



Medicare Fee-For-Service (FFS) Hospital Utilization Report

Maryland Statewide Data

Report Date: 3/29/2019

Report Timeframe: Q4-2017 to Q3-2018



This material was prepared by Health Quality Innovators (HQI), the Medicare Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for Maryland and Virginia, with support from Telligen, the QIN National Coordinating Center, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. HQI|11SOW|20190329-135829

Supplemental Information on Groups and Measures



Report Details - This report contains the following data:

Summary data for yearlong timeframe (Q4-2017 through Q3-2018)

- Hospital utilization raw numbers and per 1,000 beneficiaries rates for admissions, readmissions, emergency department visits, and observation stays comparing state to nation
- Percentages of institutional days by setting, of vaccination rates, and home health services utilized
- 30-day readmission rates by beneficiary demographics (gender, race/ethnicity, age group)
- 30-day readmission rates by length of stay and primary discharge destination
- Frequency of days until readmission broken down by return to same hospital versus other hospital
- Top 10 principal discharge diagnoses leading to a 30-day readmission by discharge destination
- Hospital utilization (includes admissions, emergency department visits, and observation stays) and readmissions per 1,000 high-risk medication (HRM) beneficiaries on opioids, anticoagulants, or diabetics.
- Readmission rates by discharge destination and age distribution of beneficiaries with diabetes

Quarterly data for three-years of time (Q4-2017 through Q3-2018)

- Percent of live discharges readmitted within 30 days for beneficiaries with diabetes
- Rates per 1,000 beneficiaries for admissions, readmissions, emergency department visits, and observation stays comparing state to nation, and % of live discharges readmitted within 30 days comparing state to nation
- Percent of live discharges readmitted within 30 days by primary discharge destination

Group/Measure	Description
National/US	All Medicare fee-for-service (FFS) beneficiaries residing in any valid ZIP code in the 50 States, District of Columbia, Puerto Rico, the United States (US) Virgin Islands, and outer Pacific islands.
State	All Medicare FFS beneficiaries residing in any valid ZIP code in the state/territory.
Eligible Beneficiaries	Number of Medicare FFS beneficiaries who reside in the ZIP codes associated with the designated grouping.
Admissions	Number of hospitalizations from short-term hospitals, critical access hospitals (CAHs), psychiatric hospitals, and psychiatric units among eligible Medicare FFS beneficiaries who reside in the ZIP codes associated with the designated grouping.
Readmissions	Number of readmissions within 30 days of a hospital discharge among eligible Medicare FFS beneficiaries residing in the ZIP codes associated with the designated grouping. Readmissions and hospital discharges are from short-term hospitals, CAHs, psychiatric hospitals, and psychiatric units.
Emergency Department Visits	Number of ED visits from short-term hospitals, CAHs, psychiatric hospitals, and psychiatric units among eligible FFS beneficiaries residing in the ZIP codes associated with the designated grouping.
Observation Stays	Number of observation stays from short-term hospitals, CAHs, psychiatric hospitals, and psychiatric units among eligible FFS beneficiaries residing in the ZIP codes associated with the designated grouping.

Data sources: Medicare Part A claims and QIN NCC Scorecard [Data pulled January 2019]

Maryland Statewide Overview

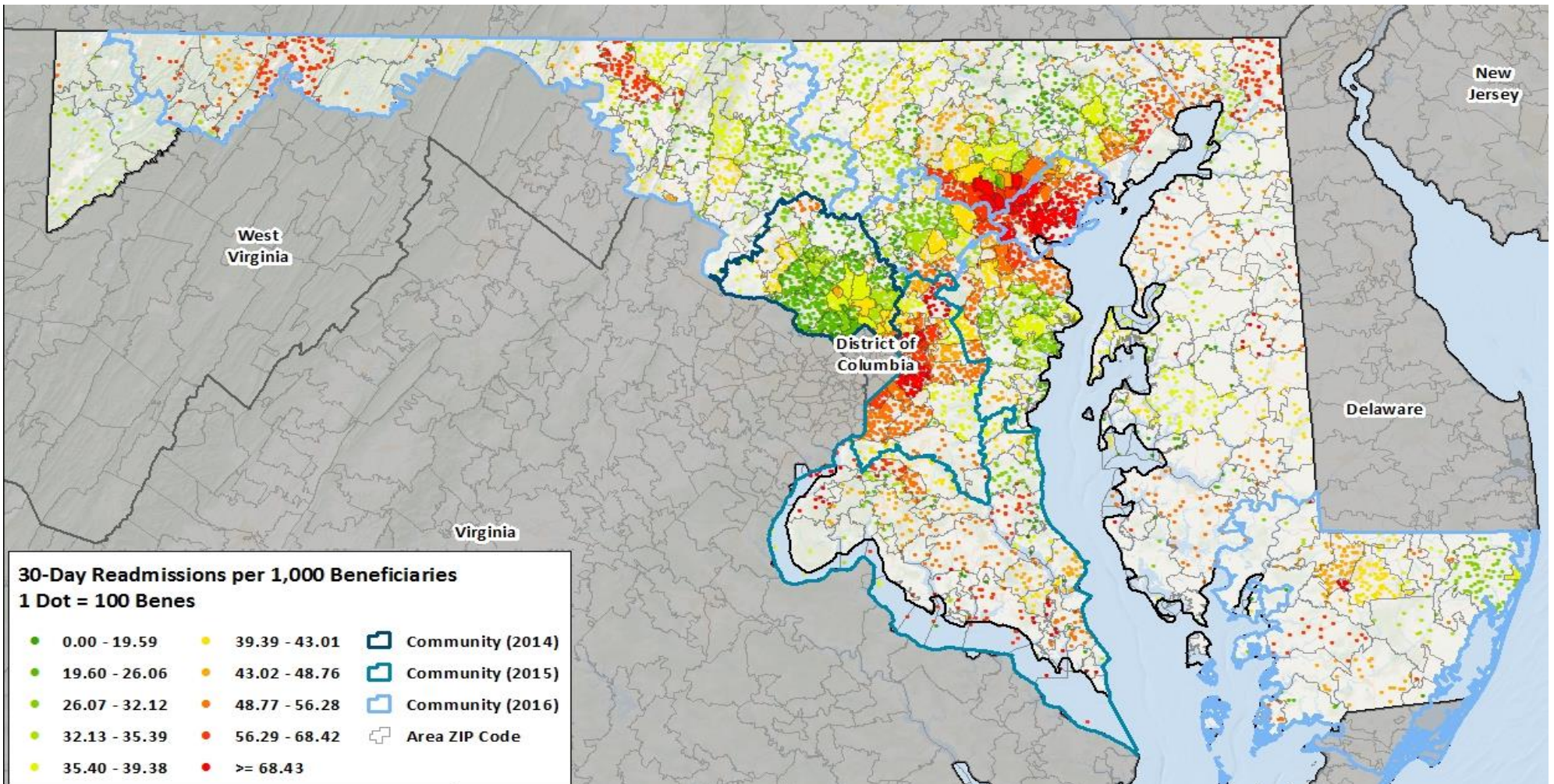
(Q4-2017 to Q3-2018)

Table 1: Maryland vs. Nation Raw Hospital Utilization Data

RAW DATA	Maryland	Nation
# Eligible Beneficiaries	881,565	38,095,369
# Admissions	216,160	10,004,195
# Readmissions	37,899	1,794,983
# Discharges	208,982	9,694,493
# ED Visits	296,003	14,635,153
# Observations Stays	62,021	2,075,218

Table 2: Maryland vs. Nation Hospital Utilization Rates

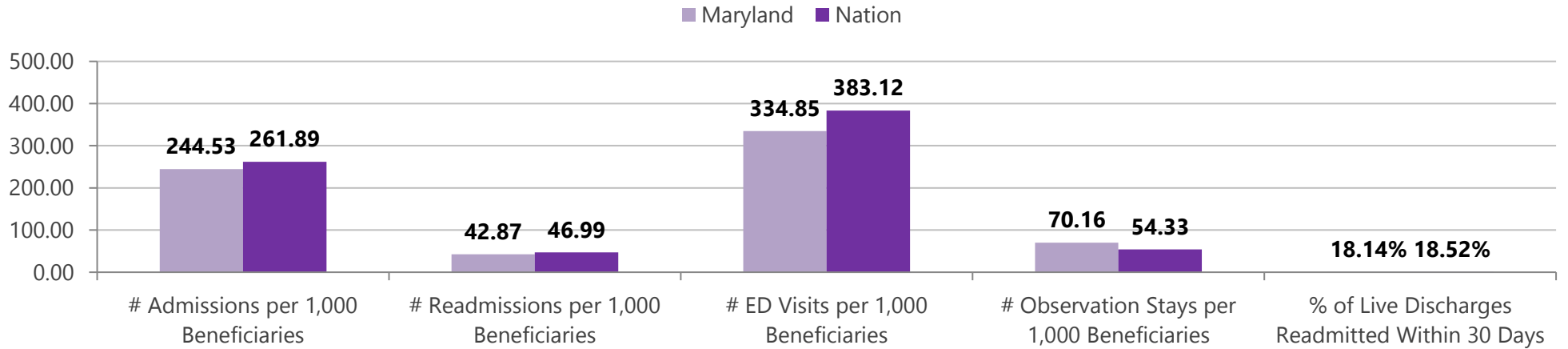
RATES	Maryland	Nation
# Admissions per 1,000 Beneficiaries	244.53	261.89
# Readmissions per 1,000 Beneficiaries	42.87	46.99
# ED Visits per 1,000 Beneficiaries	334.85	383.12
# Observation Stays per 1,000 Beneficiaries	70.16	54.33
% of Live Discharges Readmitted Within 30 Days	18.14%	18.52%



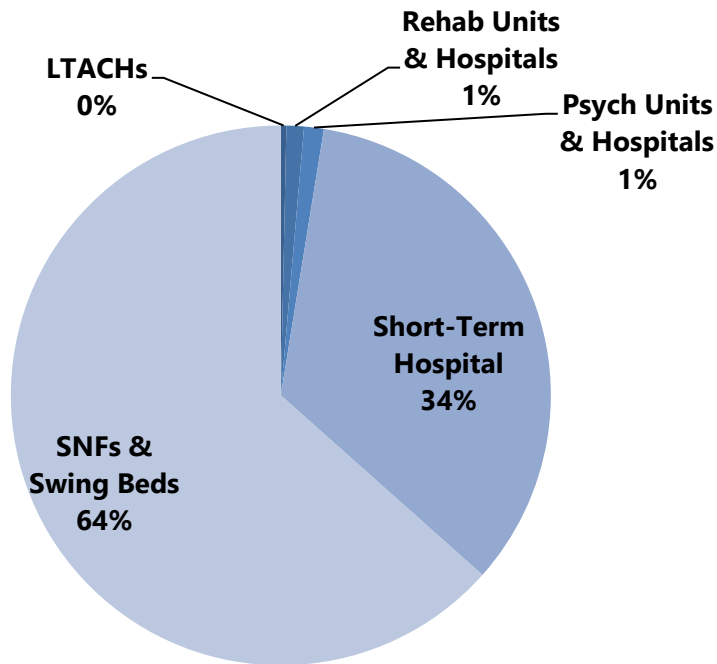
Maryland Statewide Overview (Q4-2017 to Q3-2018)



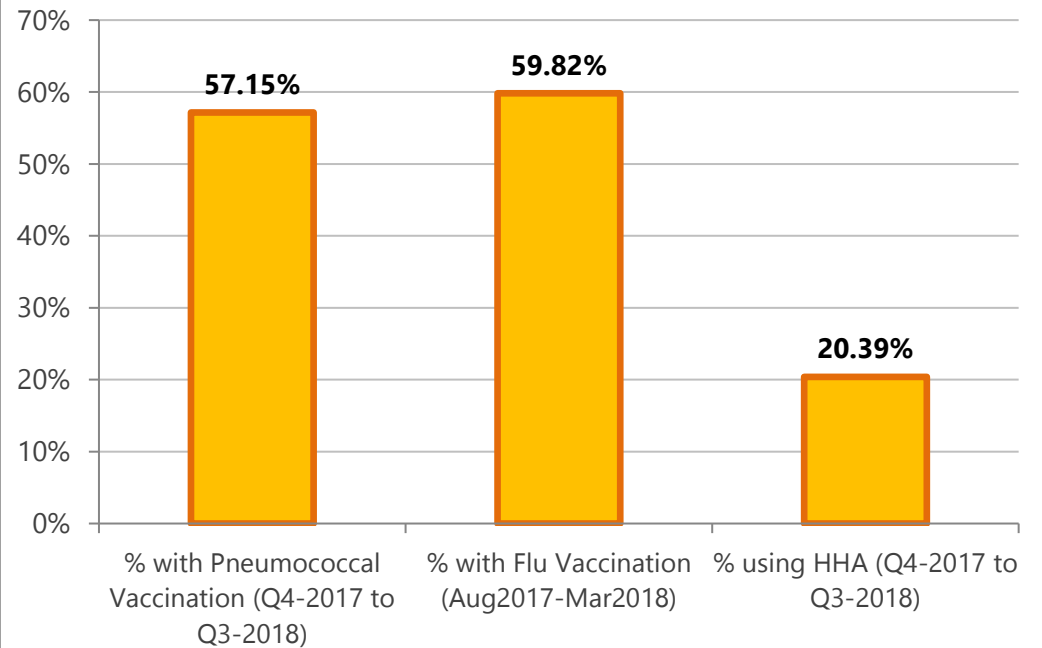
Statewide vs. National Hospital Utilization Rates (Q4-2017 to Q3-2018)



% of Medicare Institutional Days Spent by Setting (Q4-2017 to Q3-2018)



% of Eligible Medicare Beneficiaries Receiving Vaccinations and Using Home Health Services



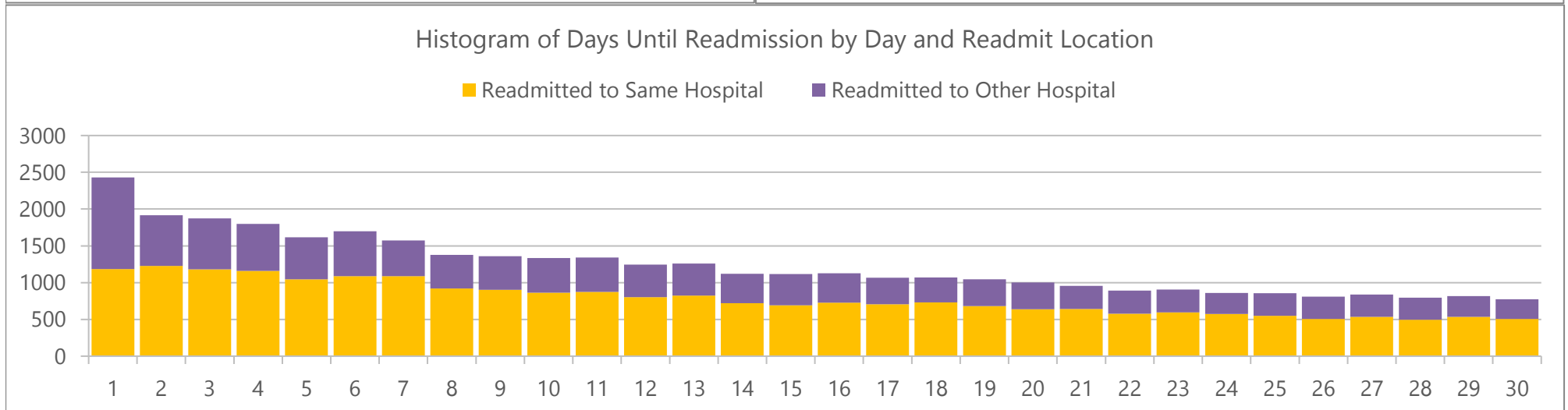
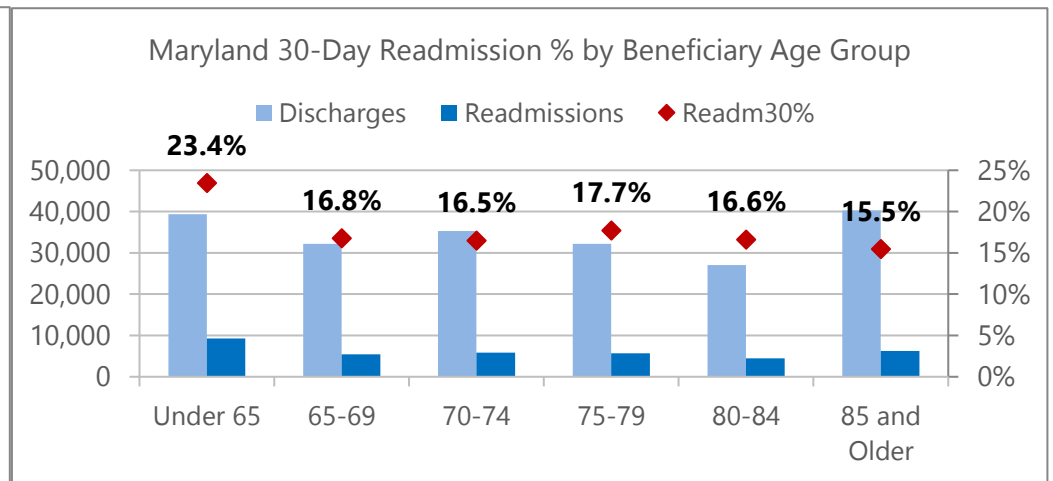
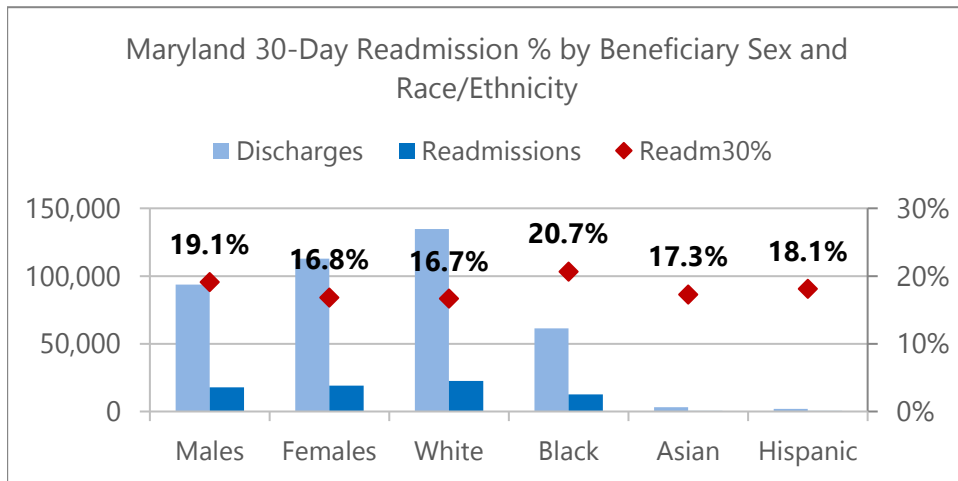
Maryland Statewide Overview

(Q4-2017 to Q3-2018)



Table 3. Maryland % of Live Discharges Readmitted Within 30 Days by Demographics (Beneficiary Sex, Race/Ethnicity, and Age Group)

BENEFICIARY SEX & RACE/ETHNICITY	Discharges	Readmissions	Readm30%	BENEFICIARY AGE GROUP	Discharges	Readmissions	Readm30%
Males	93,589	17,877	19.10%	Under 65	39,382	9,235	23.45%
Females	112,756	18,997	16.85%	65-69	32,218	5,405	16.78%
White	134,798	22,476	16.67%	70-74	35,278	5,819	16.49%
Black	61,238	12,657	20.67%	75-79	32,153	5,697	17.72%
Asian	3,172	548	17.28%	80-84	27,017	4,489	16.62%
Hispanic	1,853	336	18.13%	85 and Older	40,298	6,229	15.46%



Maryland Statewide Overview

(Q4-2017 to Q3-2018)

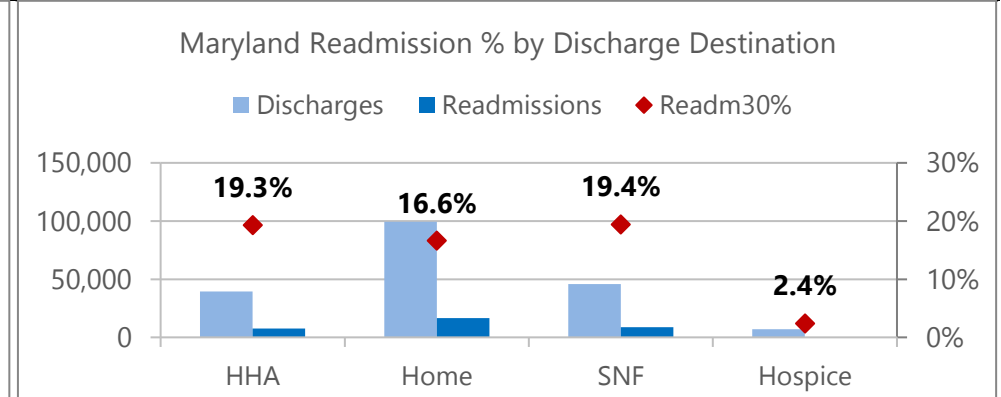
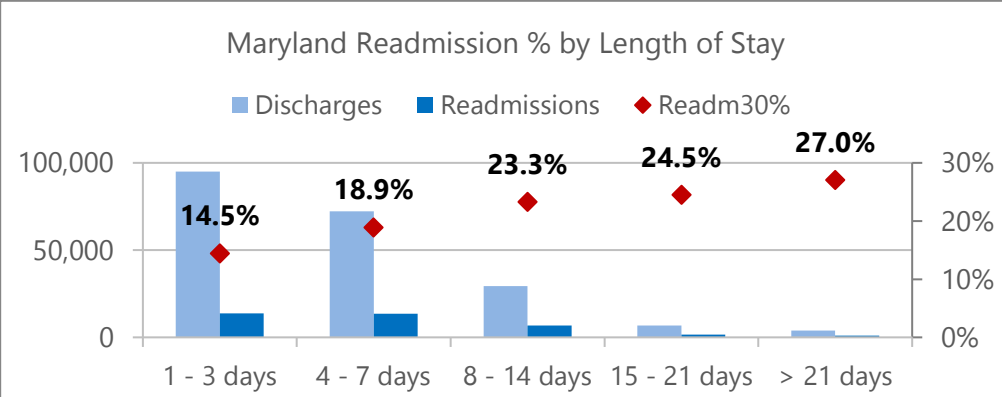


Table 4. Maryland % of Live Discharges Readmitted Within 30 Days by Length of Stay

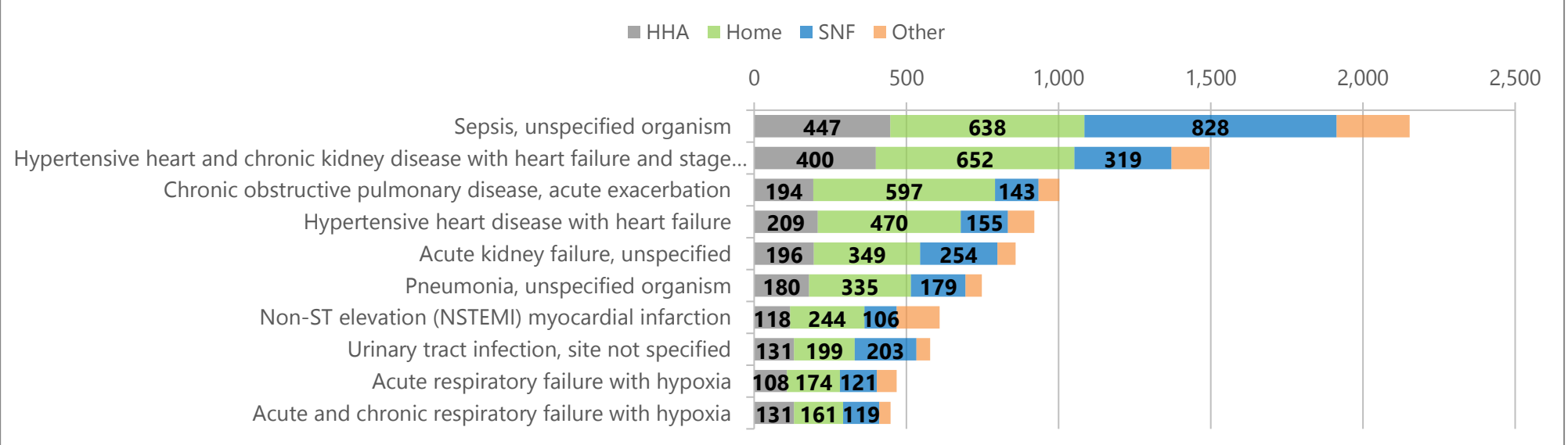
Length of Stay	Discharges	Readmissions	Readm30%
1 - 3 days	94,920	13,724	14.46%
4 - 7 days	72,155	13,629	18.89%
8 - 14 days	29,313	6,828	23.29%
15 - 21 days	6,743	1,653	24.51%
> 21 days	3,845	1,040	27.05%

Table 5. Maryland % of Live Discharges Readmitted Within 30 Days by Primary Discharge Destination

Discharge Destination	Discharges	Readmissions	Readm30%
HHA	39,494	7,616	19.28%
Home	99,302	16,498	16.61%
SNF	45,683	8,861	19.40%
Hospice	7,147	171	2.39%



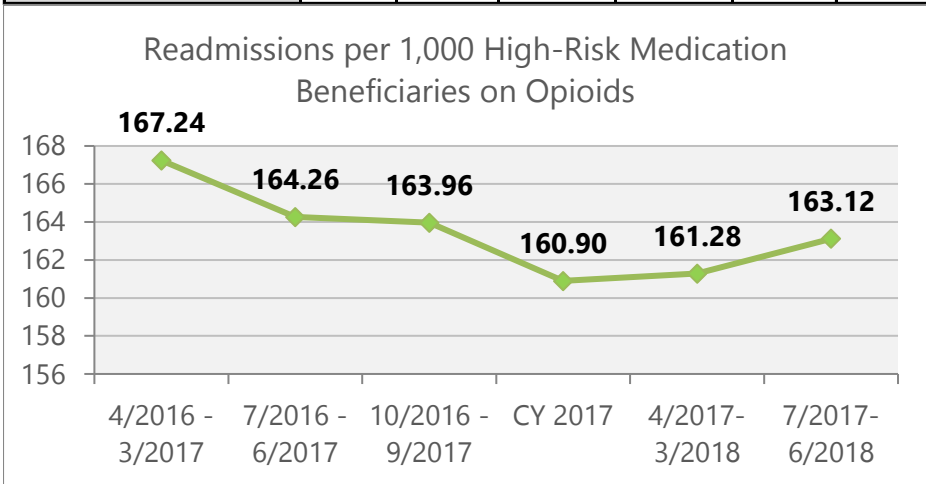
Top 10 Principal Discharge Diagnoses Leading to a 30-Day Readmission by Discharge Destination (Q4-2017 to Q3-2018)



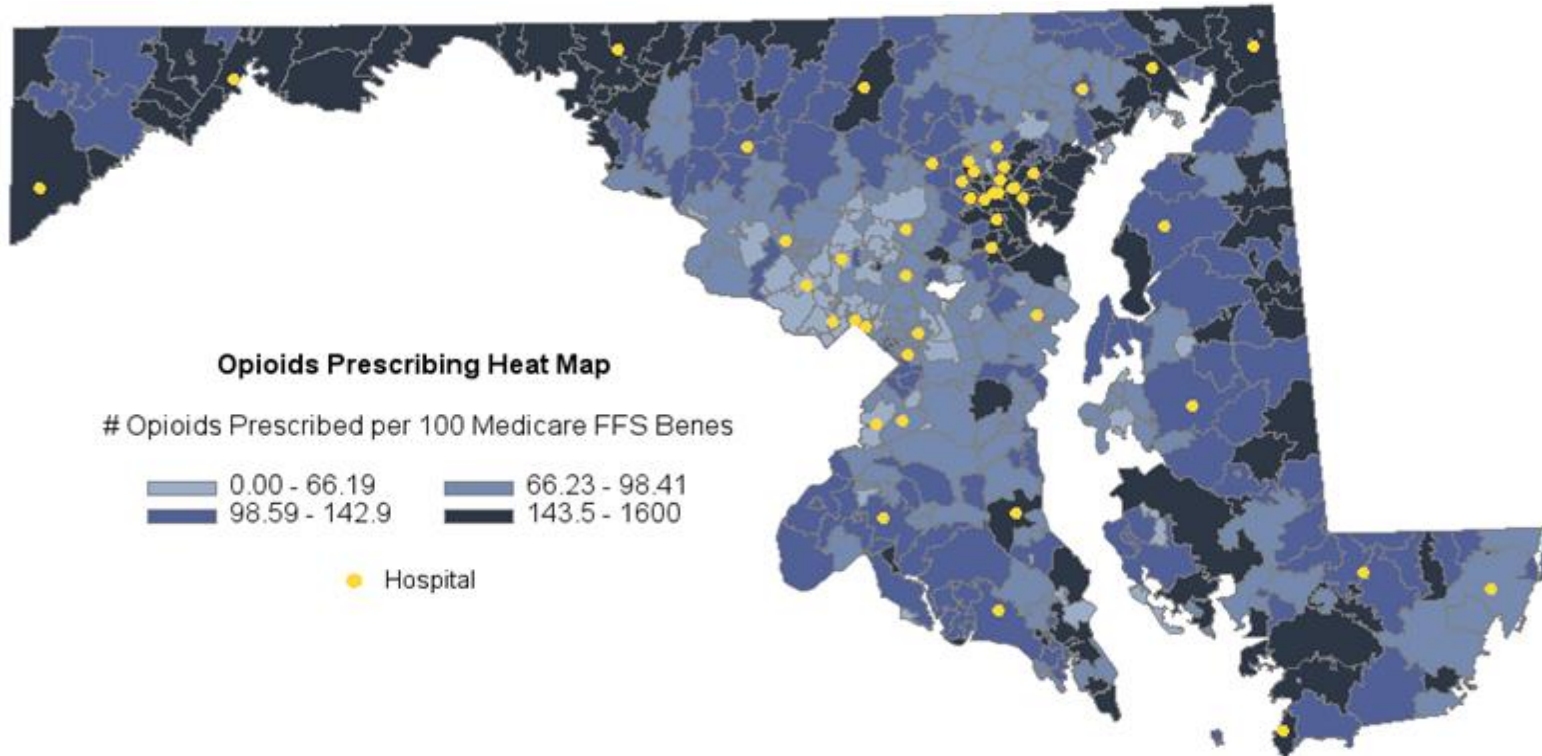
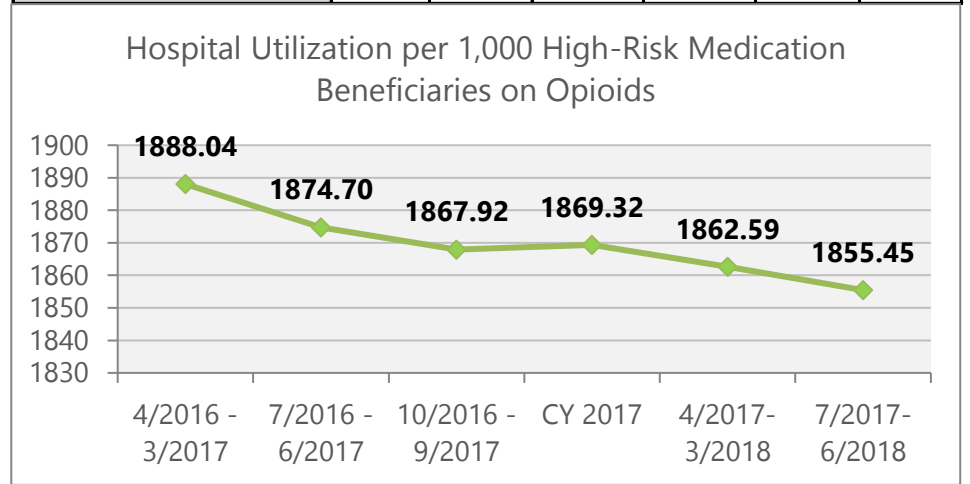
Maryland Statewide Overview

(Q1-2017 to Q2-2018)

Readmissions per 1,000 HRM Beneficiaries	4/2016 - 3/2017	7/2016 - 6/2017	10/2016 - 9/2017	CY 2017	4/2017 - 3/2018	7/2017 - 6/2018
Opioids	167.24	164.26	163.96	160.90	161.28	163.12



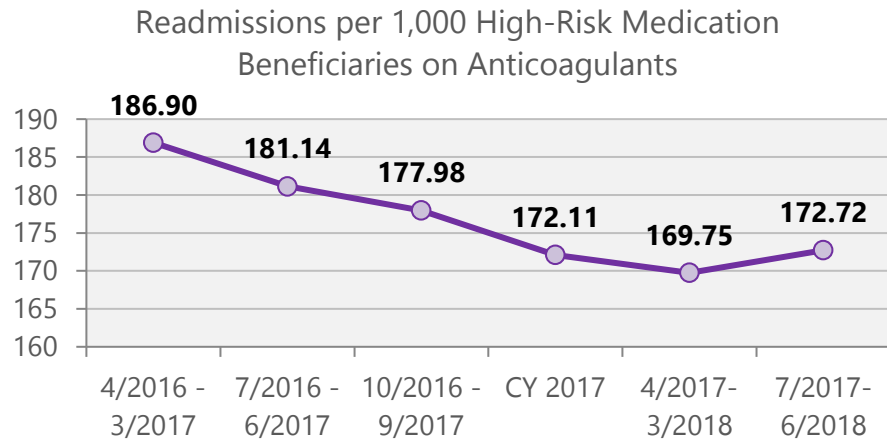
Hospital Utilization per 1,000 HRM Beneficiaries	4/2016 - 3/2017	7/2016 - 6/2017	10/2016 - 9/2017	CY 2017	4/2017 - 3/2018	7/2017 - 6/2018
Opioids	1888.04	1874.70	1867.92	1869.32	1862.59	1855.45



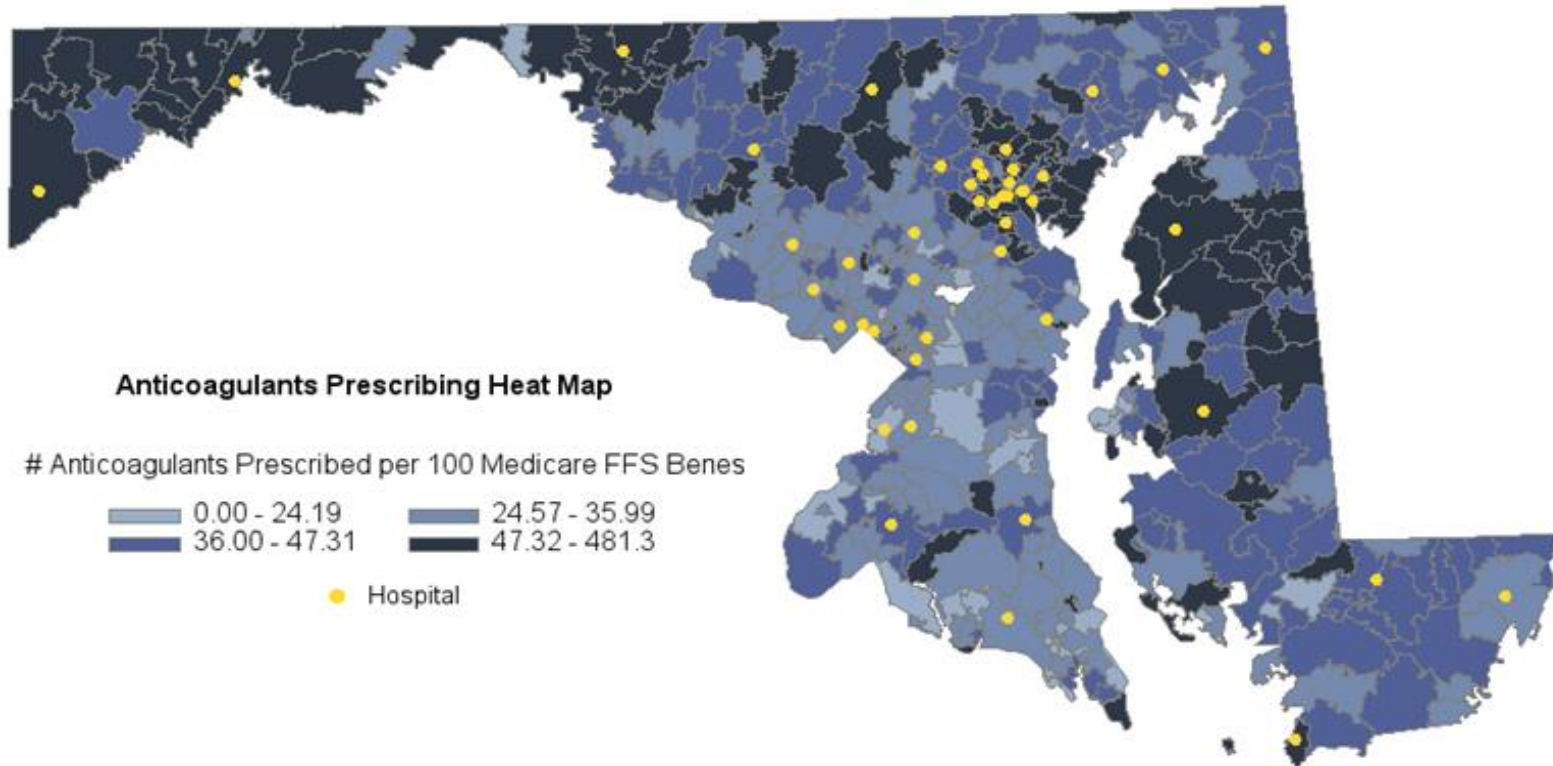
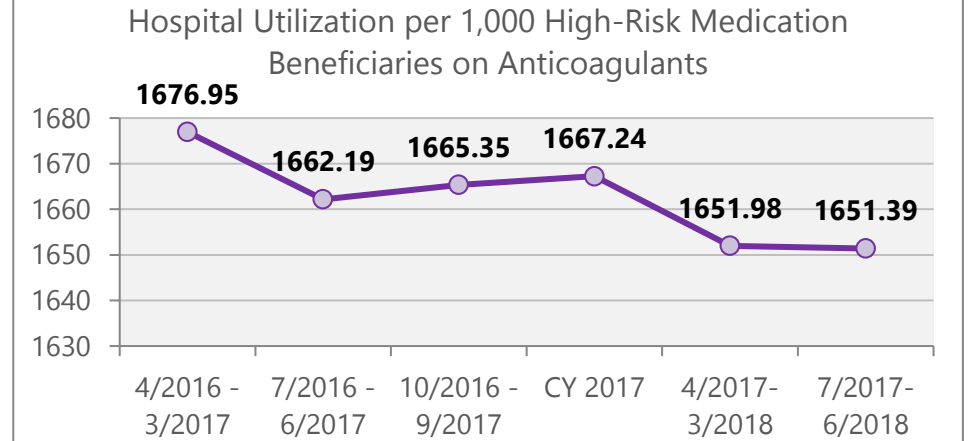
Maryland Statewide Overview

(Q1-2017 to Q2-2018)

Readmissions per 1,000 HRM Beneficiaries	4/2016 - 3/2017	7/2016 - 6/2017	10/2016 - 9/2017	CY 2017	4/2017 - 3/2018	7/2017 - 6/2018
Anticoagulants	186.90	181.14	177.98	172.11	169.75	172.72



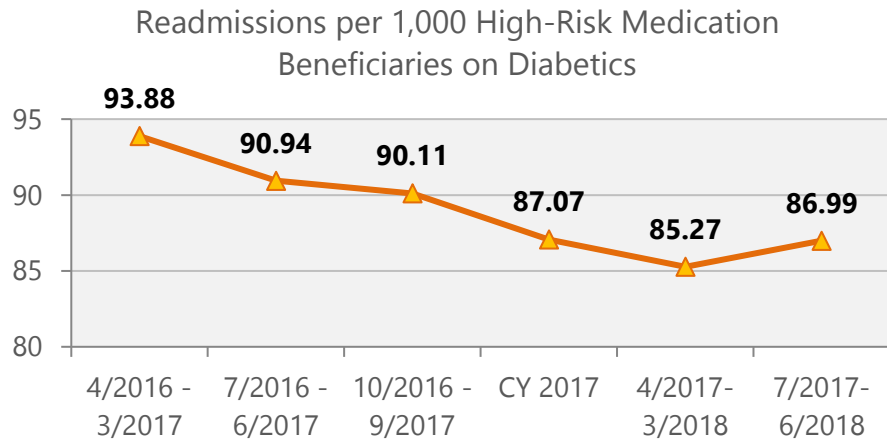
Hospital Utilization per 1,000 HRM Beneficiaries	4/2016 - 3/2017	7/2016 - 6/2017	10/2016 - 9/2017	CY 2017	4/2017 - 3/2018	7/2017 - 6/2018
Anticoagulants	1676.95	1662.19	1665.35	1667.24	1651.98	1651.39



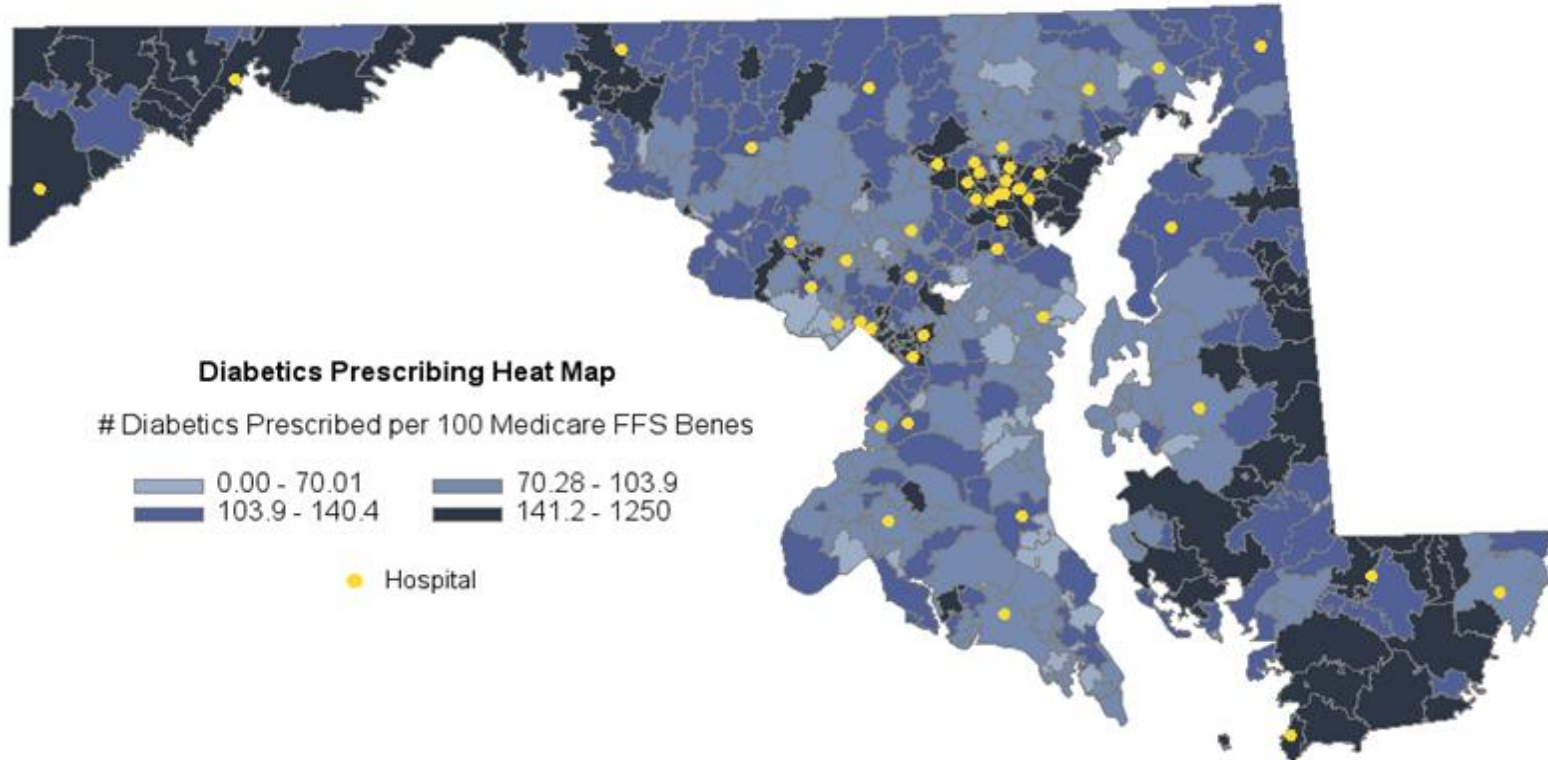
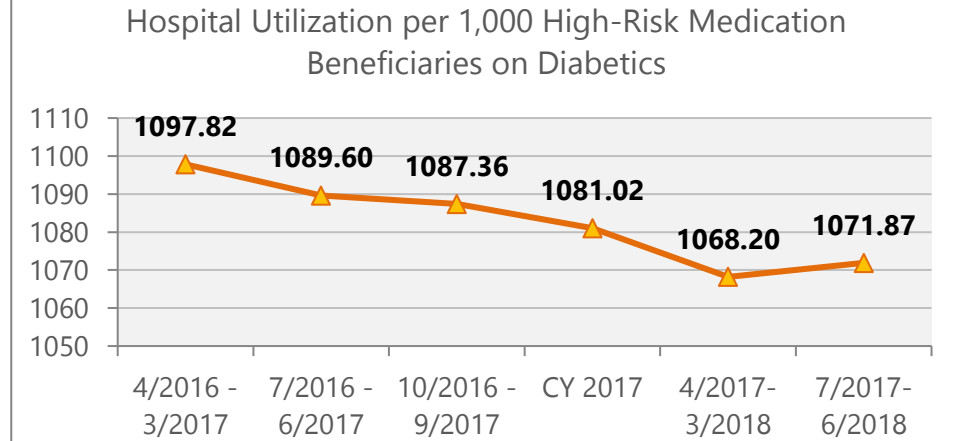
Maryland Statewide Overview

(Q1-2017 to Q2-2018)

Readmissions per 1,000 HRM Beneficiaries	4/2016 - 3/2017	7/2016 - 6/2017	10/2016 - 9/2017	CY 2017	4/2017 - 3/2018	7/2017 - 6/2018
Diabetics	93.88	90.94	90.11	87.07	85.27	86.99



Hospital Utilization per 1,000 HRM Beneficiaries	4/2016 - 3/2017	7/2016 - 6/2017	10/2016 - 9/2017	CY 2017	4/2017 - 3/2018	7/2017 - 6/2018
Diabetics	1097.82	1089.60	1087.36	1081.02	1068.20	1071.87



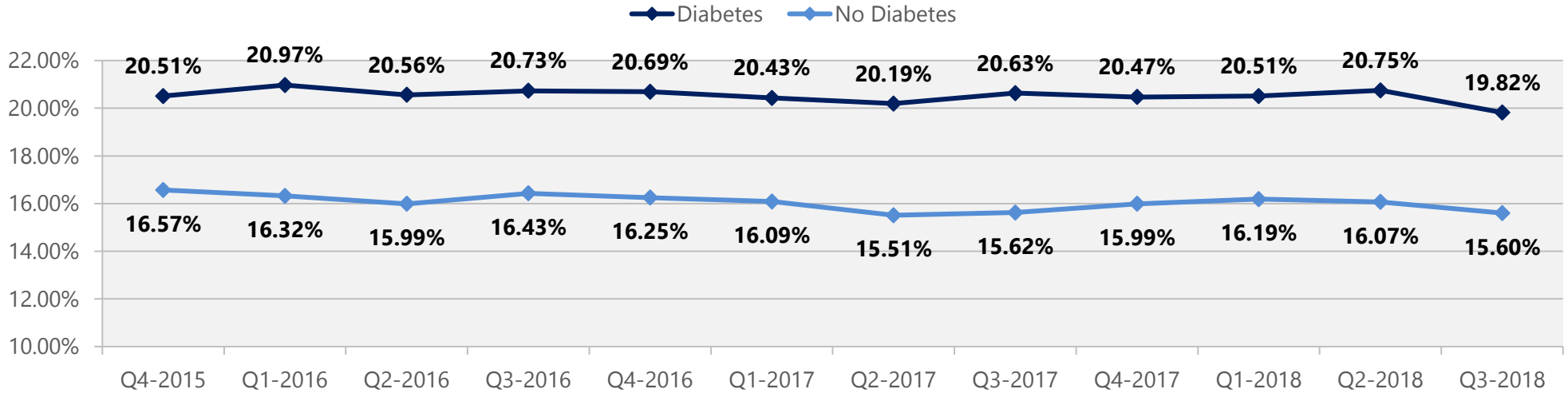
Maryland Statewide Quarterly Data (Q4-2015 to Q3-2018)



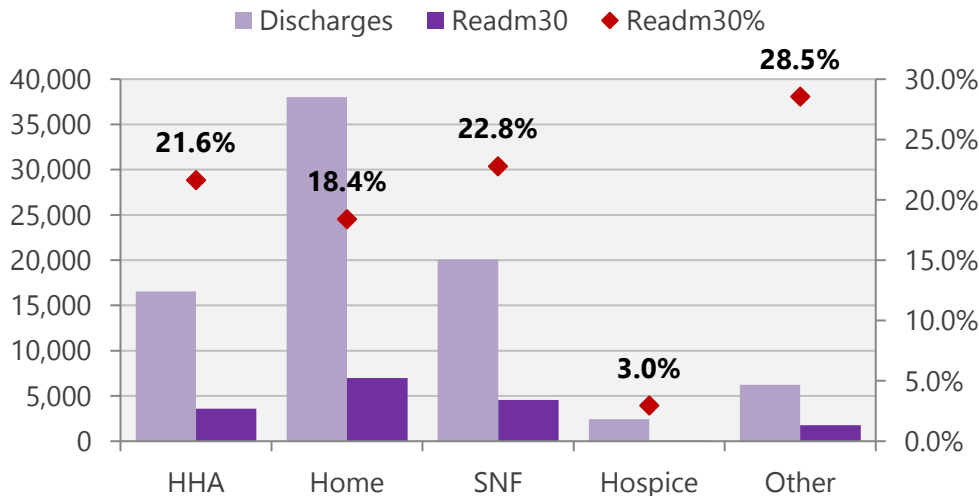
Table 6: % of Live Discharges Readmitted Within 30 Days for Beneficiaries with Diabetes

REGION	Q4-2015	Q1-2016	Q2-2016	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018	Q3-2018
Diabetes	20.51%	20.97%	20.56%	20.73%	20.69%	20.43%	20.19%	20.63%	20.47%	20.51%	20.75%	19.82%
No Diabetes	16.57%	16.32%	15.99%	16.43%	16.25%	16.09%	15.51%	15.62%	15.99%	16.19%	16.07%	15.60%

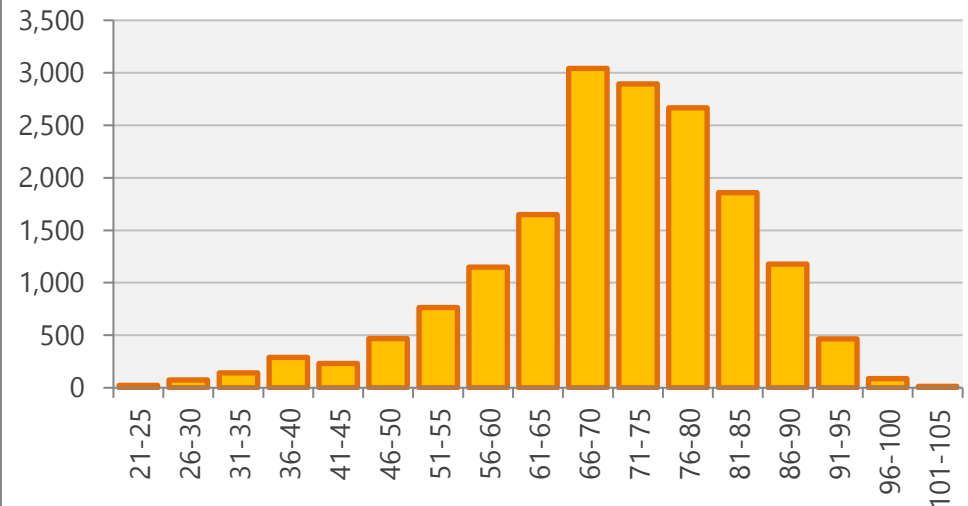
% of Live Discharges Readmitted Within 30 Days for Beneficiaries with Diabetes



Maryland 30-Day Readmission % for Beneficiaries with Diabetes



Age Distribution of Maryland Statewide Beneficiaries with Diabetes Readmitting Within 30 Days



Maryland Statewide Quarterly Data (Q4-2015 to Q3-2018)



Table 7: Admissions per 1,000 Beneficiaries

REGION	Q4-2015	Q1-2016	Q2-2016	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018	Q3-2018
Maryland	66.02	67.39	66.34	63.73	64.66	68.72	63.61	60.49	61.48	65.37	61.02	57.39
Nation	67.07	69.50	67.55	65.57	66.43	71.18	67.07	64.57	65.92	69.70	64.98	62.04

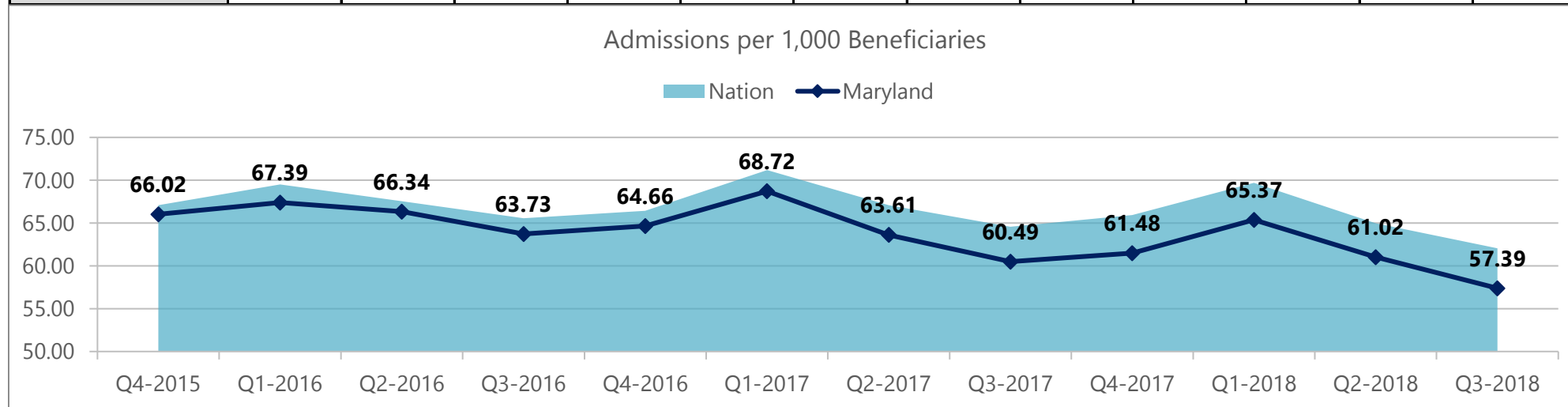
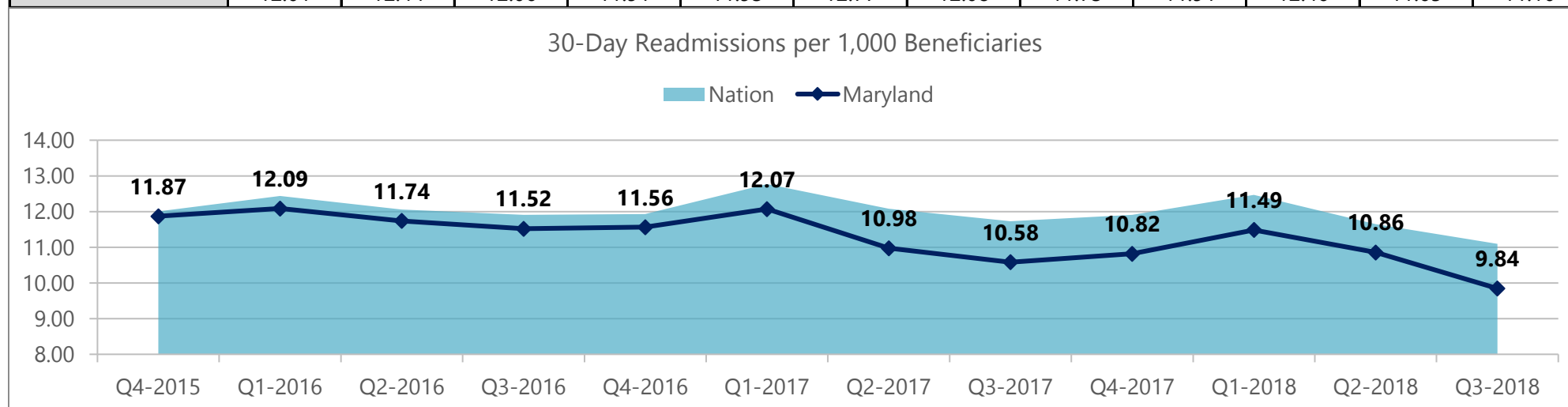


Table 8: 30-Day Readmissions per 1,000 Beneficiaries

REGION	Q4-2015	Q1-2016	Q2-2016	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018	Q3-2018
Maryland	11.87	12.09	11.74	11.52	11.56	12.07	10.98	10.58	10.82	11.49	10.86	9.84
Nation	12.01	12.44	12.06	11.91	11.93	12.77	12.08	11.73	11.91	12.46	11.65	11.10



Maryland Statewide Quarterly Data (Q4-2015 to Q3-2018)



Table 9: Emergency Department Visits per 1,000 Beneficiaries

REGION	Q4-2015	Q1-2016	Q2-2016	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018	Q3-2018
Maryland	86.19	81.78	86.43	88.30	83.95	84.22	87.07	87.71	83.18	82.73	84.68	85.17
Nation	97.56	97.02	100.55	102.08	97.51	98.59	99.63	100.92	96.97	96.01	95.65	95.54

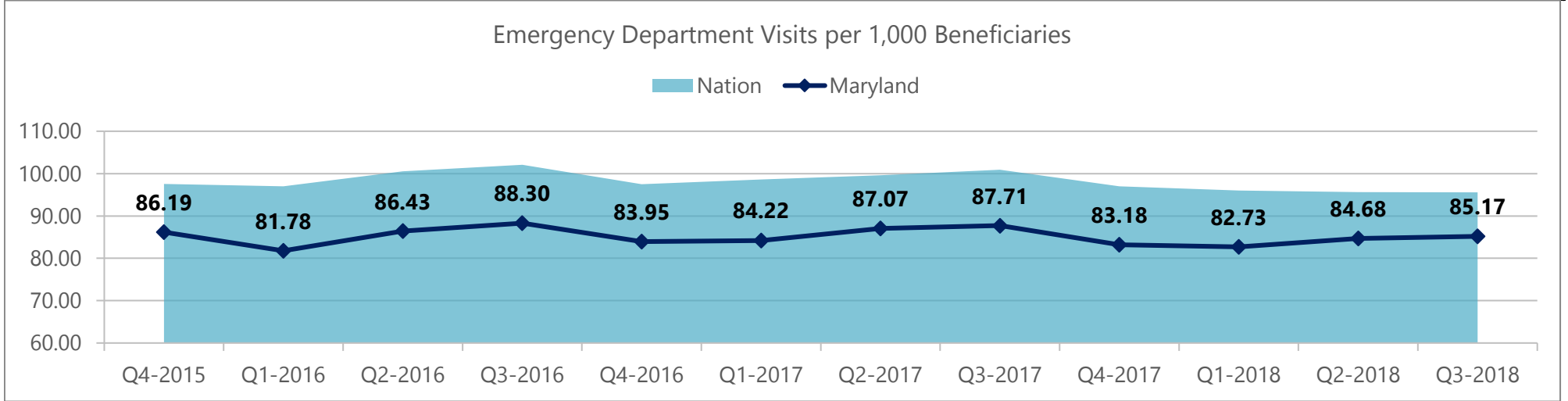
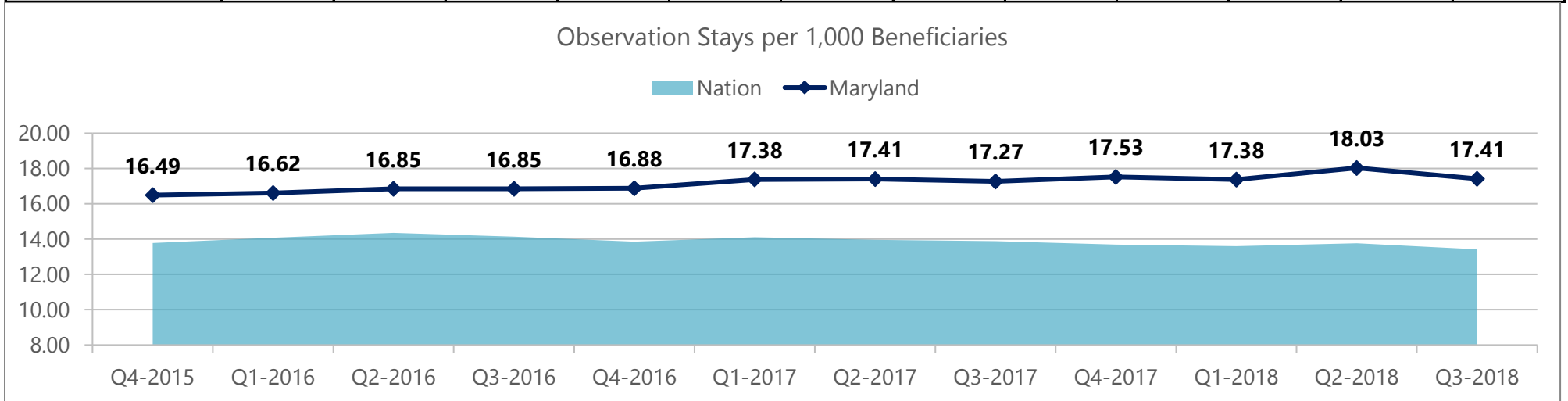


Table 10: Observation Stays per 1,000 Beneficiaries

REGION	Q4-2015	Q1-2016	Q2-2016	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018	Q3-2018
Maryland	16.49	16.62	16.85	16.85	16.88	17.38	17.41	17.27	17.53	17.38	18.03	17.41
Nation	13.77	14.08	14.35	14.15	13.86	14.11	13.96	13.89	13.69	13.60	13.77	13.42



Maryland Statewide Quarterly Data (Q4-2015 to Q3-2018)



Table 11: % of Live Discharges Readmitted Within 30 Days

REGION	Q4-2015	Q1-2016	Q2-2016	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018	Q3-2018
Maryland	18.56%	18.58%	18.27%	18.66%	18.53%	18.20%	17.82%	18.06%	18.22%	18.24%	18.34%	17.71%
Nation	18.50%	18.53%	18.40%	18.71%	18.56%	18.55%	18.56%	18.71%	18.66%	18.52%	18.46%	18.41%

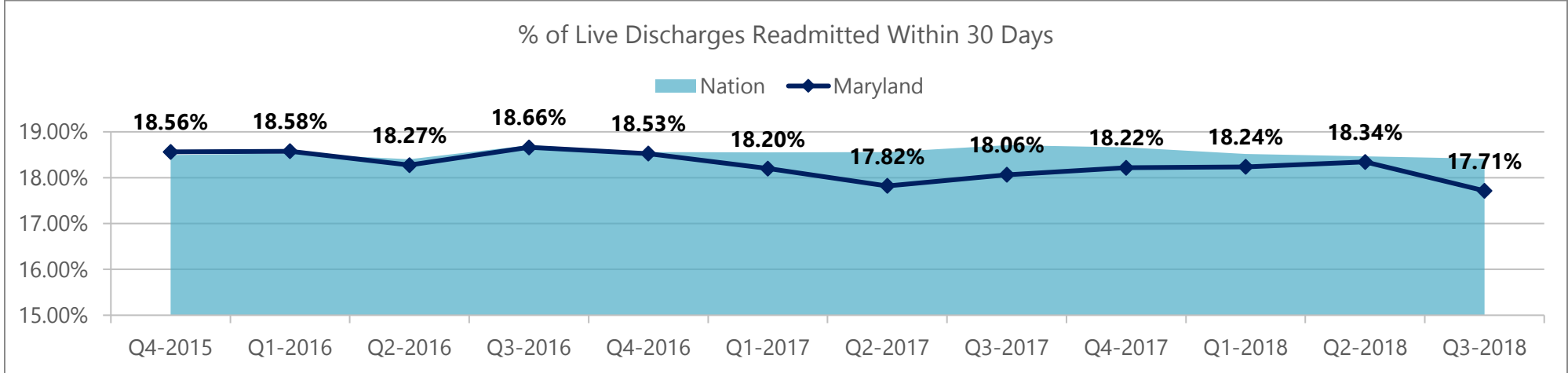
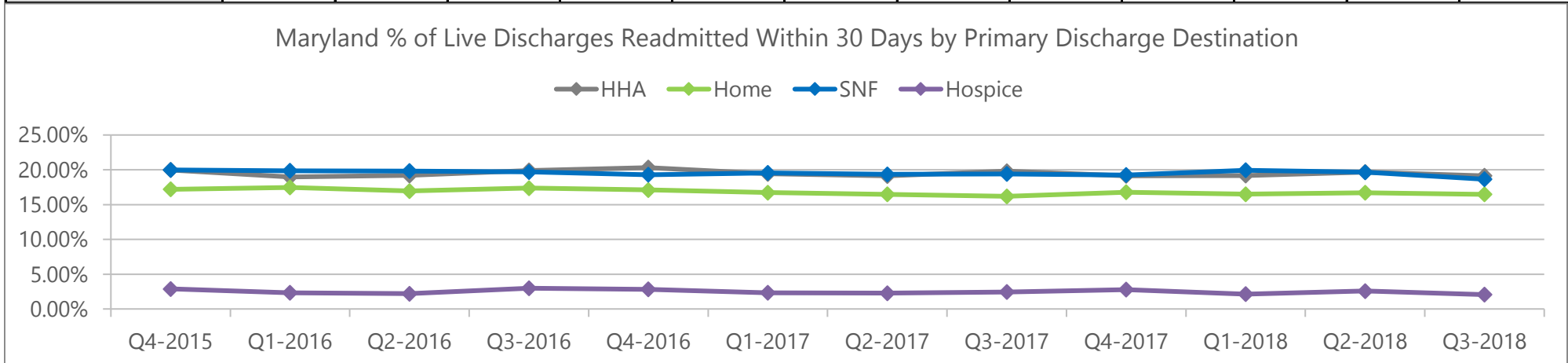


Table 12: Maryland % of Live Discharges Readmitted by Primary Discharge Destination

SETTING	Q4-2015	Q1-2016	Q2-2016	Q3-2016	Q4-2016	Q1-2017	Q2-2017	Q3-2017	Q4-2017	Q1-2018	Q2-2018	Q3-2018
HHA	19.96%	18.97%	19.20%	19.90%	20.31%	19.42%	19.12%	19.81%	19.13%	19.18%	19.68%	19.14%
Home	17.20%	17.46%	16.96%	17.37%	17.09%	16.72%	16.47%	16.19%	16.77%	16.50%	16.71%	16.48%
SNF	19.98%	19.86%	19.83%	19.68%	19.29%	19.56%	19.35%	19.40%	19.26%	19.94%	19.65%	18.64%
Hospice	2.87%	2.32%	2.20%	2.98%	2.83%	2.33%	2.27%	2.43%	2.79%	2.13%	2.58%	2.06%



About HQI



As the QIN-QIO for Maryland and Virginia, HQI convenes patients, providers and stakeholders to rapidly improve health quality and achieve better health, better care and lower costs. We do this work through CMS' QIO Program, the cornerstone of Medicare's efforts to improve the quality and value of health care for its more than 45 million beneficiaries. For additional information on this report or our organization, please see contact table below:

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