



# Maryland Health Services Cost Review Commission

Review of Market Shift Calculations

# Two Overarching Principles

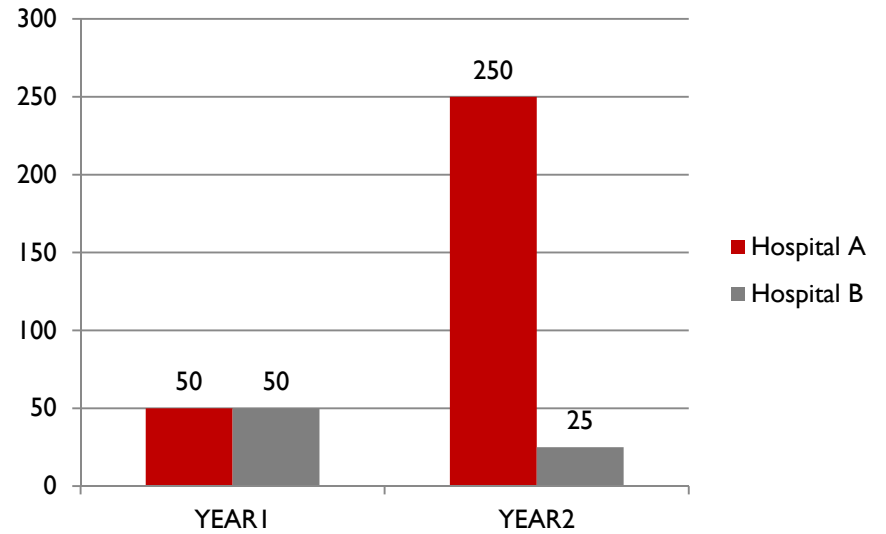
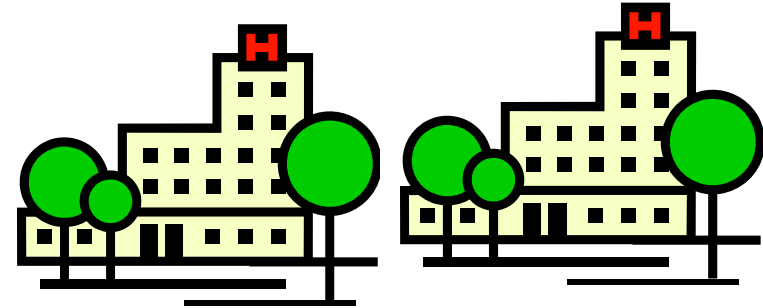
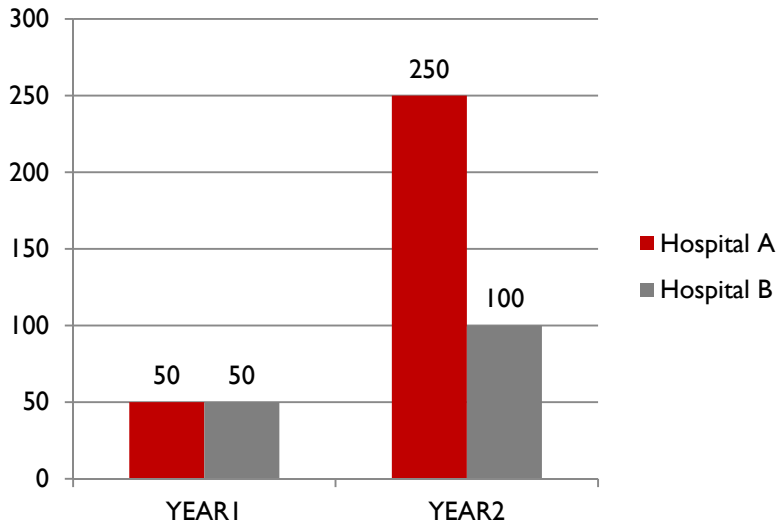
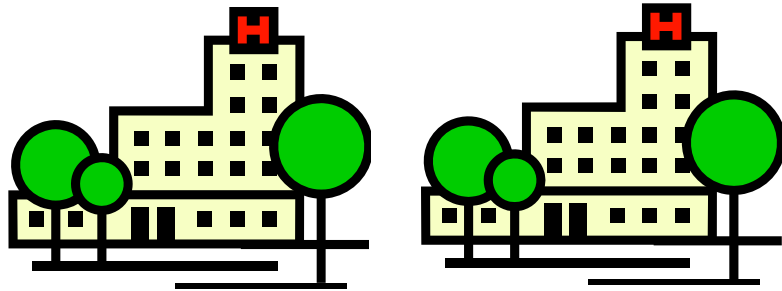
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- ▶ **Market shift adjustment should not undermine the incentives to reduce avoidable utilization**
  - ▶ Separate shifts from utilization increase
- ▶ **Market shift adjustment should provide necessary resources for services shifted to another hospital**
  - ▶ Money follows the patient

# Market Share

vs.

# Market Shift



# Market Shift Formula

Zipcode 21000 General Surgery	ECMAD CY13	ECMAD CY14	ECMAD Growth	Proportion of Hospital	Market Shift
	A	B	C=B-A	D=C/Subtotal C	E=D*Allowed Market Shift
HOLY CROSS	1,000	1,500	500	76%	99
SUBURBAN	500	600	100	15%	20
MONTGOMERY GENERAL	50	100	50	8%	10
JOHNS HOPKINS	-	4	4	1%	1
<b>Utilization Increase</b>			<b>654</b>		<b>129</b>
SINAI	500	500	-	0%	-
UPPER CHESAPEAKE HEALTH	500	400	(100)	78%	(100)
SHADY GROVE	50	25	(25)	19%	(25)
UNIVERSITY OF MARYLAND	4	-	(4)	3%	(4)
<b>Utilization Decline</b>			<b>(129)</b>		<b>(129)</b>
<b>Zip Total</b>			<b>525</b>		<b>-</b>
<b>Allowed Market Shift</b>			<b>129</b>		

## Volume Adjustments under Global Budgets

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- ▶ Demographic adjustment: Population growth and aging
- ▶ Utilization increases due to ACA: Medicaid Expansion
- ▶ Market Shift: Shifts between acute care MD hospitals for services provided to MD residents
- ▶ Out of state utilization
- ▶ Changes in services provided: Shifts to unregulated settings
- ▶ Transfer adjustments: Complex Patients transferred to Academic Medical Centers

# Not Undermining GBR Incentives

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- ▶ **Exclude Potentially Avoidable Utilization**
  - ▶ Readmissions, Prevention Quality Indicators (PQIs)
- ▶ **Limit market shift to the lesser of loses or gains**

<b>Loses&lt;Gains</b>	<b>Loses&gt;Gains</b>
Loses=100 Admissions	Loses=200 admissions
Gains=200 Admissions	Gains=100 admissions
Market Shift Adjustment=+100	Market Shift Adjustment=+100

# Money Follows the Patient

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- ▶ Included observation stays with 24 hours or greater to inpatient counts
- ▶ Service Specific calculations
  - ▶ eg. shifts in orthopedic surgery are calculated independently from cardiac surgery
- ▶ Zip code level calculations

# Zip code level vs Aggregation

Service Line	Orthopedic Surgery				Orthopedic Surgery					Orthopedic Surgery			
Zip code	21224,Baltimore, MD				21287,Baltimore, MD					Combined			
Hospital Name	Total ECMAD FY14	Total ECMAD FY15	ECMAD GROWTH	MARKET SHIFT	Total ECMAD FY14	Total ECMAD FY15	ECMAD GROWTH	MARKET SHIFT	Total Market Shift	Total ECMAD FY14	Total ECMAD FY15	ECMAD GROWTH	Market Shift
Hospital A	37	68	31	19	-	2	2	0	19	37	70	33	0
Hospital B	43	24	(19)		8	31	24	0	-	50	55	5	0
<b>Grand Total</b>	<b>80</b>	<b>92</b>	<b>12</b>	<b>-</b>	<b>8</b>	<b>31</b>	<b>24</b>	<b>(0)</b>	<b>19</b>	<b>88</b>	<b>126</b>	<b>38</b>	<b>0</b>



# Rural County Zip Codes Combined

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- ▶ Low population density
- ▶ Concentrated markets
  
- ▶ Zip codes under consideration to be aggregated are following counties:

Garrett, Allegany , Washington, Carroll, Cecil, Kent, Queen Anne's, Caroline, Talbot , Dorchester, Wicomico, Somerset, Calvert, Charles, Saint Mary's, Worcester, Frederick, Harford

# Risk Adjustment- Equivalent Case Mix Adjusted Discharges (ECMAD)

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- ▶ Inpatient Casemix Weights
- ▶ Outpatient Weights
  - ▶ Weights developed separately for types of visits
    - ▶ Radiation Therapy/Infusion/Drugs (patient level weights, work in progress)
    - ▶ Significant Procedures
    - ▶ Medical Visits
    - ▶ Other (Ancillary, labs etc).
  - ▶ ECMAD=
    - ▶ Inpatient Casemix Adjusted Discharges
    - ▶ Outpatient Casemix Adjusted Visits\* Average cost of Outpatient Visit/Average cost of an Inpatient Discharge

# Service Line Determinations

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- ▶ **Inpatient:**

- ▶ APR-DRG to Service Line Maps + PQI+Readmissions

- ▶ **Outpatient:**

- ▶ EAPG to Service Line Mapping + Hierarchical Service Lines
  - ▶ Radiation Therapy/Infusion/Chemo/ Oncology
  - ▶ Emergency Department
  - ▶ Drugs
  - ▶ Major Surgery
  - ▶ Minor Surgery
  - ▶ Psychiatry
  - ▶ Rehab & Therapy
  - ▶ Clinic
  - ▶ Other

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## Review of Market Shift Preliminary Data Results

# Calculation of Costs

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- ▶ **Total Cost Calculation= Market Shift ECMAD\*Average Cost\*50% Variable Cost Factor\*Price Inflator**
  - ▶ Option 1: Statewide Average Cost per ECMAD
    - ▶ Preliminary Cost=\$13,371
  - ▶ Option 2: Hospital Overall Cost per ECMAD
    - ▶ Range=\$19,069-\$10,456
  - ▶ Option 3: Hospital Service Line Specific Cost per ECMAD

# Statewide Impact-Preliminary Data

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Statewide Impact	1. Market Shift Adjustment Using State Average	2. Market Shift Adjustment Using Hospital Average Charge		3. Market Shift Adjustment Using Hospital Serviceline Specific Average	
	A	B	C	D=C-B	E
<b>Grand Net Total</b>	<b>-\$2,522,327</b>	<b>-\$792,587</b>	<b>\$1,729,739</b>	<b>\$524,359</b>	<b>\$1,316,946</b>
<b>Positive Adjustment Total</b>	\$30,421,508	\$31,214,203	\$4,781,336	\$30,689,285	\$3,831,250
<b>Negative Adjustment Total</b>	-\$32,943,835	-\$32,006,790	-\$3,051,597	-\$30,164,926	-\$2,514,303
<b>Absolute Adjustment Total</b>	\$63,365,343	\$63,220,992	\$7,832,933	\$60,854,210	\$6,345,553

# Market Shift Adjustment Timing

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- ▶ **Prospective Adjustments**
  - ▶ Prior notifications for planned changes
- ▶ **Annual calculations**
  - ▶ FY2016 : July 2014-Dec 2014
  - ▶ FY2017: Jan 2015-Dec 2015