Interim Update: Licensed Acute Care Hospital Beds
Fiscal Year 2016
July, 2015

Background

An Annual Report profiling changes in licensed acute care hospital beds in Maryland's acute care hospitals was initiated in 2001 to document and track changes in the licensed bed inventory following implementation of a standardized annual licensure renewal process based on inpatient census. The process involves notifying hospitals prior to the beginning of each fiscal year concerning the calculated total number of licensed acute care beds for the coming fiscal year. In turn, the hospitals identify the allocation of the total licensed acute care beds across four service categories: medical/surgical/gynecological/addictions ("MSGA"); obstetric, pediatric, and acute psychiatric services. Over time, additional information on hospital service capacity, covering emergency department services, surgical services, obstetric and perinatal services, and non-acute care bed capacity have been added to the survey undertaken to update acute care bed licensure.

This interim update provides information on licensed acute care hospital beds for fiscal year 2016, which began July 1, 2015. The full report, *Annual Report on Selected Maryland Acute Care Hospital Services, Fiscal Year 2016,* will be released later this year. That report, in addition to profiling changes in licensed acute care hospital beds, will also include updated information on emergency department capacity, surgical services capacity, obstetric and perinatal services capacity, non-acute care beds in the general hospital setting, and specialty hospital beds.

Acute Care Hospital Bed Capacity

Licensed bed capacity for acute care hospitals in the State of Maryland is dynamic, calculated annually based on average daily acute care inpatient census. The Maryland Health Care Commission, in conjunction with the Health Services Cost Review Commission, calculates the average daily census (ADC) of acute care patients for each hospital for the 12-month period ending with the first quarter of each year and total licensed acute care bed capacity is established for the next fiscal year at 140% of the hospital's average daily census. This licensure approach reflects an assumption that an average annual occupancy rate of approximately 71% for acute care hospital beds is an appropriate bench-mark for determining the maximum number of beds an acute care hospital needs to operate.

The initial implementation of this licensure process in FY 2001 resulted in a total of 9,562 licensed acute care beds, removing 2,773 beds from the licensure rolls. Total licensed acute care bed capacity increased, in response to increases in average daily patient census each year after the initial reduction in 2001, peaking at 10,880 beds in FY 2011. The total number of licensed acute care hospital beds in Maryland has declined in every following year, declining to 9,800 beds in the current fiscal year. Thus, Maryland experienced a 13.8% increase in the average daily census of acute care patients between 2000 and 2010 and has experienced a 9.9% decline in acute care ADC between 2010 and 2015.

Licensed Acute Care Hospital Beds in Maryland: FY 2016

Table 1 shows the licensed acute care bed capacity for each acute care hospital, by service, effective July 1, 2015. The calculation of licensed beds for FY 2016, based on each hospital's ADC during the period April 1, 2014 through March 31, 2015, results in a total of 9,800 licensed acute care hospital beds in Maryland. Table 2 shows the ten-year trend in licensed acute care beds by hospital. Table 3 shows the percent change by region.

Table 1. Licensed Acute Care Beds by Hospital and Service: Maryland, FY 2016

Jurisdiction/ Region	Hospital	Acute Care Services				
		MSGA	Obstetric	Pediatric	Psychiatric	Total
Allegany County	Western Maryland Regional Medical Center	166	10	2	17	195
Frederick County	Frederick Memorial Hospital	180	27	5	21	233
Garrett County	Garrett County Memorial Hospital	22	2	1	0	25
Washington County	Meritus Medical Center	186	17	4	16	223
	WESTERN MARYLAND TOTAL	**554**	**56**	**12**	**54**	**676**
Montgomery County	Holy Cross Germantown Hospital*	75	12	0	6	93
	Holy Cross Hospital of Silver Spring	309	88	26	0	423
	MedStar Montgomery Medical Center	89	11	2	20	122
	Shady Grove Adventist Hospital	209	56	25	0	290
	Suburban Hospital	209	0	3	24	236
	Washington Adventist Hospital	169	21	0	40	230
	MONTGOMERY COUNTY TOTAL	**1,060**	**188**	**56**	**90**	**1,394**
Calvert County	Calvert Memorial Hospital	61	6	1	9	77
Charles County	University of Maryland Charles Regional Medical Center	94	12	4	0	110
Prince George's County	Doctors Community Hospital	163	0	0	0	163
	Fort Washington Medical Center	34	0	0	0	34
	Laurel Regional Hospital	46	5	0	9	60
	MedStar Southern Maryland Hospital Center	149	30	4	25	208
	Prince George's Hospital Center	169	38	2	28	237
	Total: Prince George's County	*561*	*73*	*6*	*62*	*702*
St. Mary's County	MedStar St. Mary's Hospital	61	12	6	12	91
	SOUTHERN MARYLAND TOTAL	**777**	**103**	**17**	**83**	**980**
Anne Arundel County	Anne Arundel Medical Center	307	60	8	0	375
	University of Maryland Baltimore Washington Medical Center	264	15	10	14	303
	Total: Anne Arundel County	*571*	*75*	*18*	*14*	*678*
Baltimore City	Bon Secours Hospital	48	0	0	24	72
	Johns Hopkins Bayview Medical Center	294	22	5	20	341
	MedStar Good Samaritan Hospital	165	0	0	0	165
	MedStar Harbor Hospital	84	24	5	0	113
	MedStar Union Memorial Hospital	183	0	2	26	211
	Mercy Medical Center	147	32	5	0	184
	Sinai Hospital of Baltimore	315	27	26	24	392
	St. Agnes Hospital	226	20	5	0	251
	The Johns Hopkins Hospital	846	35	140	108	1,129
	University of Maryland Medical Center	628	30	58	56	772
	University of Maryland Medical Center Midtown Campus	79	0	0	28	107
	University of Maryland Rehabilitation and Orthopaedics Institute	7	0	0	0	7
	Total: Baltimore City	*3,022*	*190*	*246*	*286*	*3,744*
Baltimore County	Greater Baltimore Medical Center	163	60	8	0	231
	MedStar Franklin Square Hospital	278	37	9	40	364
	Northwest Hospital Center	176	0	0	23	199
	University of Maryland St. Joseph Medical Center	204	20	4	19	247
	Total: Baltimore County	*821*	*117*	*21*	*82*	*1,041*
Carroll County	Carroll Hospital Center	93	20	7	20	140
Harford County	University of Maryland Harford Memorial Hospital	58	0	0	26	84
	University of Maryland Upper Chesapeake Medical Center	167	11	2	0	180
	Total: Harford County	*225*	*11*	*2*	*26*	*264*
Howard County	Howard County General Hospital	206	34	6	20	266
	CENTRAL MARYLAND TOTAL	**4,938**	**447**	**300**	**448**	**6,133**
Cecil County	Union Hospital of Cecil County	66	5	2	11	84
Dorchester County	University of Maryland Shore Medical Center at Dorchester	23	0	0	24	47
Kent County	University of Maryland Shore Medical Center at Chestertown	29	0	1	0	30
Somerset County	Edward W. McCready Memorial Hospital	4	0	0	0	4
Talbot County	University of Maryland Shore Medical Center at Easton	87	17	8	0	112
Wicomico County	Peninsula Regional Medical Center	252	20	8	12	292
Worcester County	Atlantic General Hospital	48	0	0	0	48
	EASTERN SHORE TOTAL	**509**	**42**	**19**	**47**	**617**
	MARYLAND TOTAL	**7,838**	**836**	**404**	**722**	**9,800**

Source: Maryland Health Care Commission, Acute Care Hospital Inventory (ACHI) FY2016.

*Holy Cross Germantown Hospital opened in October, 2014. Thus, it has not yet operated for the twelve-month period necessary to calculate a licensed bed total derived from an annual average daily census. For this reason, the full physical bed complement is shown here.

Table 2. Trend in Licensed Acute Care Beds by Hospital: Maryland, FY 2007 - 2016*

Jurisdiction/Region	Hospital	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Allegany County	Braddock Hospital	148	155	154	-	-	-	-	-	-	-
	Memorial Hosp. & Med. Ctr. of Cumberland	120	109	117	-	-	-	-	-	-	-
	Western Maryland Regional Medical Center	-	-	-	262	252	250	234	200	192	195
	Total: Allegany County	*268*	*264*	*271*	*262*	*252*	*250*	*234*	*200*	*192*	*195*
Frederick County	Frederick Memorial Hospital	227	246	269	274	276	309	298	297	258	233
Garrett County	Garrett County Memorial Hospital	31	34	36	33	31	30	29	26	23	25
Washington County	Meritus Medical Center	243	264	258	260	258	252	245	237	231	223
WESTERN MARYLAND TOTAL		**769**	**808**	**834**	**829**	**817**	**841**	**806**	**760**	**704**	**676**
Montgomery County	Holy Cross Germantown Hospital*	-	-	-	-	-	-	-	-	-	93
	Holy Cross Hospital of Silver Spring	379	404	408	404	402	409	396	397	391	423
	MedStar Montgomery General Hospital	144	149	165	170	159	158	138	132	120	122
	Shady Grove Adventist Hospital	268	275	293	320	336	339	331	312	305	290
	Suburban Hospital	212	228	238	239	222	233	229	236	220	236
	Washington Adventist Hospital	285	294	292	288	281	271	252	252	232	230
MONTGOMERY COUNTY TOTAL		**1,288**	**1,350**	**1,396**	**1,421**	**1,400**	**1,410**	**1,346**	**1,329**	**1,268**	**1,394**
Calvert County	Calvert Memorial Hospital	107	105	106	98	98	95	95	92	85	77
Charles County	Univ. of MD Charles Regional Medical Center	109	121	129	120	120	124	110	121	115	110
Prince George's County	Doctors Community Hospital	186	192	195	190	195	219	207	198	182	163
	Fort Washington Medical Center	42	42	43	43	42	41	31	33	31	34
	Laurel Regional Hospital	96	95	97	95	87	83	77	78	74	60
	MedStar Southern Maryland Hospital Center	257	258	255	246	235	238	239	227	207	208
	Prince George's Hospital Center	268	264	246	254	244	242	224	214	215	237
	Total: Prince George's County	*849*	*851*	*836*	*828*	*803*	*823*	*778*	*750*	*709*	*889*
St. Mary's County	MedStar St. Mary's Hospital	105	108	108	103	96	90	90	89	82	91
SOUTHERN MARYLAND TOTAL		**1,170**	**1,185**	**1,179**	**1,149**	**1,117**	**1,132**	**1,073**	**1,052**	**991**	**980**
Anne Arundel County	Anne Arundel Medical Center	265	278	301	316	324	336	380	385	384	375
	Univ. of MD Baltimore Washington Medical Center	286	293	298	311	321	308	307	319	310	303
	Total: Anne Arundel County	*551*	*571*	*599*	*627*	*645*	*644*	*687*	*704*	*694*	*678*
Baltimore City	Bon Secours Hospital	141	151	125	126	141	127	115	107	88	72
	Johns Hopkins Bayview Medical Center	323	333	345	346	348	348	355	355	337	341
	MedStar Good Samaritan Hospital	265	265	245	236	235	222	224	206	177	165
	MedStar Harbor Hospital	186	203	215	221	193	179	160	136	120	113
	MedStar Union Memorial Hospital	279	283	292	295	271	231	236	221	205	211
	Mercy Medical Center	224	235	243	244	244	226	233	225	207	184
	Sinai Hospital of Baltimore	393	398	415	413	424	416	426	421	407	392
	St. Agnes Hospital	323	314	307	318	314	296	287	276	264	251
	The Johns Hopkins Hospital	958	982	979	990	994	992	1,000	1,060	1,082	1,129
	University of Maryland Medical Center	669	689	705	731	757	779	800	816	801	772
	Univ. of MD Medical Center Midtown Campus	205	209	191	180	167	164	155	128	110	107
	Univ. of MD Rehabilitation & Orthopaedic Institute	11	10	11	10	10	9	9	10	10	7
	Total: Baltimore City	*3,977*	*4,072*	*4,073*	*4,110*	*4,098*	*3,989*	*4,000*	*3,961*	*3,808*	*3,744*
Baltimore County	Greater Baltimore Medical Center	292	298	310	300	285	281	270	255	245	231
	MedStar Franklin Square Hospital	357	362	380	371	376	347	355	347	354	364
	Northwest Hospital Center	214	213	218	221	215	221	225	243	245	199
	Univ. of MD St. Joseph Medical Center	370	364	354	345	300	263	247	232	238	247
	Total: Baltimore County	*1,233*	*1,237*	*1,262*	*1,237*	*891*	*1,112*	*1,097*	*1,077*	*1,082*	*1,041*
Carroll County	Carroll Hospital Center	210	216	218	213	195	189	158	151	147	140
Harford County	Univ. of MD Harford Memorial Hospital	94	91	104	105	101	97	89	89	84	84
	Univ. of MD Upper Chesapeake Medical Center	167	168	182	196	186	175	181	185	183	180
	Total: Harford County	*261*	*259*	*286*	*301*	*287*	*272*	*270*	*274*	*267*	*264*
Howard County	Howard County General Hospital	208	219	209	227	238	249	249	253	259	266
CENTRAL MARYLAND TOTAL		**6,440**	**6,574**	**6,647**	**6,715**	**6,354**	**6,455**	**6,461**	**6,420**	**6,257**	**6,133**
Cecil County	Union Hospital of Cecil County	99	105	116	113	113	106	92	85	75	84
Dorchester County	Univ. of MD Shore Medical Center at Dorchester	53	49	54	54	53	52	46	41	39	47
Kent County	Univ. of MD Shore Medical Center at Chestertown	58	62	57	53	47	46	42	41	31	30
Somerset County	Edward W. McCready Memorial Hospital	9	8	9	8	8	9	5	4	4	4
Talbot County	Univ. of MD Shore Medical Center at Easton	120	123	120	125	120	116	112	112	112	112
Wicomico County	Peninsula Regional Medical Center	371	366	362	358	362	363	317	288	275	292
Worcester County	Atlantic General Hospital	49	51	53	55	53	53	48	45	48	48
EASTERN SHORE TOTAL		**759**	**764**	**771**	**766**	**756**	**745**	**662**	**616**	**584**	**617**
	MARYLAND TOTAL	**10,426**	**10,681**	**10,827**	**10,880**	**10,729**	**10,583**	**10,348**	**10,177**	**9,804**	**9,800**

Source: Maryland Health Care Commission.

*Holy Cross Germantown Hospital opened in October, 2014. Thus, it has not yet operated for the twelve-month period necessary to calculate a licensed bed total derived from an annual average daily census. For this reason, the full physical bed complement is shown here.
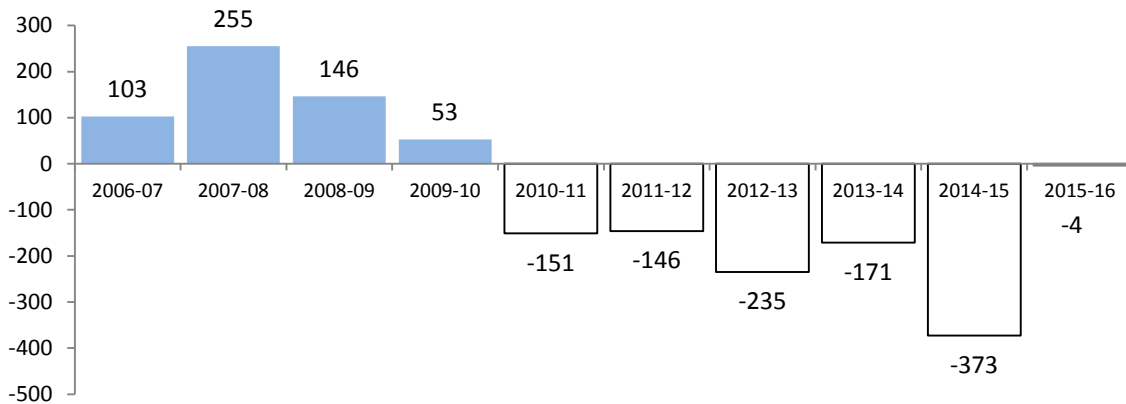
Table 3. Percent Change in Total Licensed Acute Care Hospital Beds, by Maryland Region: Fiscal Years 2007 - 2016

Region	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average Annual Change 2006 - 2016
Western Maryland	-1.3%	5.1%	3.2%	-0.6%	-1.4%	2.9%	-4.2%	-5.7%	-7.4%	-4.0%	-1.3%
Montgomery County	-0.8%	4.8%	3.4%	1.8%	-1.5%	0.7%	-4.5%	-1.3%	-4.6%	9.9%	0.8%
Southern Maryland	1.3%	1.3%	-0.5%	-2.5%	-2.8%	1.3%	-5.2%	-2.0%	-5.8%	-1.1%	-1.6%
Central Maryland	1.8%	2.1%	1.1%	1.0%	-1.1%	2.8%	0.1%	-0.6%	-2.5%	-2.0%	0.3%
Eastern Shore	-0.5%	0.7%	0.9%	-0.6%	-1.3%	1.5%	-11.1%	-6.9%	-5.2%	5.7%	-1.7%
Maryland Total	1.0%	2.4%	1.4%	0.5%	-1.4%	-1.4%	-2.2%	-1.7%	-3.7%	0.0%	-0.5%

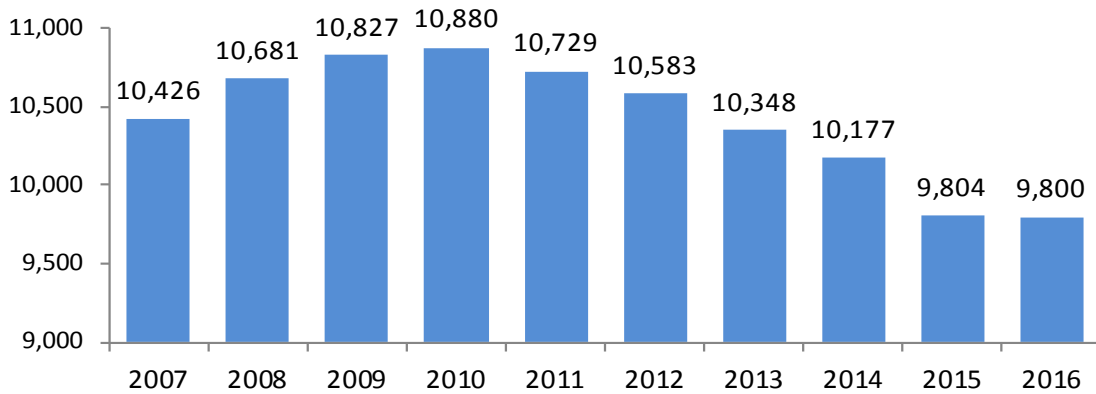Source: Maryland Health Care Commission

Chart 1 displays the annual net change in licensed acute care beds over the last ten years, while Chart 2 shows the total number of licensed beds over the same time period.

Chart 1. Year to Year Change in Total Licensed Acute Care Beds: Maryland Hospitals, FY 2006 - 2016
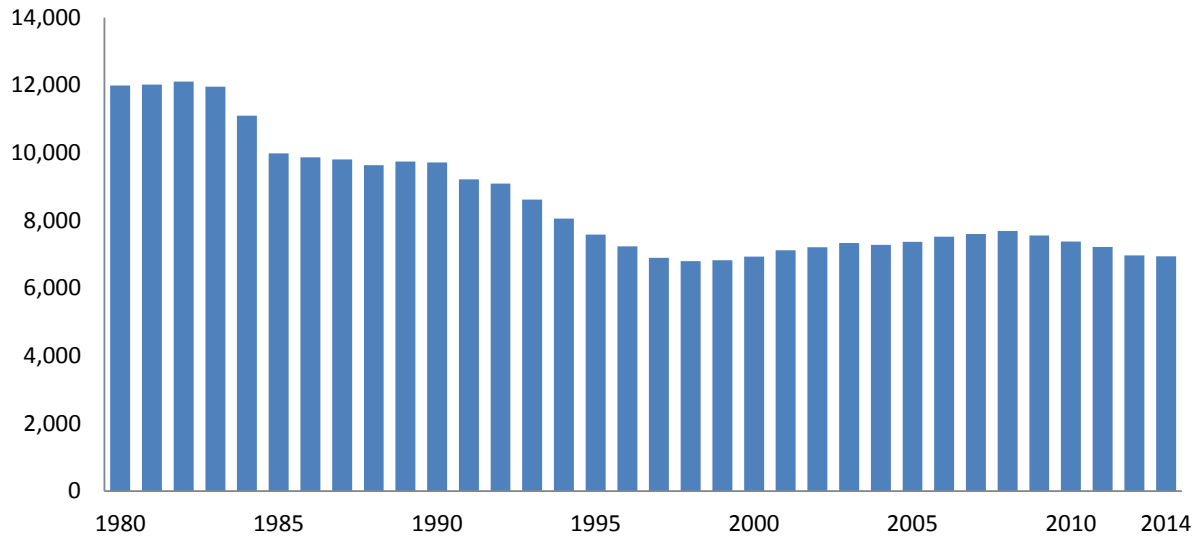

Source: Maryland Health Care Commission

**Chart 2. Total Licensed Acute Care Beds:
Maryland Hospitals, FY 2007 - 2016**

Year	Beds
2007	10,426
2008	10,681
2009	10,827
2010	10,880
2011	10,729
2012	10,583
2013	10,348
2014	10,177
2015	9,804
2016	9,800

Source: Maryland Health Care Commssion

**Chart 3. Trend in Average Daily Acute Care Patient
Census: Maryland Hospitals, CY 1980 - 2014**

While the average daily census of acute care patients began to gradually trend upward in the late 1990's, hospital utilization in Maryland never returned to historic peaks. During calendar year 2009 average daily census saw the first decline since dynamic hospital bed licensure went into effect in 2001. The average daily census declined again in calendar year 2010. Chart 3 shows the trend of declining acute care census from the early 1980s through the late 1990s, the extent of the rebound in census that occurred in the next ten years and the recent return to gradual decline after 2008.

Table 4 profiles the FY 2015 - 2016 change in total licensed acute care hospital beds from a regional perspective. The State as a whole experienced an overall decrease of 4 beds, a drop of less than 1%. Three (3) Maryland health planning regions saw licensed bed capacity shrink in FY 2016, with Western Maryland experiencing the biggest decline (4%). Montgomery County and the Eastern Shore saw licensed acute care bed totals increase, nearly ten percent in Montgomery County and over five percent on the Eastern Shore. Statewide, eighteen (18) hospitals saw an increase in bed capacity, twenty-four (24) hospitals saw a decrease in bed capacity and four hospitals had no change in bed capacity from the previous year.

Table 4. Change in Number of Total Licensed Acute Care Beds by Region: Maryland Hospitals, FY 2015 - FY 2016

Region	Total Number of Hospitals	Net Change in Number of Total Licensed Beds	Percent Change	Number of Hospitals with an Increase in Beds	Number of Hospitals with a Decrease in Beds	Number of Hospitals with No Change in Hospital Beds
Western Maryland	4	(28)	-4.0%	2	2	0
Montgomery County	5	126	9.9%	3	2	0
Southern Maryland	8	(11)	-1.1%	4	4	0
Central Maryland	22	(124)	-2.0%	6	15	1
Eastern Shore	7	33	5.7%	3	1	3
MARYLAND TOTAL	**46**	**(4)**	**0.0%**	**18**	**24**	**4**

Source: Maryland Health Care Commission

Excludes Holy Cross Germantown which opened in October of 2014

Tables 5 and 6 profile the change in the inventory of licensed acute care hospital beds for the past ten fiscal years for the four acute care bed service categories. As can be seen, there have been no dramatic changes in the allocation of acute care beds by Maryland's hospitals over this period, with MSGA beds accounting for an average of 80% of total acute care beds, obstetric beds comprising an average of 8%, acute psychiatric beds, on average, 7% of total, and pediatric beds, 4% of total.   Licensed bed capacity allocated to psychiatric services is the only service category of the four that saw consistent growth over this nine year period.

Table 5. Allocation of Licensed Acute Care Beds by Service
Maryland Hospitals, FY2007 - 2016

Service Category	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
MSGA	8,451	8,694	8,827	8,890	8,738	8,590	8,352	8,198	7,835	7,846
Obstetric	838	848	854	851	848	851	851	827	823	832
Pediatric	459	458	459	451	452	447	442	438	422	400
Acute Psychiatric	678	681	687	688	691	695	703	714	724	722
TOTAL	10,426	10,681	10,827	10,880	10,729	10,583	10,348	10,177	9,804	9,800

Source: Maryland Health Care Commission

Table 6. Allocation of Licensed Acute Care Beds by Service (Percentage),
Maryland Hospitals, FY 2007 - FY 2016

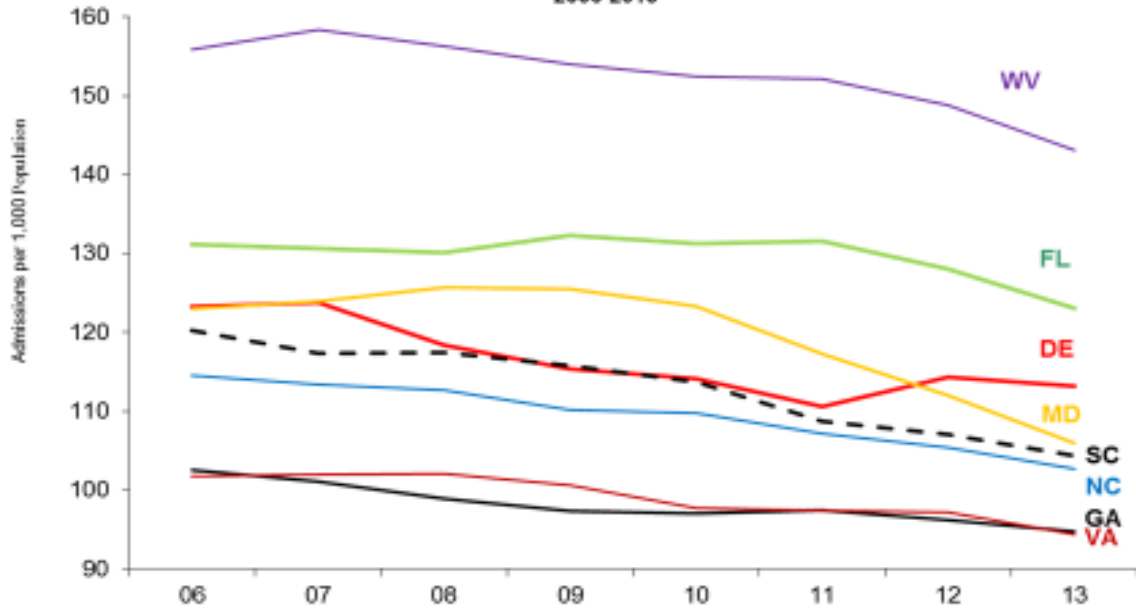| Service Category	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
MSGA	81.1%	81.4%	81.5%	81.7%	81.4%	81.2%	80.7%	80.6%	79.9%	80.1%
Obstetric	8.0%	7.9%	7.9%	7.8%	7.9%	8.0%	8.2%	8.1%	8.4%	8.5%
Pediatric	4.4%	4.3%	4.2%	4.1%	4.2%	4.2%	4.3%	4.3%	4.3%	4.1%
Acute Psychiatric	6.5%	6.4%	6.3%	6.3%	6.4%	6.6%	6.8%	7.0%	7.4%	7.4%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Maryland Health Care Commission

Demand for Hospital Beds in Maryland Compared with Regional and National Trends

The following graphs profile information from *Hospital Statistics*, an annual publication of the American Hospital Association. They reflect this publication's reported acute care hospital use rates and average stay statistics for Maryland and contrasts the demand reported for other Southeastern States and the U.S. experience.

The first two graphs compare hospital admissions per thousand population and average length of hospital stay in Maryland with the experience of the seven other states in the South Atlantic Census Region. This data is not age-adjusted. The relative age of the population in these states is an important factor in its interpretation. To provide some context, the accompanying table compares the proportion of 65 and older persons in the total 2013 population of these states, as estimated by the U.S. Census Bureau.

Chart 4: Hospital Admissions per 1,000 Population
All Hospital Unit Admissions (Excludes NH Unit Admissions)
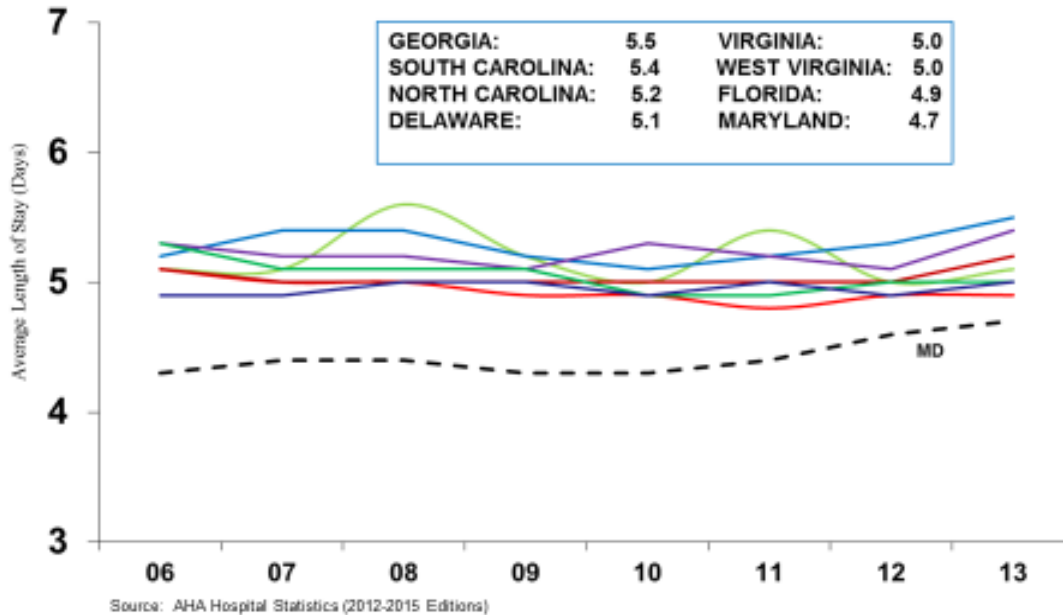South Atlantic Census Region States
2006-2013

Source: AHA Hospital Statistics (2012-2015 Editions)

Table 7.

Proportion of Total Population Aged 65 and Older

South Atlantic Census Region States, 2013

State	Percentage of Population Aged 65 and Older
Florida	18.7%
West Virginia	17.3%
Delaware	15.9%
South Carolina	15.2%
North Carolina	14.3%
Maryland	13.4%
Virginia	13.4%
Georgia	12.0%

Source: U.S. Census Bureau, Estimated 2014

Chart 5: Hospital Average Length of Stay
All Hospital Unit Admissions (Excludes NH Unit Admissions)
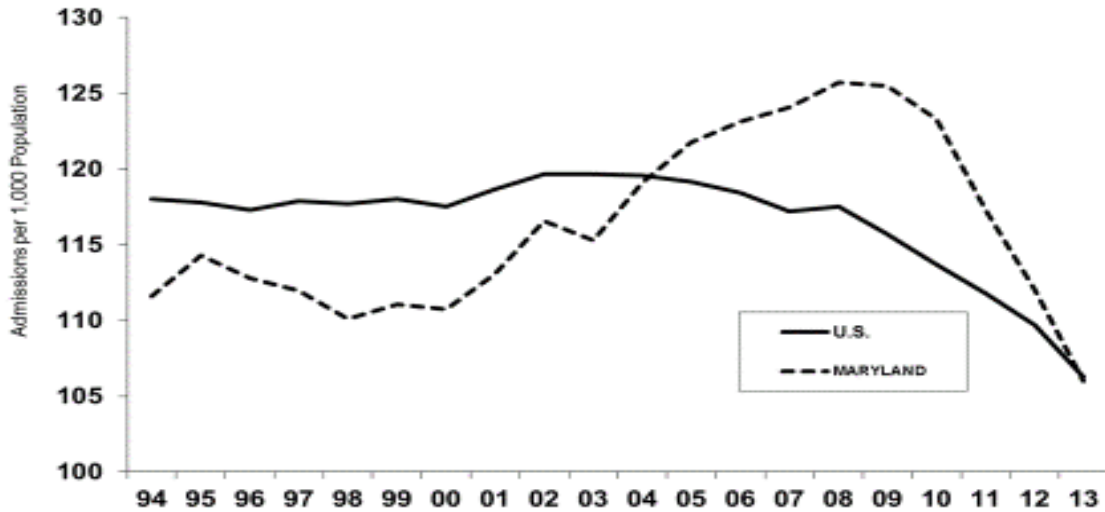**South Atlantic Census Region States**
2006-2013

GEORGIA:	5.5	VIRGINIA:	5.0
SOUTH CAROLINA:	5.4	WEST VIRGINIA:	5.0
NORTH CAROLINA:	5.2	FLORIDA:	4.9
DELAWARE:	5.1	MARYLAND:	4.7

Source: AHA Hospital Statistics (2012-2015 Editions)

As will be noted, from a regional perspective, Maryland's admissions rate has been lower than that of the states in the South Atlantic region with a higher percentage of population aged 65 and older, Florida and West Virginia, as would be expected. Maryland's admissions rate was substantially higher, for the most part, in the early years of this time period compared with that of the Carolinas or Delaware, states with populations only slightly older than that of Maryland, and was much higher than Virginia's hospital use rate, a state with a very similarly sized elderly population. However, beginning in 2010, Maryland's admissions rate has declined more steeply than that of any other state in this region.

Maryland stands out as having a distinctly shorter average length of hospital stay, when compared with these other states, as shown in Chart 5. The ALOS gap is closing however, indicating that Maryland's decline in admissions was largely due to a decline in short-stay hospitalizations.

The following graphs, taken from the same data source, provide a longer-term perspective on Maryland and the Nation. Maryland had an enviable record with respect to admissions rate and average length of hospital stay in the 1990s but this changed during the previous decade. Hospital use rates in Maryland peaked in the 2008-09 period, at approximately 8-9% higher than the overall National use rate but have steeply declined in the following years.
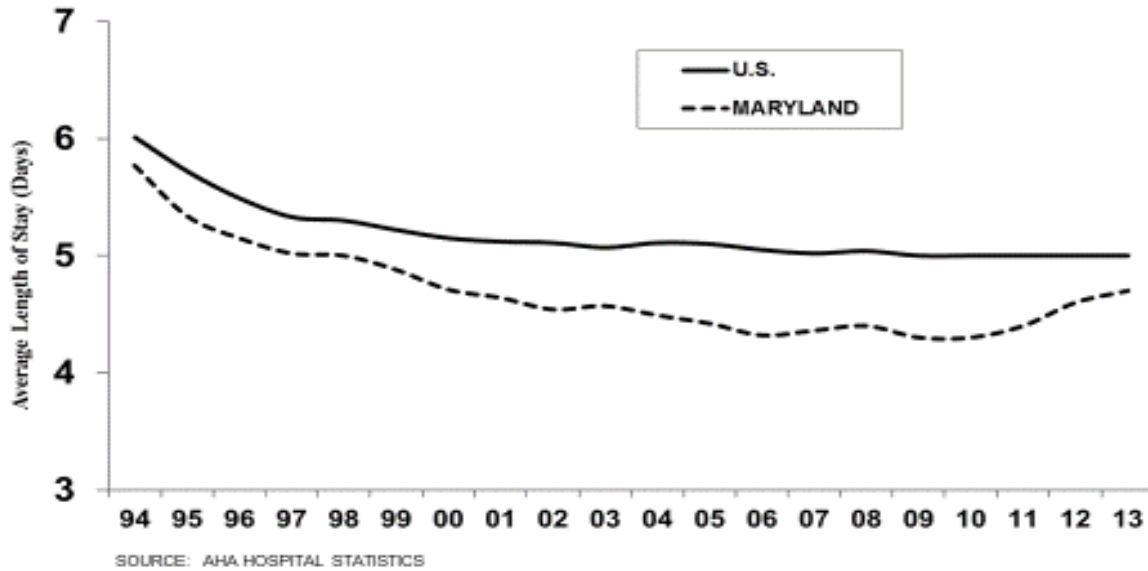
Maryland has been steadily discharging hospital patients more quickly, on average, than has been the National experience. Some narrowing of the gap between Maryland's ALOS and that of the U.S. has occurred as Maryland's hospitals have reduced short stays, in many cases, replacing such stays with "observation" admissions that are not recorded as hospital admissions in this data. The Health Services Cost Review Commission initiated policy changes in recent years aimed at reducing very short-stay admissions, prompted by data indicating a relatively high proportion of one day stays in the State. Further narrowing of the gap between Maryland and the nation with respect to hospital length of stay can be anticipated.

Chart 6: Hospital Admissions per 1,000 Population
All Hospital Unit Admissions (Excludes NH Unit Admissions)
U.S. and Maryland
1994-2013

Source: AHA Hospital Statistics (Average of Published Rates, 2000, 2002-2007, 2009-2015 Editions)

Chart 7: Hospital Average Length of Stay
All Hospital Unit Admissions (Excludes NH Unit Admissions)
U.S. and Maryland
1994-2013

SOURCE: AHA HOSPITAL STATISTICS

Note concerning the AHA data: The American Hospital Association (AHA) conducts an annual survey of all hospitals, both AHA-registered and nonregistered, in the U.S. and its associated areas. AHA reports, overall, the average response rate over the past five years has been approximately 85 percent.