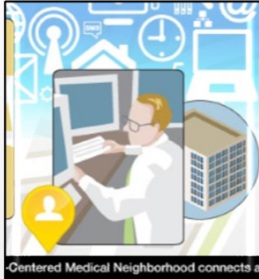


# THE MEDICAL NEIGHBORHOOD: PCMH PRIMARY CARE AS THE CATALYST TO COMPREHENSIVE AND EFFECTIVE COLLABORATION



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Greater Baltimore Medical Center

# Why PCMN?



Connect primary care with their community based hospitals, specialists, and other health resources



Helps patients have collaborative care from their health care providers



Helps patients manage their care more proactively

# What Is The Collaborative PCMN CMMI Project?

- ▣ A three-year project funded by a CMS, Center for Medicare and Medicaid Innovation (CMMI) - Health Care Innovation Award (HCIA)
- ▣ Expands the Patient-Centered Medical Home to a Medical Neighborhood connecting Primary Care to:
  - acute-care hospitals
  - specialists
  - community health resources
  - increasingly assists patients manage their health proactively





# 15 Participating Organizations

**Avera Health**, O'Neill, Neb.  
**Charleston Area Medical Center**, Charleston, W.Va.  
**Columbus Regional**, Columbus, Ind.  
**Greater Baltimore Medical Center**, Baltimore, Md.  
**Huntsville Hospital**, Huntsville, Ala.  
**INTEGRIS Health**, Oklahoma City, Okla.  
**Marquette General Health**, Marquette, Mich.  
**Northeast Georgia Health System**, Gainesville, Ga.  
**North Mississippi Health Services**, Tupelo, Miss.  
**North Shore Physicians Group**, Salem, Mass.  
**Novant Health**, Winston-Salem, NC  
**Orlando Health**, Orlando, Fla.  
**Owensboro Medical Health System**, Owensboro, Ky.  
**Via Christi Health**, Wichita, Kan.  
**Western Connecticut Health Network**, Danbury, Conn.



WESTERN CONNECTICUT HEALTH NETWORK

DANBURY HOSPITAL



NorthShorePhysiciansGroup



\*\*90 total primary care practices

# TransforMED's Project Affiliates:



- Phytel offers Insight and Coordinate solutions for automating population health management delivering advanced care coordination, patient engagement, and quality-based analytical tools for PCMH-N.



- VHA Inc. is a network of not-for-profit hospitals that work together to improve their clinical and economic performance. VHA includes more than 1,400 not-for-profit hospitals and 25,500+ non-acute health care organizations. Provides consultation and 12 blueprints around PCMH-N "leading practices."



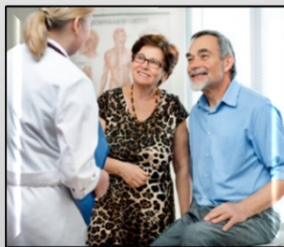
- Cobalt Talon helps healthcare companies transform data into a strategic asset by providing high-performance analytic and data management products and services designed to solve the complex issues facing the industry.

# Project Goals By June 2015



Reduce the Total Cost of Health Care for Medicare and Medicaid Beneficiaries by \$49.5 Million

Improve Health of Eligible Population Demonstrated by an Average of 15% with at least 3% Improvement in Each Selected Quality Measure



A 25% Improvement in Patient Experience

Demonstrate Ability to Scale to Additional Practices within Each Community



“The measure of intelligence is the ability to change.”

~ Albert Einstein



# Journey to PCMN



- ▣ Greater Baltimore Medical Center, Towson, Maryland
  - 300 bed community non-profit hospital
  - 50 employed primary care providers
  - Level 3 PCMH Primary Care Network 2010-13
- ▣ Accountable Care Organization 2012
  - 100 primary care providers
  - Caring for 100,000 lives in Baltimore Region
  - Utilizing E-clinical Works as electronic medical record



# Connected Primary Care Network

- ▣ Aligned employed physicians
- ▣ Created one Lead PCMH physician over all practices
- ▣ Practice Coach
- ▣ Director of Population Health
- ▣ Lead Physician in every office
- ▣ Monthly meetings of Lead Physicians
- ▣ Standardization of policies and processes
- ▣ Cornerstone of Accountable Care Organization

# Health Information Exchange



- ▣ Connect physicians with technology to improve patient care
- ▣ Maryland-CRISP

# CRISP

**Chesapeake Regional Information System for our Patients**

## **Mission**

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

## **Vision**

Enable and support the Maryland healthcare community to appropriately and securely share data in order to facilitate care, reduce costs, and improve health outcomes.





# Numbers at a Glance

Chesapeake Regional Information System for Our Patients

| Progress Metric                                 | May '13 |
|---|---------|
| Live Hospitals                                  | 47      |
| Live Labs and Rad Centers (non-hosp)            | 9       |
| Live Clinical Data Feeds                        | 98      |
| Identities in MPI                               | ~5.4M   |
| Lab Results Available                           | ~29M    |
| Radiology Report Available                      | ~8M     |
| Clinical Documents Available                    | ~4M     |
| Opt-Outs  | ~2,000  |
| Queries (past 30 days)                          | ~14,000 |
| Notifications (past 30 days)                    | ~60,000 |
| Participating physicians (query & notification) | ~1,200  |



# Encounter Notification Service

Chesapeake Regional Information System for Our Patients

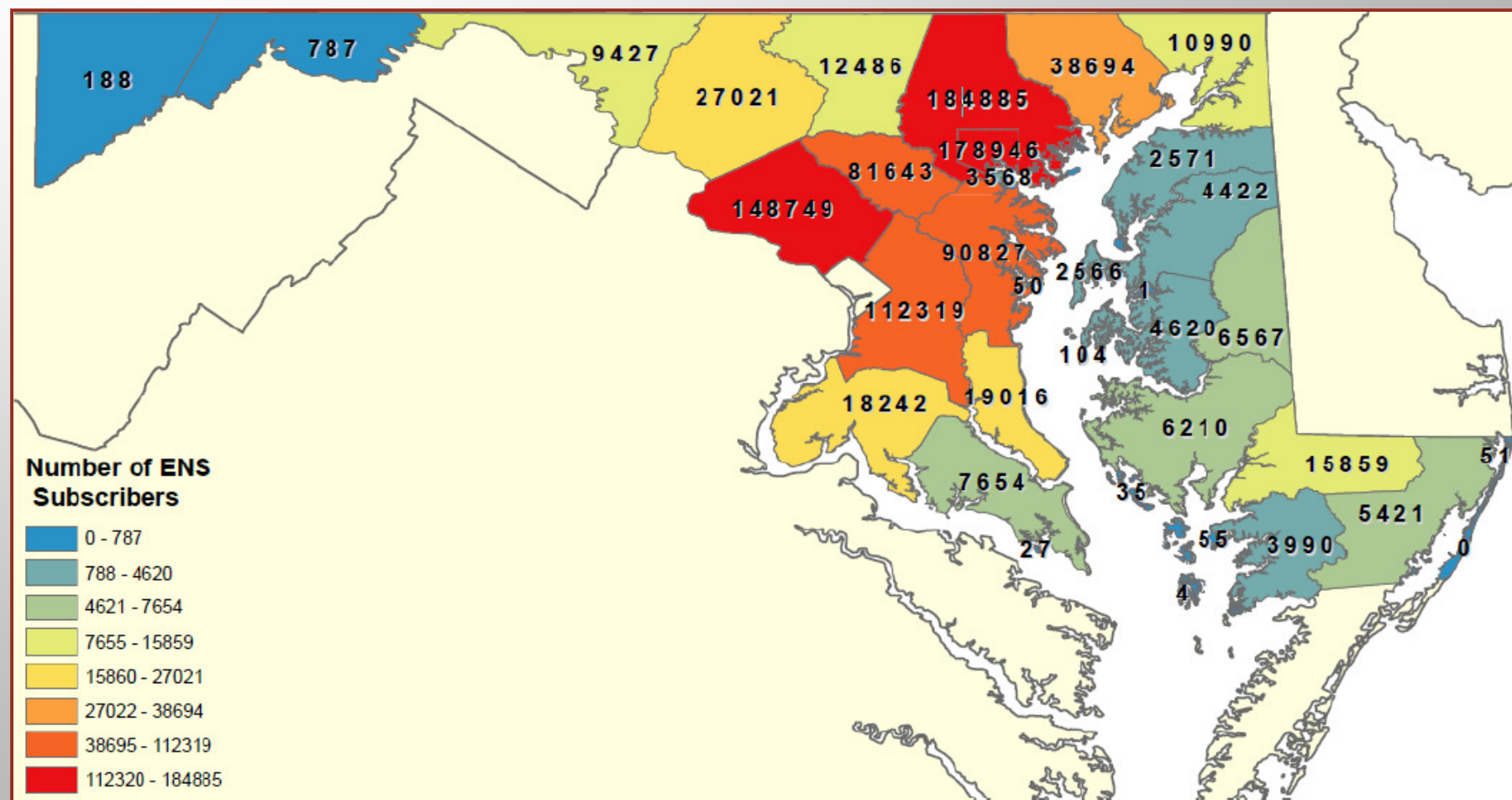


- ENS enables CRISP participants to receive real-time notifications when one of their patients or members is hospitalized.
- The alerts are generated from the “ADT” messages CRISP receives from all Maryland hospitals.
- Participants can only subscribe to “active patient or members”
- If an individual has opted out of the HIE, an alert will not be triggered.
- There are currently over 1,000,000 patients subscribed to with in ENS resulting in over 2,000 notifications per day.



# Individual Subscription by County

Chesapeake Regional Information System for Our Patients







# Maryland SIM Program and CRISP's Role

## Chesapeake Regional Information System for Our Patients

- DHMH and CRISP have partnered under Maryland's SIM Model Design Grant to develop a hospital service utilization reporting and mapping capability (building from the existing Encounter Reporting Service).
- Reporting and mapping capabilities will be designed to support the community integrated medical home model that is core to the Maryland approach.
- CRISP reporting and mapping capability will be enhanced to support broader "Camden Initiative-like" capabilities on a statewide scale.
- Additional data types will be incorporated into the CRISP reporting solution to enable broad understanding of population health status and trending.
- Highly granular mapping and reporting will be made possible through CRISP's address level data for encounters.



# Hospital Services Utilization Reporting

Chesapeake Regional Information System for Our Patients

- As encounter messages flow into CRISP, reporting on aggregate hospital services, regional or community utilization, and trending analysis becomes possible.
- By consolidating, correlating, and reporting against real-time encounter data CRISP can produce rapid and comprehensive views of hospital data for purposes such as identifying (to the appropriate entity) “super-utilizers” in targeted geographies.

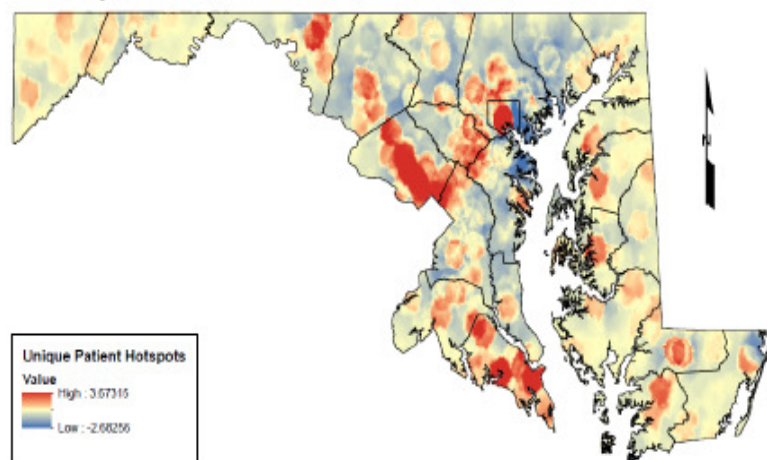


# GIS Mapping Capability

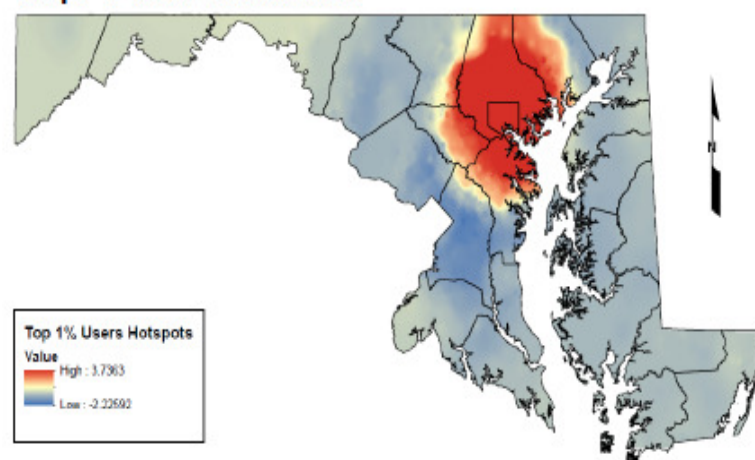
Chesapeake Regional Information System for Our Patients

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

Unique Patients



Top 1% Patients

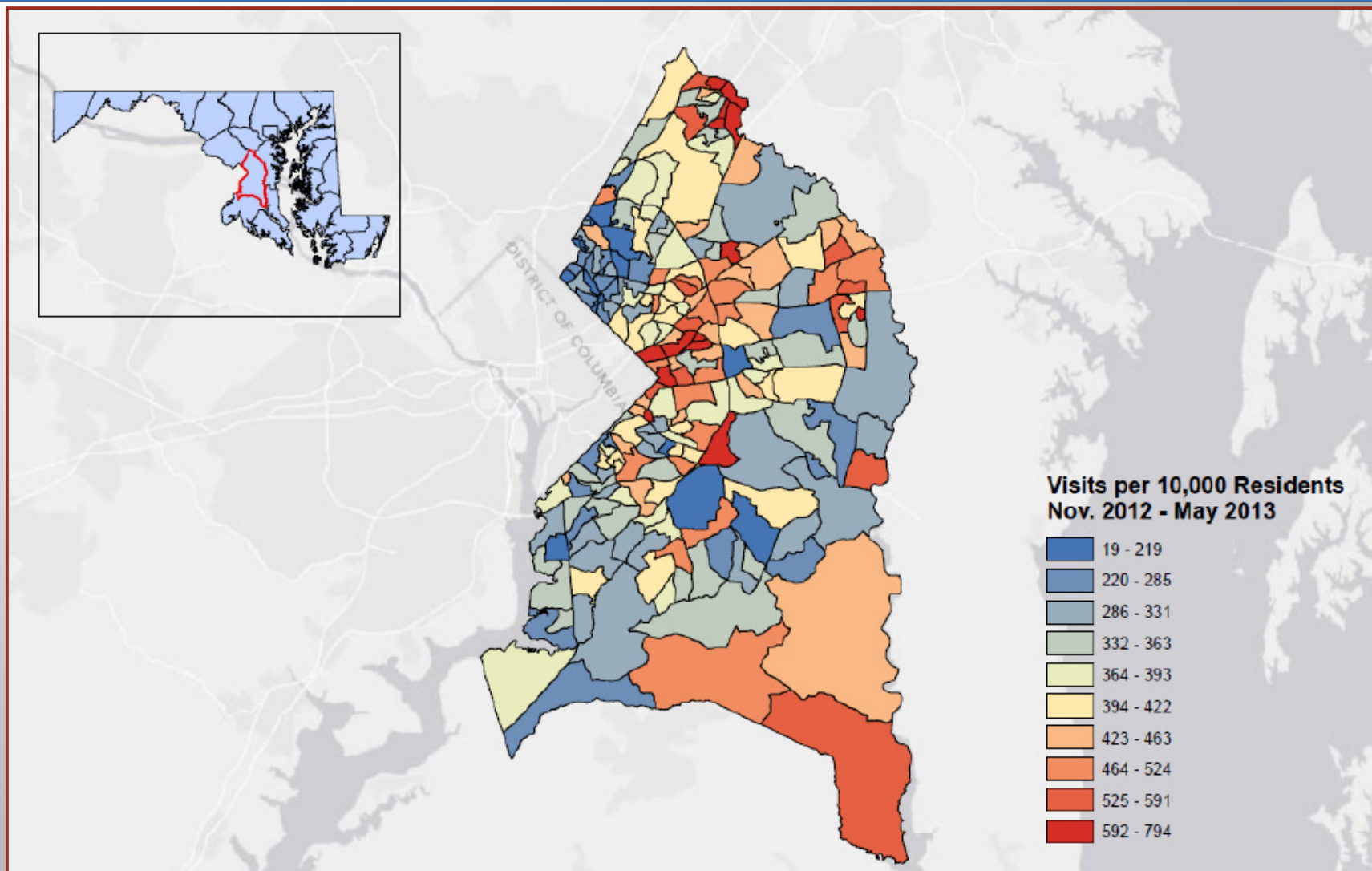






# Inpatient Utilization, Prince George's

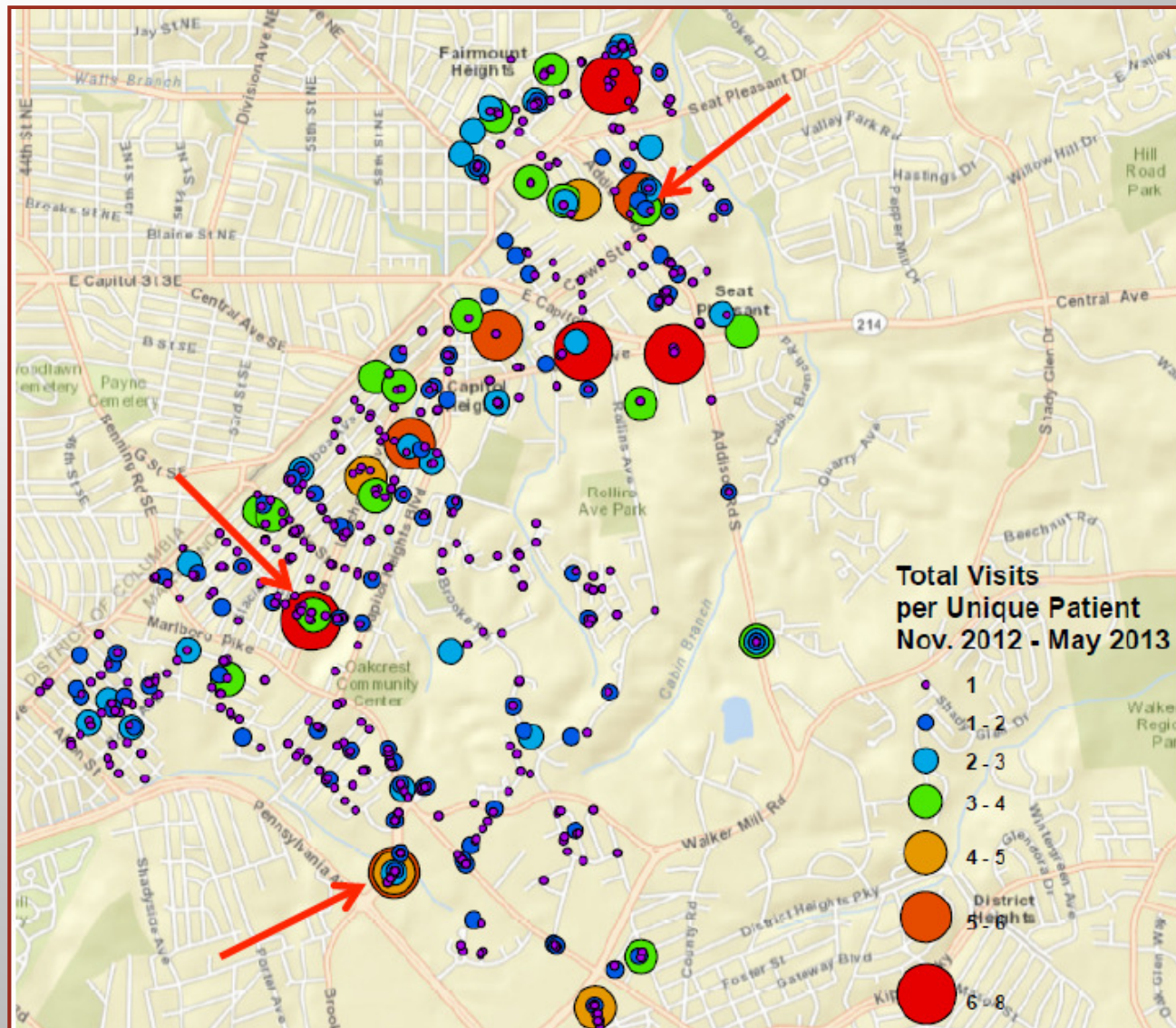
Chesapeake Regional Information System for Our Patients





# Inpatient Utilization Capitol Heights Area (Obscured Data)

Chesapeake Regional Information System for Our Patients

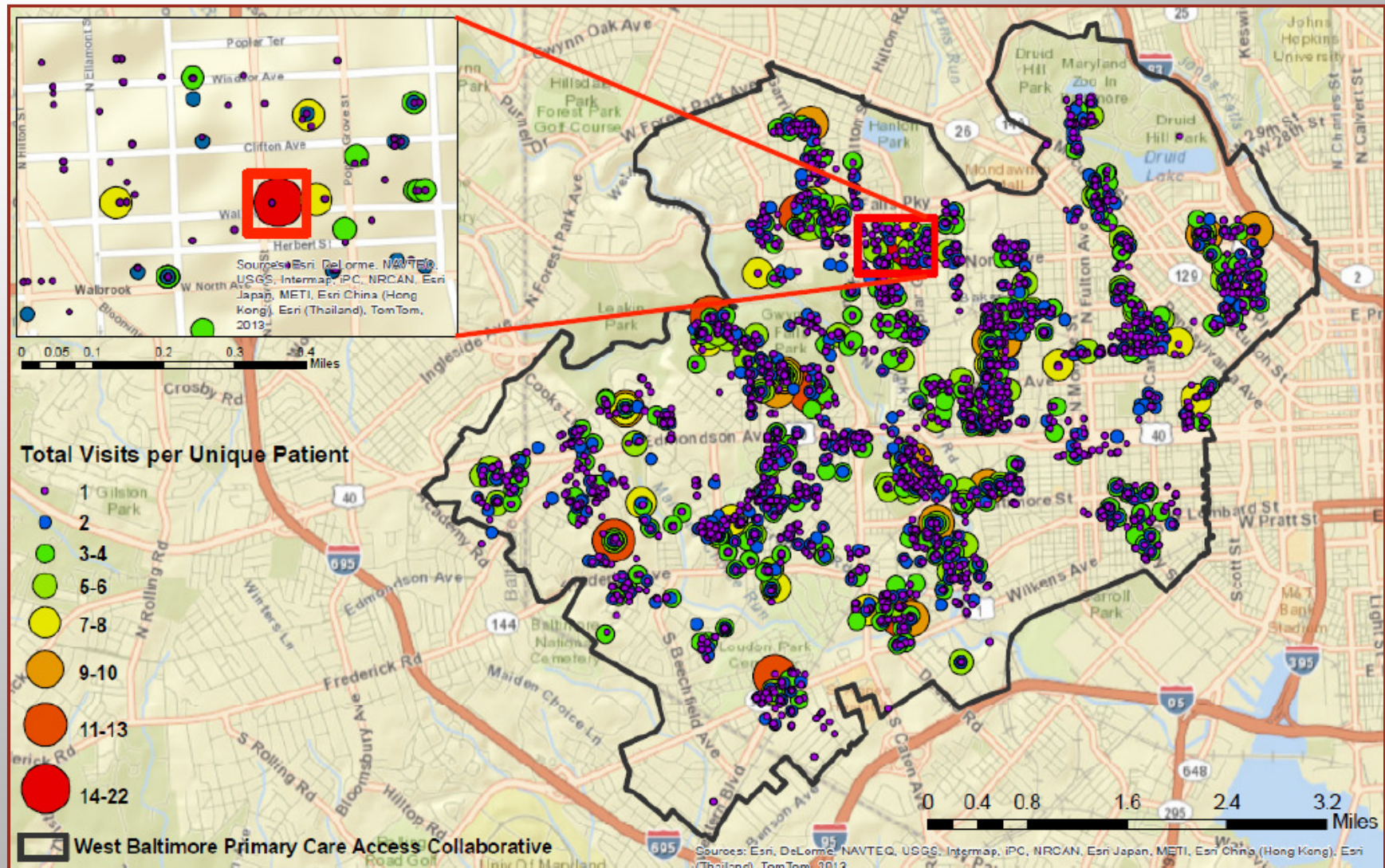






# Inpatient Utilization West Baltimore HEZ (Mocked Up Dots)

Chesapeake Regional Information System for Our Patients





# Utilization Reports

## Utilization Report Summary

**Class:** Inpatient

**Event:** Discharge

**Date Range:** 10/1/13 - 12/31/13

**Practice:** Hunt Valley

| Patient Name  | DOB      | Provider          | Number of Discharges |
|---------------|----------|-------------------|----------------------|
| John Smith    | 1/1/1965 | Mark Lamos        | 7                    |
| John Smith I  | 2/7/1970 | Robin Motter-Mast | 5                    |
| John Smith II | 3/2/1967 | Andrea Olaru      | 4                    |
| John Smith IV | 4/5/1945 | Deb Jones         | 3                    |
| John Smith V  | 5/8/1954 | Mark Lamos        | 3                    |

Care Team runs two reports:

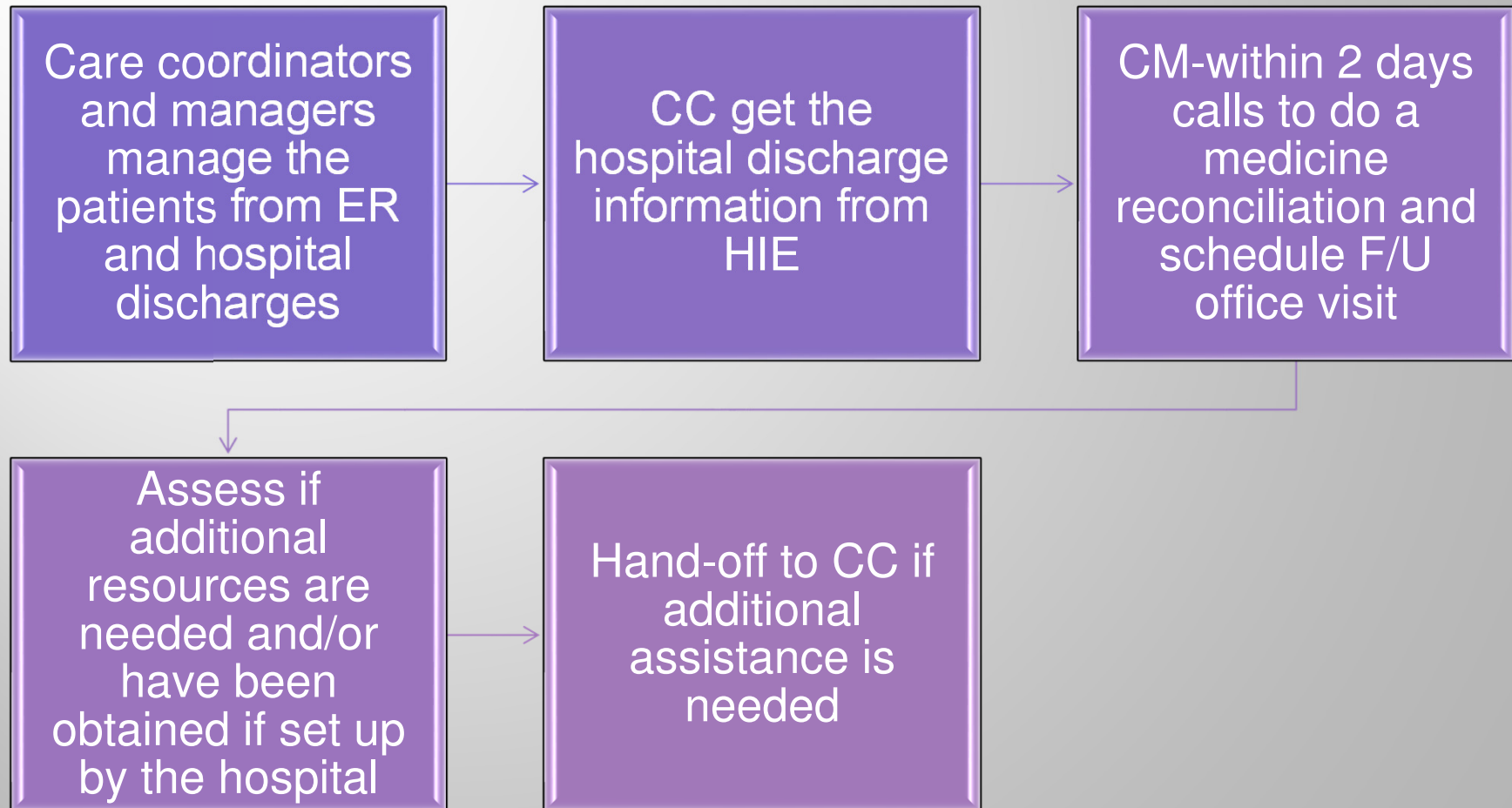
- Monthly Utilization (twice a month)
- Previous 48 hour (daily)



# Transition of Care

- ▣ Notified if any GBMA PCP patient is admitted and discharged from any ED or IP facility in Maryland
- ▣ Averaging ~630 discharges/month (21/day)
- ▣ Care Managers and Coordinators following up with 7 Primary Care Practices and 2 aligned ACO practices.

# Transition of Care





# CRISP

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## BEFORE CRISP

- GBMC was only aware of ER visits and inpatient discharges days after they occurred
- ▣ The provider did not engage the patient until they arrived at a follow up appointment

## AFTER CRISP

- ▣ Real time notification of ER and hospital utilization
- ▣ Transition of care process implemented
  - Make sure all patients have a follow-up appointment with their PCP.
- ▣ Helps us keep track of high ER utilizers and multiple hospitalizations

# Patient Story

- ▣ November of 2012 a 54 y.o. male was seen in the E.R. c/o dizziness.
- ▣ He was found to have a glucose in the 600's and HbA1c of 13.
- ▣ He was admitted to the hospital.
- ▣ He was contacted quickly, and scheduled for an outpatient follow up visit.
- ▣ At his visit, he met the Care Manager, and he was care planned.
- ▣ As of October 2013, his sugars are in the low 100's and his HbA1c is 5.9.

# Patient Story

27

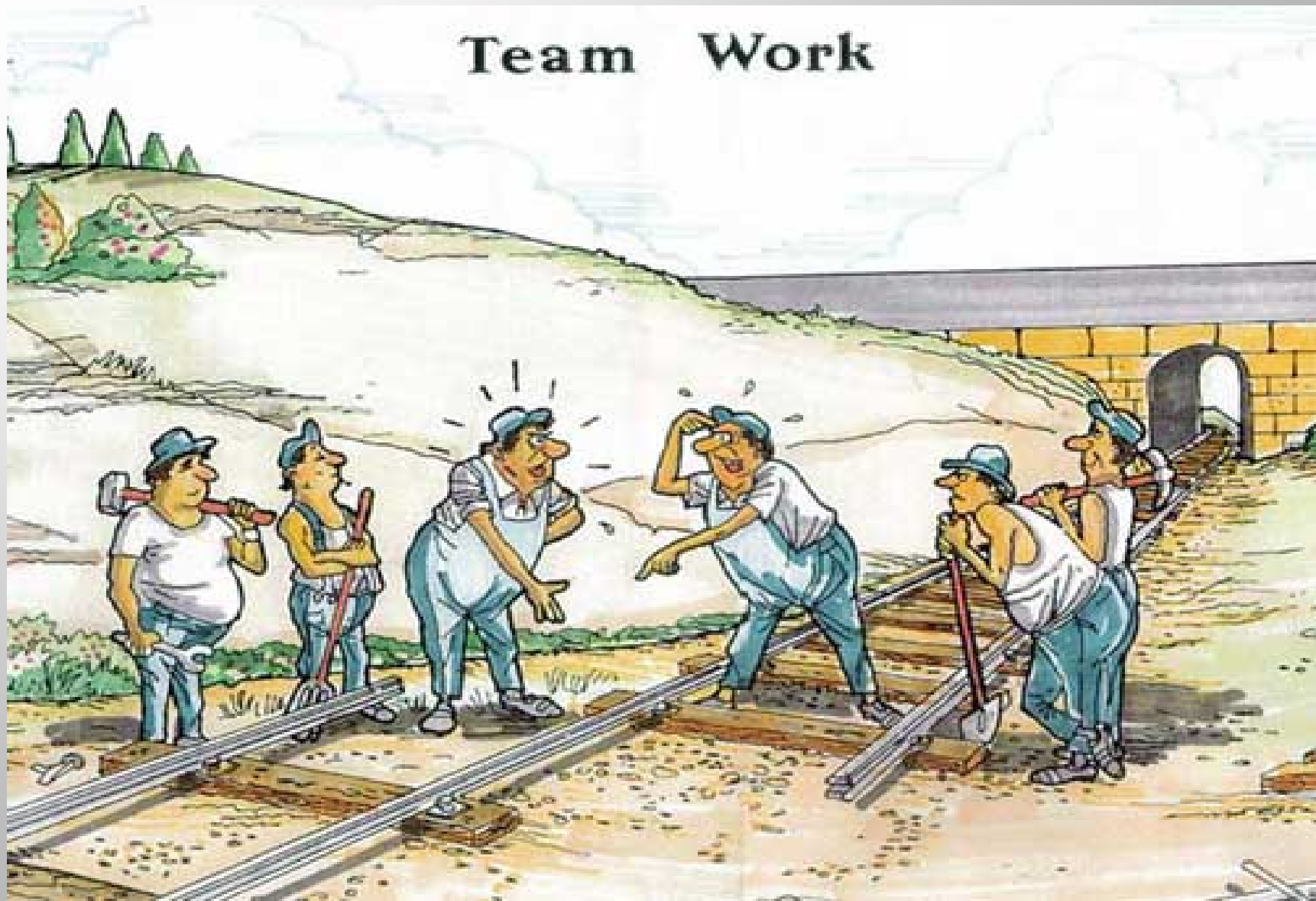
## OUTCOME

- ▣ The PCP consulted with the Care Manager and quickly came up with a treatment plan for the patient.
  - The patient has not been back to the ER.
  - His diabetes is well managed, and he has met his treatment goals.

## BENEFIT

- ▣ CRISP helped us identify a high risk patient and potentially high utilizer.
- ▣ Proactive instead of reactive patient care.

# Team Work





# ACO/GBHA

- ▣ **Greater Baltimore Health Alliance (GBHA)**
  - Chartered in 2011 to integrate delivery of both employed and community-based clinical services
    - ▣ Network of approximately 100 primary care providers
  - Goal: Improve access for patients, maximize quality, reduce cost of care
  - Approved as an Accountable Care Organization (ACO) through the Medicare Shared Savings program in July 2012

# Care Team

- ▣ Manage population health of the entire network
- ▣ Provide access to Care Manager and Care Coordinator for every practice
- ▣ Entire team meets together at least monthly



# Care Team

Mitigate coverage issues

Teach new members of the team about their roles

Standardize work

Level workload

Work together to provide resources to the GBMA neighborhood

# Specialists

Created a Board of Physician Specialists

Collaborative Compacts

Referral Guidelines



# Medicare Shared Savings Program ACO Results

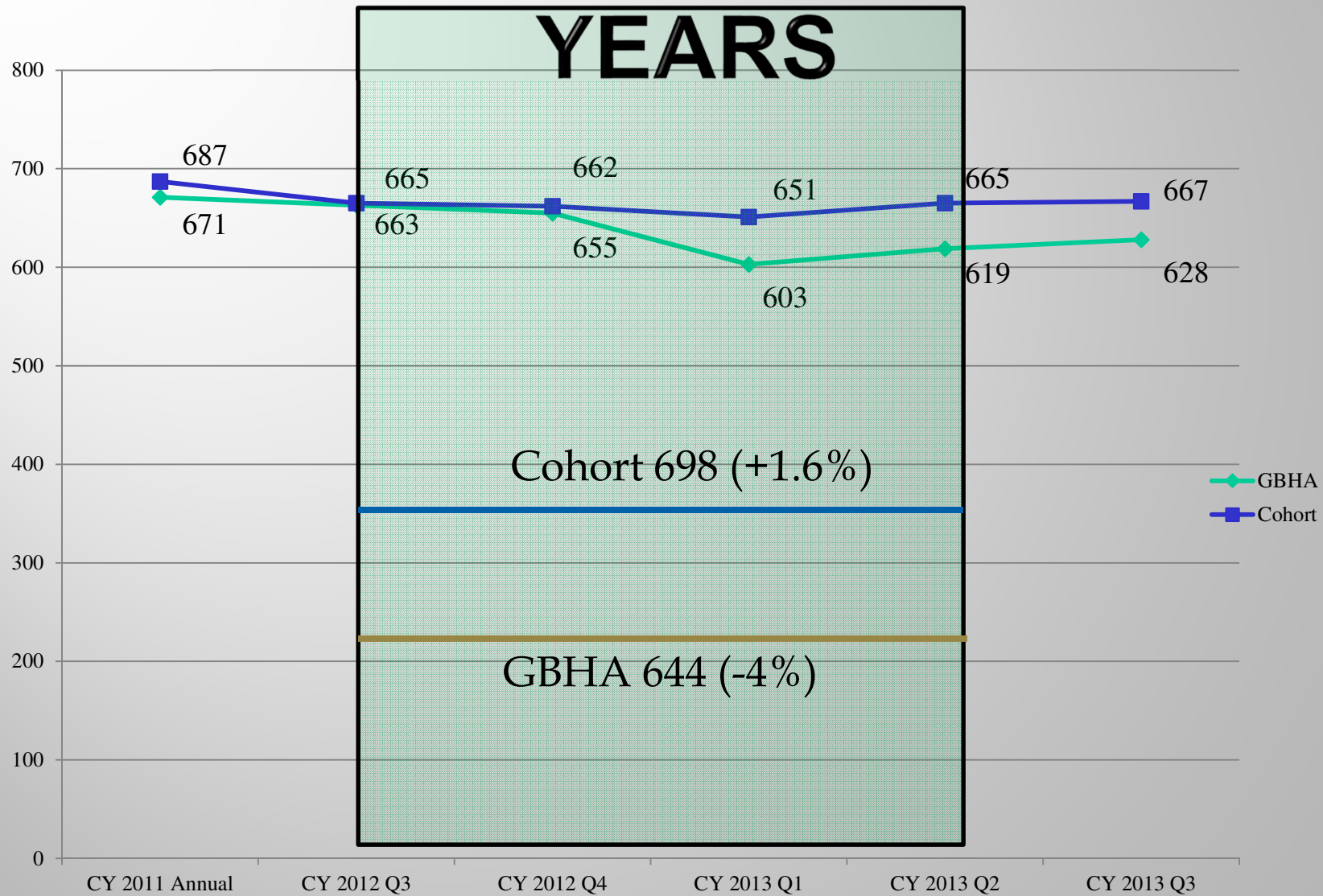


Results trended from CY 2011 to  
CY2013 Q3

Compares GBHA to the cohort (all  
organizations in the MSSP)

GBHA shows an improvement in  
both quality and cost per capita  
metrics

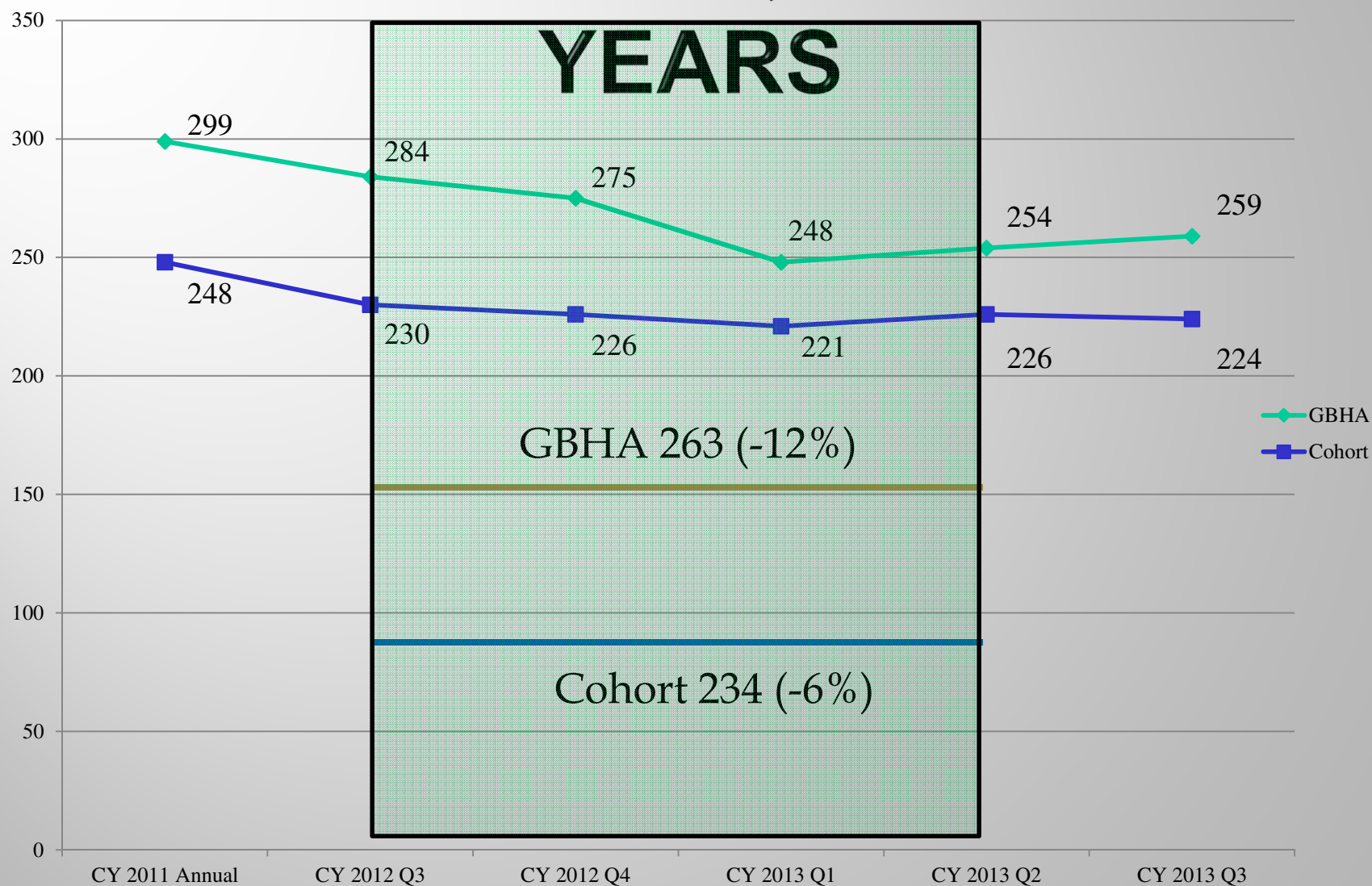
# ED VISITS/ 1,000 PLAN



Cohort = 2012 CMS ACO Median

CY 2013Q1 Data missing 2 weeks  
of claims

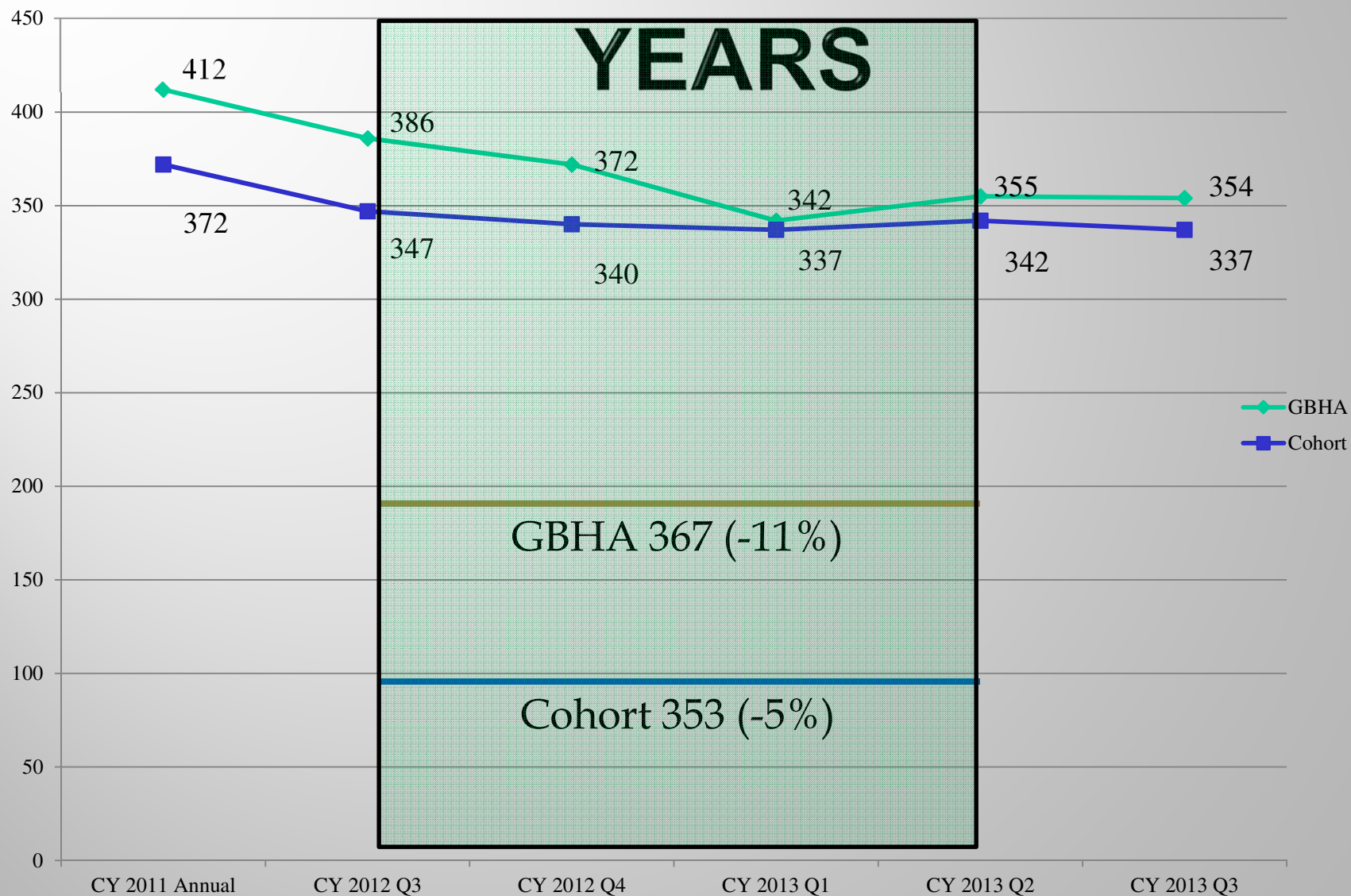
# ED ADMITS/ 1,000 PLAN



Cohort = 2012 CMS ACO Median

CY 2013 Q1 Data missing 2 weeks  
of claims

# HOSPITALIZATIONS/ 1,000 PLAN

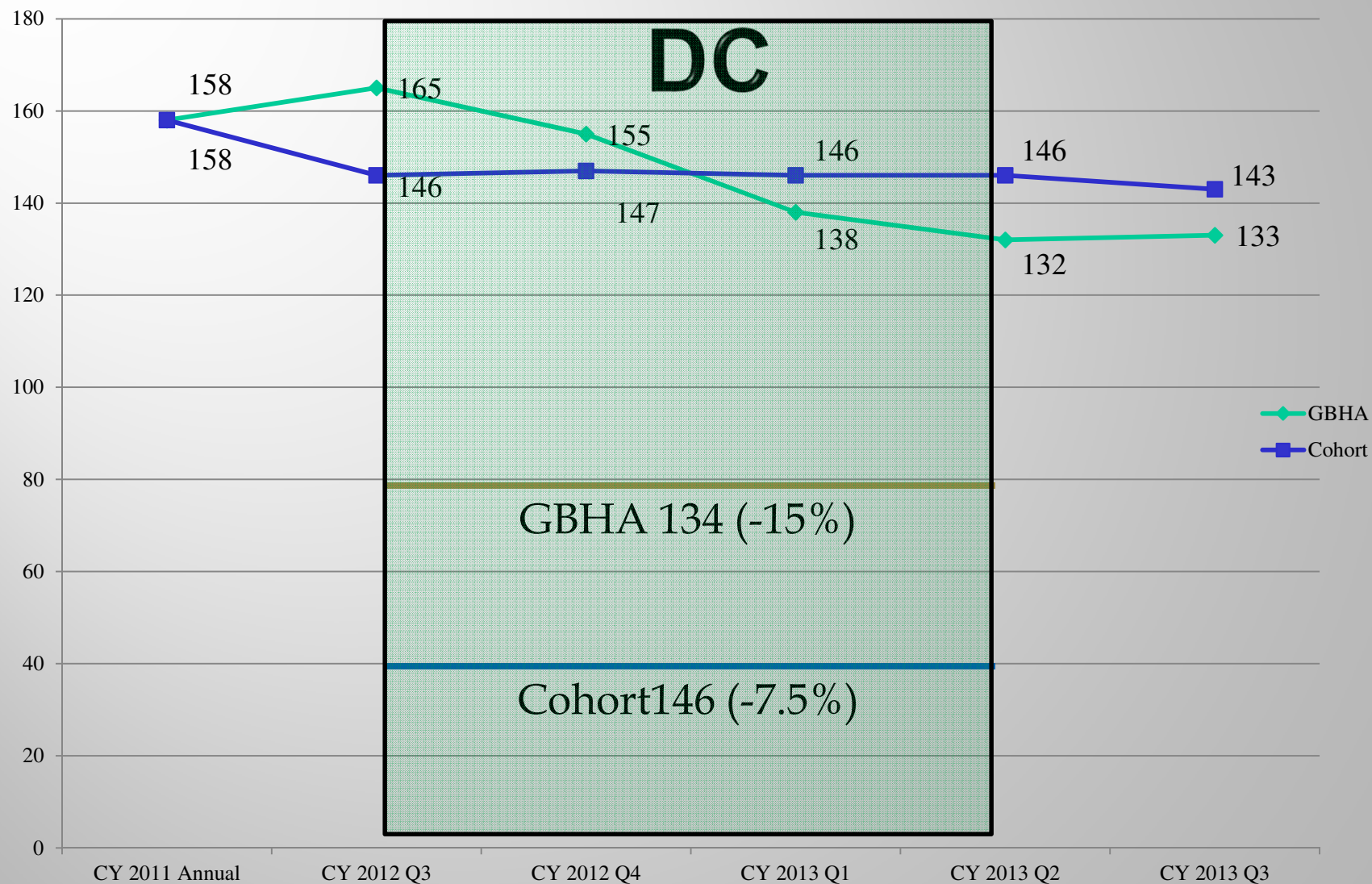


Cohort = 2012 CMS ACO Median

CY 2013 Q1 Data missing 2 weeks  
of claims



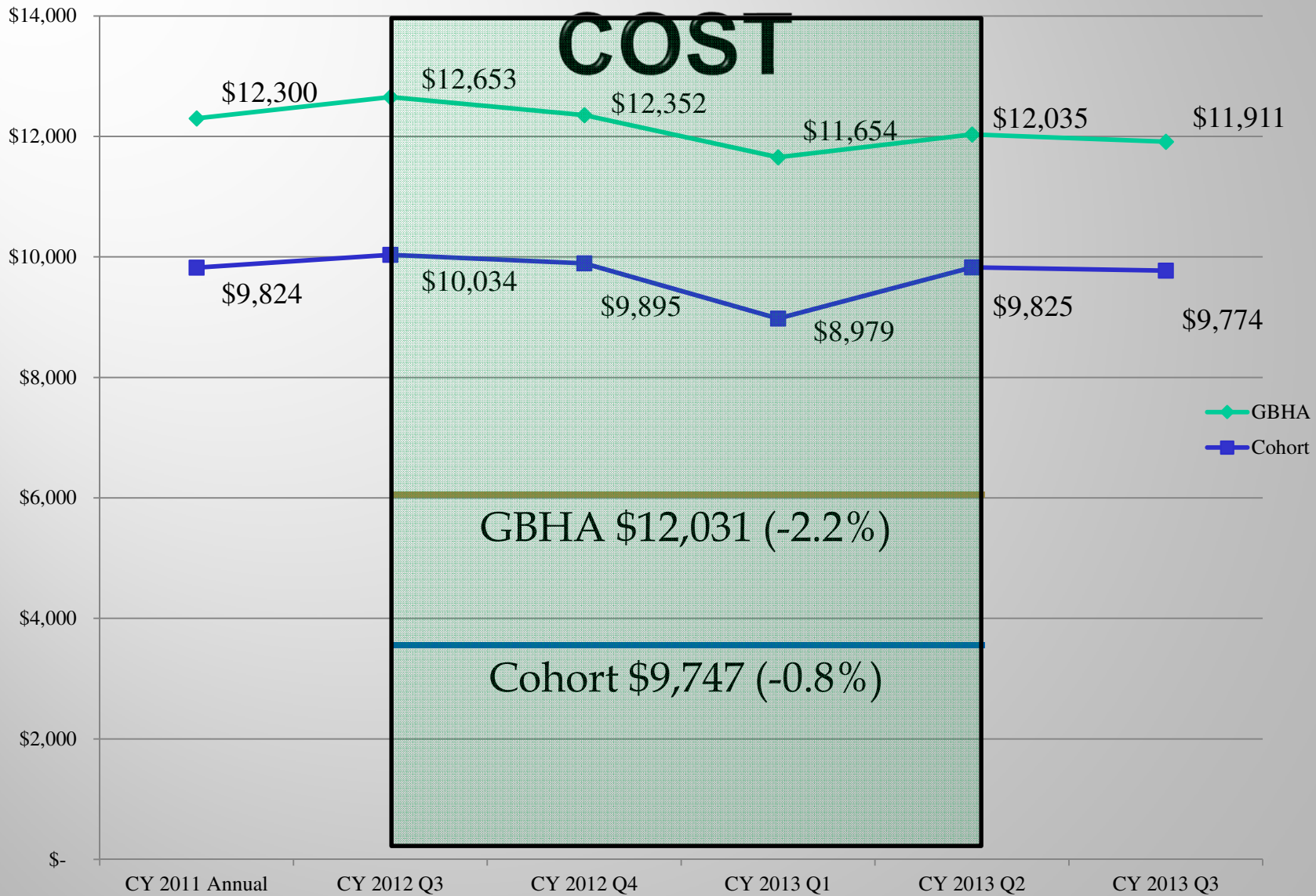
# 30-DAY READMISSIONS/1,000



Cohort = 2012 CMS ACO Median

CY 2013Q1 Data missing 2 weeks  
of claims

# TOTAL PER CAPITA



Cohort = 2012 CMS ACO Median

CY 2013Q1 Data missing 2 weeks  
of claims

# Next Steps to Enhance Collaboration

Initiate early communication from outpatient setting with ER/hospital

- Decrease duplicating services

Expand HIE to non-aligned resources

- Specialists, nursing homes, PT/OT, home nursing services, pharmacies, local health departments

Exchange more utilization information between payers and healthcare organizations/providers

# Take -a-Ways

- ▣ HIE has been very successful in Maryland
- ▣ Work with an ACO/Medical System focused on population health management





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