



Total Cost of Care Workgroup

June 28, 2017

Agenda

- ▶ Updates on initiatives with CMS
- ▶ Review of MPA options
- ▶ Updated HSCRC numbers on attribution approaches for assigning Medicare TCOC
- ▶ Updated Mathematica numbers on geography-based attribution

Updates on Initiatives with CMS

- ▶ Phase 2 (aka Enhanced Model)
- ▶ Care Redesign Programs (HCIP, CCIP, ...)
- ▶ Rough draft MPA contract language



Review of MPA Options



Medicare Performance Adjustment (MPA)

▶ **What is it?**

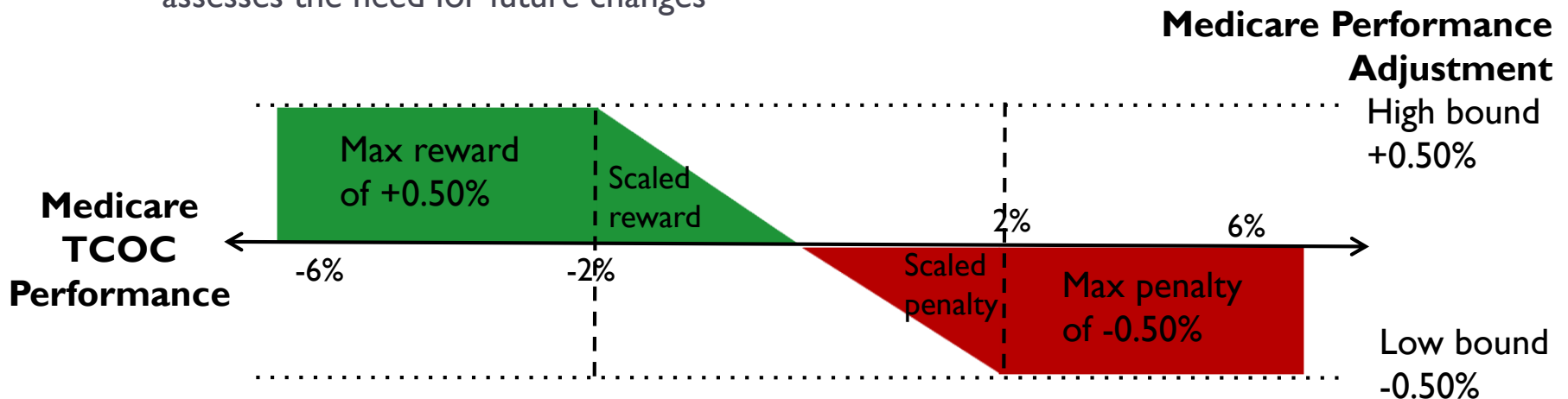
- ▶ A scaled adjustment for each hospital based on its performance relative to a Medicare Total Cost of Care (TCOC) benchmark

▶ **Objectives**

- ▶ Allow Maryland to step progressively toward developing the systems and mechanisms to control TCOC, by increasing hospital-specific responsibility for Medicare TCOC (Part A & B) over time (Progression Plan Key Element 1b)
- ▶ Provide a vehicle that links non-hospital costs to the All-Payer Model, allowing participating clinicians to be eligible for bonuses under MACRA

MPA: Current Design Concept

- ▶ Based on a hospital's performance on the Medicare TCOC measure, the hospital will receive a scaled bonus or penalty
 - ▶ Function similarly to adjustments under the HSCRC's quality programs
 - ▶ Be a part of the revenue at-risk for quality programs (redistribution among programs)
 - ▶ NOTE: Not an insurance model
- ▶ Scaling approach includes a narrow band to share statewide performance and minimize volatility risk
- ▶ MPA will be applied to Medicare hospital spending, starting at 0.5% Medicare revenue at-risk (which translates to approx. 0.2% of hospital all-payer spending)
 - ▶ First payment adjustment in July 2019
 - ▶ Increase to 1.0% Medicare revenue at-risk, perhaps more moving forward, as HSCRC assesses the need for future changes



Tentative MPA Timeline

Date	Topic/Action
Ongoing	TCOC Work Group meetings, transitioning to technical revisions of potential MPA policy with stakeholders
October 2017	Staff drafts RY 2020 MPA Policy
November 2017	Draft RY 2020 MPA Policy presented to Commission
December 2017	Commission votes on Final RY 2020 MPA Policy
Jan 1, 2018	Performance Period for RY 2020 MPA begins

Rate Year 2018			Rate Year 2019				Rate Year 2020				Rate Year 2021		
Calendar Year 2018			Calendar Year 2019				Calendar Year 2020				CY2021		
Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun

Hospital Calculations	MPA: CY 2018 is RY2020 Performance Year	MPA: CY 2019 is RY2021 Performance Year	MPA: CY 2020 is RY2022 Performance Year	
------------------------------	-----------------------------------------	-----------------------------------------	-----------------------------------------	--

Hospital Adjustment		MPA RY2020 Payment Year	MPA RY2021 Payment Year
----------------------------	--	-------------------------	-------------------------

Considerations in Developing Hospital-specific Medicare TCOC

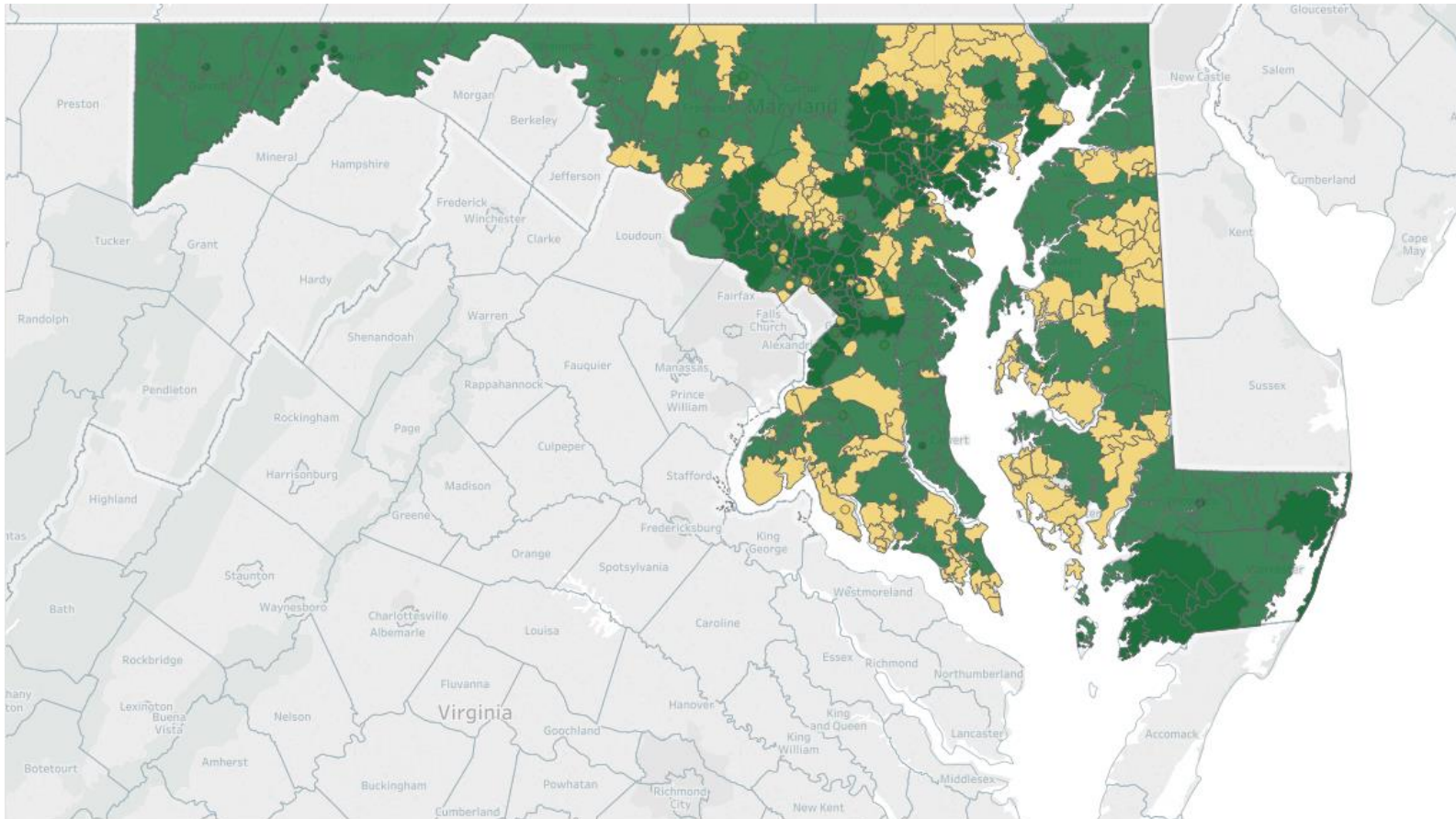
- ▶ **Total cost of care capture**
 - ▶ How to include costs from beneficiaries who do not see a hospital?
- ▶ **Conceptually sensible for hospitals**
 - ▶ Can hospitals intervene on assigned beneficiaries and costs?
 - ▶ Does measure build upon existing investments and efforts to reduce TCOC?
- ▶ **Measure stability over time**
 - ▶ Does reducing avoidable utilization affect measurement?
- ▶ **Sharing service areas and/or beneficiaries?**
 - ▶ How does the method affects hospitals with overlapping geography?
 - ▶ How does the method deal with hospital care received outside of a beneficiary's residential geography?
- ▶ **Appropriate capture of hospital spending and total spending across the state**

MPA: Potential Methods for Assigning Hospital-Specific Medicare TCOC

Beneficiary attribution based on:

- ▶ Enrollment in a hospital-based ACO (that is, Maryland-based ACOs with Maryland hospital participant(s))
 - ▶ HSCRC obtained list of 2017 ACO providers
 - ▶ How to attribute beneficiaries to those doctors? Prospectively?
- ▶ Utilization at Maryland hospitals
 - ▶ Hierarchy based on (1) same hospital/system, (2) majority of payments, and then (3) plurality of both payments and visits
 - ▶ Prospective or concurrent attribution?
- ▶ Geography (zip code where beneficiary resides)
 - ▶ Hospitals' Primary Service Areas (PSAs) under GBR Agreement
 - ▶ How to capture remaining zip codes? Exploring "PSA-plus"

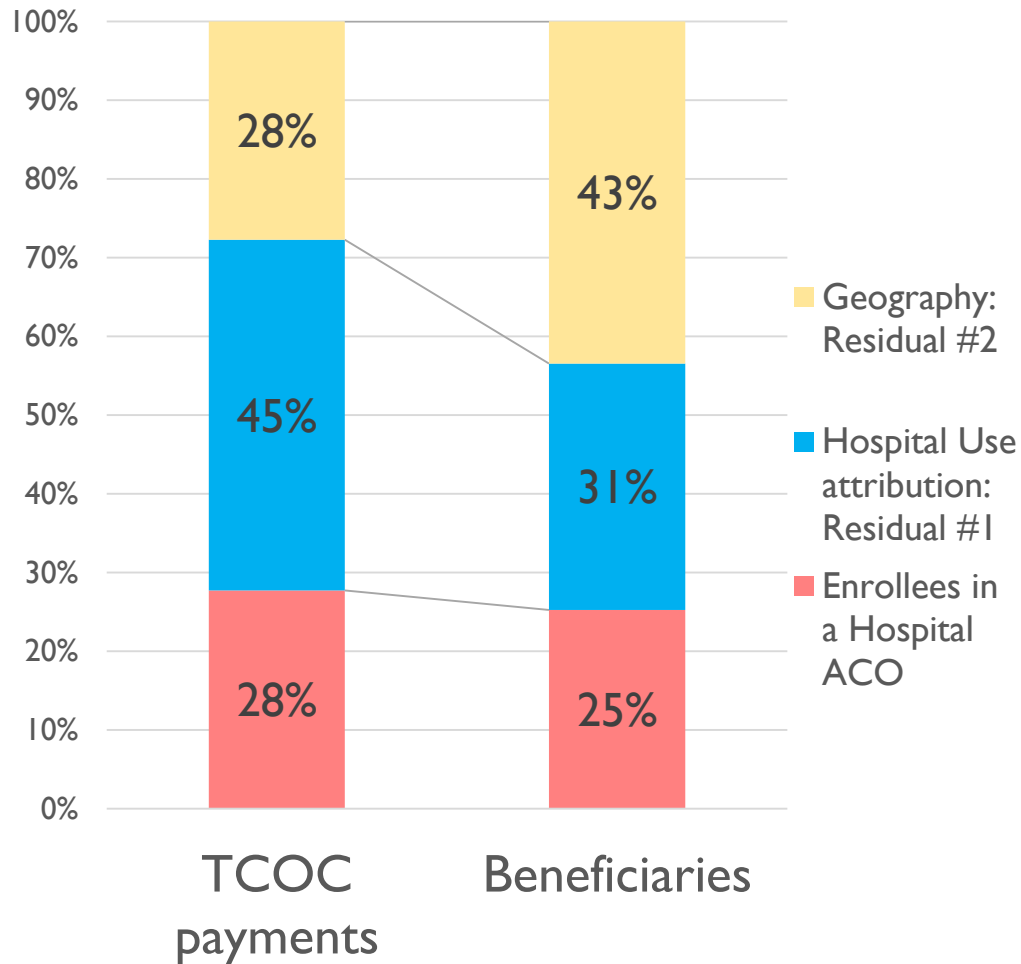
Zip Codes: In Current PSAs (green) vs. Not



Map based on Longitude (generated) and Latitude (generated). Color shows sum of PSA. Details are shown for Bene Zip and Hospname. The view is filtered on Hospname, which keeps 47 of 47 members.



Option of hierarchy with prospective attribution: Hospital-based ACO + Hospital Use + Geography



- ▶ Attribution occurs prospectively, based on utilization in prior 2 years, but using their current-year TCOC
- 1. Beneficiaries attributed first based on link to clinicians in hospital-based ACO
- 2. Beneficiaries not attributed through ACO are attributed based on hospital utilization
- 3. Finally, beneficiaries still not attributed would be attributed with a Geographic approach
- ▶ Performance would be assessed on TCOC spending per capita
- ▶ For hospitals not in an ACO, attribution would be Hospital Use + Geography, among beneficiaries not in a hospital-based ACO

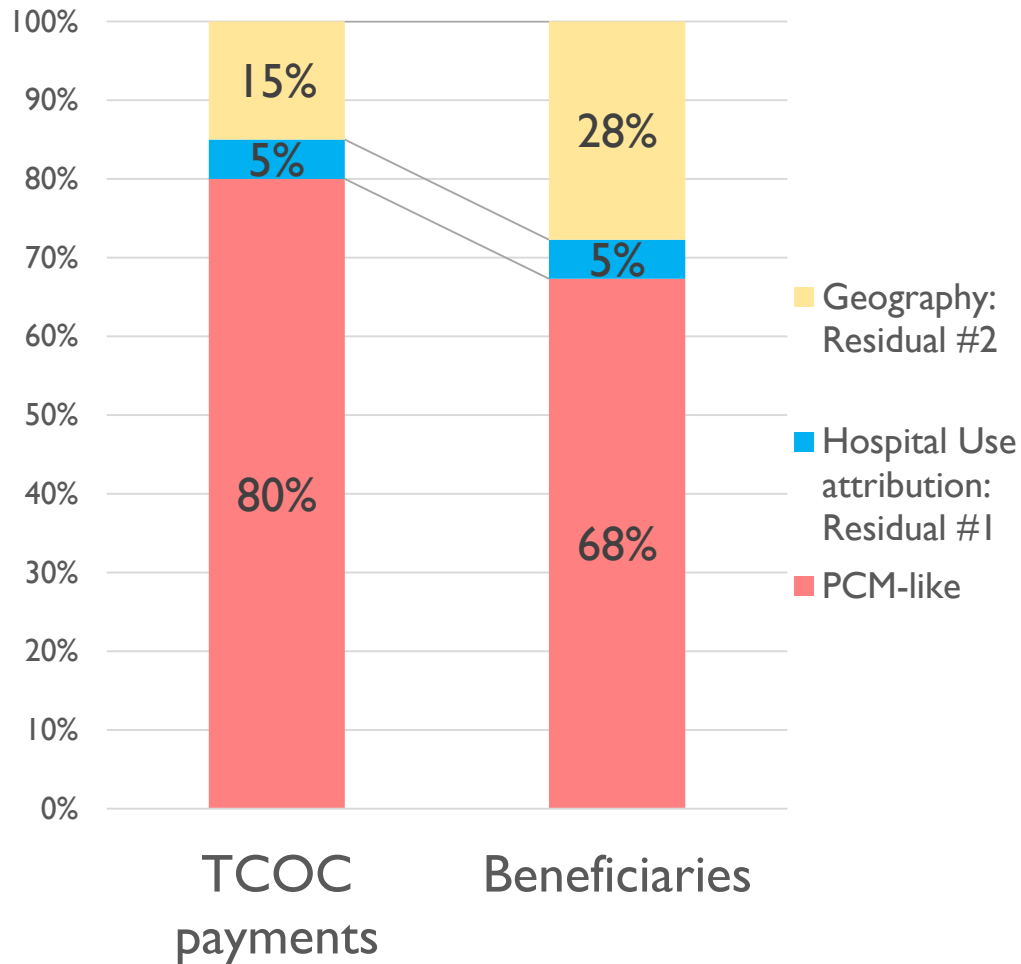
MPA: Principles for Attribution and Hierarchy

Principle	Approach
Cover all Maryland Medicare FFS beneficiaries and costs with Parts A and B	All A&B beneficiaries and their TCOC could be attributed through hierarchy: <ol style="list-style-type: none"><li data-bbox="987 462 1456 511">1. Hospital-based ACO<li data-bbox="987 519 1309 568">2. Hospital Use<li data-bbox="987 576 1271 625">3. Geography
Allow hospitals to “know” their population prior to the performance year	<ol style="list-style-type: none"><li data-bbox="987 654 1773 815">1. Hospitals in an ACO can expect that beneficiaries seeing ACO physicians will likely be attributed to that ACO<li data-bbox="987 823 1746 929">2. Hospitals know which beneficiaries use significant hospital services<li data-bbox="987 938 1804 1100">3. Geographies will be assigned based on hospital-designated areas and share of hospital care in remaining areas

MPA: Principles for Attribution and Hierarchy, continued

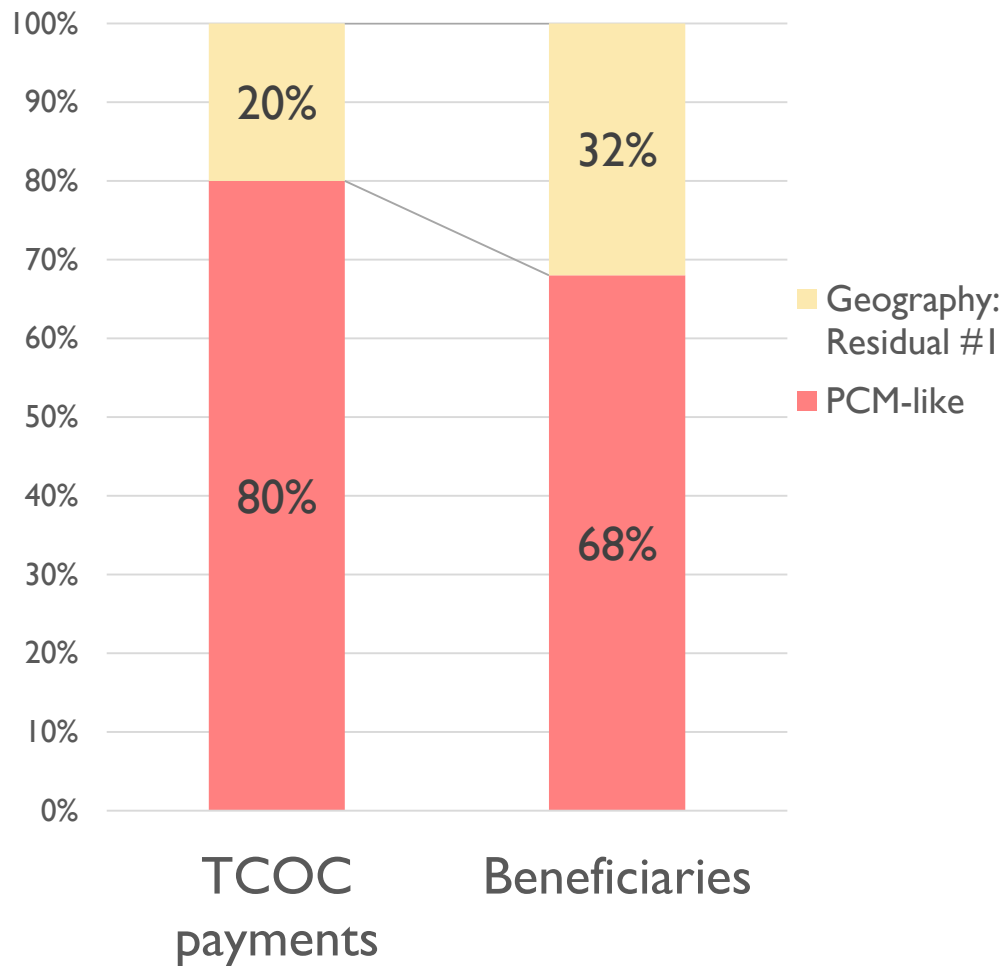
Principle	Approach
Support hospital efforts focusing on populations or provider relationships already managed by hospitals or their partners	<ol style="list-style-type: none">1. Hospitals in an ACO already responsible for TCOC for beneficiaries seeing ACO physicians, and have developed relationships with providers2. Hospitals already working on preventing readmissions and providing transitional care for patients seen in their hospitals3. Many hospitals already working in their communities through community benefits, Regional Partnerships, etc.
Reinforce incentives to hospitals for reducing utilization	<ol style="list-style-type: none">1. Beneficiaries are attributed in ACO approach based on primary care provider, not hospital use; hospitals would benefit from reduction in hospital use2-3. Coupling a prospective Utilization attribution with Geography provides a way to help keep beneficiaries who no longer use the hospital within the hospital's denominator

Another attribution option: Primary Care Model-like + Hospital Use + Geography



- ▶ Attribution based on draft Maryland Primary Care Model (PCM), based on beneficiary use of clinicians (without PCM limitation to practices with 150+ benes), then link those clinicians to hospitals based on plurality of hospital utilization by those beneficiaries
- ▶ Attribution logic very similar to that for ACOs, but adds providers not in an ACO

Dropping Hospital Use: Primary Care Model-like + Geography



- ▶ Since prior slide shows such a small share for Hospital Use when PCM-like is first in the hierarchy, is the Hospital Use attribution necessary?
- ▶ Further exploration and comparisons are necessary

MPA: Principles for Attribution and Hierarchy Using PCM-like instead of ACO

- ▶ **As part of hierarchy:**
 - ▶ Still captures all beneficiaries
 - ▶ Hospitals still “know” their population prior to PY
 - ▶ Supports hospital efforts working with populations and providers – beyond just ACOs
 - ▶ Reinforce incentives to hospitals for reducing utilization
- ▶ **Under PCM-like, hospitals in ACOs are assigned their own beneficiaries rather than sharing those in the system under current ACO approach**
- ▶ **Next steps: How similar is each hospital’s attributed list of beneficiaries under the various options**

Updated HSCRC numbers on
attribution approaches for assigning
Medicare TCOC



Modeling of 2016 Performance Year with 2-Year Prospective Attribution

Scenario Order (1 / 2 / 3)	1) Avg Part B Benes	1) TCOC	2) Avg Part B Benes	2) TCOC	3) Avg Part B Benes	3) TCOC	Total Cost of Care
ACO-Like / MHA-Like / PSAP	193 K	\$2.4 B	237 K	\$3.9 B	329 K	\$2.4 B	\$8.7 B
ACO-Like / PCM-Like / PSAP	193 K	\$2.4 B	341 K	\$4.7 B	225 K	\$1.6 B	\$8.7 B
ACO-Like / PSAP	193 K	\$2.4 B	563 K	\$6.3 B			\$8.7 B
PCM-Like / MHA-Like / PSAP	518 K	\$6.9 B	40 K	\$0.4 B	209 K	\$1.3 B	\$8.7 B
PCM-Like / PSAP	518 K	\$6.9 B	241 K	\$1.7 B			\$8.7 B
MHA-Like / PSAP	348 K	\$5.7 B	407 K	\$2.9 B			\$8.7 B
PSAP	759 K	\$8.6 B					\$8.7 B

Key	Description
ACO-Like	Hospital-based ACOs are attributed beneficiaries based on ACO logic by PCP utilization first then other selected specialties. NPI list provided by CMMI for each ACO. For ACOs with more than one hospital, dollars distributed by Medicare market share.
PCM-Like	Patient Designated Providers (PDP) are attributed beneficiaries based on proposed Maryland Primary Care Model (PCM) logic by PCP utilization first then other selected specialties. PCM restriction of practice size over 150 beneficiaries removed. PDP is attributed to a hospital based on the plurality of utilization by hospital of their attributed beneficiaries.
MHA-Like	Beneficiaries are attributed to hospitals based on 1) all of their hospital utilization is with the same hospital or system, 2) a majority of their hospital utilization is with one hospital or system, or 3) a plurality of their hospital utilization
PSAP (PSA-Plus)	Mathematica geographic attribution by 1) beneficiary zip code on GBR PSA, then 2) for remaining zip codes, plurality of hospital utilization

Updated Mathematica numbers on
geography-based attribution



Total Cost of Care:

Defining Hospital Service Areas

Presented to Total Cost of Care Workgroup

June 27, 2017

Eric Schone
Fei Xing

Testing Service Area Variations

- **Primary Service Area (PSA)**
 - Defined by hospital
- **Service Flows**
 - Zip codes sorted by descending hospital market share
 - Service area is combination of zip codes exceeding threshold share of hospital's inpatient+outpatient ECMAD
 - Thresholds of 50%, 60%, 75% and 80% tested
- **Plurality rule**
 - Zip codes unassigned to PSAs allocated to hospital with top share of ECMAD in that zip

Candidate assignments

- **PSA plus plurality rule for unassigned zip codes (hospital with highest share)**
- **Union of PSA and 60% flow service areas, plus plurality rule for unassigned zip codes**
- **Assignment rules:**
 - **In unique zip code assignments, all cost or use assigned to a single hospital**
 - **In multiple zip code assignments, cost or use assigned according to share of ECMAD from assigned hospitals**

Metrics

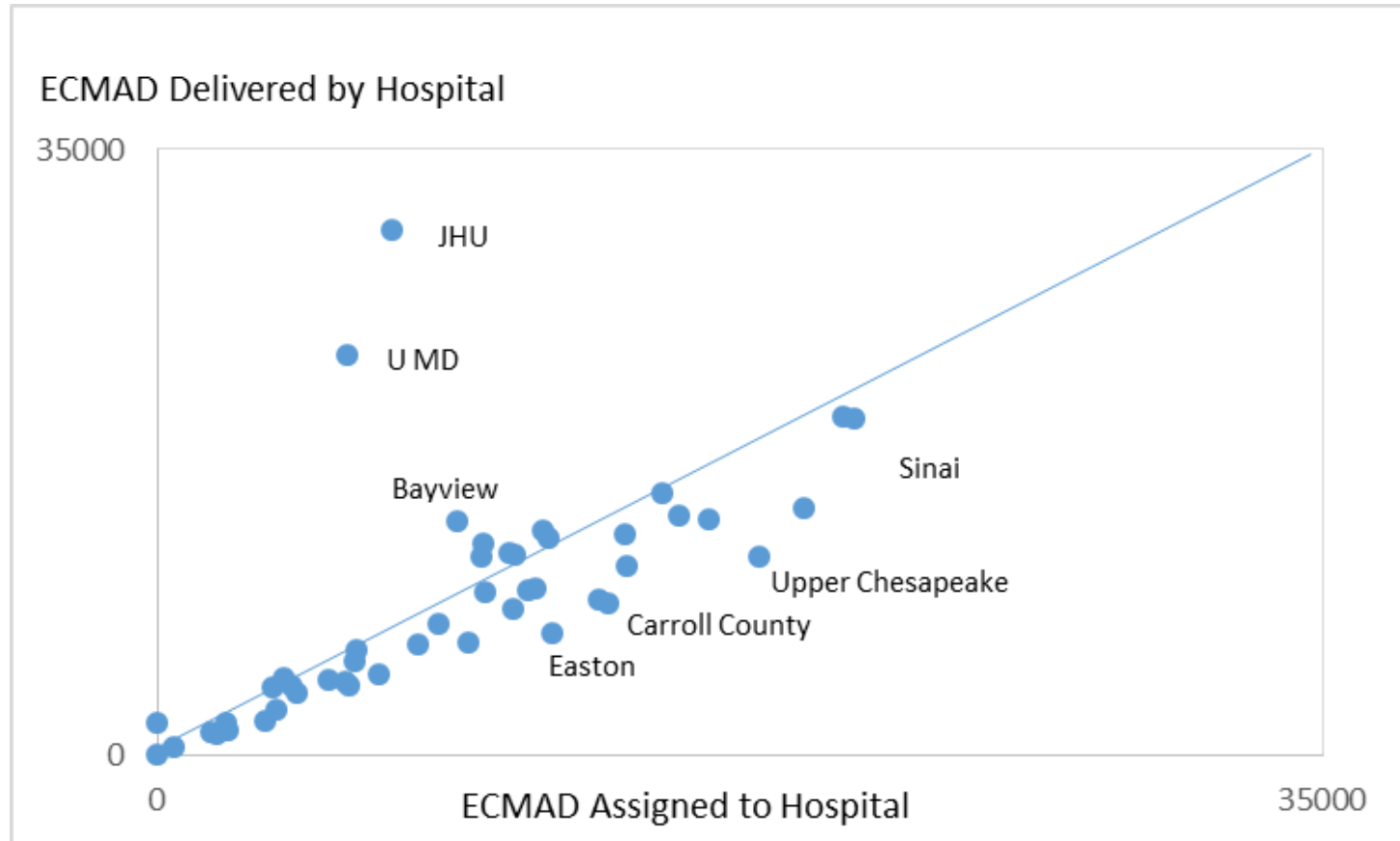
- **Share of zip codes uniquely assigned by source (PSA|60 vs plurality rule)**
- **Share of ECMAD uniquely assigned by source (PSA|60 vs plurality rule)**
- **Share of zip codes assigned to multiple hospitals (for PSA|60 only)**
- **ECMAD hospital delivered vs ECMAD of its assigned patients: mean absolute difference (MAD)**

Characteristics of Alternative Geographic Assignments

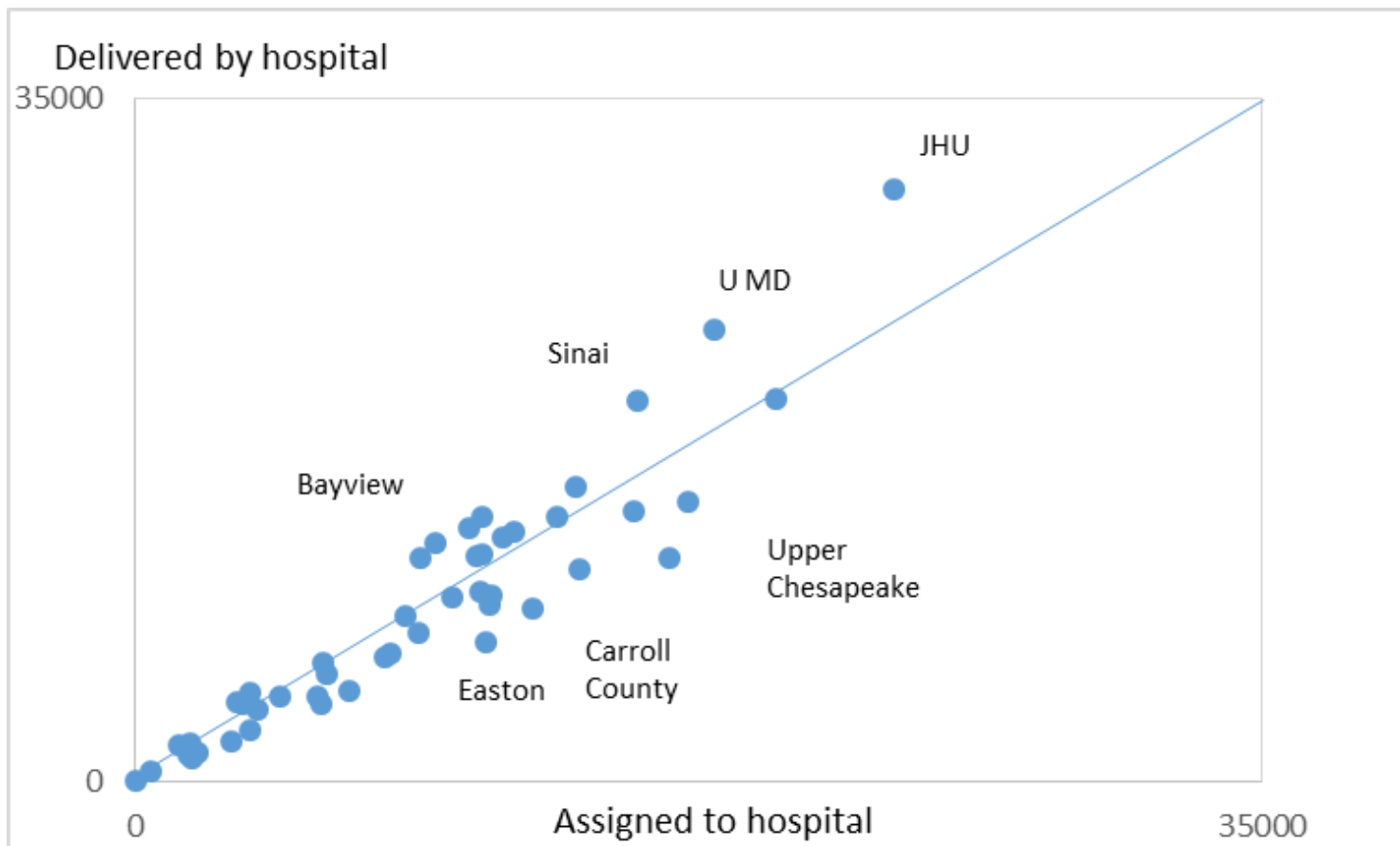
	PSA+	PSA 60+
PSA 60: Unique zips	33.5%	29.9%
PSA 60: Unique ECMAD	39.3%	22.3%
Plurality: Unique zips	52.0%	51.1%
Plurality: Unique ECMAD	9.3%	7.7%
PSA 60: Multiple zips	14.4%	19.0%
PSA 60: Multiple ECMAD	51.4%	70.0%
Hospital actual vs assigned resource use: MAD	27.5%	20.4%

From FY 2015 HSCRC data

Hospital ECMAD Assigned Using PSA+ Rule Compared to ECMAD Delivered by Hospital



Hospital ECMAD Assigned Using PSA or 60% Threshold + Rule Compared to ECMAD Delivered by Hospital



Comparison of PSA+ and PSA|60+

- **PSA alone results in**
 - More separation of service areas
 - Assigning tertiary and quaternary care to local hospitals
- **Incorporating 60% threshold results in**
 - More overlap of service areas
 - Assigning tertiary and quaternary care to hospitals providing them
- **Conclusion**
 - PSA approach better reflects patient management responsibility

PSA+ variations

- **Include out-of-state PSAs**
- **Modified PSA +: If no hospital has majority of ECMAD, zip code allocated by share of ECMAD to two highest share hospitals**
- **Plurality rule with Johns Hopkins, University Medical Center excluded**
- **Professional Services Included**

Metrics: PSA+ Variations

- Share of zip codes uniquely assigned by source (PSA vs plurality rule)
- Share of ECMAD uniquely assigned by source (PSA vs plurality rule)
- Multiple assignments for PSA or modified plurality rule
- ECMAD delivered by hospital vs ECMAD assigned to hospital: MAD
 - Share of ECMAD delivered vs Share of total cost assigned if physician costs included
- Drive time: from hospital assigned zip code to its PSA
- Change in assignments from 2014 to 2015

Characteristics of Alternative Geographic Assignments

	PSA+	Include Out-of-State PSAs	Modified PSA+	PSA+ JHU & UMD Excluded*
PSA: Unique zips	33.5%	36.1%	33.5%	34.0%
PSA: Unique ECMAD	39.3%	40.1%	39.3%	39.3%
Plurality: Unique zips	52.0%	50.0%	33.5%	51.4%
Plurality: Unique ECMAD	9.3%	9.2%	3.6%	9.3%
PSA: Multiple zips	14.4%	13.9%	14.4%	14.6%
PSA: Multiple ECMAD	51.4%	50.7%	51.4%	51.4%
Plurality: Multiple zips	NA	NA	18.5%	NA
Plurality: Multiple ECMAD	NA	NA	5.7%	NA

* Some unassigned zip codes

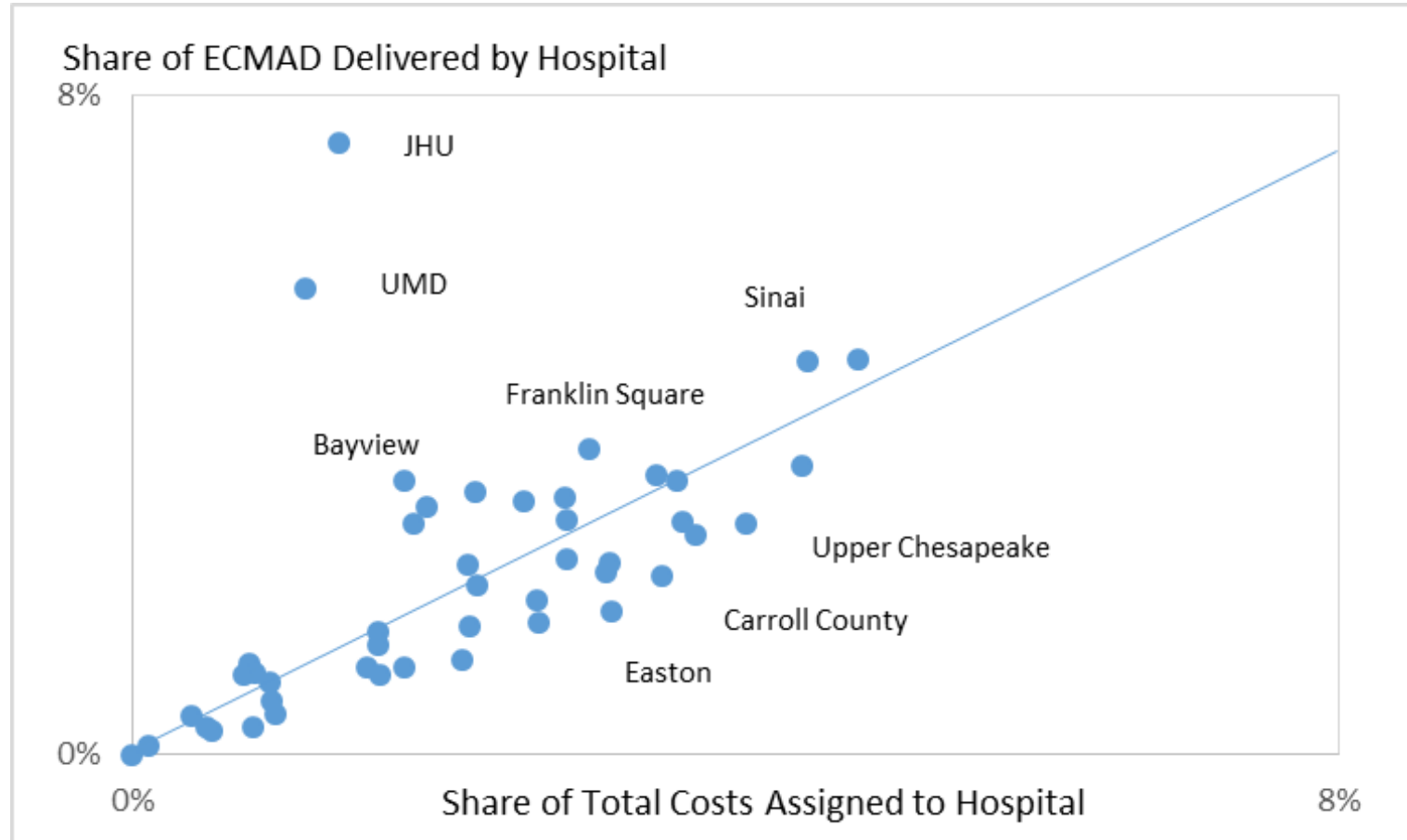
From FY 2015 HSCRC data

Characteristics of Alternative Geographic Assignments

	PSA+	Modified PSA+	PSA+ JHU & UMD Excluded
Hospital actual vs assigned resource use: MAD	26.0%	25.7%	26.1%
Plurality: Drive time >30 minutes	10.7%	Not yet	8.3%
Plurality: Same assignment 2014 to 2015	76.8%	72.3%	79.2%

From FY 2015 HSCRC data

Hospital Cost Assigned Using PSA+ : Physician Cost Included



Conclusions and Next Steps

- **Most care and patient needs are captured by PSAs**
- **Many of remaining zip codes have weak connections to individual hospitals**
- **Impact of variations in plurality-based assignment will be minor**
- **Distribution of assigned total costs is similar to distribution of assigned hospital use**
- **Current Plan: Use plurality over 2-year timeframe and drive time to assign remaining zip codes**



Total Cost of Care Workgroup

May 24, 2017

TCOC Work Group Meeting Dates

- ▶ **June 28, 2017, 8 AM – 10 AM**
- ▶ July 26, 2017, 9 AM – 11 AM
- ▶ None in August
- ▶ September 20, 2017, 10 AM – 12 PM
- ▶ October 18, 2017, 10 AM – 12 PM
- ▶ November 15, 2017, 10 AM – 12 PM

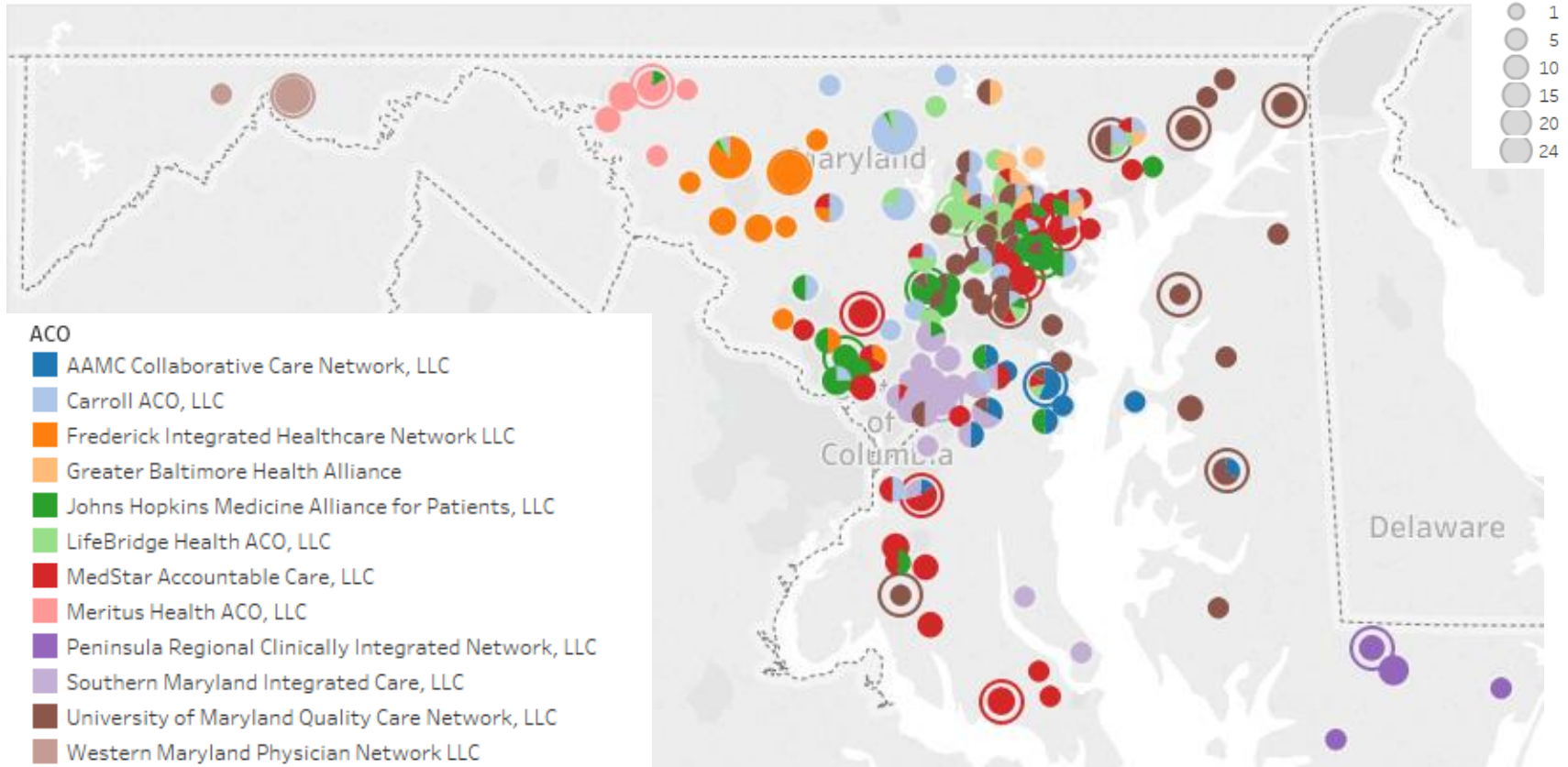


Appendix



ACO Practice Location Distribution

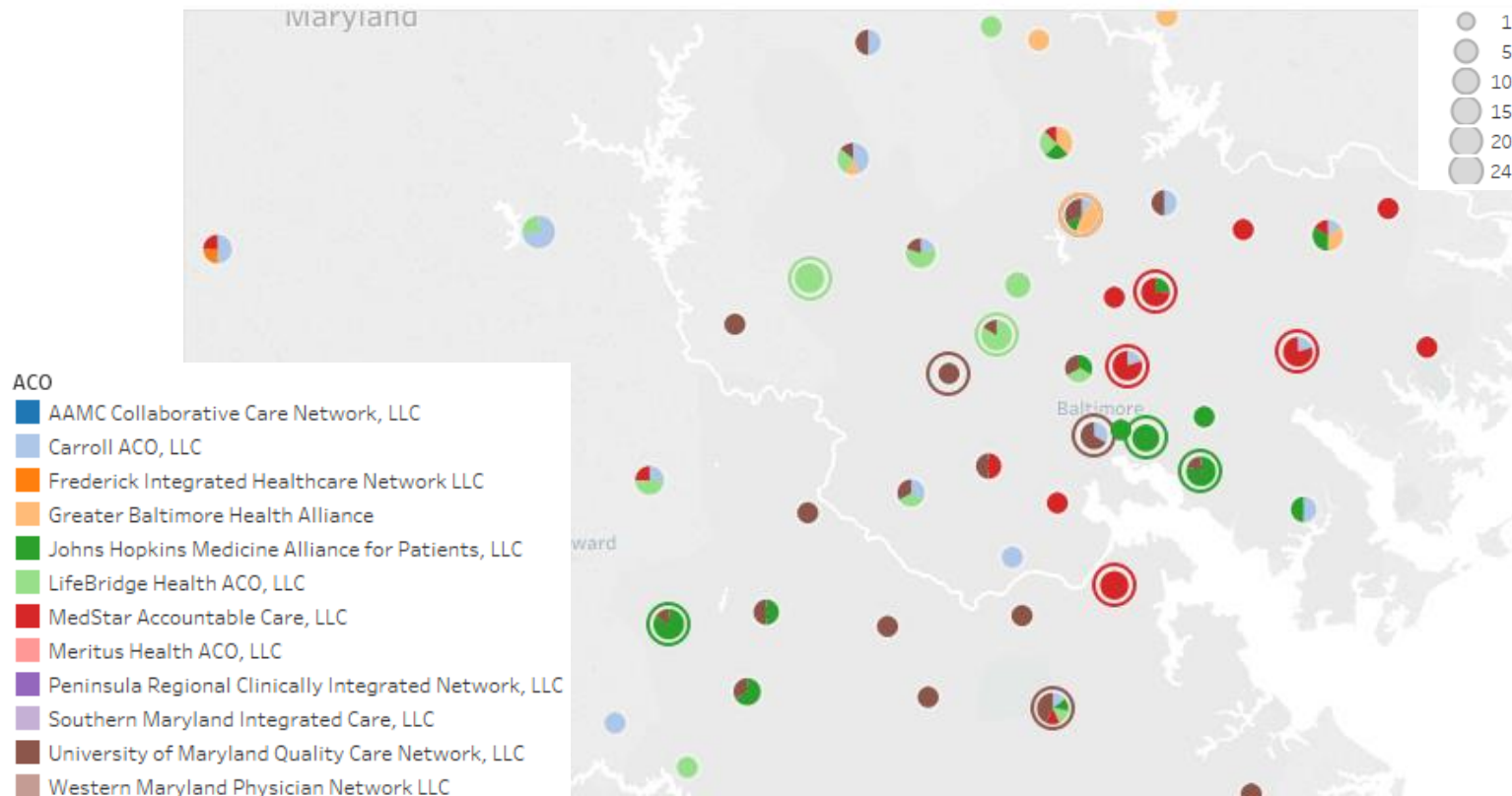
ACO practices and MD Hospitals



Larger size circles represent a greater number of practice locations in that zip code. (see top right for size indicators).
Circle outlines represent hospitals in the ACO systems.

ACO Practice Location Distribution- Baltimore

ACO practices and MD Hospitals



Larger size circles represent a greater number of practice locations in that zip code. (see top right for size indicators).
Circle outlines represent hospitals in the ACO systems.

