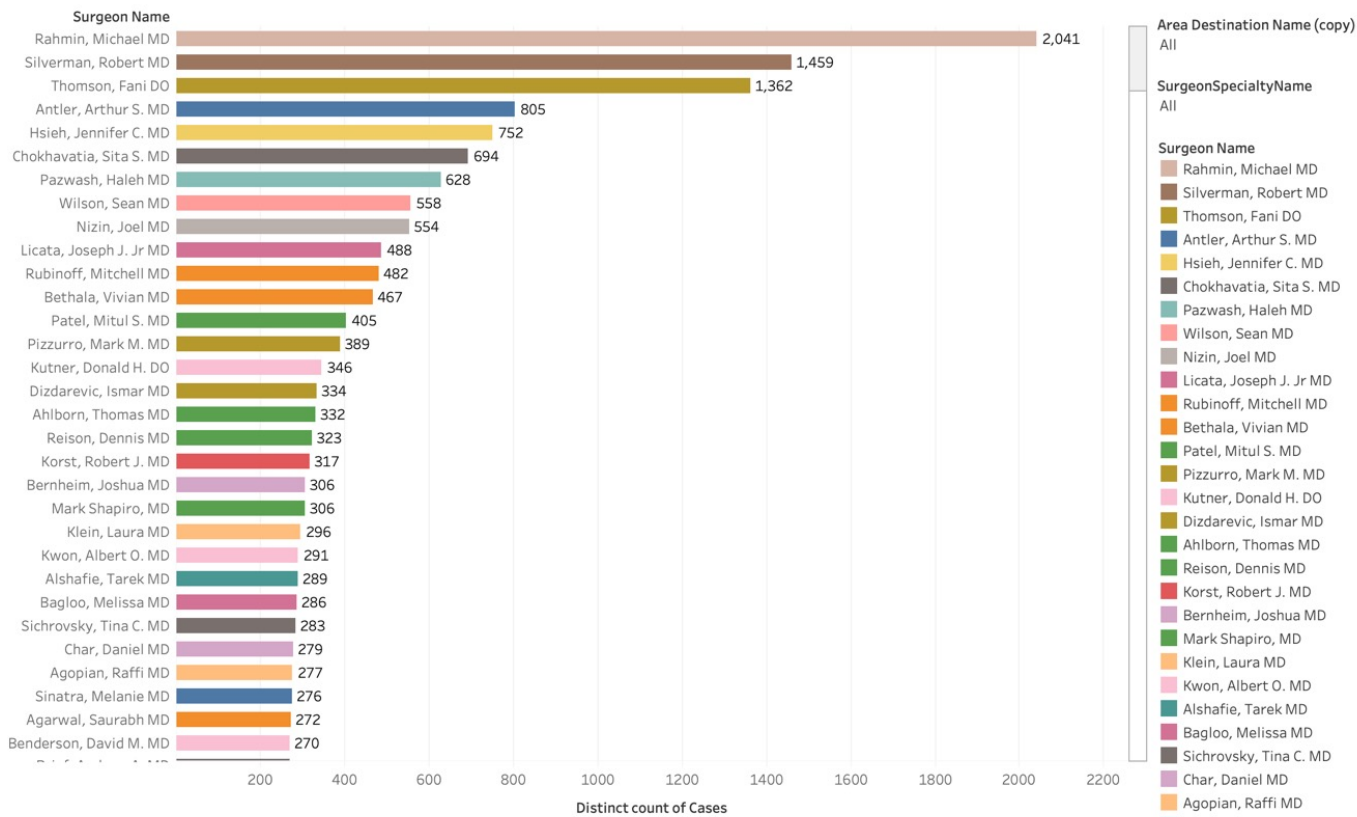
Patient Count by Month



- When evaluating procedure room utilization by month and location.
- Acquire:
 - Procedure date, time
 - Prep, Procedure, PACU, Phase 2 in and out times
 - Surgeon
 - Procedure
 - Location
- Produce
 - Charts
 - Tables
 - Trends

Throughput – Procedural Volume by Surgeon

Patient Count by Surgeon



Account Type (group)
All

Area Destination Name (copy)
All

SurgeonSpecialtyName
All

Surgeon Name

- Rahmin, Michael MD
- Silverman, Robert MD
- Thomson, Fani DO
- Antler, Arthur S. MD
- Hsieh, Jennifer C. MD
- Chokhavatia, Sita S. MD
- Pazwash, Haleh MD
- Wilson, Sean MD
- Nizin, Joel MD
- Licata, Joseph J. Jr MD
- Rubinoff, Mitchell MD
- Bethala, Vivian MD
- Patel, Mitul S. MD
- Pizzurro, Mark M. MD
- Kutner, Donald H. DO
- Dizdarevic, Ismar MD
- Ahlborn, Thomas MD
- Reison, Dennis MD
- Korst, Robert J. MD
- Bernheim, Joshua MD
- Mark Shapiro, MD
- Klein, Laura MD
- Kwon, Albert O. MD
- Alshafie, Tarek MD
- Bagloo, Melissa MD
- Sichrovsky, Tina C. MD
- Char, Daniel MD
- Agopian, Raffi MD
- Sinatra, Melanie MD

- When evaluating procedure room utilization by surgeon.
- Produce
 - Charts
 - Tables
 - Trends

Throughput – Procedural Volume by Site

Procedural Cases (2)

Area Destination Name (copy)	Distinct count of Cases	Avg. PreOP_Mnts	Avg. PreOp Hrs	Avg. Rm_Mnts	Avg. Rm Hrs	Avg. Pacu_Mnts	Avg. Pacu Hrs	Avg. Phase2_Mnts	Avg. Phase2 Hrs
Grand Total	28,468	89.9	1.5	75.5	1.3	71.8	1.2	92.4	1.5
Endoscopy	8,814			39.7	0.7			80.6	1.3
OR Luckow Pavilion	4,504	67.5	1.1	54.6	0.9	69.6	1.2	35.0	0.6
OR Main	12,331	121.4	2.0	122.1	2.0	86.3	1.4	116.1	1.9
Pain Management	2,819	38.6	0.6	15.9	0.3	23.5	0.4		

Year of Operation Date Time
2018

Month, Year of Operation Date Time
All

Patient Age At Registration
0 to 105
and Null values
Account Type (group)
 Inpatient
 Outpatient
 Null

Account Type
 INP
 IVF
 NB
 OBSER
 SDM
 SDS
 ER

Area Destination Name
 Cardiac Cath Lab/EP
 Endoscopy
 OR Luckow Pavilion
 OR Main
 Pain Management

Operation Room Name
All

Proc Name
All

ProcedureGroupName
All

- When evaluating procedure room volumes and duration by location.
- Acquire:
 - Procedure date, time
 - Prep, Procedure, PACU, Phase 2 in and out times
 - Surgeon
 - Procedure
 - Location
- Produce
 - Charts
 - Tables
 - Trends
 - Counter arguments

Throughput – Procedural Duration by Site / Specialty

Procedural Cases (4)

Area Destination Name (copy)	SurgeonSpecialtyName	Distinct count of Cases	Avg. PreOP_Mnts	Avg. PreOp Hrs	Avg. Rm_Mnts	Avg. Rm Hrs	Avg. Pacu_Mnts	Avg. Pacu Hrs	Avg. Phase2_Mnts	Avg. Phase2 Hrs
Grand Total		24,545	92.7	1.5	91.4	1.5	71.9	1.2	124.7	2.1
OR Luckow Pavilion	Total	5,656	68.7	1.1	54.6	0.9	69.9	1.2	35.0	0.6
	General Surgery	519	58.4	1.0	59.4	1.0	77.8	1.3		
	Orthopedics	952	78.4	1.3	89.3	1.5	86.4	1.4		
	Null	317	64.8	1.1	102.7	1.7	93.0	1.6		
	Urology	559	72.1	1.2	44.5	0.7	70.3	1.2		
	Ophthalmology	1,352	77.7	1.3	44.1	0.7	57.7	1.0		
	Gynecology/Obstetrics	556	65.5	1.1	40.1	0.7	76.5	1.3		
	Gynecology	201	69.6	1.2	47.2	0.8	82.4	1.4		
	Neurosurgery	1			17.0	0.3				
	Repro Endocrinology/Infe..	694	50.4	0.8	21.6	0.4	49.3	0.8		
	Bariatric Surgery	14	27.5	0.5	54.7	0.9	56.0	0.9		
	Otolaryngology	267	66.0	1.1	59.8	1.0	69.7	1.2	15.0	0.3
	Podiatry	114	67.7	1.1	67.1	1.1	77.3	1.3	55.0	0.9
	Surgical Oncology	37	61.4	1.0	43.3	0.7	76.0	1.3		
	Plastic and Reconstruct	21	50.0	0.8	65.4	1.1	74.2	1.2		
	Medical	4	93.3	1.6	37.8	0.6	77.5	1.3		
Radiation Therapy	48	56.1	0.9	37.2	0.6	64.2	1.1			
OR Main	Total	15,414	122.5	2.0	122.0	2.0	86.3	1.4	124.7	2.1
	General Surgery	5,232	119.1	2.0	103.0	1.7	88.3	1.5	126.4	2.1
	Orthopedics	3,001	125.5	2.1	142.0	2.4	87.5	1.5	109.7	1.8
	Null	503	127.7	2.1	144.8	2.4	94.9	1.6	120.6	2.0
	Urology	1,115	118.2	2.0	66.8	1.1	69.6	1.2	116.4	1.9
	Ophthalmology	185	113.0	1.9	70.1	1.2	53.6	0.9	79.6	1.3
	Gynecology/Obstetrics	930	113.1	1.9	70.0	1.2	67.2	1.1	102.4	1.7
	Gynecology	857	133.1	2.2	120.5	2.0	82.9	1.4	119.8	2.0
	Neurosurgery	926	126.9	2.1	188.0	3.1	113.4	1.9	120.8	2.0
	Repro Endocrinology/Infe..	1	74.0	1.2	50.0	0.8	36.0	0.6		
	Cardiac Surgery	594	133.0	2.2	234.6	3.9	113.8	1.9	109.8	1.8
Bariatric Surgery	564	128.7	2.1	138.7	2.3	89.1	1.5	135.0	2.3	
Otolaryngology	269	103.5	1.7	102.4	1.7	75.7	1.3	221.6	3.7	

Year of Operation Date Time

- 2017
- 2018
- 2019

Month, Year of Operation Date Time

All

Patient Age At Registration

0 to 105
and Null values

Account Type (group)

- Inpatient
- Outpatient
- Null

Account Type

- INP
- IVF
- NB
- OBSER
- SDM
- SDS
- ER
- OUTPT
- Null

Operation Room Name

Multiple values

Proc Name

All

- When evaluating procedure room volumes and duration by location and specialty.
- Acquire:
 - Procedure date, time
 - Prep, Procedure, PACU, Phase 2 in and out times
 - Surgeon
 - Procedure
 - Location
- Produce
 - Charts
 - Tables
 - Trends
 - Counter arguments

Wrap Up

- Data can be incredibly powerful and insightful
 - Access it
 - Manipulate it
 - Share it
- Lots of trial and error is always involved, especially when confirming data validity
- Decisions are better when backed with real data
 - Reduce emotions
 - Increase acceptance
 - Improve access
 - Maximize efficiency



John Downes, MBA, LEED AP
JDownes@stroudwater.com
1685 Congress Street, Suite 202
Portland, Maine 04102
(207) 221-8275

www.stroudwater.com