

# DHG

.....  
healthcare

CAPABILITIES >>>



SOLUTIONS >>>



Required Data Analytics – Leveraging Data to Drive Decisions



## About the Presenter



### **Brandon Hill**

Brandon is a Senior Manger in our Enterprise Intelligence team at Dixon Hughes Goodman where he:

- Assists organizations in driving strategic initiatives through data management including Health System Strategic Planning, Medicare Shared Savings Program development, Hospital Quality and Efficiency Dashboard creation and tailored market assessments
- Performs hospital/service line analyses to inform clients on market trends, provider utilization patterns and strategic opportunities within their given service areas
- Informs the decision making process for clients on strategic initiatives through the utilizations of internal and external data



# Agenda

- DHG Healthcare - Who We Are and What We Do
- Required Analytics – What Does it Mean
- How Are Organizations Using Information to Inform Decision Making in Real-time



# DHG Healthcare is aligned to support transformational themes related to the achievement of Risk Capability.



FOCUSED ON THE CRITICAL ISSUES FACING HEALTHCARE ORGANIZATIONS

2,000+ CLIENTS ACROSS THE UNITED STATES



300+ DEDICATED HEALTHCARE PROFESSIONALS



50+ PARTNERS/PRINCIPALS /DIRECTORS



10<sup>TH</sup> LARGEST PRIVATELY-HELD HEALTHCARE CONSULTING FIRM RANKED BY MODERN HEALTHCARE

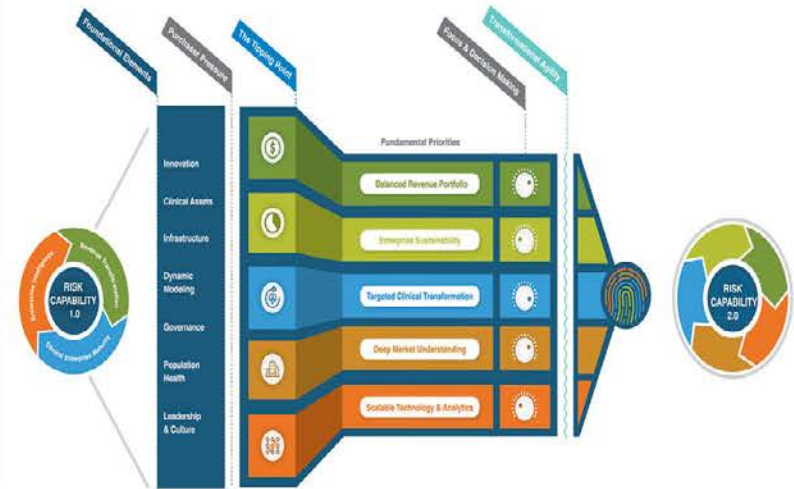


## WHAT WE BELIEVE

The healthcare ecosystem (including providers, payers and employers) is undergoing a radical shift from a traditional fee-for-service economy towards one that is value based with vastly increased expectations for quality and cost. While the speed at which individual markets tip from one economy towards the other has varied, we believe that the healthcare industry, as a whole, has passed the tipping point. At this point and beyond, healthcare organizations will be facing greater risk for payment of services despite the impact to the organization, both financially and operationally. We believe that Risk Capability is the new measurement by which healthcare providers will thrive or struggle.



Beyond The Tipping Point // Risk Capability



### Capabilities

- Enterprise Intelligence
- Finance
- National Strategy Practice
- Reimbursement
- Revenue Cycle Improvement

### Transformational Solutions

- circumference™
- calibrate™
- iluminus™
- Innovation Acceleration™
- ko'neki™

[www.dhgllp.com/healthcare](http://www.dhgllp.com/healthcare)





# Enterprise Intelligence at DHG Healthcare



## NETWORK ANALYTICS

- Affordable Care Organization (ACO)
- Clinically Integrated Network Quality Analytics (i.e. HQEP, HEP, QIP)
- Commercial Claims
- QNET Analytics
- Value Based Purchasing (VBP)
- Out of Network Utilization



## EPISODIC ANALYTICS

- Bundled Payment Care Initiative Advanced (BPCI- A)
- Comprehensive Joint Replacement (CJR)
- Oncology Care Model (OCM)
- Custom Bundles



## SERVICE LINE ANALYTICS

- State Data Service Line Dashboard
- Comprehensive Service Line Dashboard
- CMS State Data Service Line Dashboard



## MARKET DRIVEN ANALYTICS

- Access Assessments (i.e. FSED, Urgent Care, Imaging Centers, ASCs)
- Provider Assessments
- Physician Need and Inventory
- Market Assessment
- Demographics



## POST ACUTE SOLUTIONS

- SNF Scorecards
- Home Health Scorecards
- PAC Market Assessment
- SNF Operational Improvement
- SNF Back Office Hosting Product



### UNIQUE SKILLS:

Tableau, SAS Programming, SQL Knowledge, VBA Database Programming, Clinical Expertise, Dedicated Strategic Analytic Advisory Team, In Depth Knowledge of CMS Data

**150+**  
**MARKETS**

Provider, Overall Market and Outpatient Assessments

**300+**  
**PROVIDERS**

Monthly dashboard and analysis tool for acute care providers at risk for CMS Episodic Care

**200+**  
**LOCATIONS**

Skilled Nursing Facilities with daily business functions and operational platforms

**100+**  
**LOCATIONS**

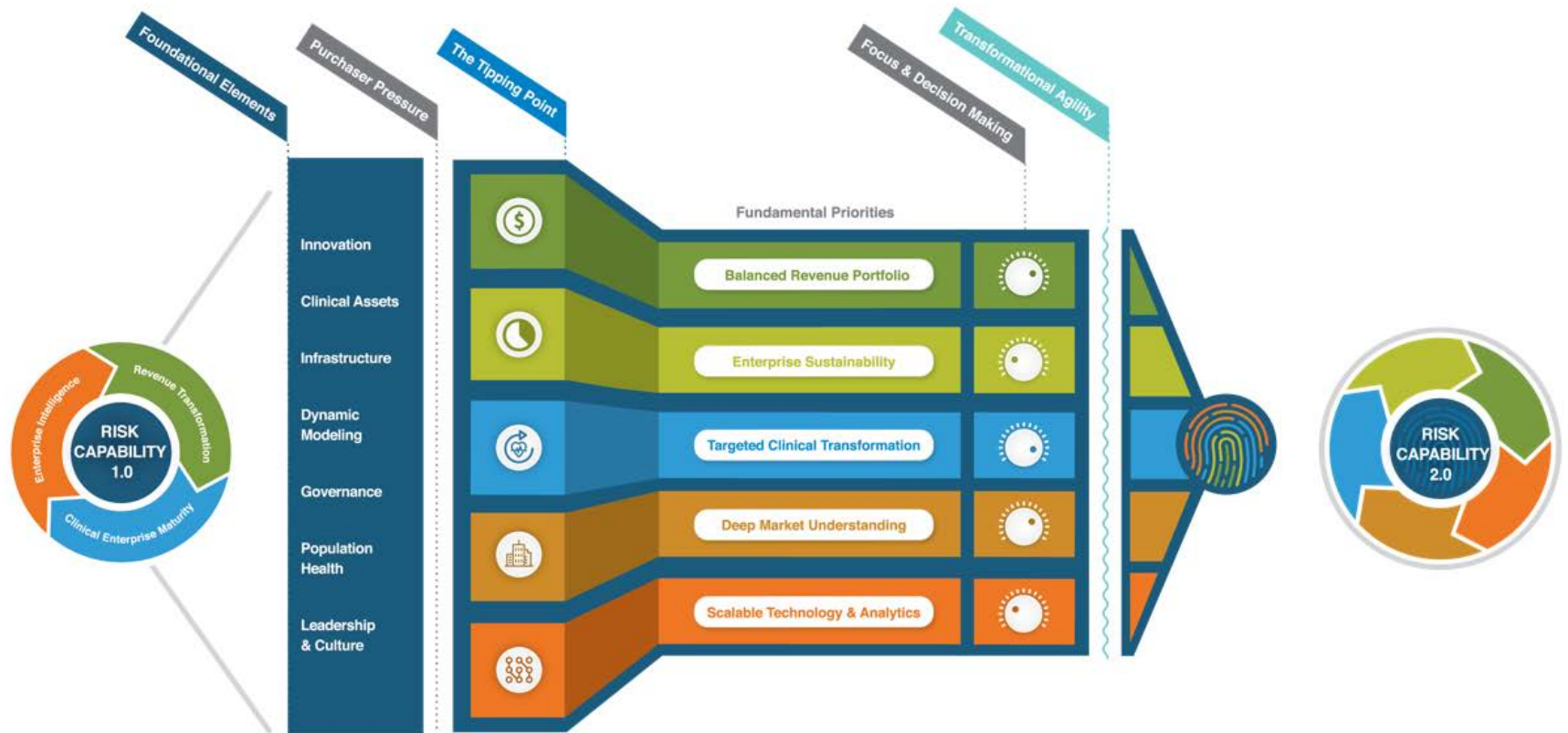
Market assessments/ Strategic planning analysis for a large post-acute care provider





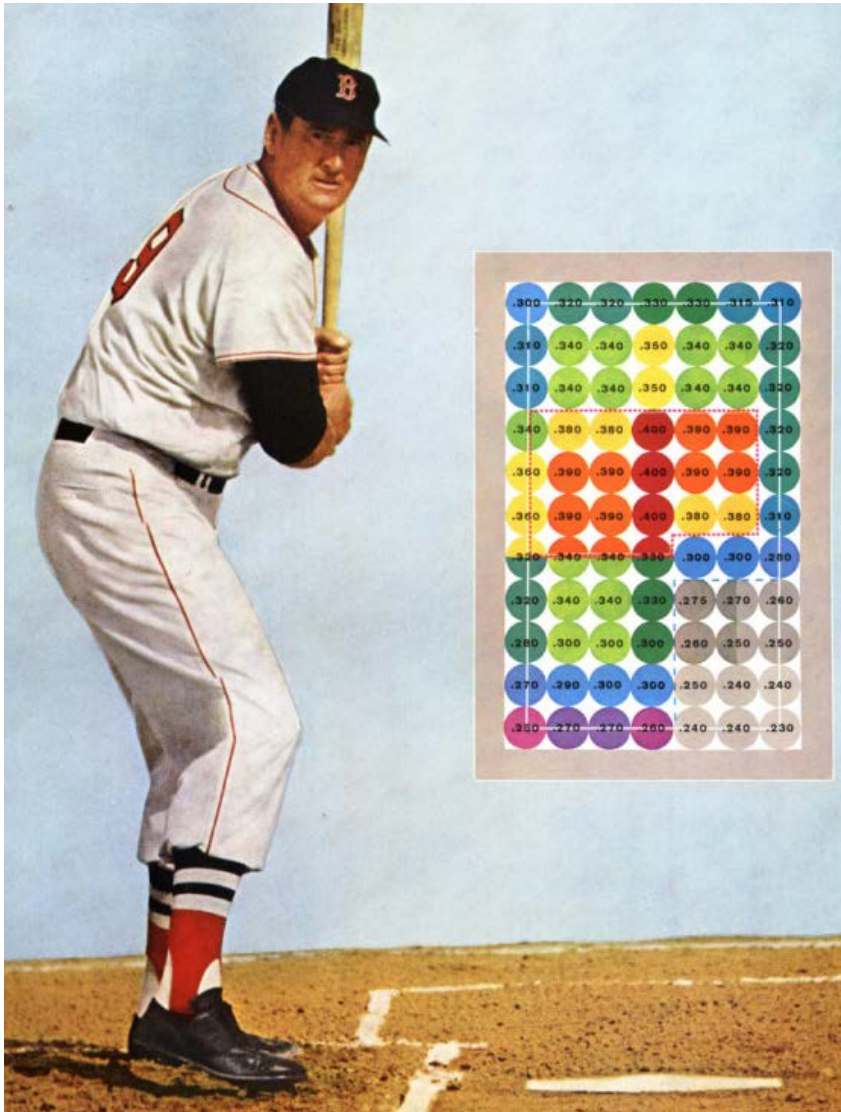
# Organizational Risk Capability

## Beyond The Tipping Point // Risk Capability





# Data Analytics...Then



- Ted Williams – The Science of Hitting (1971)
- Looking for pitches in his “happy-zone”, with a sweet spot belt high right over the plate
- Had to swing at pitches he knew that he couldn’t hit well (low and outside), because they were strikes
- He knew that (with less than two strikes) if he could select only those pitches in the red/orange he’d bat  $\sim .400$



# Data Analytics... Now

**Jose Altuve**  
Houston Astros

Age: 28 | Bats/Throws: R/R | 5' 6" / 165 | 2B

Birthdate: 5/6/1990 (28 y, 4 m, 15 d)  
Contract: \$151M / 5 Years (2020 - 2024)

**RotoWire News:** Altuve went 2-for-3 with a double, a walk, three runs scored, two RBI and a stolen base in Saturday's 10-4 win over the Diamondbacks. (9/16/2018)

9/10/2018 **RG** The Sleeper and the Bust Episode: 598 - 2018 Disappointments in ... by Paul Sporer  
8/20/2018 **FG** The AL West Now Has a Race by Jay Jaffe  
6/4/2018 **RG** Disappointing 2018 Studs: Altuve, Stanton, & Bellinger by Jeff Zimmerman  
5/9/2018 **RG** The Sleeper and the Bust Episode: 547 - The Struggle Bus Team by Paul Sporer  
3/17/2018 **FG** Jose Altuve Signs Updated Joey Votto Deal by Craig Edwards

Season Stats | Graphs | Splits | Game Log | Play Log | Compare | Spray Charts | **Heatmaps**

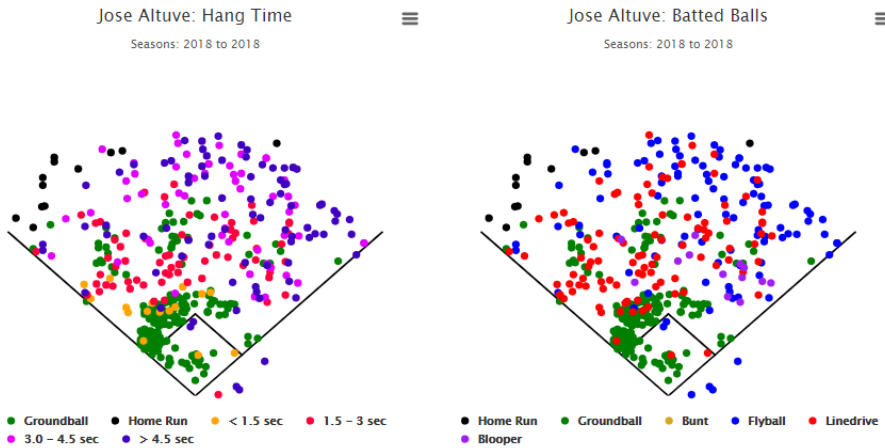
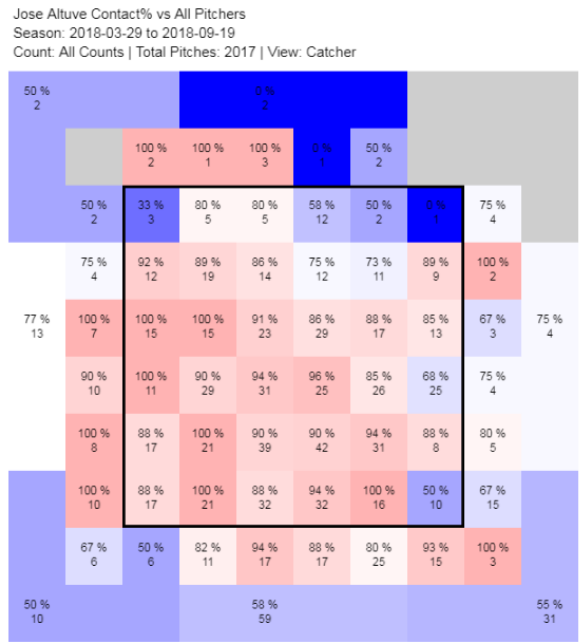
Grid Type: 5x5 | **10x10** | KDE

Viewpoint: **Catcher** | Pitcher

Batting Stat: Conta...

Season: 2018 | All Dates

3/29/2018 to 9/19/2018 vs All All Counts All Pitches Selected No Smoothing Refresh

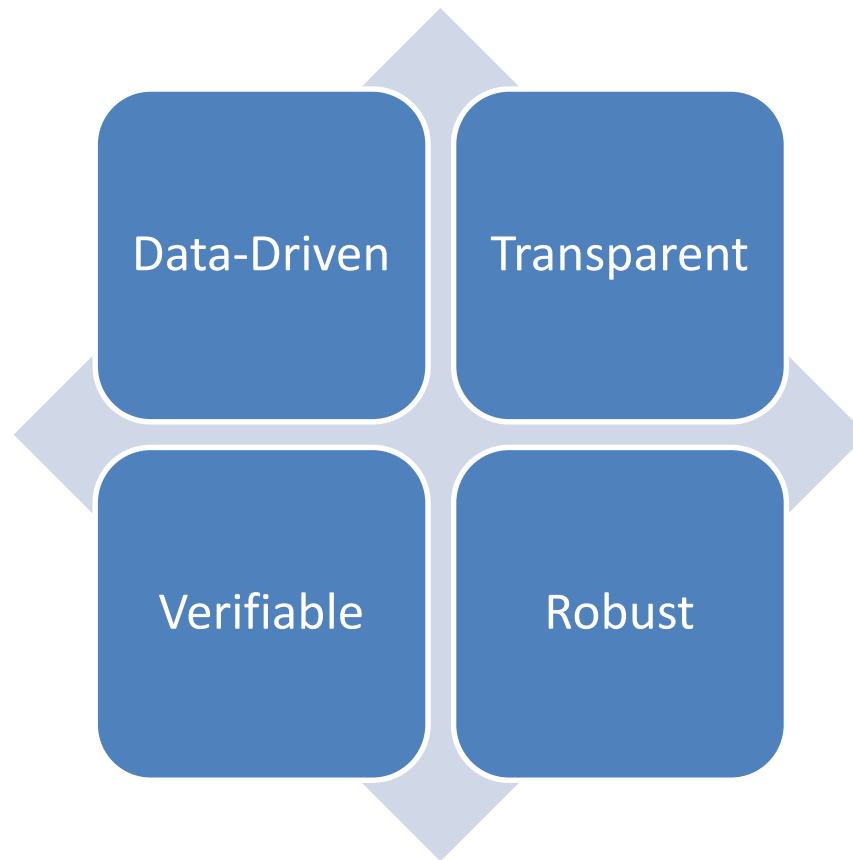






# Objectives of Healthcare Analytics

- The fundamental objective to healthcare analytics is to help people to make and execute rational decisions, defined as being:





# Evolution of Data Analytics in Healthcare

## Data Analytics in the Past

- Expensive
- Small
- Slow
- Costly

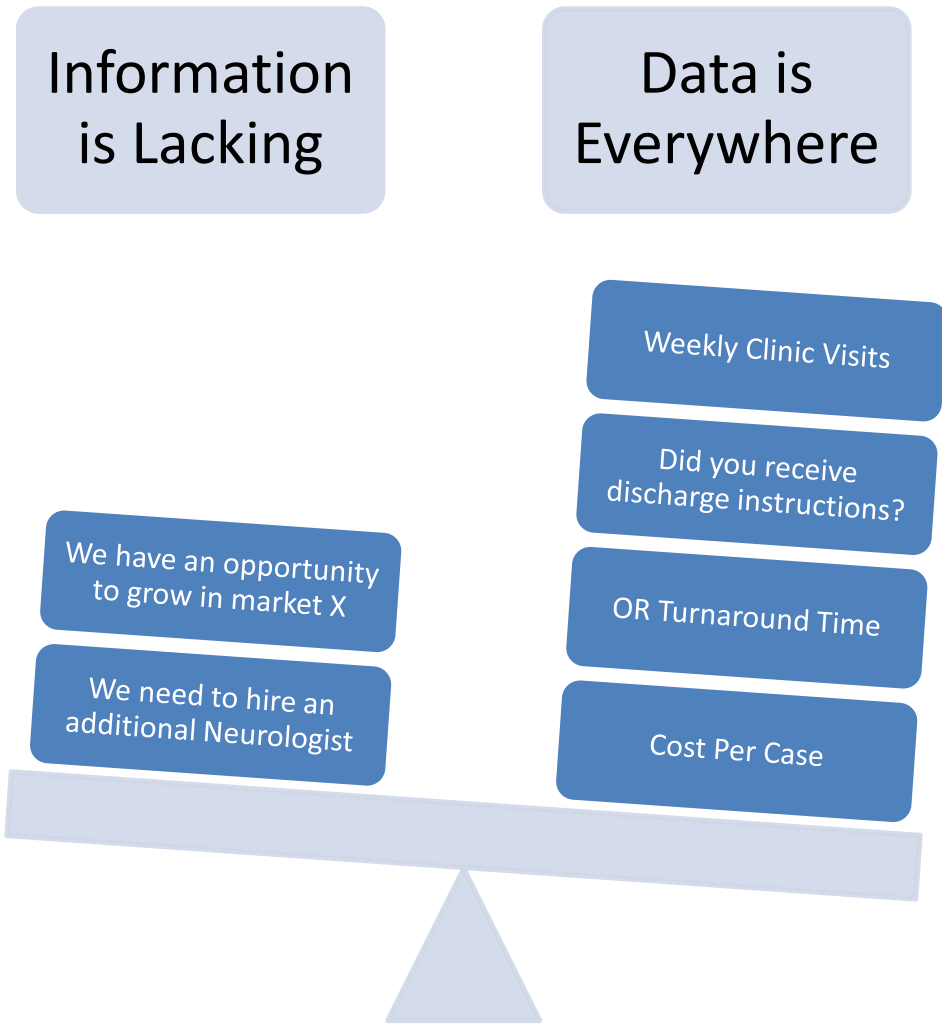


## Data Analytics Today

- Data Acquisition is Cheap
- Large and Varying Types of Data
- Extremely Fast



# Finding the Balance Between Data and Information





# Changing Landscape in Healthcare

## Payment Models

- Optimize cost structure
- Revenue transformation shifting risk
- Transition from volume to value

## Consumerism

- Employer as consumers
- Patient consumers demand high quality/low cost care

## Accessibility

- Expansion of Telehealth initiatives
- Enhanced outpatient access
- Strategic Partnerships for retail care

## Clinical Advancements

- Quality and Process Improvement
- Enterprise intelligence
- Innovations in research

## Evolving Contracting Strategies

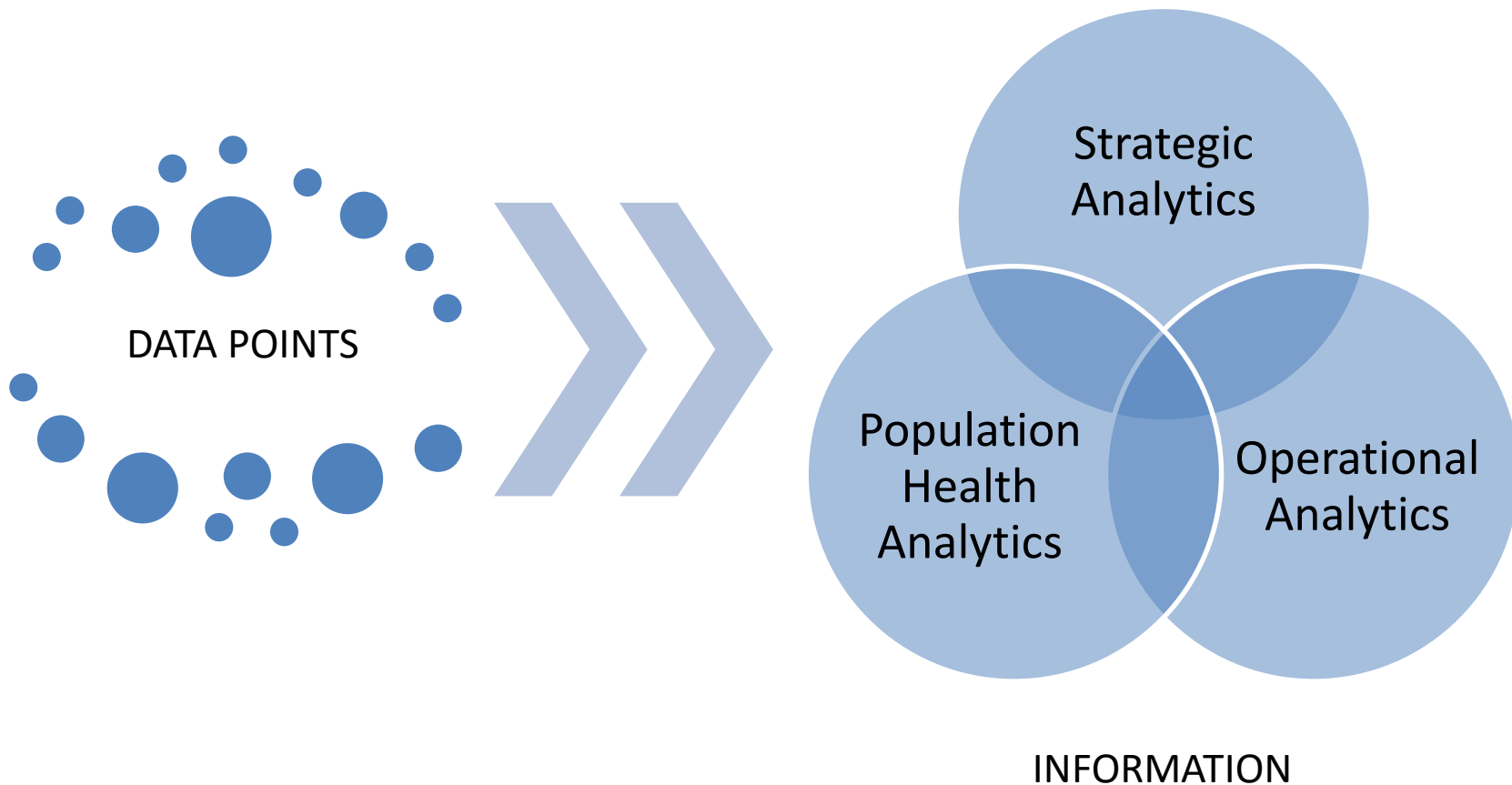
- Medicare Advantage is growing in 2018
- Consolidation is leading to Joint-Contracting

## Population Health

- Management of the care continuum
- Understanding of the health needs of the population
- Learning and impacting social determinants of health

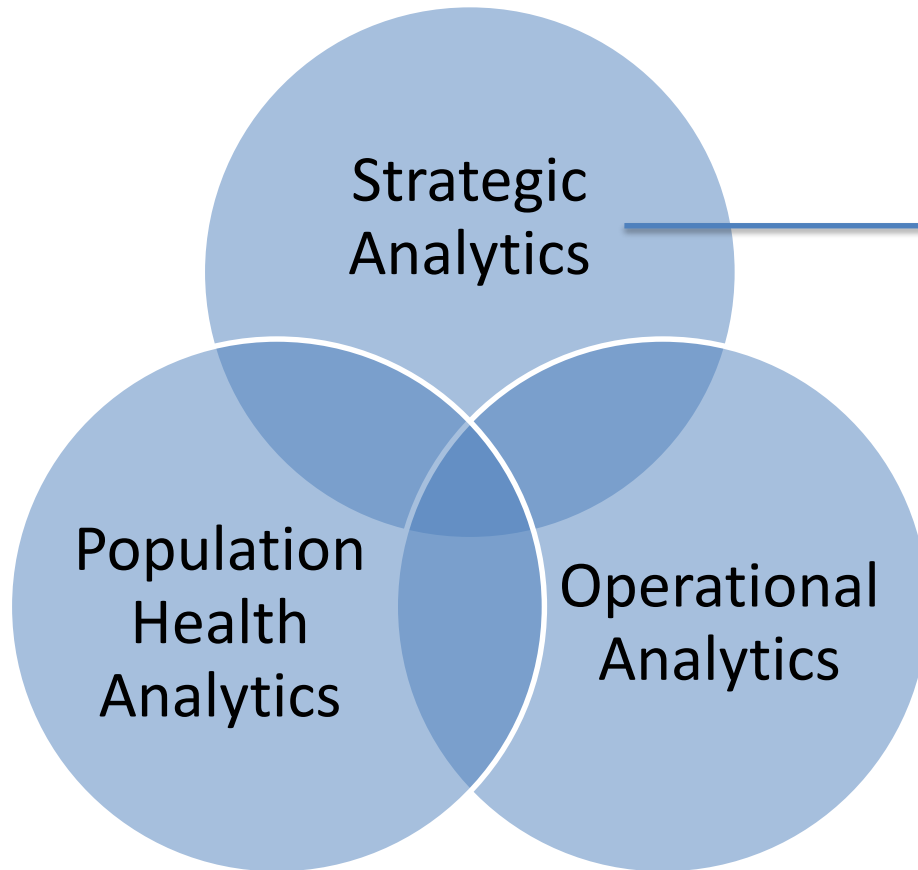


# Hospital / Health System Data Management





# Hospital / Health System Data Management

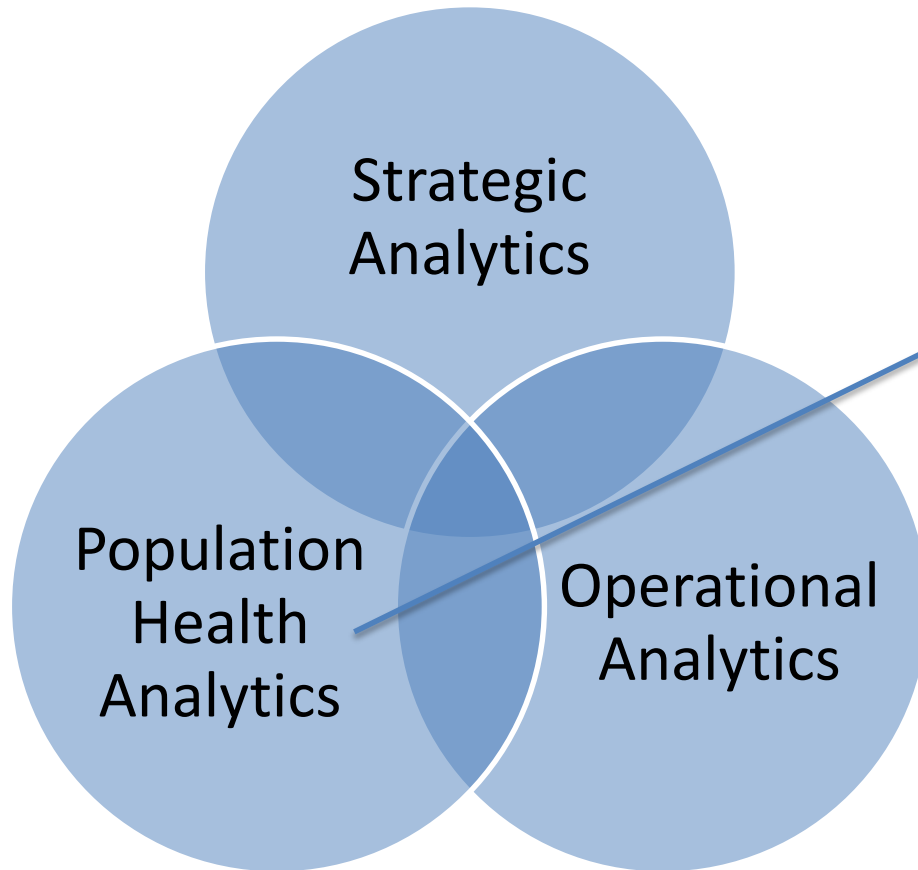


*DATA USED TO INFORM STRATEGIC INITIATIVES AND THE NON-ORGANIC GROWTH EFFORTS OF AN ORGANIZATION*

- Trends and Changes in Market Demographics
- Competitor Market Share and Development Activity
- Provider Landscape (Employed Physicians v. Independent Physicians)
- Network Development and Value Quantification



# Hospital / Health System Data Management

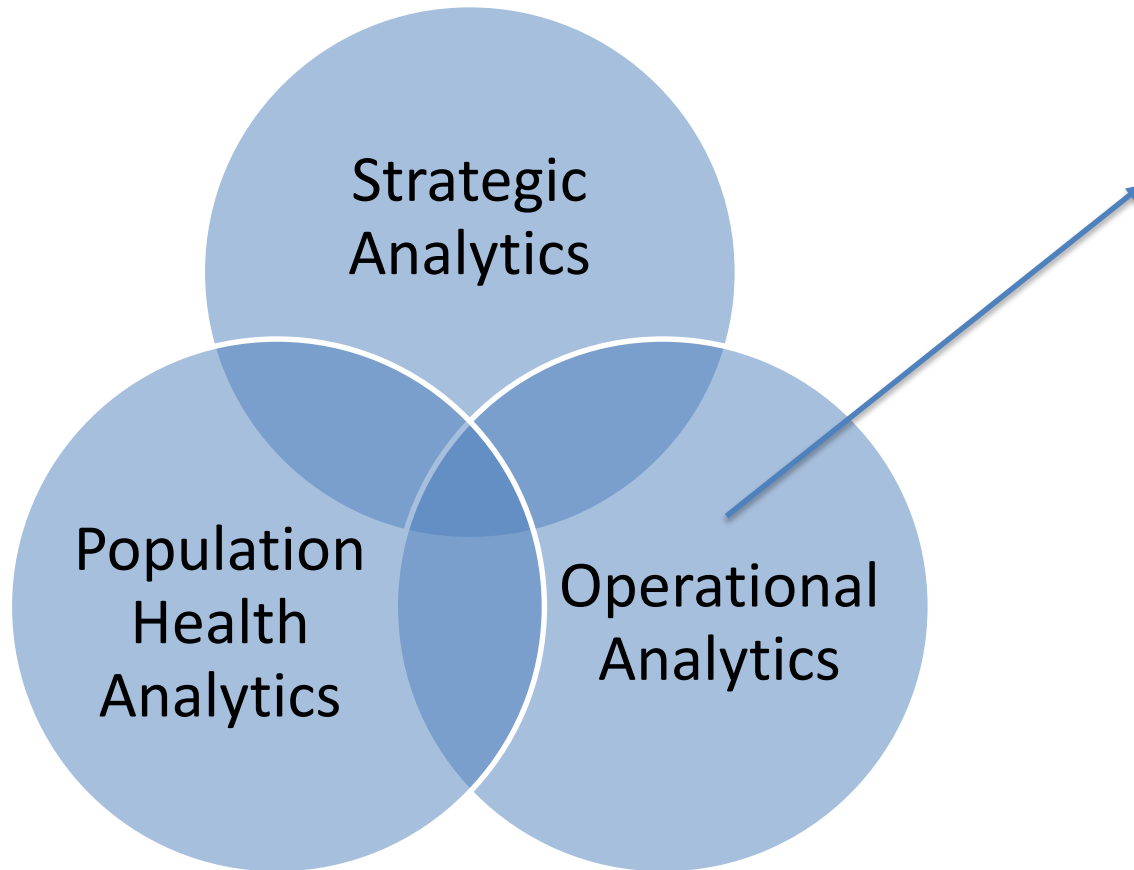


*DATA USED TO ASSESS THE QUALITY OF CARE BEING PROVIDED AND PROACTIVELY ADDRESS PATIENT NEEDS*

- EHR Based Analysis / Quality Metrics
- Care Path / Protocol Compliance
- Care Coordination Patient Management
- Population Specific Metric Performance (i.e. AVWs, Flu Vaccinations, Diabetic Eye Exams, etc.)
- Clinical Documentation and Improvement



# Hospital / Health System Data Management



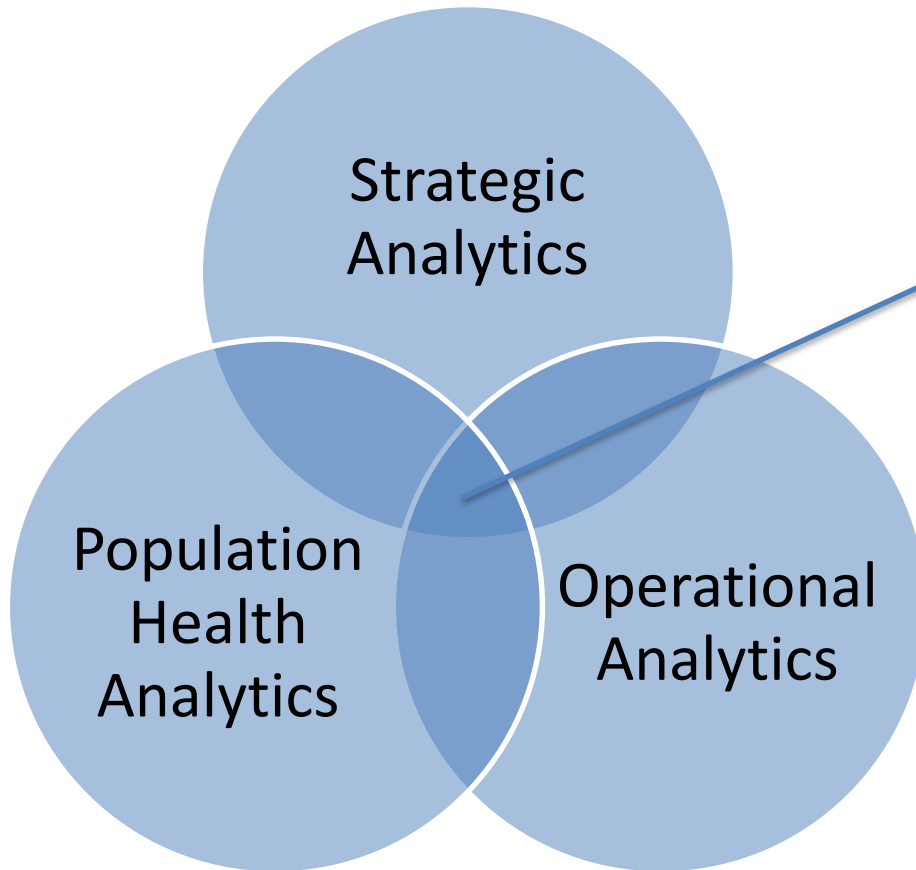
## *DATA USED TO MEASURE THE DAY-TO-DAY PERFORMANCE OF AN ORGANIZATION*

- Financial Performance Relative to Budget
  - Income Statement, Balance Sheet, Key Performance Indicators
- Patient Volumes
- Length of Stay
- Surgical Statistics (i.e. Room Turnaround Time, WIWO, etc.)
- Patient Experience
- Employee Turnover Rate
- Patient Access / Slot Utilization
- Productivity
- Patient / Case Mix





# Hospital / Health System Data Management



## The Overlap

*THOSE ACTIVITIES THAT PRODUCE DATA REQUIRING ELEMENTS FROM MULTIPLE BUCKETS*

- Strategic Priorities / Special Projects
- Bundled Payments for Care Improvement – Advanced (BPCI-A)
- Medicare Shared Savings Program (MSSP)
- Next Generation Accountable Care Organizations (NG-ACO)
- Clinically Integrated Network (CINs) Contracts





# What Are the Challenges to Major Challenges to Providing High Quality Healthcare Analytics

Variability

Gaining Trust in the Data and Processes to be Accurate

Obtaining Data in a Timely Fashion

Developing a Consolidated, Usable Platform/Interface

Organizing the Data in a Way that Compels the Organization to Act



*If it's not measured, then it can't be managed*

*If it's not **accurately measured and supported with timely and consistent delivery of information,** then it can't be managed*



## State Data Service Line Dashboard

Service Area Map

Inpatient	
Hospital Market Share Trend	Service Line Age & Payer - Opportunity
Market Share Gap	Service Line System Affiliation
Opportunity Assessment by DRG	PSA Scorecard
Market Map	PSA by Hospital Summary
Contribution Margin Map	PSA by Payer Group Summary
Service Line Detail	PSA by Service Line Summary
Service Line Age & Payer	In / Out Migration Dashboard

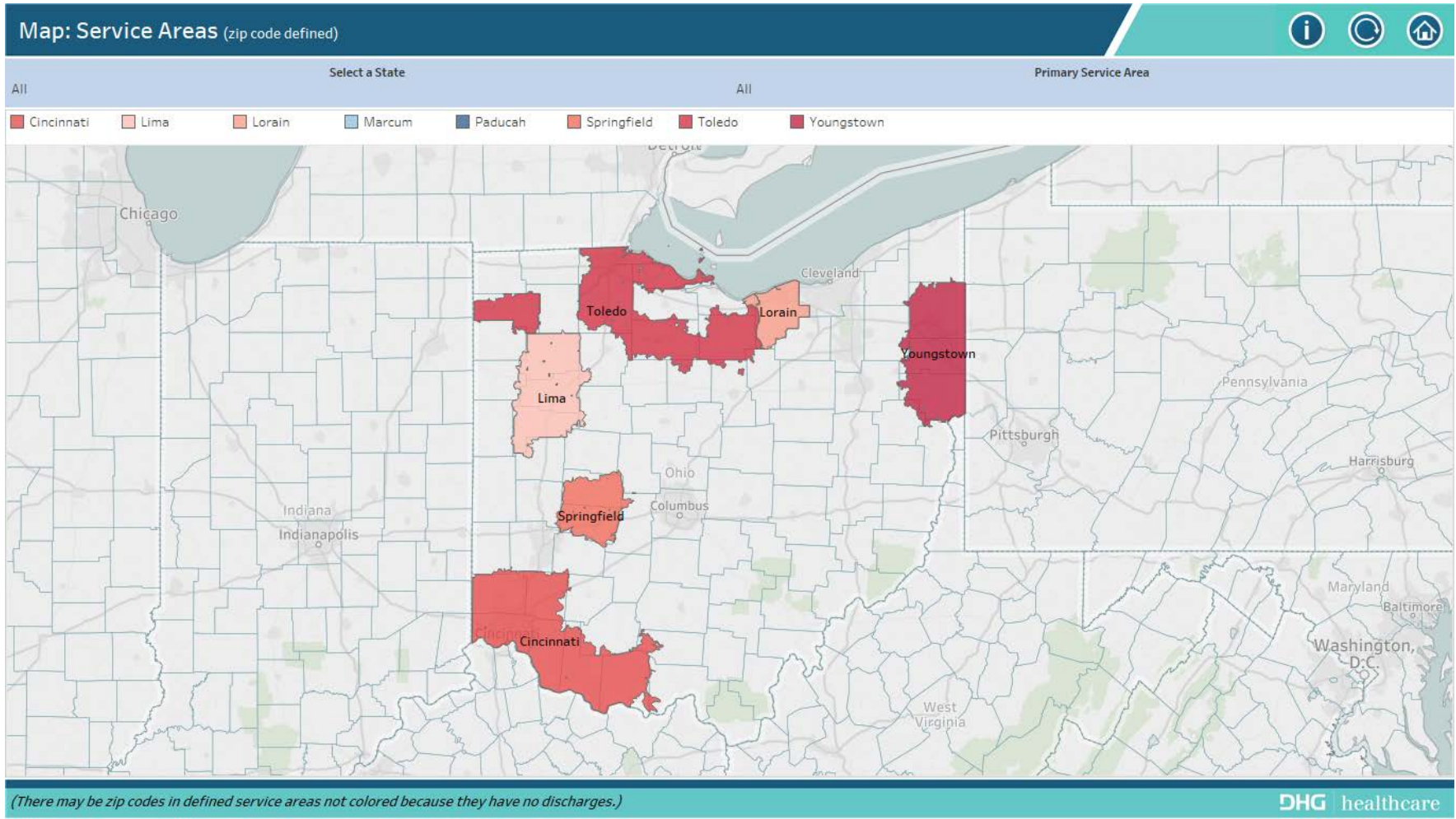
Emergency Department
ED Market Map
ED Contribution Margin Map
ED Market Share & Volume
ED Detail

Where referenced (with the exception of In/Out-Migration Dashboard), Client name includes ALL Client hospitals; not limited to just Client hospitals in the selected Service Area.





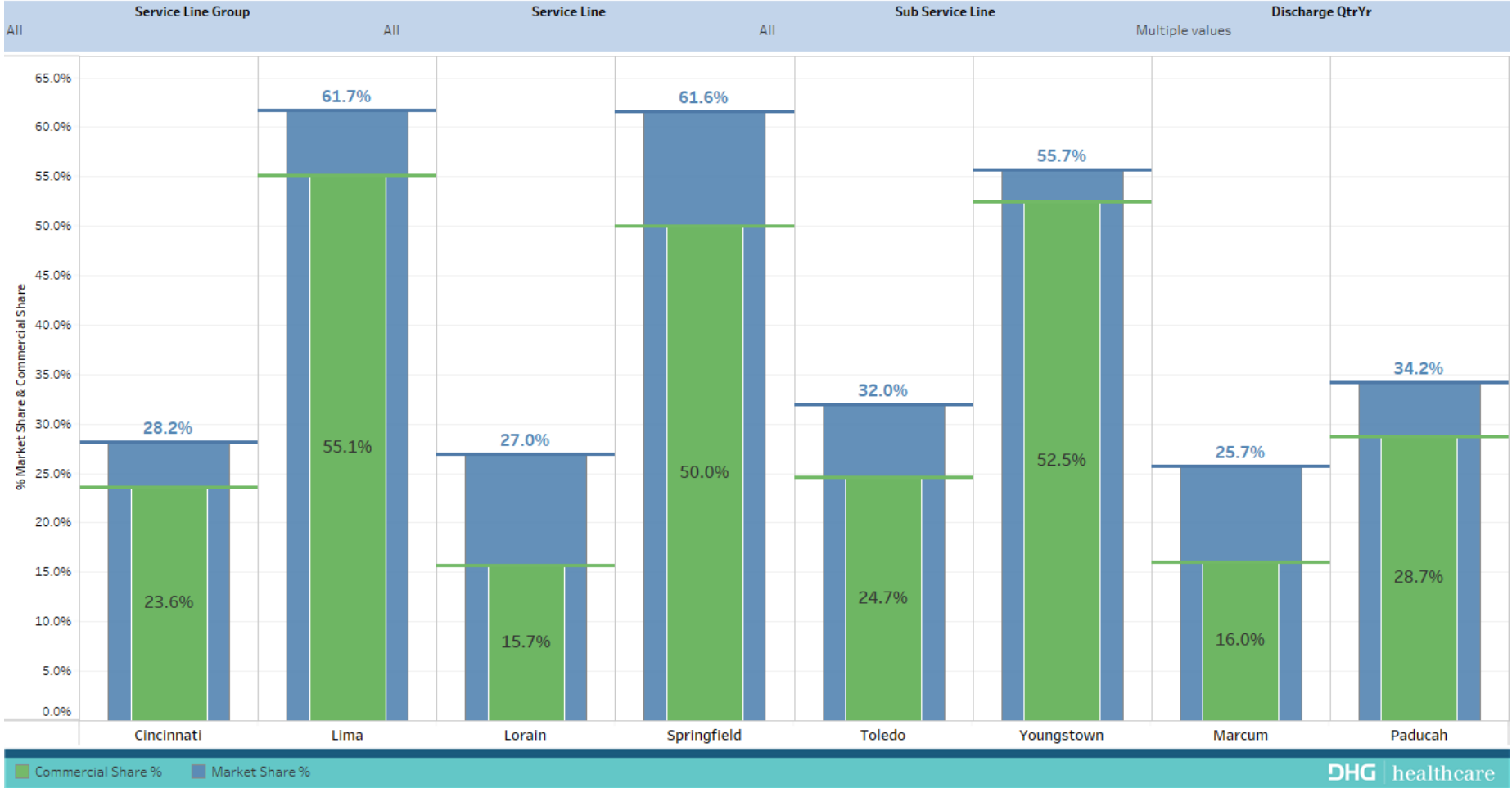
# Service Line Dashboarding





# Service Line Dashboarding

## Inpatient Gap between Market Share & Commercial Share (Most Recent 4 Quarters)





# Service Line Dashboarding

## Inpatient Market Opportunity by DRG Trend



Toledo	Primary Service Area	Service Line Group	Service Line	Sub Service Line	Payor Group	Discharge Yr-Qtr	
	Orthopedics	All	All	All		Multiple values	
MS DRG & Desc	Service Line Group	2017-Q2	2017-Q3	2017-Q4	2018-Q1	Grand Total	
Grand Total	Count	1,416	1,409	1,509	1,156	5,490	
	Avg. Contribution Margin Demo	\$5,851	\$5,708	\$6,503	\$5,887	\$6,002	
	Contribution Margin Demo	\$8,998,915	\$8,738,696	\$10,723,868	\$7,352,964	\$35,814,443	
470 - Major joint replacement or reattachment of lower e...	Orthopedics	Count	664	670	800	490	2,625
	Avg. Contribution Margin Demo	\$7,947	\$7,161	\$8,331	\$8,147	\$7,900	
	Contribution Margin Demo	\$5,864,552	\$5,327,439	\$7,381,471	\$4,423,571	\$22,997,033	
483 - Major joint/limb reattachment procedure of upper extremities	Orthopedics	Count	86	65	77	90	317
	Avg. Contribution Margin Demo	\$5,088	\$7,617	\$6,063	\$5,729	\$6,023	
	Contribution Margin Demo	\$483,346	\$548,458	\$515,323	\$572,884	\$2,120,011	
481 - Hip & femur procedures except major joint w CC	Orthopedics	Count	61	59	64	51	236
	Avg. Contribution Margin Demo	\$3,461	\$3,253	\$3,079	\$3,346	\$3,280	
	Contribution Margin Demo	\$235,371	\$214,710	\$218,639	\$190,710	\$859,429	
560 - Aftercare, musculoskeletal system & connective tissue w CC	Orthopedics	Count	43	32	42	34	152
	Avg. Contribution Margin Demo	\$4,271	\$4,748	\$4,597	\$5,505	\$4,741	
	Contribution Margin Demo	\$205,016	\$170,928	\$216,053	\$209,179	\$801,176	
468 - Revision of hip or knee replacement w/o CC/MCC	Orthopedics	Count	26	32	43	31	131
	Avg. Contribution Margin Demo	\$6,583	\$7,130	\$7,409	\$5,493	\$6,732	
	Contribution Margin Demo	\$190,915	\$249,534	\$355,647	\$186,771	\$982,866	
482 - Hip & femur procedures except major joint w/o CC/MCC	Orthopedics	Count	32	25	38	35	130
	Avg. Contribution Margin Demo	\$1,332	\$3,941	\$2,418	\$4,096	\$2,908	
	Contribution Margin Demo	\$46,604	\$110,357	\$99,158	\$159,748	\$415,866	
561 - Aftercare, musculoskeletal system & connective tissue w/o CC..	Orthopedics	Count	28	32	41	25	125
	Avg. Contribution Margin Demo	\$3,166	\$3,045	\$2,881	\$3,471	\$3,102	
	Contribution Margin Demo	\$94,976	\$103,529	\$129,658	\$93,717	\$421,880	
494 - Lower extrem & humer proc except hip,foot,femur w/o CC/M..	Orthopedics	Count	29	32	32	25	117
	Avg. Contribution Margin Demo	\$5,935	\$4,150	\$4,458	\$4,004	\$4,641	
	Contribution Margin Demo	\$189,931	\$145,260	\$156,019	\$112,122	\$603,331	
493 - Lower extrem & humer proc except hip,foot,femur w CC	Orthopedics	Count	30	24	23	22	98
	Avg. Contribution Margin Demo	\$3,609	\$4,858	\$4,357	\$5,184	\$4,437	
	Contribution Margin Demo	\$119,090	\$131,174	\$108,936	\$124,405	\$483,606	
517 - Other musculoskelet sys & conn tiss O.R. proc w/o CC/MCC	Orthopedics	Count	27	28	22	18	95
	Avg. Contribution Margin Demo	\$5,669	\$4,559	\$4,492	\$4,076	\$4,769	
	Contribution Margin Demo	\$170,069	\$141,327	\$107,796	\$81,528	\$500,720	
563 - Fx, sprn, strn & disl except femur, hip, pelvis & thigh w/o MCC	Orthopedics	Count	37	21	19	17	94
	Avg. Contribution Margin Demo	\$970	\$926	\$1,118	\$1,067	\$1,008	
	Contribution Margin Demo	\$39,754	\$21,302	\$23,483	\$20,269	\$104,808	

Contribution Margin assigned by PSA by Payer and by DRG  
 (If there is no supplied CM, then the volume of those cases are not factored into CM Dollars or Avg. CM \$ but the volume is shown in the Opportunity Count)





# Service Line Dashboarding

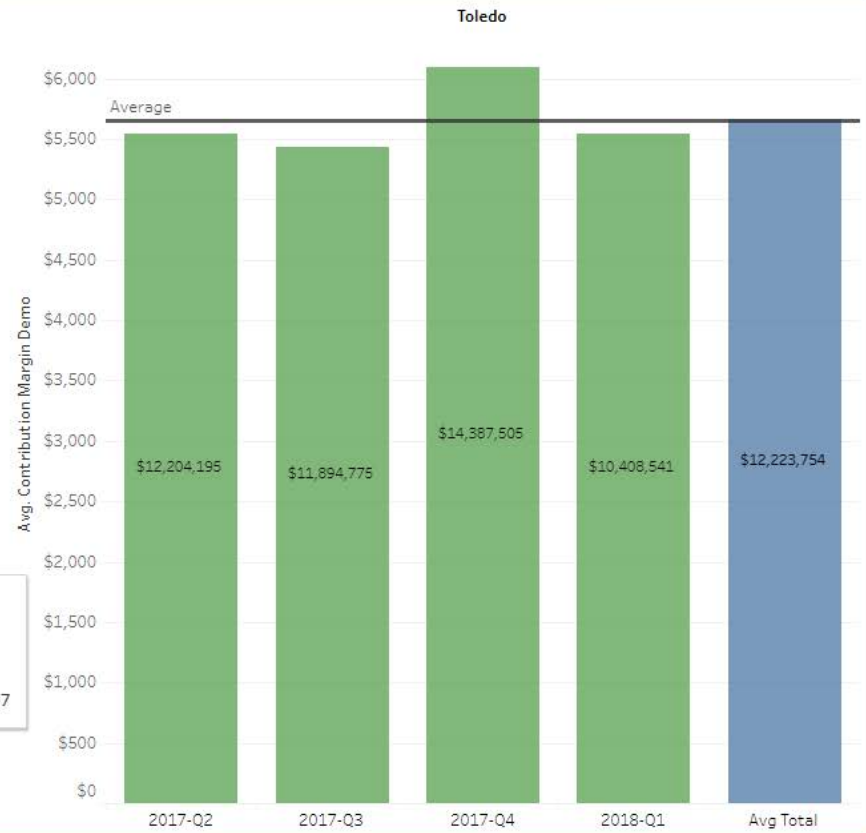
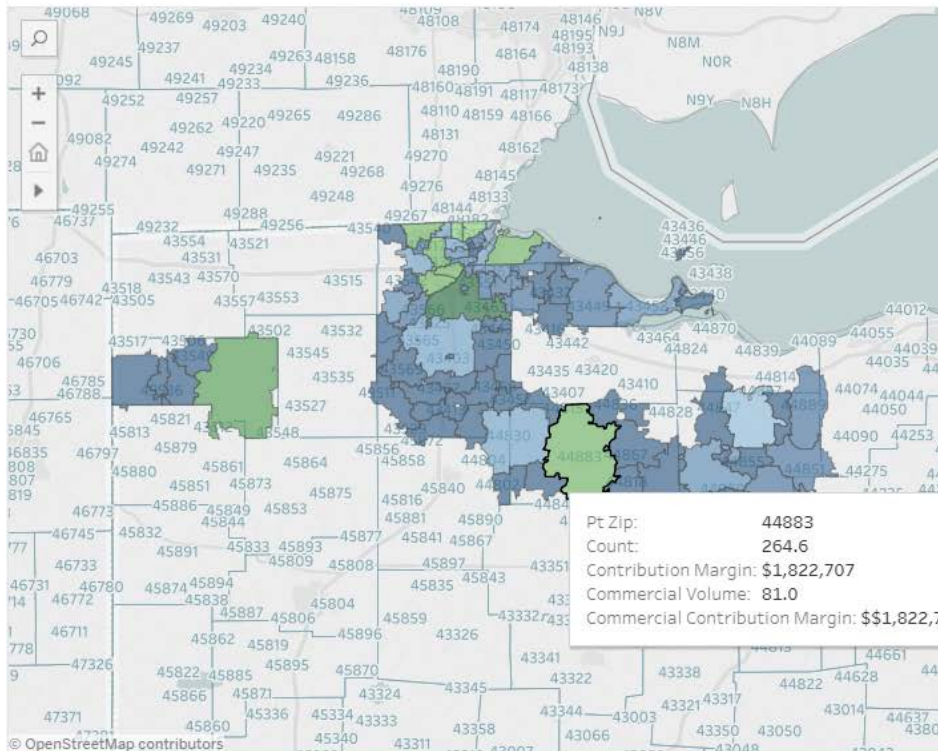
## Inpatient Contribution Margin Map - Client and Opportunity Contribution Margin



Primary Service Area	Client vs Opportunity	Service Line Group	Service Line	Sub Service Line	Payor Group	Discharge Yr-Qtr
Toledo	(All)	Orthopedics	(All)	(All)	(All)	(Multiple values)

\$13,575  \$3,011,263

Contribution Margin \$ by Zip Code



Contribution Margin assigned by PSA by Payer and by DRG

DHG healthcare







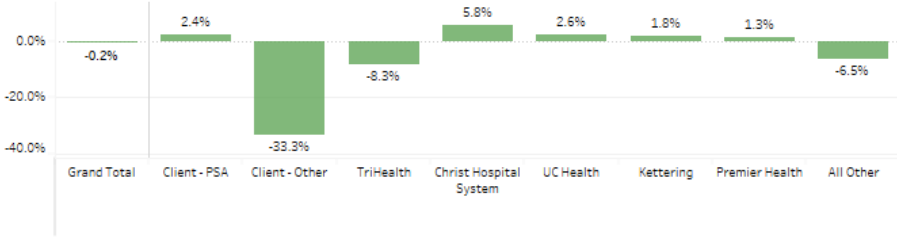
# Service Line Dashboarding

## Inpatient - Primary Service Area Scorecard

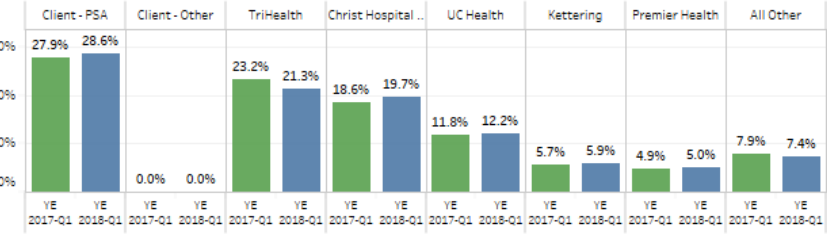


<b>Primary Service Area</b> Cincinnati	<b>Service Line Group</b> Orthopedics	<b>Service Line</b> All	<b>Sub Service Line</b> All	<b>Payer Group</b> All	<b>Age Group Detail</b>
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**% Increase / Decrease in Volume YE 2018 Q1 vs YE 2017 Q1**



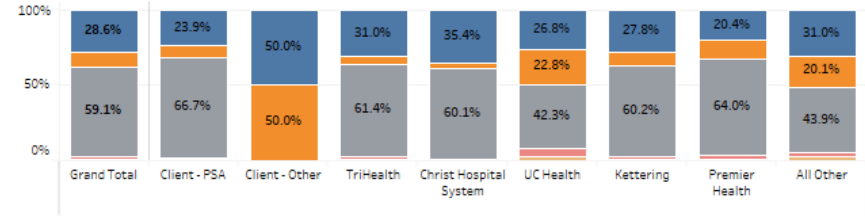
**Market Share YE 2017 Q1 vs YE 2018 Q1**



**Market Share by Payer YE 2018 Q1**

Payer Group	Grand Total		Client - PSA		Client - Other		TriHealth		Christ Hospital System		UC Health		Kettering		Premier Health		All Other	
	Count	Market Share %	Count	Market Share %	Count	Market Share %	Count	Market Share %	Count	Market Share %	Count	Market Share %	Count	Market Share %	Count	Market Share %	Count	Market Share %
Commercial	4,491	#####	1,075	23.9%	1	0.0%	1,035	23.0%	1,092	24.3%	513	11.4%	256	5.7%	158	3.5%	362	8.1%
Medicaid	1,460	#####	344	23.6%	1	0.1%	163	11.2%	103	7.0%	435	29.8%	88	6.0%	93	6.4%	234	16.0%
Medicare	9,266	#####	2,992	32.3%			2,050	22.1%	1,854	20.0%	808	8.7%	553	6.0%	498	5.4%	511	5.5%
Government	310	#####	49	15.7%			57	18.3%	32	10.2%	110	35.5%	12	3.8%	23	7.6%	28	9.0%
Self Pay & Charity	161	#####	29	17.9%			35	21.8%	6	3.9%	45	27.9%	10	6.1%	5	3.4%	31	19.0%
PSA Total	15,688	#####	4,487	28.6%	2	0.0%	3,340	21.3%	3,086	19.7%	1,911	12.2%	919	5.9%	778	5.0%	1,165	7.4%

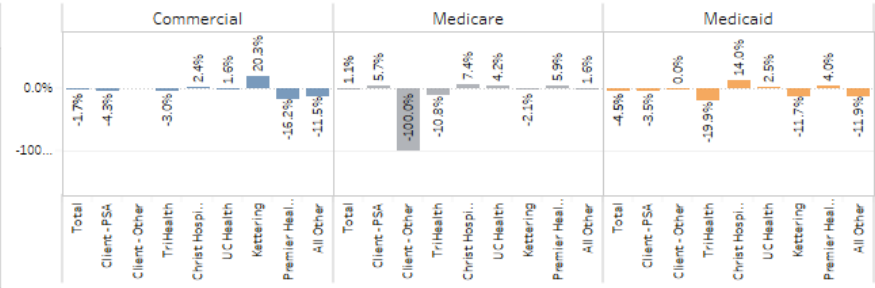
**System Payer Mix Breakdown YE 2018 Q1**



**Market Share by Service Lines of Interest YE 2018 Q1**

Service Line (group)	Client - PSA	Client - Other	TriHealth	UC Health	Christ Hospital System	Kettering	Premier Health	All Other
All Other	26.6%	0.0%	26.6%	15.0%	9.4%	6.7%	5.3%	10.3%
Cancer - Medical	29.7%	0.1%	28.2%	14.4%	8.9%	4.6%	3.1%	11.0%
Cancer - Surgical	22.3%		27.8%	22.7%	11.9%	1.9%	5.6%	7.9%
Cardiac Surgery	23.5%		29.2%	7.3%	20.6%	4.6%	5.5%	9.4%
Cardiology - Medical	37.3%	0.0%	20.4%	13.7%	9.8%	8.3%	5.7%	4.8%
General Medicine	35.2%	0.0%	14.9%	13.9%	7.6%	6.4%	5.6%	16.3%
General Surgery	28.6%	0.0%	18.9%	23.5%	8.4%	6.4%	4.6%	9.5%
Neurology	31.5%	0.0%	17.0%	18.6%	6.7%	5.6%	5.5%	15.1%
Neurosurgery	11.4%	0.1%	23.8%	34.1%	6.0%	3.7%	3.7%	17.2%
Orthopedics - Medical	37.4%		12.9%	9.6%	7.3%	4.2%	7.0%	21.7%
Orthopedics - Surgical	26.8%	0.0%	23.0%	12.7%	22.2%	6.2%	4.5%	4.5%
Spine	18.8%	0.0%	24.0%	18.5%	22.7%	3.6%	4.8%	7.4%
Thoracic Surgery	29.0%	0.1%	14.9%	21.2%	14.5%	6.2%	6.1%	8.1%
PSA Total	28.1%	0.0%	24.3%	15.2%	10.4%	6.5%	5.3%	10.1%

**% Increase / Decrease by Payer YE 2018 Q1 vs YE 2017 Q1**





# Service Line Dashboarding

## Inpatient - In/Out Migration



Service Line Group		Service Line			Sub Service Line			Discharge Yr Qtr		
All	All	All	All	All	2018-Q1					
Service Area	Market Total	Market Out Migration	Market In Migration	Net In-Migration	Client In Market	Client In Migration	Client Consolidated	Client In Market Share %	Client In Migration Share %	Client Consolidated Market Share %
Cincinnati	53,253	3,678	8,345	4,667	15,264	977	16,241	28.7%	11.7%	26.4%
Lima	7,134	1,178	1,914	736	4,378	1,101	5,479	61.4%	57.5%	60.6%
Lorain	11,175	4,450	919	(3,531)	3,003	174	3,177	26.9%	18.9%	26.3%
Springfield	6,493	2,420	197	(2,223)	4,073	197	4,270	62.7%	100.0%	63.8%
Toledo	26,217	2,412	6,420	4,008	8,463	1,430	9,893	32.3%	22.3%	30.3%
Youngstown	20,040	2,785	1,103	(1,682)	11,092	524	11,616	55.3%	47.5%	54.9%
Marcum	833	621	50	(571)	212	50	262	25.5%	100.0%	29.7%
Paducah	6,664	453	2,152	1,699	2,238	725	2,963	33.6%	33.7%	33.6%
<b>Grand Total</b>	<b>131,809</b>	<b>17,997</b>	<b>21,100</b>	<b>3,103</b>	<b>48,723</b>	<b>5,178</b>	<b>53,901</b>	<b>37.0%</b>	<b>24.5%</b>	<b>35.3%</b>

Service Area	Client Out Migration Vol	Client Out Migration % Increase	Client In Migration Adv/Disadv	Client In Migration Vol Opportunity	Client In Migration Adj Vol	Client In Migration % Increase	Client Adjusted In-Mig Share	Total Incremental	Total % Increase	Contribution Margin Incremental \$
Cincinnati	1,054	6.5%	-17.0%	1,415	2,392	8.7%	28.7%	2,469	15.2%	\$9,272,643
Lima	723	13.2%	-3.8%	74	1,175	1.3%	61.4%	797	14.5%	\$4,731,435
Lorain	1,196	37.6%	-7.9%	73	247	2.3%	26.9%	1,269	39.9%	\$3,686,719
Springfield	1,518	35.6%	37.3%	0	197	0.0%	100.0%	1,518	35.6%	\$4,467,592
Toledo	779	7.9%	-10.0%	642	2,072	6.5%	32.3%	1,421	14.4%	\$7,072,757
Youngstown	1,541	13.3%	-7.8%	87	611	0.7%	55.3%	1,628	14.0%	\$4,867,675
Marcum	158	60.3%	74.5%	0	50	0.0%	100.0%	158	60.3%	\$405,316
Paducah	152	5.1%	0.1%	0	725	0.0%	33.7%	152	5.1%	\$511,171
<b>Grand Total</b>	<b>890</b>	<b>22.4%</b>	<b>8.2%</b>	<b>286</b>	<b>7,800</b>	<b>4.9%</b>	<b>37.0%</b>	<b>9,274</b>	<b>17.2%</b>	<b>\$35,995,731</b>





# Demographic Dashboarding

## Demographic Summary



Zip Code:  Gender: 
 Select Map Type to View:

### Select Service Area in Table to Filter Dashboard

(Zip filter doesn't apply to Service Area table below; Gender/Age Grp filters don't apply to Median Age, Unemployment %, Median HHI & % Families < Poverty)

Service Area	Population CY	Population 5-Yr	5-Yr Net Growth	5-Yr % Net Growth	CAGR	Median Age CY	Unemployment % CY	Avg Med HH Inc. CY	% Families < Poverty CY
Grand Total	446,070	449,398	3,328	0.7%	0.1%	39	7.7%	\$40,592	16.7%
PSA Texarkana	187,687	191,878	4,191	2.2%	0.4%	39	7.7%	\$42,593	15.8%
SSA East Texarkana	79,039	76,923	-2,116	(2.7%)	(0.5%)	41	7.4%	\$37,247	17.8%
SSA North Texarkana	94,175	93,664	-511	(0.5%)	(0.1%)	38	7.2%	\$38,785	17.5%
SSA West Texarkana	85,169	86,933	1,764	2.1%	0.4%	40	9.2%	\$41,476	16.9%
Texas				7.6%	1.5%	35	5.9%	\$61,175	12.8%
Louisiana				2.6%	0.5%	37	7.3%	\$49,216	14.9%
Oklahoma				3.6%	0.7%	37	5.6%	\$52,112	12.1%
Arkansas				2.3%	0.5%	38	6.4%	\$44,901	14.0%
USA				3.8%	0.8%	38	6.8%	\$61,045	11.0%

### Select Age Group/Age Range in Table to Filter Dashboard

Service Area (All) - Zip Code (\*) - Gender (\*)

Age Group	Age Range	Population CY	Population 5-Yr	5-Yr Net Growth	5-Yr % Net Growth	CAGR
Grand Total		446,070	449,398	3,328	0.7%	0.1%
0-17	Total	104,675	103,810	-865	(0.8%)	(0.2%)
	0-4	28,562	28,584	22	0.1%	0.0%
	5-9	29,076	28,383	-693	(2.4%)	(0.5%)
	10-14	29,019	28,646	-373	(1.3%)	(0.3%)
	15-17	18,018	18,197	179	1.0%	0.2%
18-44	Total	147,839	149,559	1,720	1.2%	0.2%
	18-44	147,839	149,559	1,720	1.2%	0.2%
45-64	Total	112,243	106,070	-6,173	(5.5%)	(1.1%)

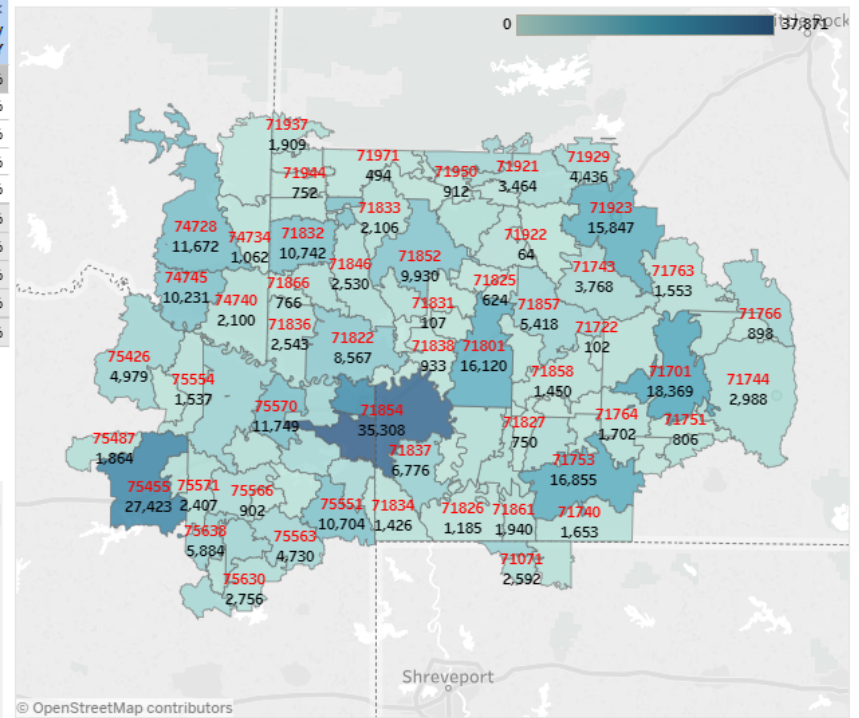
### Income by Zip (Gender/Age Grp filters don't apply)

Service Area (All)	Avg Med HH Inc. CY	% Families < Poverty CY
Grand Total	\$40,592	16.7%
75556 - Bloomburg	\$65,422	7.3%
71861 - Taylor	\$59,119	11.2%
71751 - Louann	\$57,746	11.5%
75503 - Texarkana	\$55,733	10.8%
75558 - Cookeville	\$54,464	19.7%
71834 - Doddridge	\$53,516	10.0%
71837 - Fouke	\$50,547	11.5%
75574 - Simms	\$48,904	13.0%

### Current Population

Age Group (All)

Age Range (All)





# Demographic Dashboarding

## Age Group



Service Area: (All) | Zip Code: (All) | Gender: (All) | Age Group: (All)

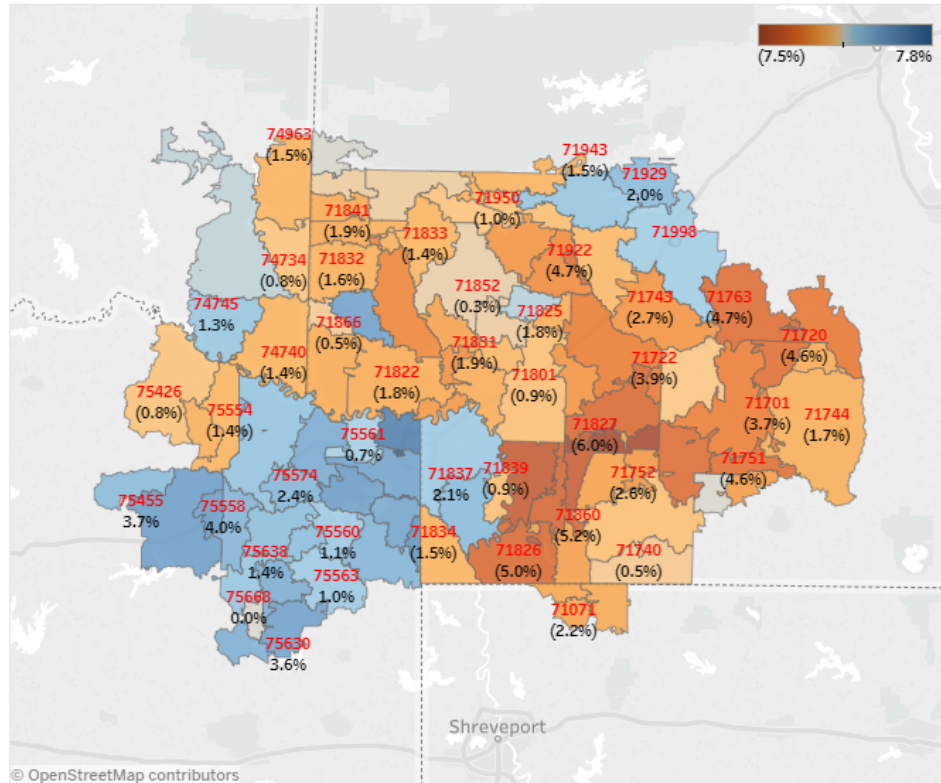
### Age Group

Service Area (All) - Zip Code (\*) - Gender (\*)

Age Group	Age Range	Population CY	% of Total	Population 5-Yr	5-Yr Net Growth	5-Yr % Net Growth	CAGR
<b>Grand Total</b>		446,070	100.0%	449,398	3,328	0.7%	0.1%
<b>0-17</b>	<b>Total</b>	104,675	23.5%	103,810	-865	(0.8%)	(0.2%)
	0-4	28,562	6.4%	28,584	22	0.1%	0.0%
	5-9	29,076	6.5%	28,383	-693	(2.4%)	(0.5%)
	10-14	29,019	6.5%	28,646	-373	(1.3%)	(0.3%)
	15-17	18,018	4.0%	18,197	179	1.0%	0.2%
<b>18-44</b>	<b>Total</b>	147,839	33.1%	149,559	1,720	1.2%	0.2%
	18-44	147,839	33.1%	149,559	1,720	1.2%	0.2%
<b>45-64</b>	<b>Total</b>	112,243	25.2%	106,070	-6,173	(5.5%)	(1.1%)
	45-54	54,310	12.2%	50,116	-4,194	(7.7%)	(1.6%)

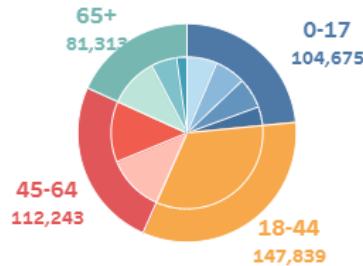
### 5-Yr % Growth Map

Age Group (\*) - Age Range (\*)



### Population CY by Age Group

Service Area (\*) - Zip Code (\*) - Gender (\*)





## In Summary

- Developing a data analytic infrastructure that can turn data into information is no longer a competitive advantage, it's a strategic imperative
- Flexible platforms that allow for on the fly analysis of relevant information are of paramount importance
- The data is out there...

# Questions?