



CRISP

*Connecting Physicians With Technology
to Improve Patient Care in Maryland*

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Chesapeake Regional Information System for Our Patients

CRISP

Maryland's Health Information Exchange

National Committee on Vital and Health Statistics

Hearing on Public Health Data Standards

November 12th, 2013





Mission

Chesapeake Regional Information System for Our Patients

CRISP is Maryland's state designated entity for health information exchange

Mission

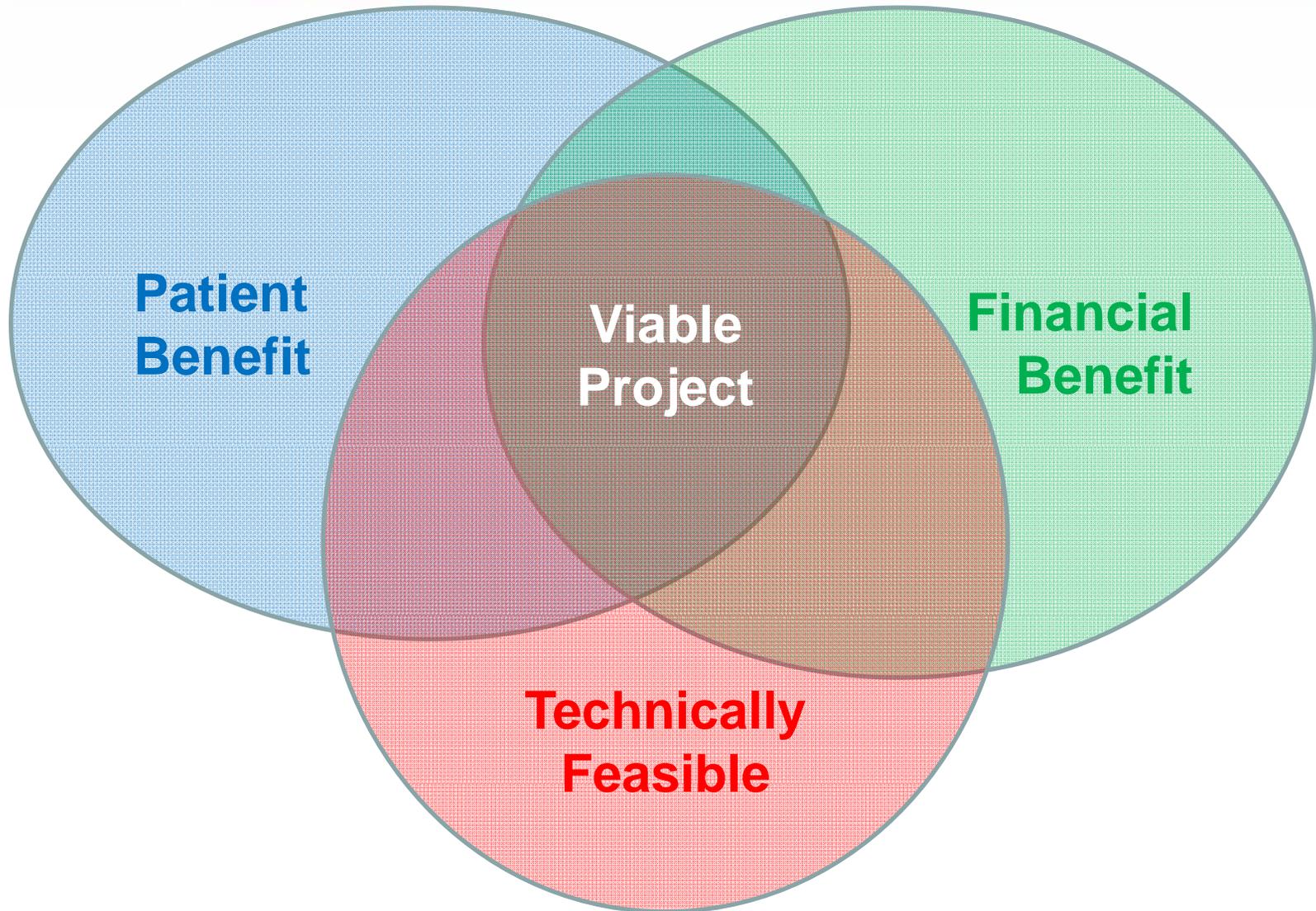
To advance the health and wellness of Marylanders by deploying health information technology solutions adopted through cooperation and collaboration.





General Project Characteristics

Chesapeake Regional Information System for Our Patients





Key Numbers at a Glance

Chesapeake Regional Information System for Our Patients

Progress Metric	Nov '13
Live Hospitals	47
LTC	6
Live Labs and Rad Centers (non-hosp)	9
Live Clinical Data Feeds	103
Identities in MPI	~6M
Lab Results Available	~32M
Radiology Report Available	~9M
Clinical Documents Available	~5M
Queries (past 30 days)	~14,000
Notifications (past 30 days)	~90,000
Participating physicians (query & notification)	~1,200

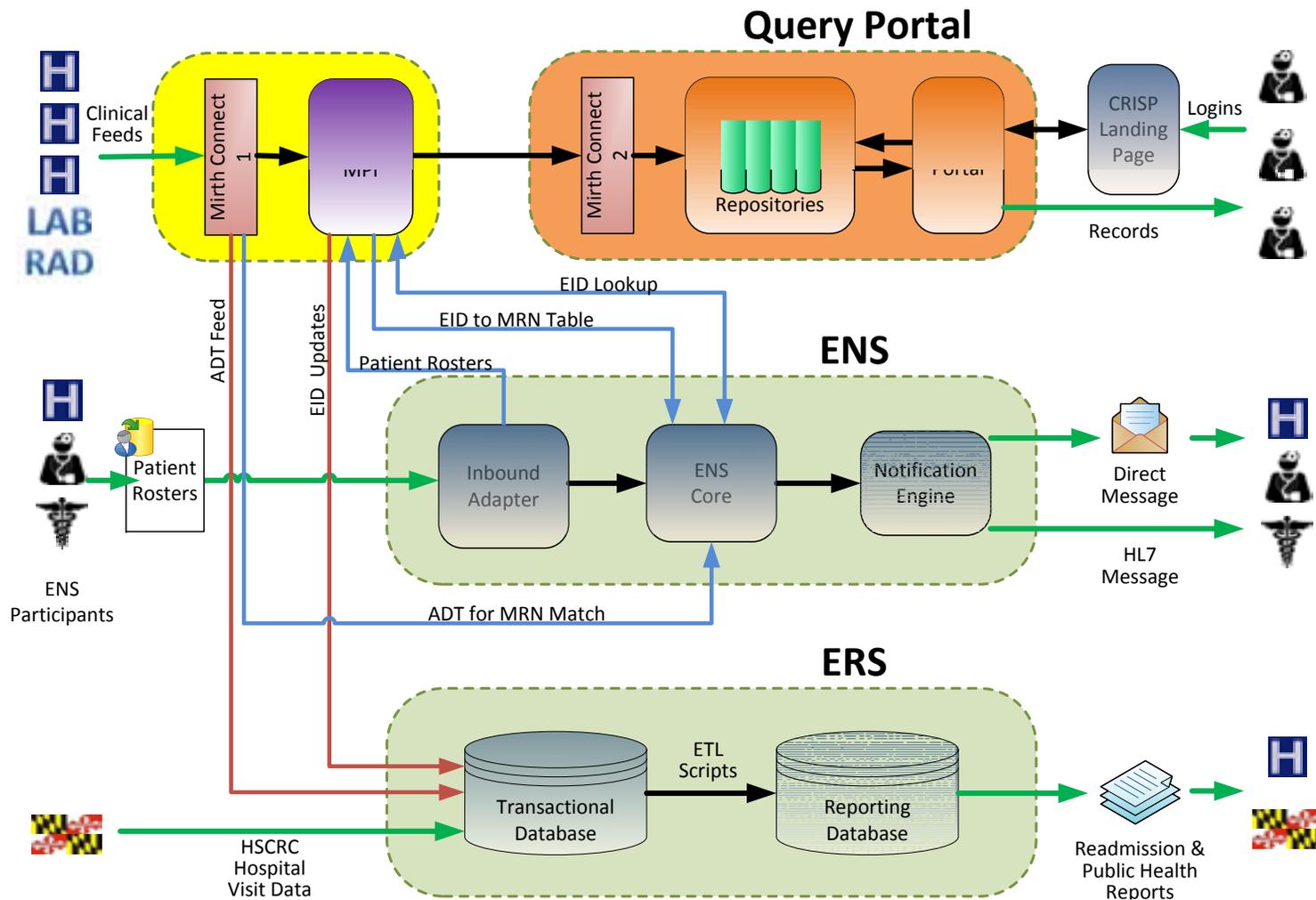
- We have started to on-board DC hospital onto the CRISP HIE



Technical Architecture Overview

Chesapeake Regional Information System for Our Patients

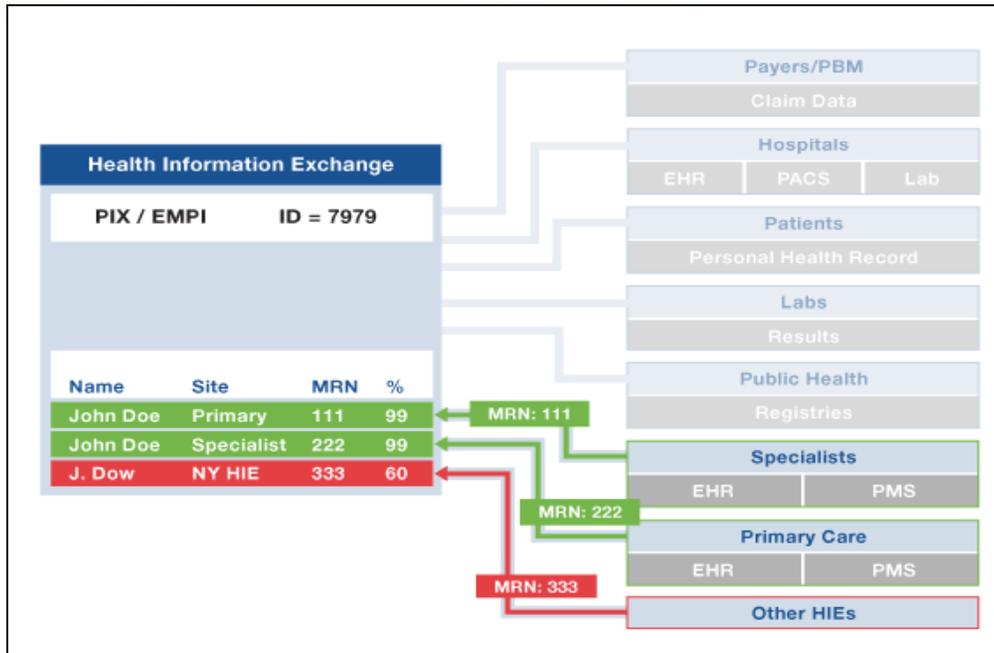
CRISP Infrastructure





Patient Identity Management

Chesapeake Regional Information System for Our Patients

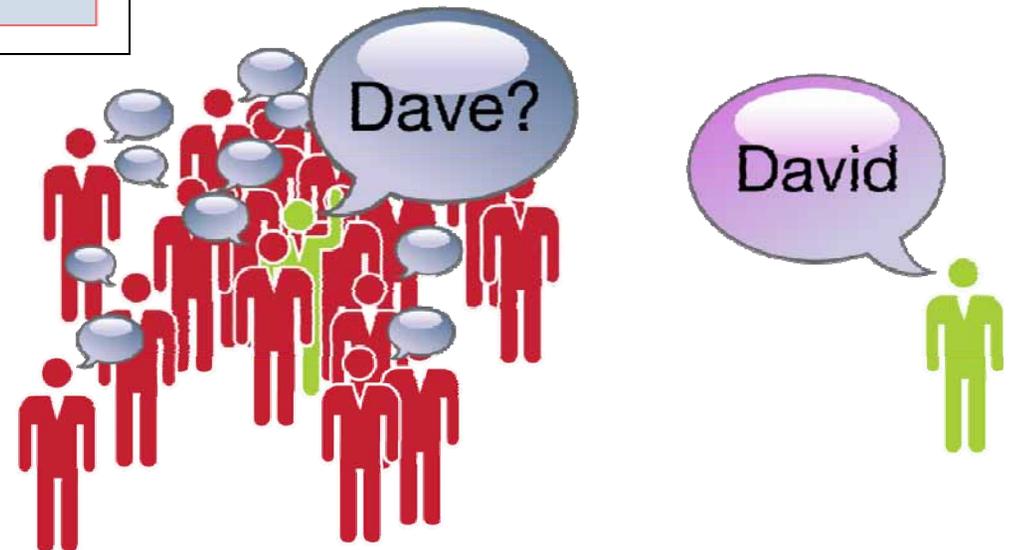


The Challenge:

Accurately and consistently linking identities across multiple facilities to create a single view of a patient.

A near-zero tolerance of a false positive match rate with a low tolerance of a false negative match rate.

Effective Master Patient Indexing is a foundational concept to population health oriented measurement, management, and intervention activity.





CRISP / DHMH Projects Overview

Chesapeake Regional Information System for Our Patients

- Prescription Drug Monitoring Program
- Electronic Lab Reporting
- Immunization Reporting
- Syndromic Surveillance
- Utilization Reporting
- Utilization Mapping
- EHDI Newborn Alerting
- LHD Query Portal Use
- Chronic Care Encounter Notifications
- Utilization Reporting
- Utilization Mapping



Our Role in Public and Population Health Initiatives

Chesapeake Regional Information System for Our Patients

- We have positioned ourselves to act as a conduit providing basic transformation and routing services.
- We consistently ask ourselves what makes us uniquely capable or more efficient at providing a given service.
- Meaningful use places significant emphasis on originating systems adhering to message and vocabulary specifications.
- Our role focuses on leveraging our relationships (and existing connectivity) and basic components of our infrastructure to help providers meet specific reporting measure.
- We believe there is significant risk in relying on public health reporting as a primary service offering for an HIE organization.



Drivers in our ability to be successful as a public health reporting conduit

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- Our ability to play a role as a viable partner to support public health reporting is reliant on our broader success in providing valuable HIE services to the community.
- As in most major technology efforts, electronic public health reporting suffers from the good being the enemy of the great.
- We are just starting to see increased emphasis from hospital partners on pursuing the public health measures in Meaningful Use.
- Reporting from practices continues to suffer from an ability to manage the scale of connectivity. Widely adopted test platforms and reliance on a Direct as a transport approach could introduce important efficiencies.
- People resources continue to be a challenge.



Population Measurement and Community-Level Intervention

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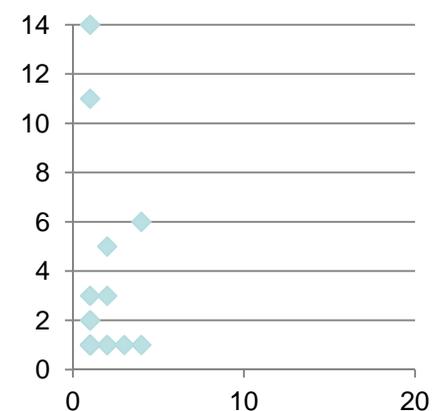
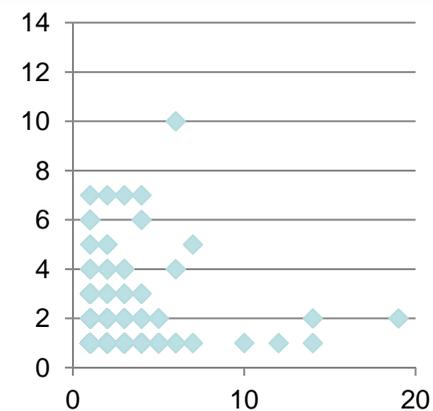
Patient County	Allegany County	Anne Arundel County	Baltimore City	Baltimore County	Calvert County	Carroll County	Cecil County	Charles County	Frederick County
Allegany County	11,888	16	565	22		14	1	1	14
Anne Arundel County	12	48,428	20,147	1,152	458	74	8	24	29
Baltimore City	12	1,080	130,920	14,147	7	124	15	1	26
Baltimore County	15	883	64,591	63,754	3	1,148	14	5	30
Calvert County	7	1,239	888	30	7,270	4		51	4
Caroline County	2	446	673	15	1	8	8		3
Carroll County	7	104	4,683	2,015	2	13,114		1	717
Cecil County		17	1,296	278		5	7,214	1	6
Charles County		296	1,417	35	593	4		8,127	10
Dorchester County	1	162	742	22	1	3		1	6
Frederick County	22	62	2,827	141	2	438			22,130
Garrett County	1,108	8	136	12	1	10			2
Harford County	6	86	7,716	6,603	2	27	84		6
Howard County	3	596	9,347	977	2	210	7	4	147
Kent County		417	469	19	2	2	107		2
Montgomery County	14	246	4,315	164	14	51	2	6	600
Prince George's County	13	6,701	5,063	227	269	15	6	917	33
Queen Anne's County		2,909	966	35	4	4	15	1	7
Somerset County		16	306	15	1				5
St. Mary's County		228	793	24	1,179		1	431	3
Talbot County	1	357	895	40	1		2	1	1
Washington County	58	28	2,084	71		16			896
Wicomico County	1	62	1,157	42		2	5	1	3
Worcester County	4	68	752	55	1	13	3	1	8
Grand Total	13,174	64,455	262,748	89,895	9,813	15,286	7,492	9,574	24,688



Granular Super-Utilization Reporting

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ID*	Age	TOTAL	Hospital A	Hospital B	Hospital C	Hospital D	Hospital E	Hospital F
TOTAL		46,095	35,738	214	1,438	2,176	8	27
6969A51C36C	71	28	11					2
7DA6A73A315	56	28						
0B4705A118	66	25	8	1				
3C464820C3	48	25	5		14	3		
4C4749358	81	25	2			5		
7625B520A	1	23	3		3	4		
53B2DD38128	1	21				6		1
91C6D8B4745	64	20	17					
C4D08CA4D68	55	20	2		2	1		
2270C9B1C9	37	20	1					1
003912A9B	74	19				7		





30-Day Inter-Hospital Readmit Reports

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1	2	A	B	C	D	E	F	G	J	L	M																										
		CRISP Basic 30-Day All-Cause Readmissions From																																			
		Target Hospital																																			
		November 2012																																			
	3																																				
	5	776 Total Discharges 11/01/2012 - 11/30/2012																																			
	6	86 Outgoing Readmissions																																			
	7	63 Outgoing Readmissions Intra-Hospital																																			
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	9	8.1% Outgoing Readmission Rate Intra-Hospital																																			
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	11	<table border="1"><thead><tr><th>Destination/Admit Hospital</th><th># Readmits</th></tr></thead><tbody><tr><td>Target Hospital</td><td>63</td></tr><tr><td>A medium sized hospital less than 15 miles from target hospital</td><td>13</td></tr><tr><td>A large hospital less than 15 miles from target hospital</td><td>12</td></tr><tr><td>A small hospital less than 15 miles from target hospital</td><td>10</td></tr><tr><td>A medium hospital less than 15 miles from target hospital</td><td>9</td></tr><tr><td>A medium hospital less than 15 miles from target hospital</td><td>6</td></tr><tr><td>A medium hospital less than 15 miles from target hospital</td><td>6</td></tr><tr><td>A large hospital less than 15 miles from target hospital</td><td>4</td></tr><tr><td>A medium hospital less than 15 miles from target hospital</td><td>2</td></tr><tr><td>A medium hospital less than 15 miles from target hospital</td><td>2</td></tr><tr><td>A large hospital less than 30 miles from target hospital</td><td>1</td></tr><tr><td>A medium hospital less than 30 miles from target hospital</td><td>1</td></tr></tbody></table>										Destination/Admit Hospital	# Readmits	Target Hospital	63	A medium sized hospital less than 15 miles from target hospital	13	A large hospital less than 15 miles from target hospital	12	A small hospital less than 15 miles from target hospital	10	A medium hospital less than 15 miles from target hospital	9	A medium hospital less than 15 miles from target hospital	6	A medium hospital less than 15 miles from target hospital	6	A large hospital less than 15 miles from target hospital	4	A medium hospital less than 15 miles from target hospital	2	A medium hospital less than 15 miles from target hospital	2	A large hospital less than 30 miles from target hospital	1	A medium hospital less than 30 miles from target hospital	1
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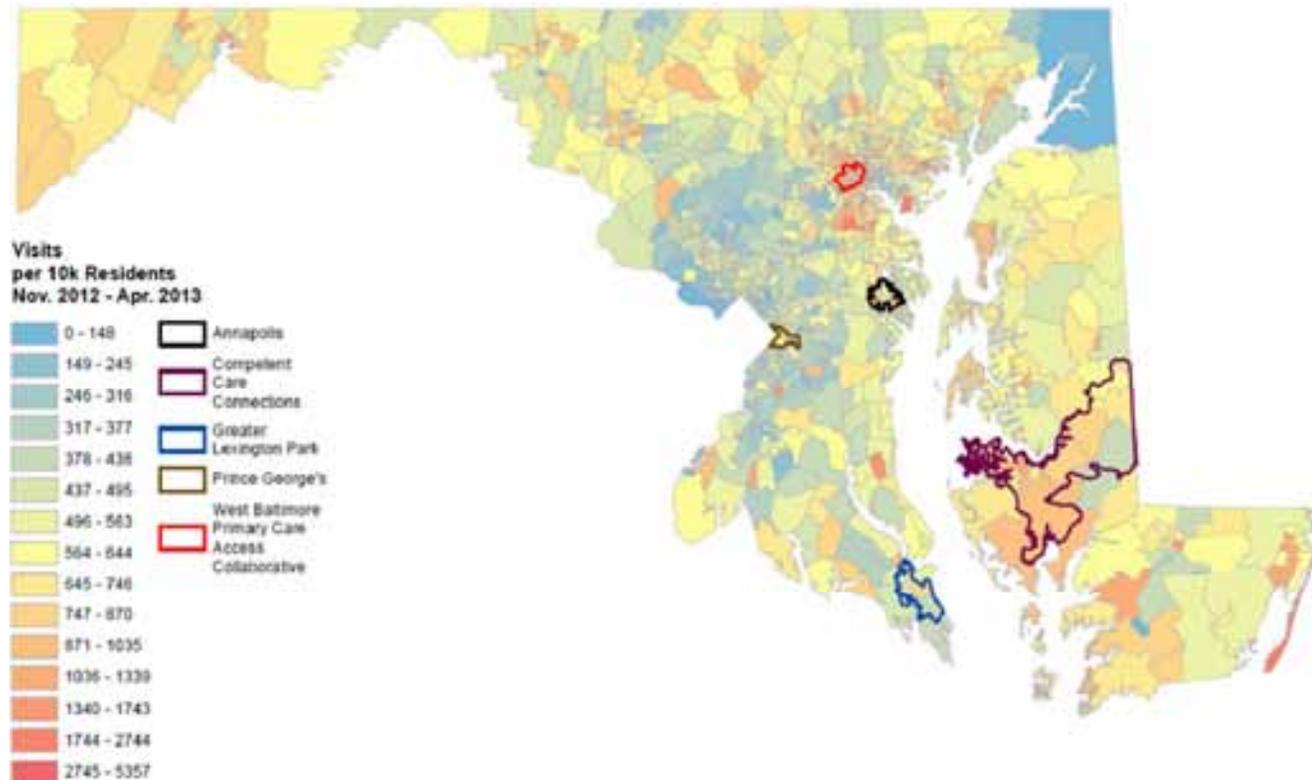




GIS Mapping Capability

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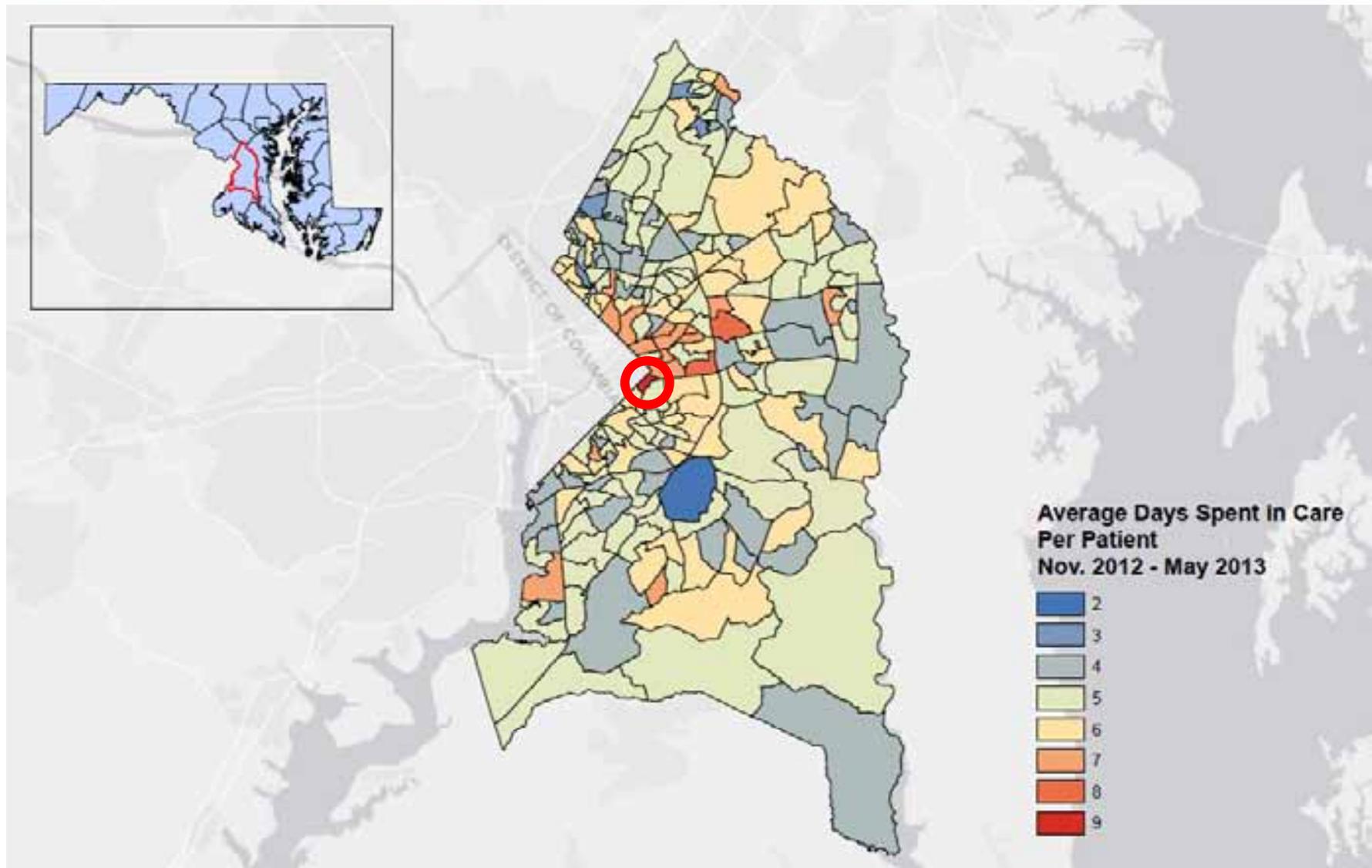
- Based on the indexed utilization information CRISP can produce visualizations of hospital utilization data in near real time.
- Granular geographic data can assist in better understanding localized use of services and opportunities for the most efficient / targeted interventions.





Inpatient LOS, Prince George's

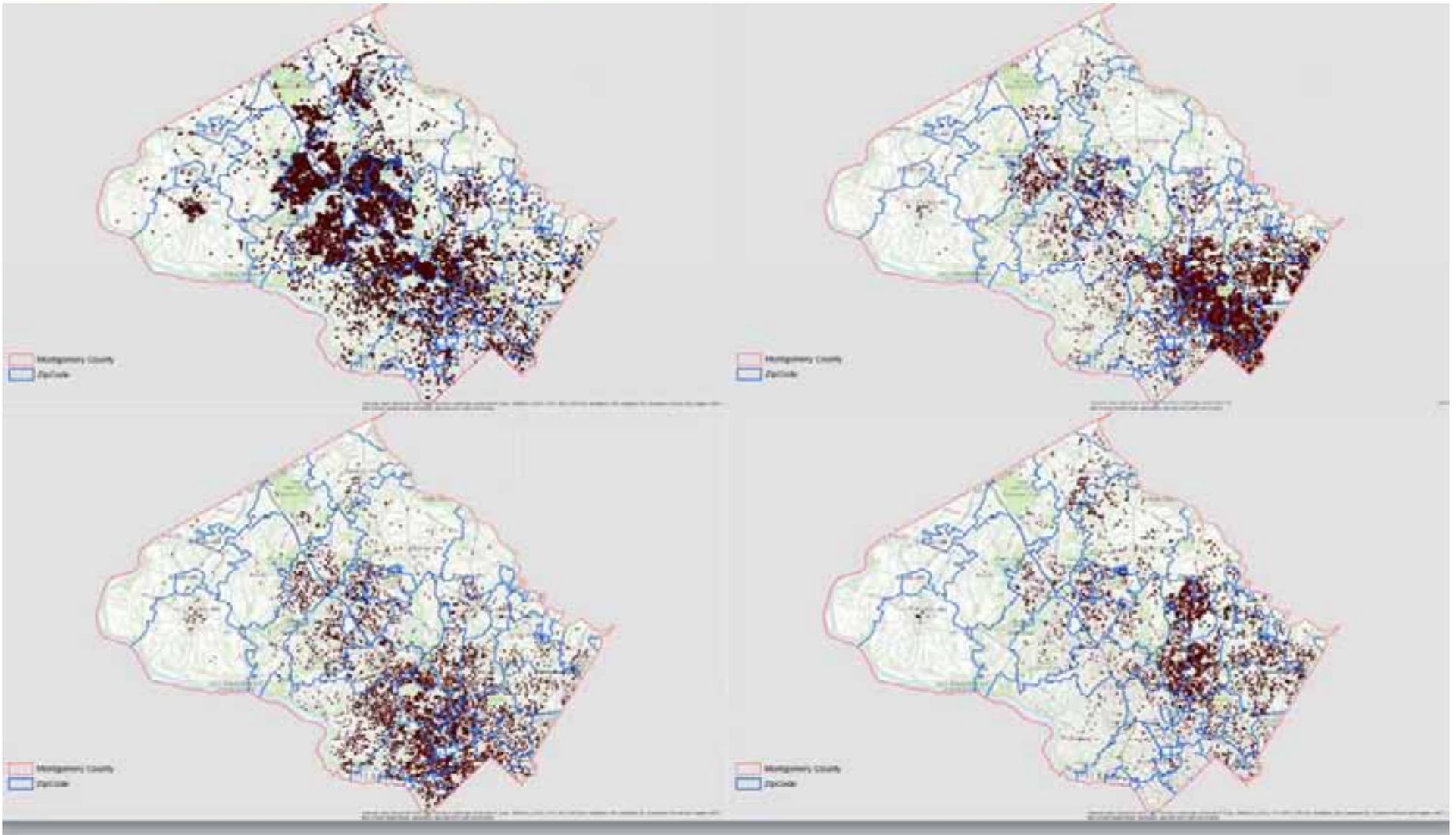
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County / Zip Analysis

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