

Even allowing for the 4th of July holiday, we see a continuing macro trend through Mid July. Wherever COVID gets "under control", outpatient volumes rebound as people get caught up on screening and necessary care. We saw this in the Northeast and now this week in the Midwest. One message for policy makers and health care providers alike seems clear: Keep COVID-19 at manageable levels and care seekers will return and avoid worrisome delays in necessary care.

The data science team at Strata aggregated data from a cohort of 257 hospitals in 56 healthcare delivery systems. The breakdown of hospitals by U.S. Census Region is below.

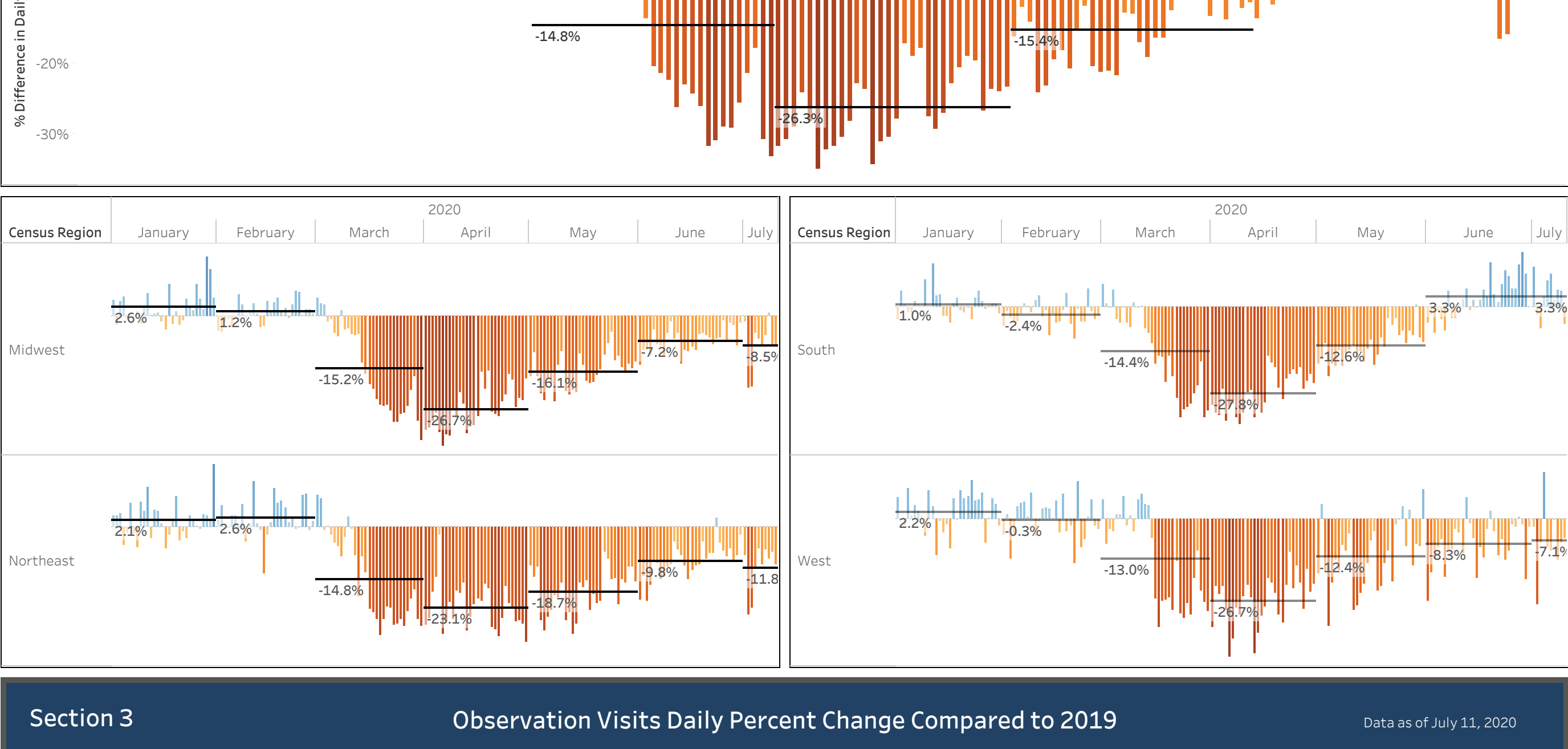
Census Region	Midwest	Northeast	South	West	Grand Total
	104	36	83	34	257

Section 1 Admission Stays and Visits Recent Volume Changes Data as of July 11, 2020

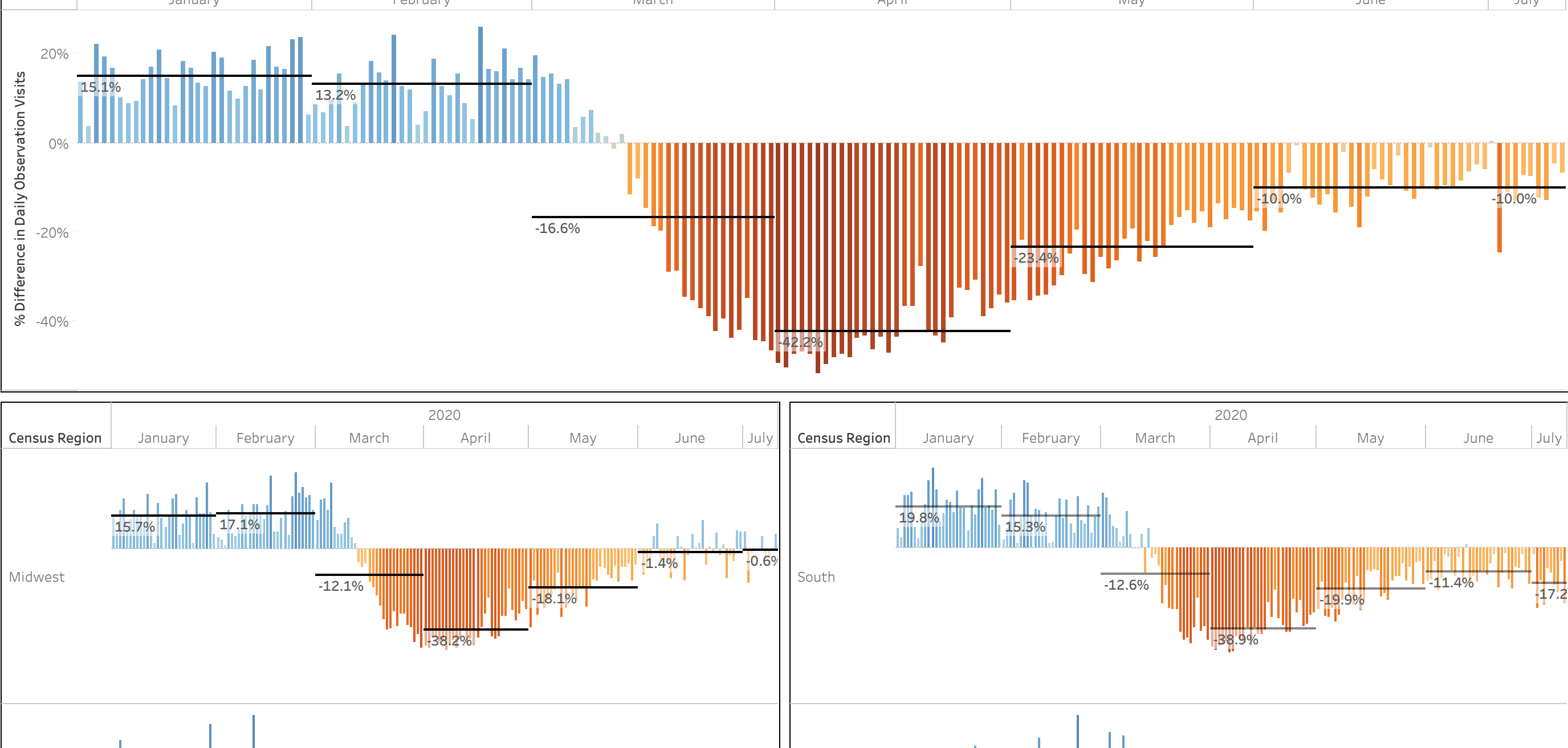
Metric	30 Day Change Compare to 2019		14 Day Change Compare to 2019		Change in Last 30 Days		Change in Last 14 Days	
	2019	2020	2019	2020	2019	2020	2019	2020
DailyInpatientAdmissions	-3.0%	-1.6%	-3.0%	-1.6%	+7.7%	-0.4%	+7.7%	-0.4%
DailyObservationVisits	-10.9%	-9.3%	-10.9%	-9.3%	+12.0%	+0.5%	+12.0%	+0.5%
DailyEmergencyVisits	-16.7%	-14.8%	-16.7%	-14.8%	+14.9%	+5.7%	+14.9%	+5.7%
DailyOutpatientVisits	+19.8%	+22.9%	+19.8%	+22.9%	+12.8%	+0.4%	+12.8%	+0.4%

Census Region	Metric	30 Day Change Compared to Same Period 2019	14 Day Change Compared to Same Period 2019	Census Region	Metric	Change in Last 30 Days	Change in Last 14 Days
Midwest	DailyInpatientAdmissions	-5.8%	-4.3%	Midwest	DailyInpatientAdmissions	+4.3%	-0.4%
	DailyObservationVisits	+1.5%	+3.9%		DailyObservationVisits	+13.3%	+0.6%
	DailyEmergencyVisits	-17.0%	-16.4%		DailyEmergencyVisits	+13.1%	+4.9%
	DailyOutpatientVisits	+22.2%	+27.4%		DailyOutpatientVisits	+13.8%	+7.7%
Northeast	DailyInpatientAdmissions	-7.6%	-7.3%	Northeast	DailyInpatientAdmissions	+7.5%	+0.3%
	DailyObservationVisits	-15.9%	-10.6%		DailyObservationVisits	+22.4%	+7.5%
	DailyEmergencyVisits	-22.4%	-19.7%		DailyEmergencyVisits	+12.9%	+7.9%
	DailyOutpatientVisits	+19.7%	+23.3%		DailyOutpatientVisits	+19.7%	+1.2%
South	DailyInpatientAdmissions	-7.5%	+9.9%	South	DailyInpatientAdmissions	+13.4%	+0.0%
	DailyObservationVisits	+10.6%	+13.2%		DailyObservationVisits	+4.3%	+4.0%
	DailyEmergencyVisits	-17.0%	-14.7%		DailyEmergencyVisits	+14.3%	+4.3%
	DailyOutpatientVisits	+10.6%	+9.7%		DailyOutpatientVisits	+7.7%	+5.9%
West	DailyInpatientAdmissions	-6.0%	-4.7%	West	DailyInpatientAdmissions	+5.5%	-1.5%
	DailyObservationVisits	-16.5%	-17.2%		DailyObservationVisits	+7.9%	+0.7%
	DailyEmergencyVisits	-10.5%	-8.7%		DailyEmergencyVisits	+13.5%	+5.7%
	DailyOutpatientVisits	+26.9%	+31.3%		DailyOutpatientVisits	+16.7%	+1.4%

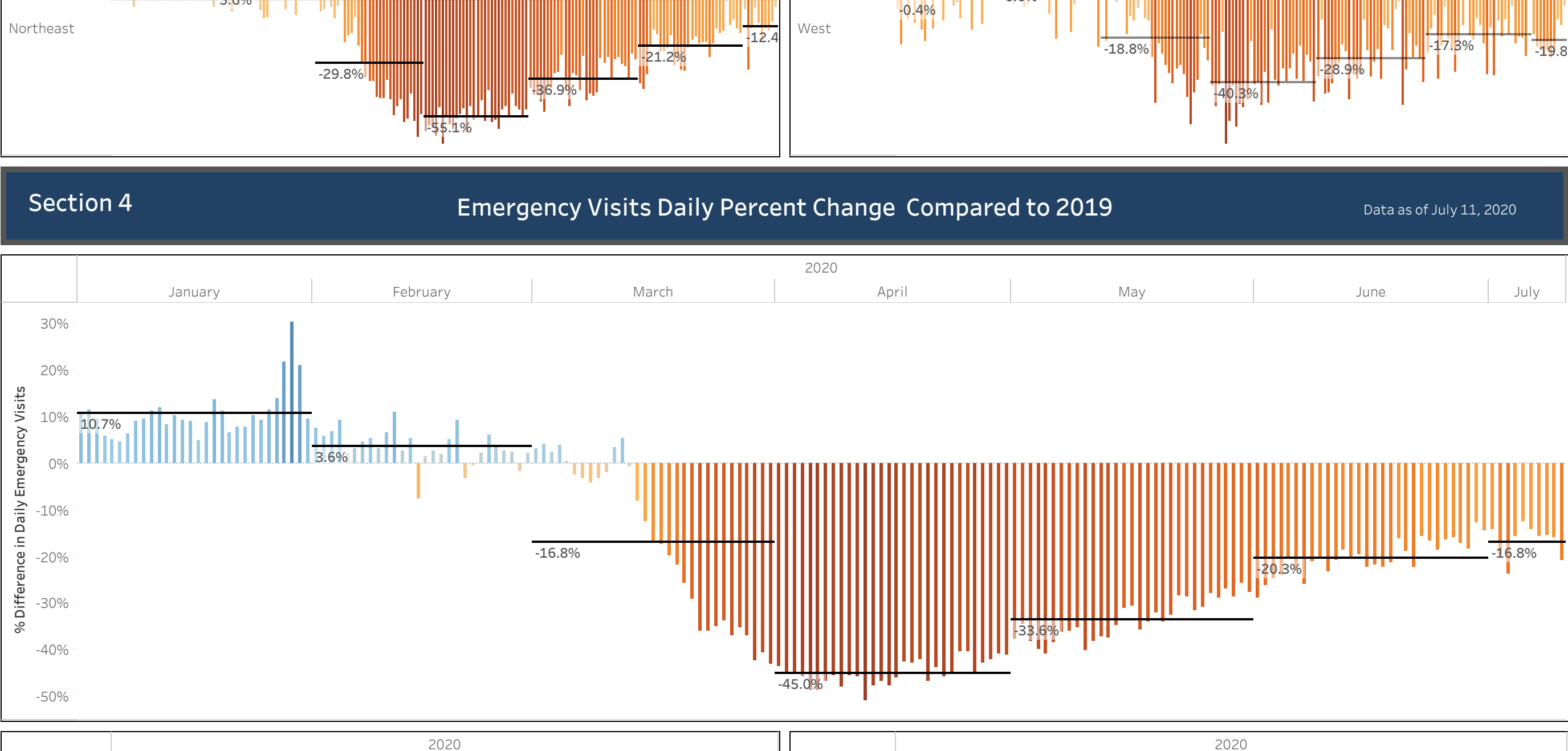
Section 2 Inpatient Admissions Daily Percent Change Compared to 2019 Data as of July 11, 2020



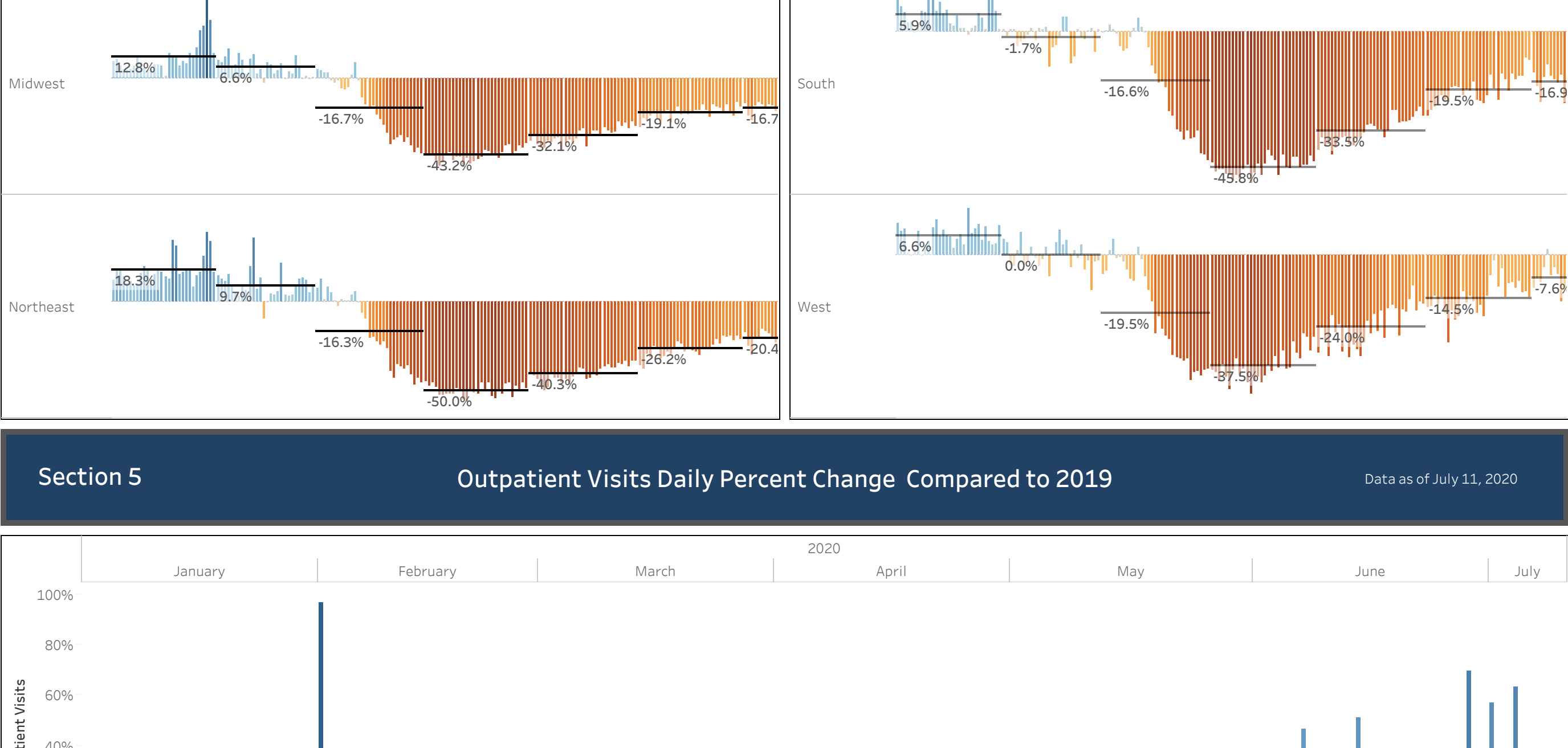
Section 3 Observation Visits Daily Percent Change Compared to 2019 Data as of July 11, 2020



Section 4 Emergency Visits Daily Percent Change Compared to 2019 Data as of July 11, 2020



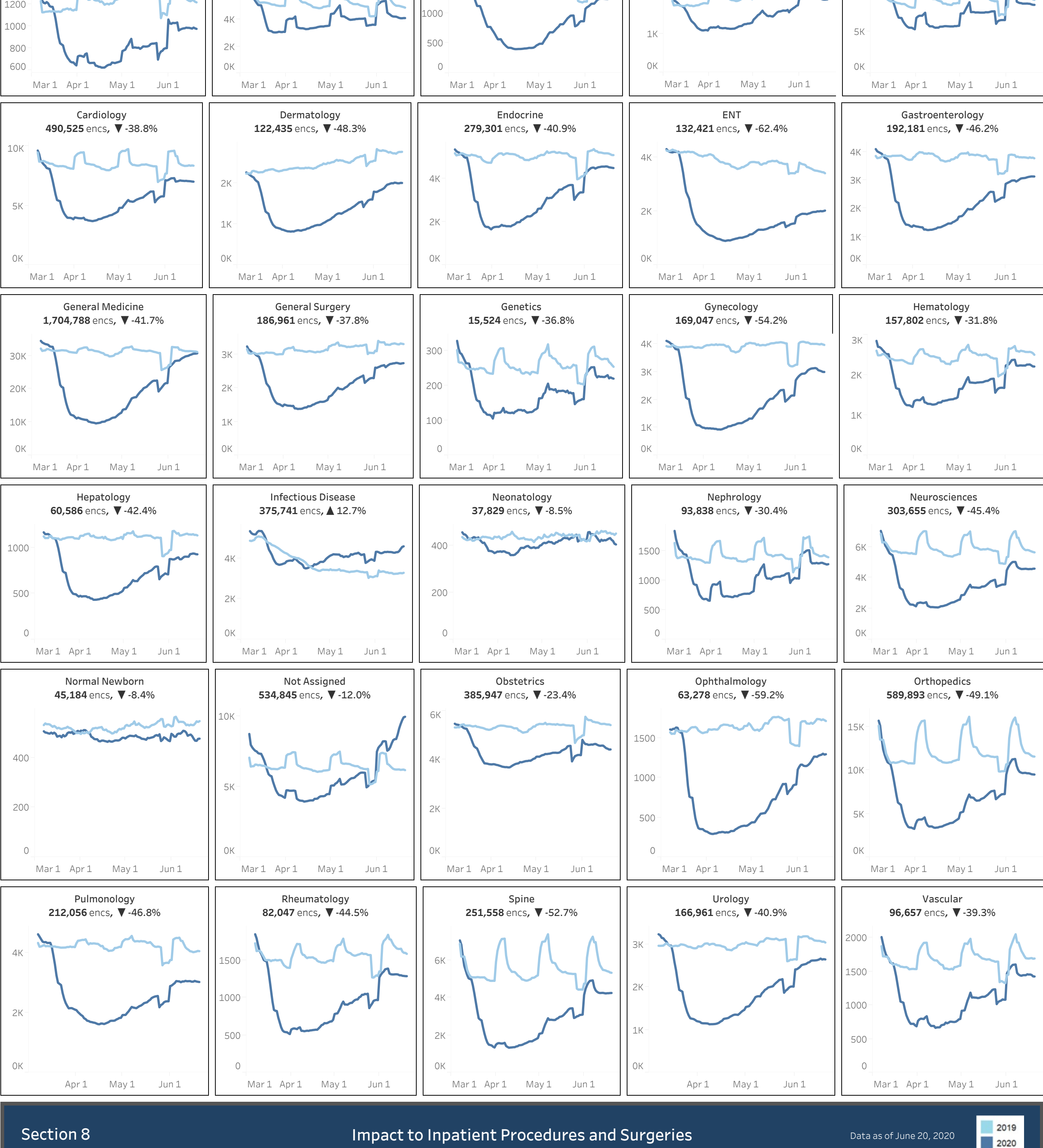
Section 5 Outpatient Visits Daily Percent Change Compared to 2019 Data as of July 11, 2020



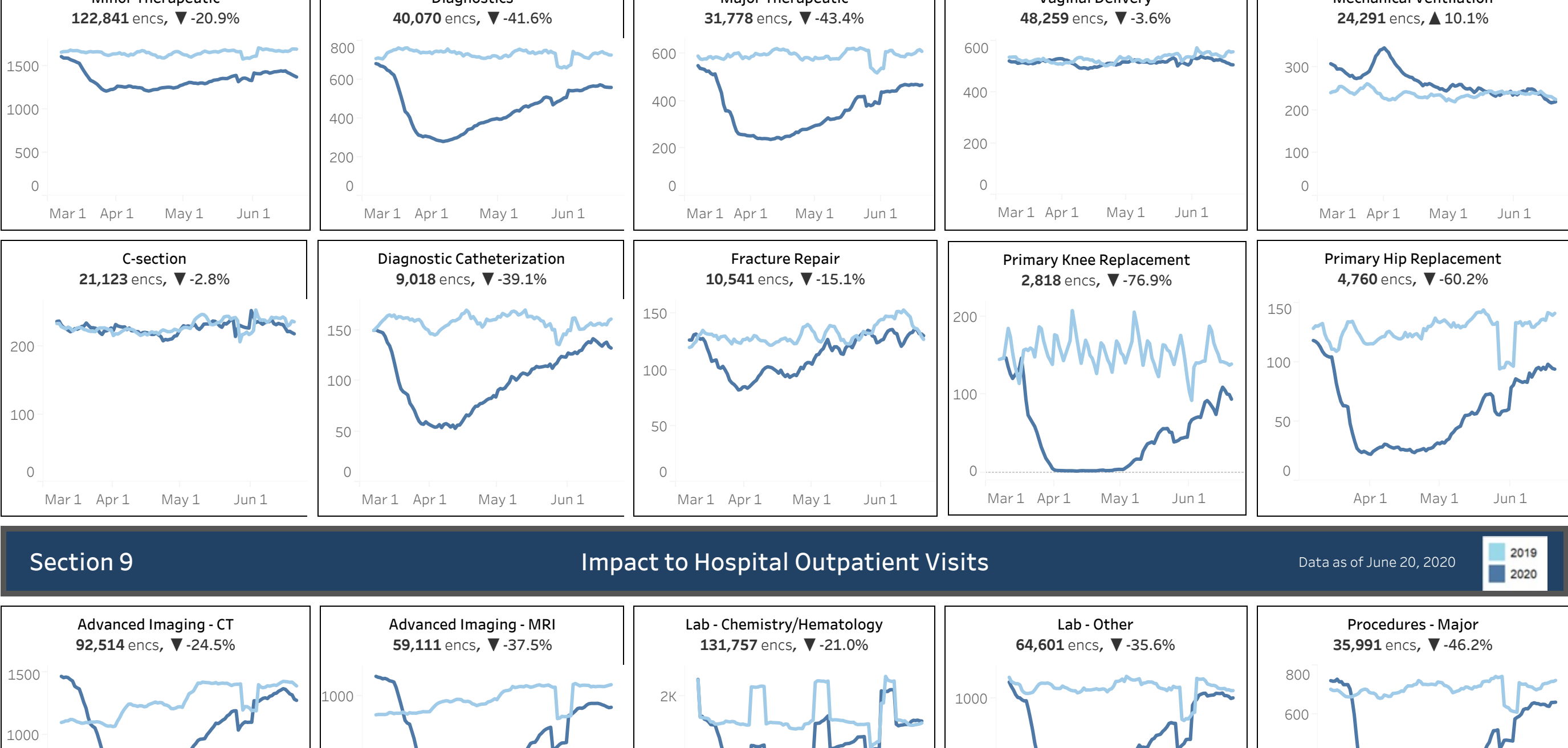
Section 6 Sg2 Service Line Percent Change Last 14 Days Data Compares Service Line Volume Changes for the weeks of 5/24-6/6/2020 to the weeks of 6/7-6/20/2020

Allergy and Immunology	-1.1%	Hepatology	+2.9%
Behavioral Health	-2.6%	Infectious Disease	+7.3%
Breast Health	+2.5%	Neonatology	-4.1%
Burns and Wounds	-2.3%	Nephrology	-1.0%
Cancer	-1.8%	Neurosciences	+0.3%
Cardiology	-1.0%	Normal Newborn	-2.9%
Dermatology	+0.3%	Obstetrics	-3.3%
Endocrine	-1.5%	Ophthalmology	+2.4%
ENT	+2.6%	Orthopedics	-1.9%
Gastroenterology	+1.8%	Pulmonology	-0.9%
General Medicine	+2.8%	Rheumatology	-1.9%
General Surgery	+0.3%	Spine	+0.0%
Genetics	-2.2%	Urology	+0.9%
Gynecology	-4.3%	Vascular	-1.4%
Hematology	-1.1%		

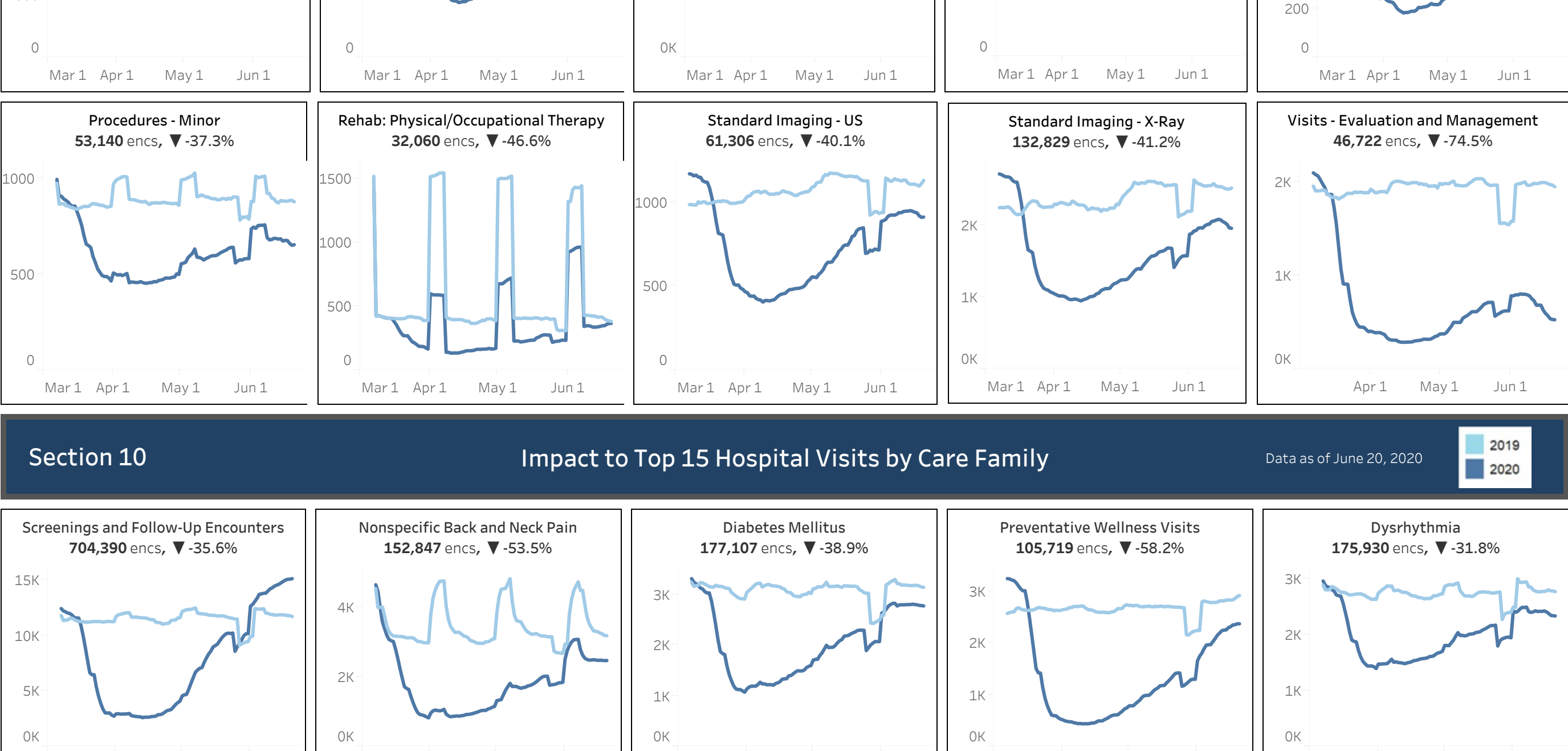
Section 7 Volume Losses by Service Line 2019 vs 2020 Data as of June 20, 2020



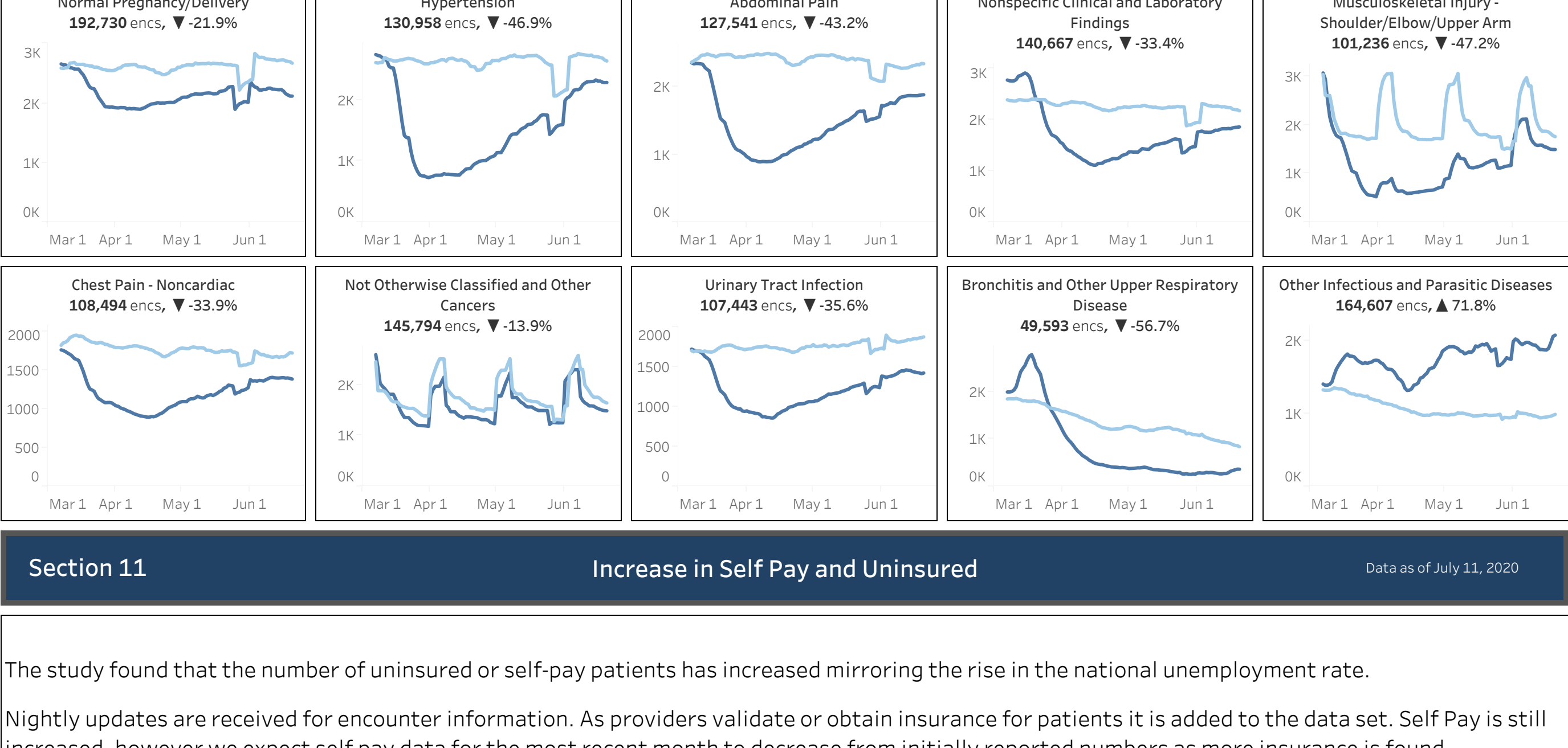
Section 8 Impact to Inpatient Procedures and Surgeries Data as of June 20, 2020



Section 9 Impact to Hospital Outpatient Visits Data as of June 20, 2020

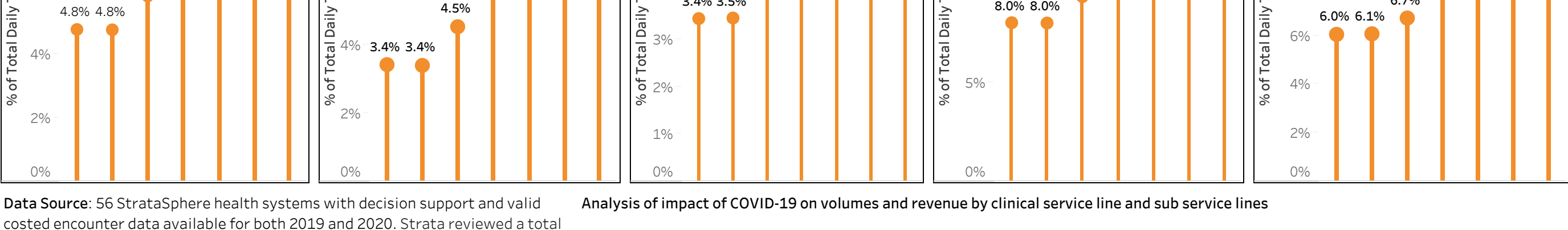


Section 10 Impact to Top 15 Hospital Visits by Care Family Data as of June 20, 2020



Section 11 Increase in Self Pay and Uninsured Data as of July 11, 2020

The study found that the number of uninsured or self-pay patients has increased mirroring the rise in the national unemployment rate. Nightly updates are expected for encounter information. As providers validate or obtain insurance for patients it is added to the data set. Self Pay is still increased, however we receive self pay data for the most recent month to date from initially reported numbers as more insurance is found.



Data Source: 56 StrataSphere health systems with decision support and valid costed encounter data available for both 2019 and 2020. Strata reviewed a total of 10 million encounters for matching timeframes in 2019 and 2020. All hospital billing encounters with nonzero charges were pulled.

Analysis of impact of COVID-19 on volumes and revenue by clinical service line and sub service lines

Timeframe: Baseline: Admit dates between March 20 and June 20, 2019. COVID era: Admit dates between March 20 and June 20, 2020.

The COVID era timeframe was chosen to reflect the first full weeks of widespread closures and shelter-in-place orders. The end date was chosen to ensure sufficient time for patient discharge and diagnosis coding to take place. The time frame will be expanded as time passes. Data Processing: All encounters were run through the 2020 Sg2 Care Group™ to obtain service lines and CARE families.

Methodology and Output: For all columns, data was aggregated by either service line or CARE family, and the metrics were calculated using the aggregate values. The columns in the output were calculated as follows: Baseline encounters: Total number of encounters in the 2019 time frame. COVID-era encounters: Total number of encounters in the 2020 time frame. Volume loss: Baseline encounters minus COVID-era encounters. Percent volume loss: Volume loss divided by baseline encounters.