

COVID-19 DATA of HOSPITALIZATION and MORTALITY ACROSS VARIOUS AGE GROUPS BY WEEK

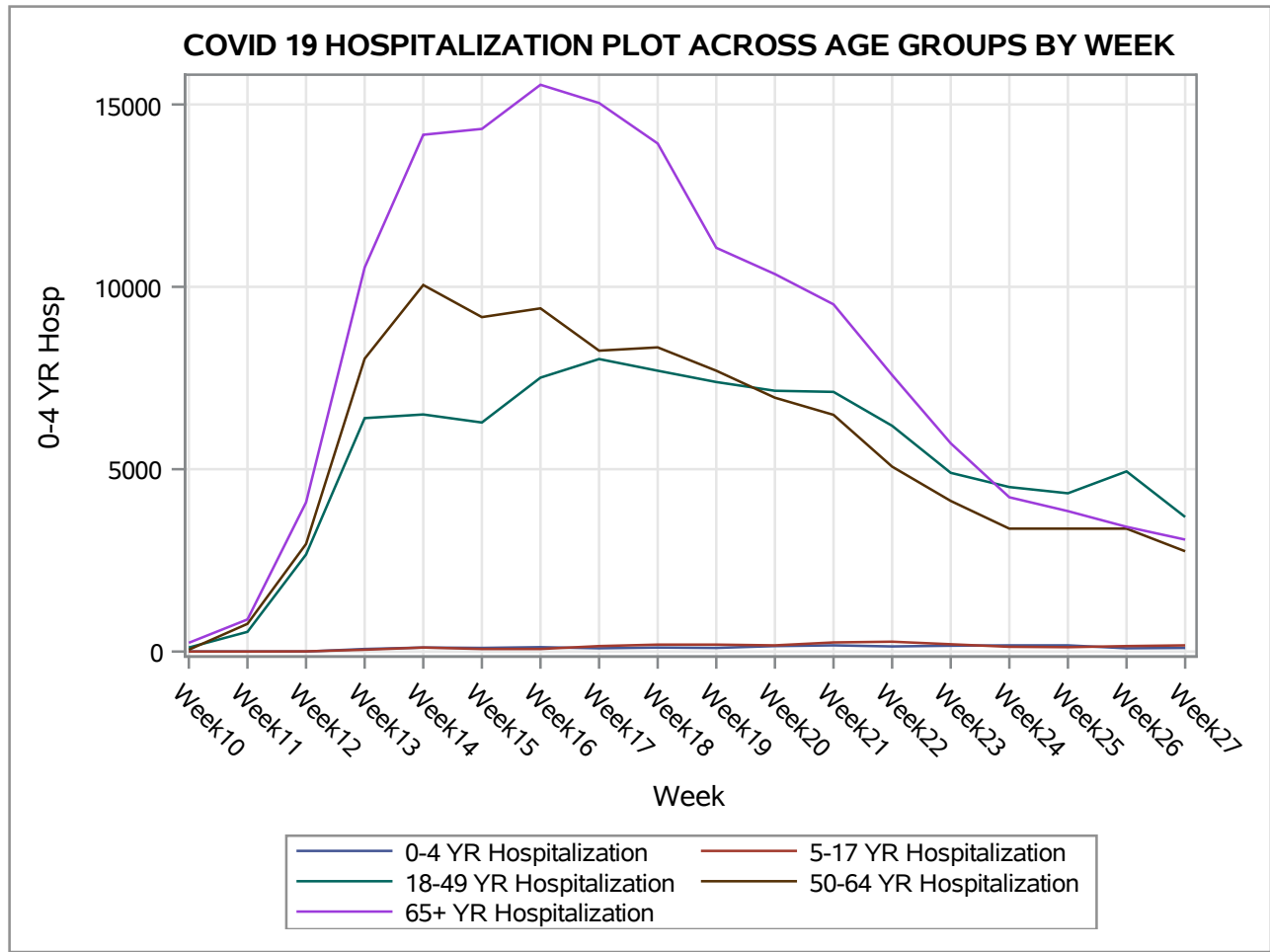
Obs	Week_end_Date	Week	0-4 YR Hosp	5-17 YR Hosp	18-49 YR Hosp	50-64 YR Hosp	65+ YR Hosp	0-4 YR Mortality	5-17 YR Mortality	18-49 YR Mortality
1	03/07/2020	Week10	0	0	110	50	240	0	0	2
2	03/14/2020	Week11	0	0	540	760	880	0	0	0
3	03/21/2020	Week12	0	5	2660	2950	4090	1	1	64
4	03/28/2020	Week13	70	50	6400	8030	10530	1	6	396
5	04/04/2020	Week14	110	110	6500	10050	14170	1	14	1055
6	04/11/2020	Week15	100	70	6280	9170	14330	2	25	1253
7	04/18/2020	Week16	120	70	7510	9410	15540	0	17	1186
8	04/25/2020	Week17	90	150	8020	8250	15040	2	24	959
9	05/02/2020	Week18	110	190	7700	8340	13930	0	15	787
10	05/09/2020	Week19	100	190	7390	7700	11070	3	19	666
11	05/16/2020	Week20	150	170	7150	6960	10350	2	14	598
12	05/23/2020	Week21	170	250	7120	6490	9520	0	5	481
13	05/30/2020	Week22	140	270	6190	5070	7580	1	11	431
14	06/06/2020	Week23	160	200	4900	4130	5710	2	6	413
15	06/13/2020	Week24	170	130	4510	3370	4230	0	7	384
16	06/20/2020	Week25	170	120	4340	3370	3850	1	8	323

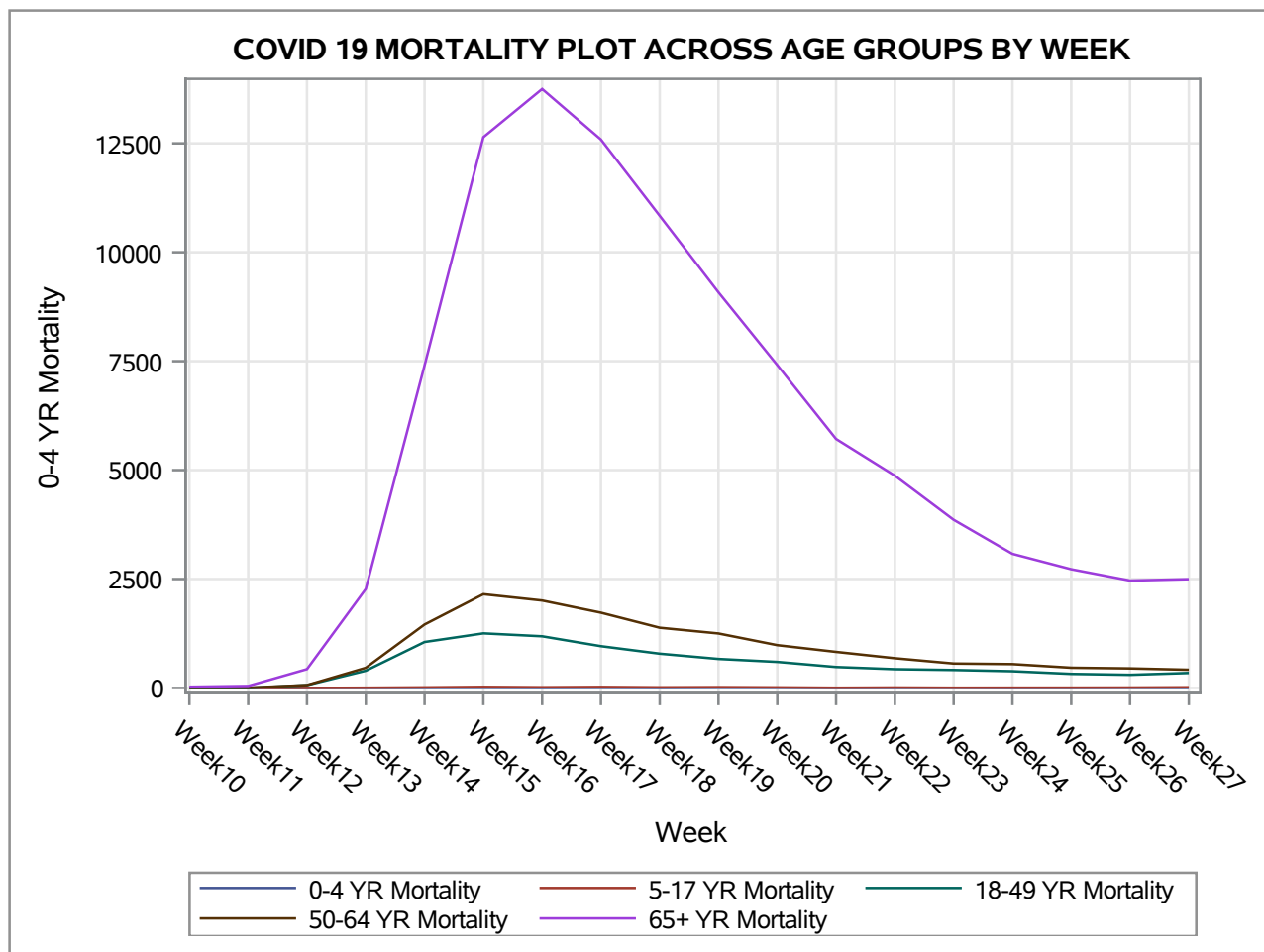
Obs	50-64 YR Mortality	65+ YR Mortality	Total_Hosp	Total_Mortality
1	5	28	400	35
2	6	46	2180	52
3	66	432	9705	564
4	463	2273	25080	3139
5	1457	7404	30940	9931
6	2152	12641	29950	16073
7	2007	13747	32650	16957
8	1728	12588	31550	15301
9	1382	10836	30270	13020
10	1251	9081	26450	11020
11	983	7410	24780	9007
12	828	5715	23550	7029
13	683	4872	19250	5998
14	561	3860	15100	4842
15	548	3078	12410	4017
16	465	2725	11850	3522

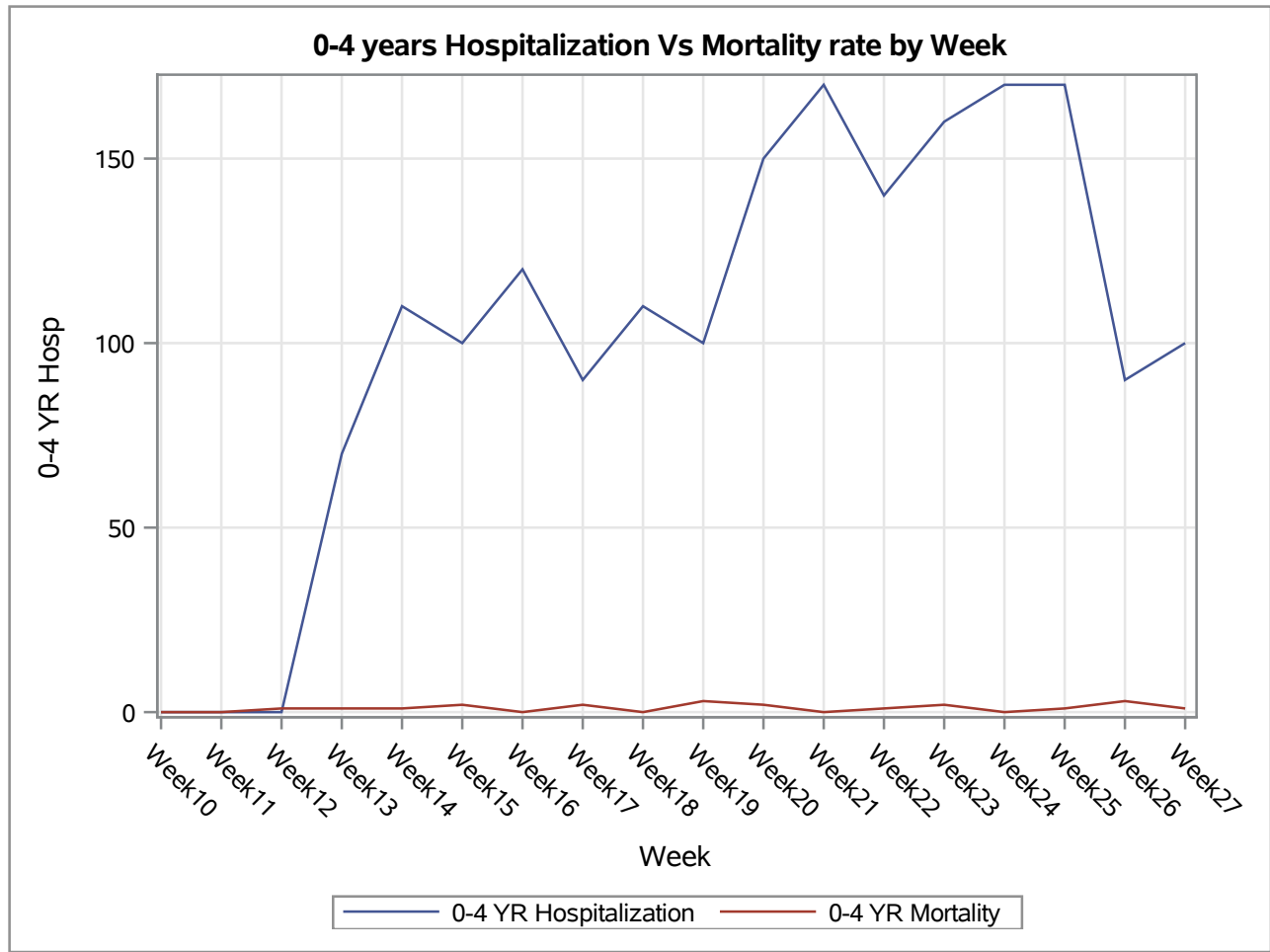
COVID-19 DATA of HOSPITALIZATION and MORTALITY ACROSS VARIOUS AGE GROUPS BY WEEK

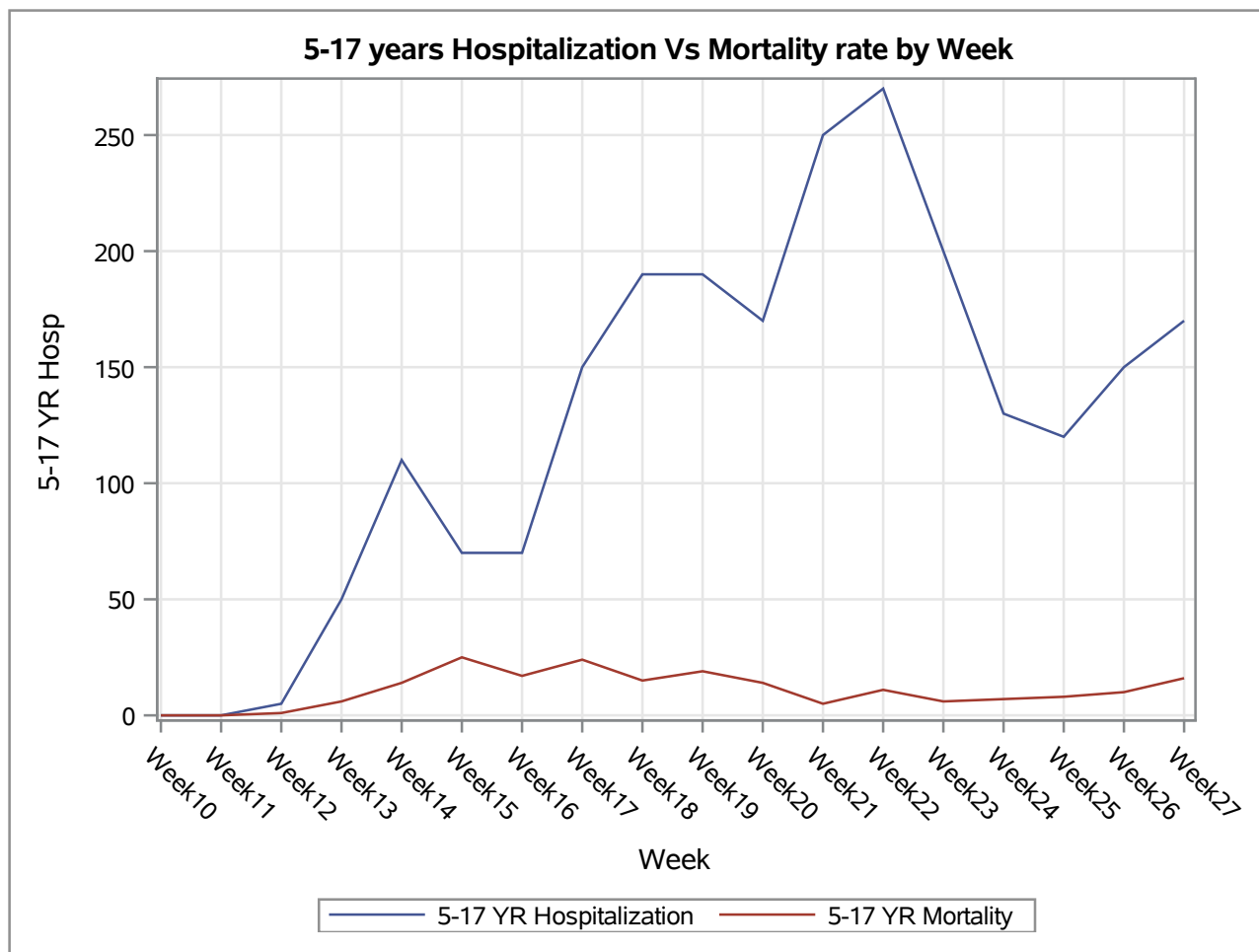
Obs	Week_end_Date	Week	0-4 YR Hosp	5-17 YR Hosp	18-49 YR Hosp	50-64 YR Hosp	65+ YR Hosp	0-4 YR Mortality	5-17 YR Mortality	18-49 YR Mortality
17	06/27/2020	Week26	90	150	4940	3370	3420	3	10	302
18	07/04/2020	Week27	100	170	3690	2750	3070	1	16	344

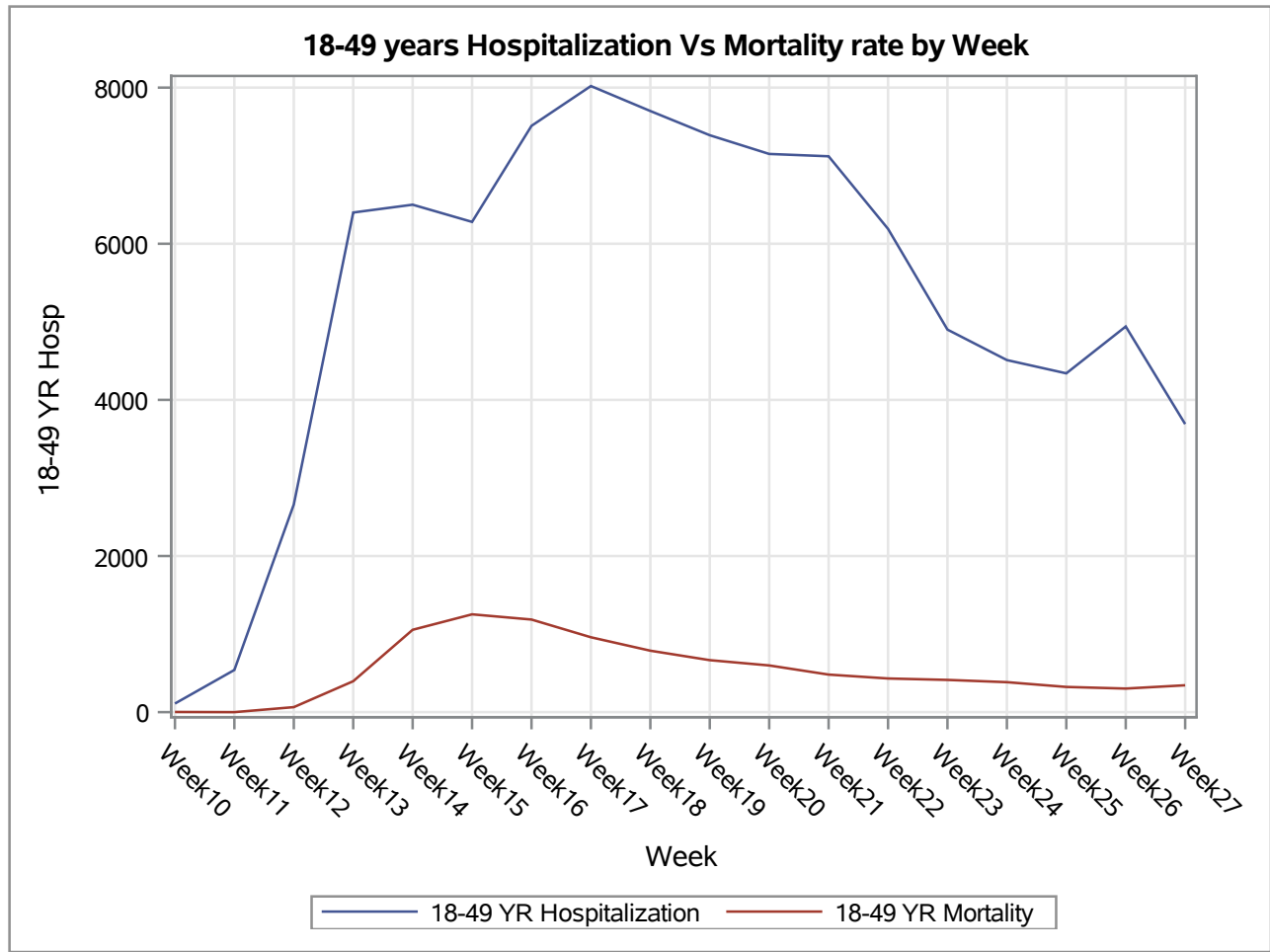
Obs	50-64 YR Mortality	65+ YR Mortality	Total_Hosp	Total_Mortality
17	449	2465	11970	3229
18	418	2497	9780	3276

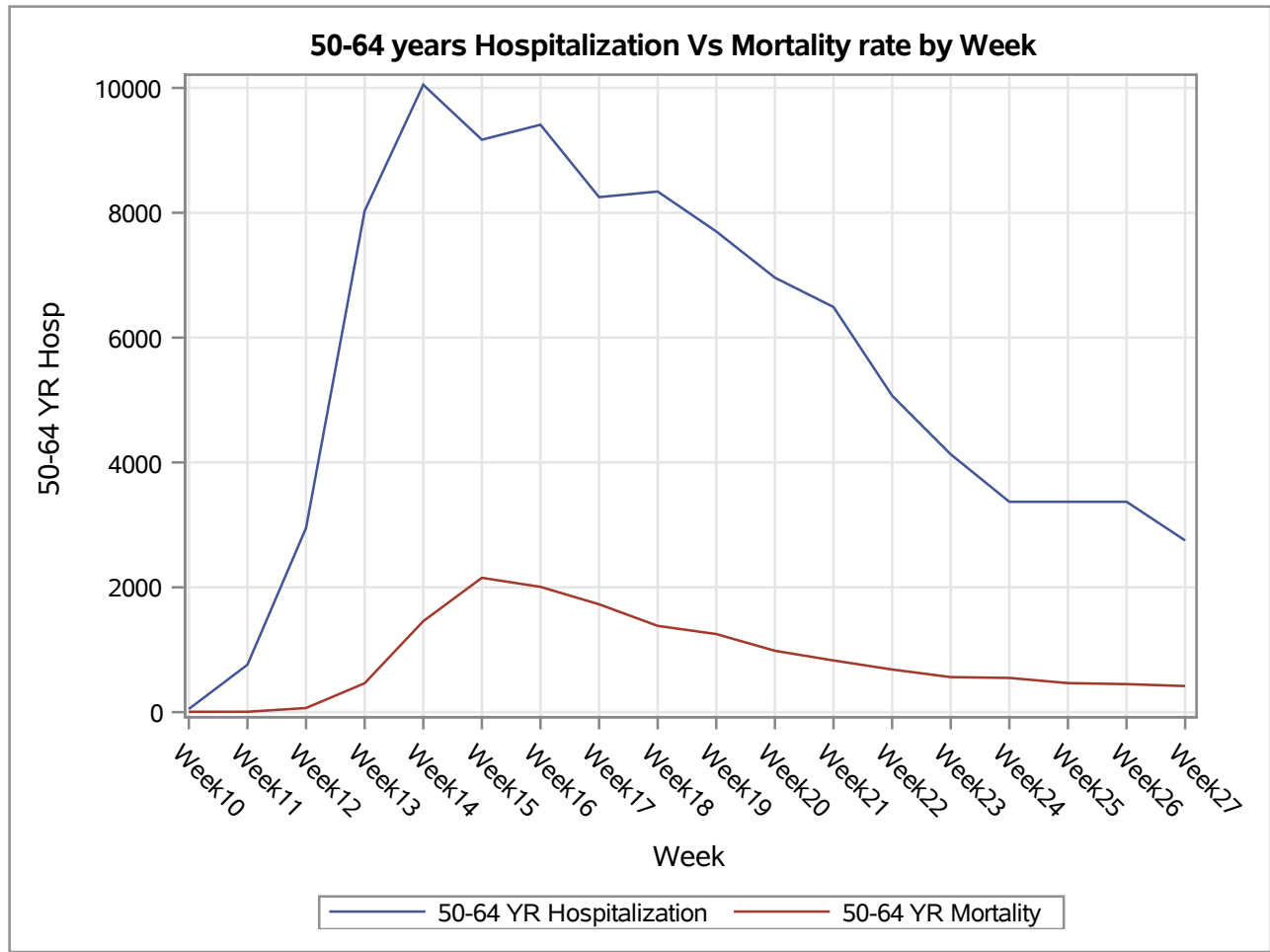


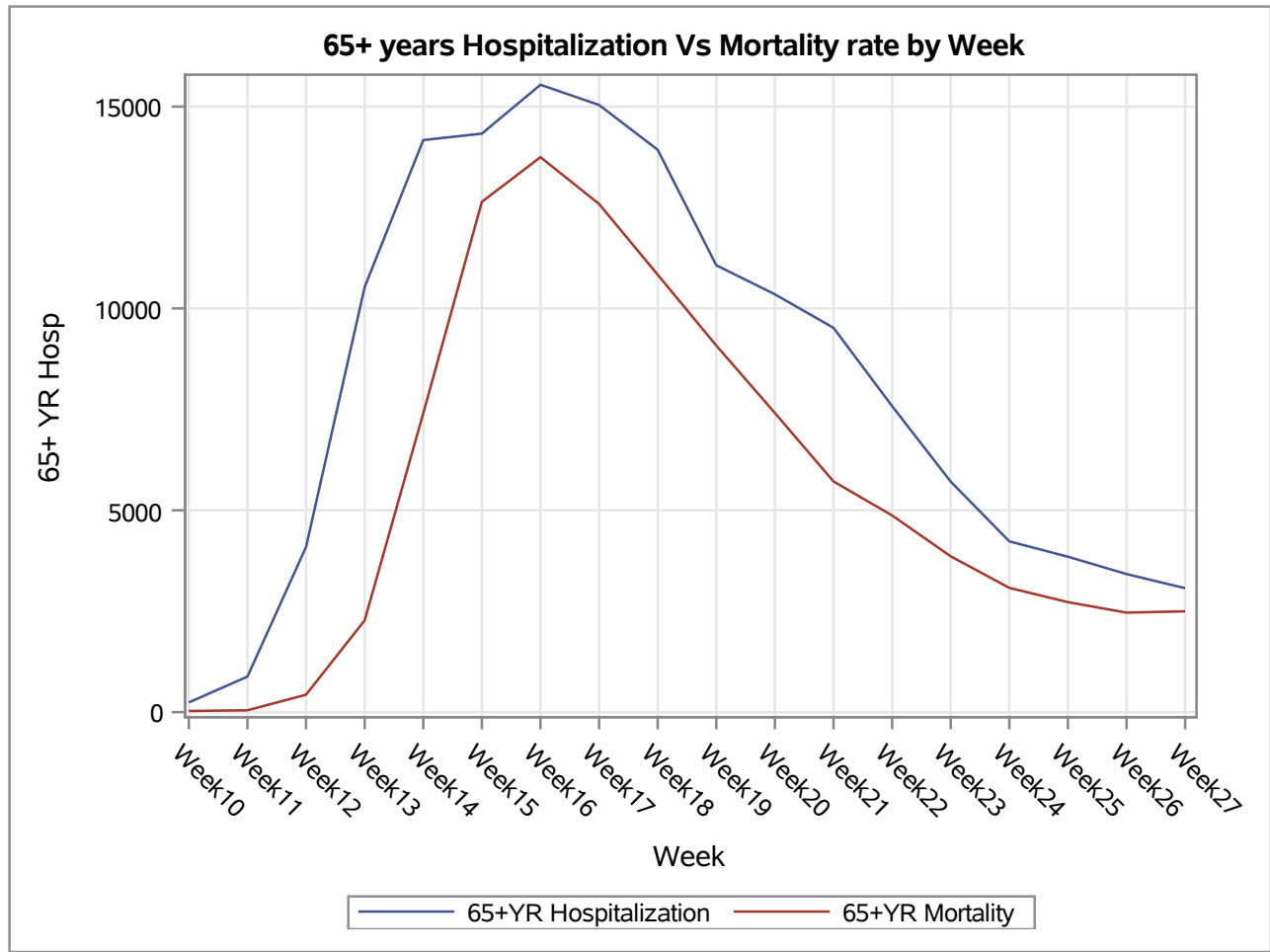












COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

Number of Observations	18
Number of Pairwise Missing	0

Simple Summary Statistics							
Variable	Type	N	Mean	Standard Deviation	Min	Max	Label
0-4 YR Hosp	Dependent	18	102.77778	56.33989	0.00000	170.00000	0-4 YR Hosp
5-17 YR Hosp	Dependent	18	127.50000	81.71417	0.00000	270.00000	5-17 YR Hosp
18-49 YR Hosp	Dependent	18	5330.55556	2357.98885	110.00000	8020.00000	18-49 YR Hosp
50-64 YR Hosp	Dependent	18	5567.77778	3079.96477	50.00000	10050.00000	50-64 YR Hosp
65+ YR Hosp	Dependent	18	8197.22222	5150.73816	240.00000	15540.00000	65+ YR Hosp

COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

Type of Model	VAR(1)
Estimation Method	Least Squares Estimation

Model Parameter Estimates						
Equation	Parameter	Estimate	Standard Error	t Value	Pr > t	Variable
0-4 YR Hosp	CONST1	9.82475	19.73438	0.50	0.6284	1
	AR1_1_1	0.31964	0.21719	1.47	0.1691	0-4 YR Hosp(t-1)
	AR1_1_2	0.10887	0.19123	0.57	0.5806	5-17 YR Hosp(t-1)
	AR1_1_3	0.01363	0.01336	1.02	0.3296	18-49 YR Hosp(t-1)
	AR1_1_4	0.00942	0.01359	0.69	0.5027	50-64 YR Hosp(t-1)
	AR1_1_5	-0.00888	0.00754	-1.18	0.2638	65+ YR Hosp(t-1)
5-17 YR Hosp	CONST2	-14.35768	18.67174	-0.77	0.4581	1
	AR1_2_1	0.04080	0.20550	0.20	0.8463	0-4 YR Hosp(t-1)
	AR1_2_2	0.09174	0.18094	0.51	0.6222	5-17 YR Hosp(t-1)
	AR1_2_3	0.05416	0.01264	4.28	0.0013	18-49 YR Hosp(t-1)
	AR1_2_4	-0.02870	0.01286	-2.23	0.0474	50-64 YR Hosp(t-1)
	AR1_2_5	0.00051	0.00714	0.07	0.9446	65+ YR Hosp(t-1)
18-49 YR Hosp	CONST3	1880.39049	625.64379	3.01	0.0120	1
	AR1_3_1	-0.88704	6.88566	-0.13	0.8998	0-4 YR Hosp(t-1)
	AR1_3_2	-10.07890	6.06271	-1.66	0.1246	5-17 YR Hosp(t-1)
	AR1_3_3	0.94613	0.42362	2.23	0.0472	18-49 YR Hosp(t-1)
	AR1_3_4	-0.18572	0.43093	-0.43	0.6748	50-64 YR Hosp(t-1)
	AR1_3_5	0.12221	0.23913	0.51	0.6194	65+ YR Hosp(t-1)
50-64 YR Hosp	CONST4	2190.09648	752.24391	2.91	0.0142	1
	AR1_4_1	-14.76130	8.27898	-1.78	0.1022	0-4 YR Hosp(t-1)
	AR1_4_2	-12.35178	7.28951	-1.69	0.1183	5-17 YR Hosp(t-1)
	AR1_4_3	0.59357	0.50934	1.17	0.2685	18-49 YR Hosp(t-1)
	AR1_4_4	0.98892	0.51813	1.91	0.0827	50-64 YR Hosp(t-1)
	AR1_4_5	-0.25010	0.28752	-0.87	0.4030	65+ YR Hosp(t-1)
65+ YR Hosp	CONST5	2654.00103	884.60111	3.00	0.0121	1
	AR1_5_1	-18.33651	9.73567	-1.88	0.0863	0-4 YR Hosp(t-1)
	AR1_5_2	-19.60451	8.57210	-2.29	0.0430	5-17 YR Hosp(t-1)
	AR1_5_3	0.53869	0.59896	0.90	0.3877	18-49 YR Hosp(t-1)
	AR1_5_4	0.97059	0.60929	1.59	0.1395	50-64 YR Hosp(t-1)
	AR1_5_5	0.21897	0.33811	0.65	0.5305	65+ YR Hosp(t-1)

COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORCAST FOR 5 WEEKS

Covariances of Innovations					
Variable	0-4 YR Hosp	5-17 YR Hosp	18-49 YR Hosp	50-64 YR Hosp	65+ YR Hosp
0-4 YR Hosp	865.95268	-314.92484	9345.12382	16119.36049	21089.56108
5-17 YR Hosp	-314.92484	775.20515	3030.07572	-1772.94681	363.51506
18-49 YR Hosp	9345.12382	3030.07572	870364.89878	846370.91820	985624.53230
50-64 YR Hosp	16119.36049	-1772.94681	846370.91820	1258242.7900	1351783.9743
65+ YR Hosp	21089.56108	363.51506	985624.53230	1351783.9743	1739971.1854

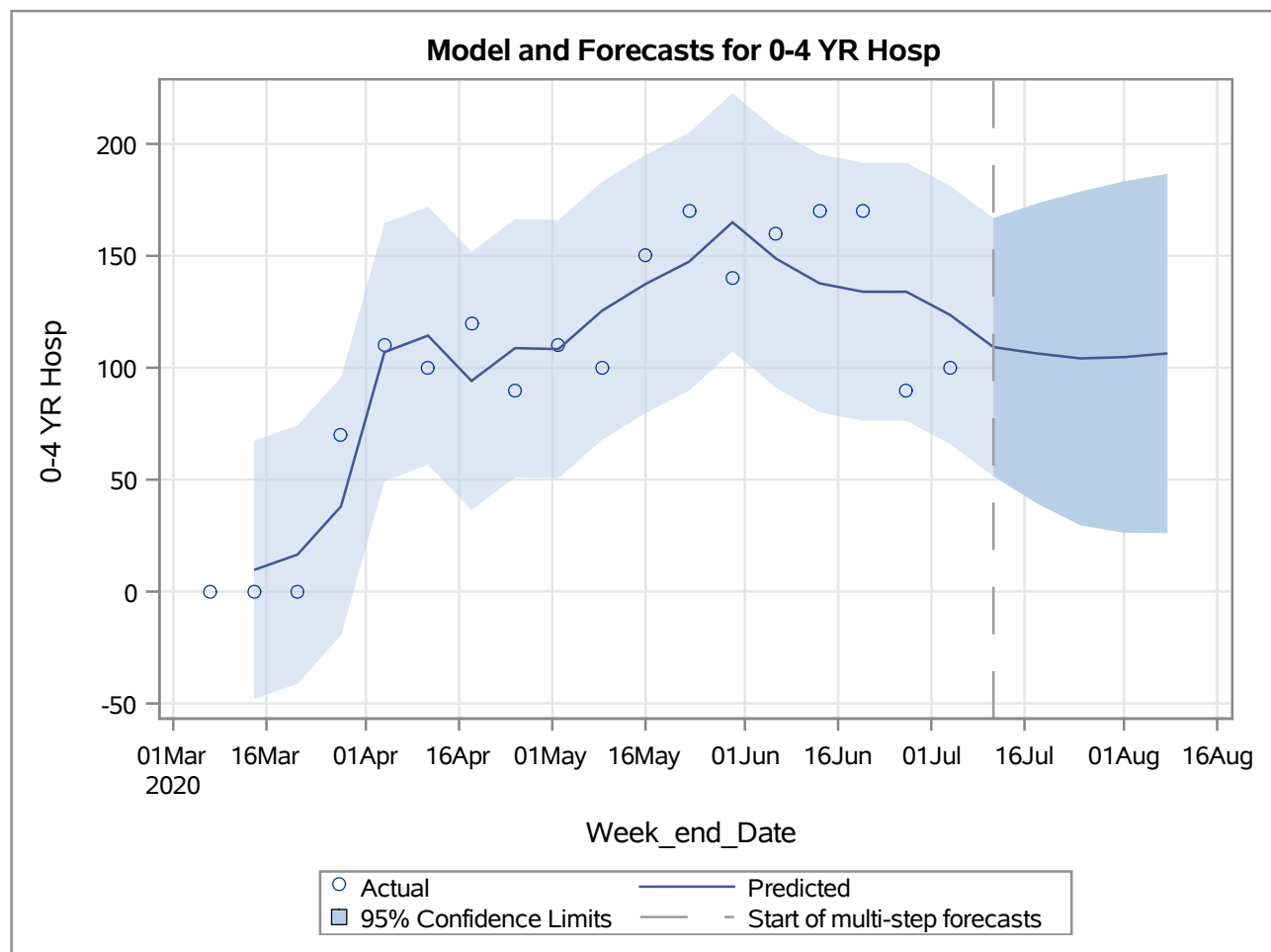
Log-likelihood	-464.927
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Information Criteria	
AICC	877.0964
HQC	1023.582
AIC	1019.855
SBC	1057.35
FPEC	1.531E23

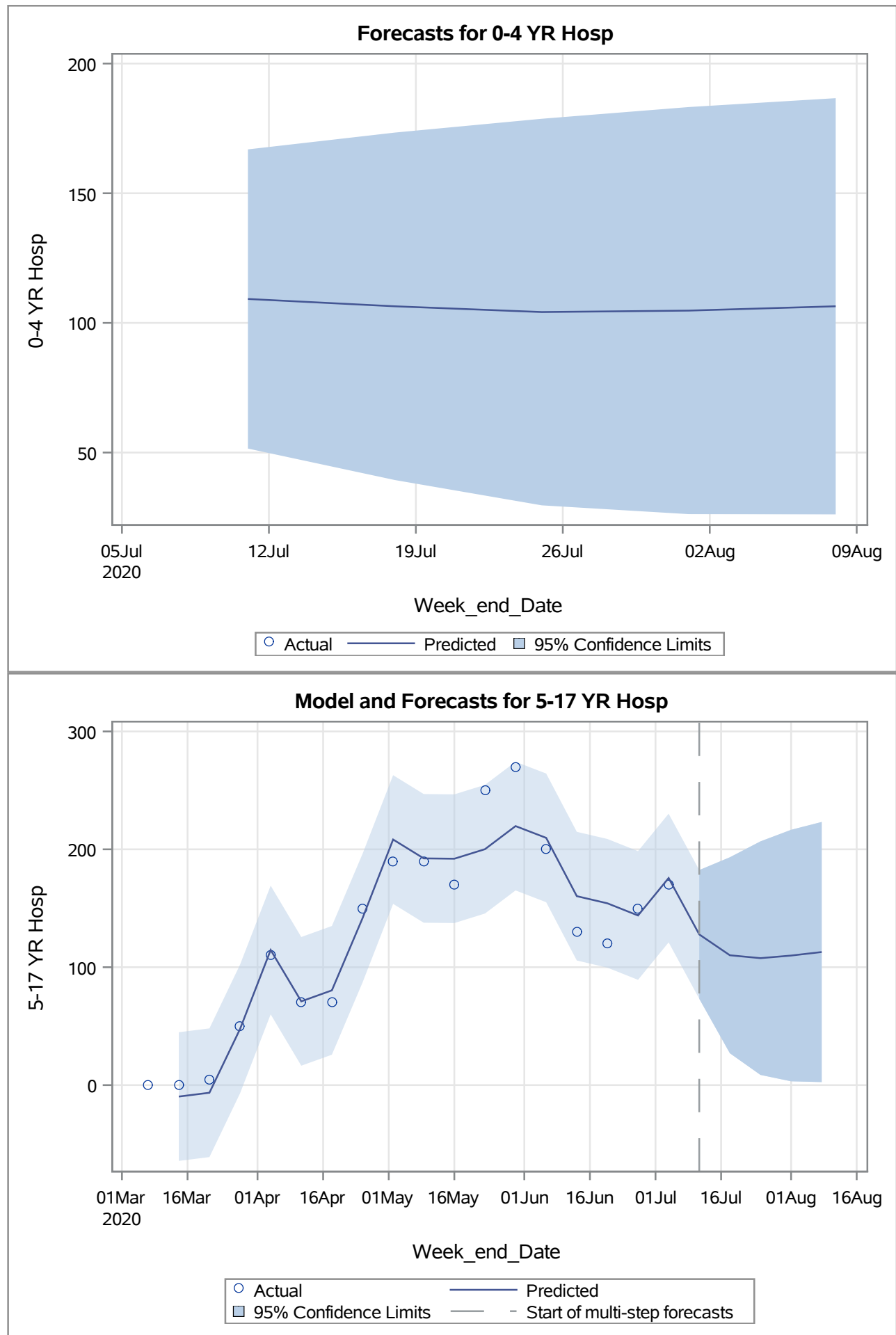
Forecasts						
Variable	Obs	Time	Forecast	Standard Error	95% Confidence Limits	
0-4 YR Hosp	19	Sat, 11 Jul 2020	109.22542	29.42707	51.54941	166.90142
	20	Sat, 18 Jul 2020	106.39667	34.17839	39.40827	173.38508
	21	Sat, 25 Jul 2020	104.18298	38.02704	29.65136	178.71461
	22	Sat, 1 Aug 2020	104.74189	40.04291	26.25922	183.22455
	23	Sat, 8 Aug 2020	106.40766	40.94383	26.15923	186.65610
5-17 YR Hosp	19	Sat, 11 Jul 2020	127.79698	27.84251	73.22667	182.36728
	20	Sat, 18 Jul 2020	110.12741	42.40449	27.01614	193.23868
	21	Sat, 25 Jul 2020	107.68115	50.53202	8.64022	206.72208
	22	Sat, 1 Aug 2020	109.87839	54.41278	3.23130	216.52548
	23	Sat, 8 Aug 2020	112.87453	56.28043	2.56691	223.18215
18-49 YR Hosp	19	Sat, 11 Jul 2020	3433.90993	932.93349	1605.39389	5262.42598
	20	Sat, 18 Jul 2020	3576.69718	1257.57877	1111.88809	6041.50628
	21	Sat, 25 Jul 2020	3893.73431	1386.03931	1177.14718	6610.32144
	22	Sat, 1 Aug 2020	4229.13529	1465.73128	1356.35477	7101.91582
	23	Sat, 8 Aug 2020	4538.48746	1544.64179	1511.04517	7565.92975
50-64 YR Hosp	19	Sat, 11 Jul 2020	2756.16054	1121.71422	557.64107	4954.68001
	20	Sat, 18 Jul 2020	3058.69373	1628.23669	-132.59155	6249.97901

COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

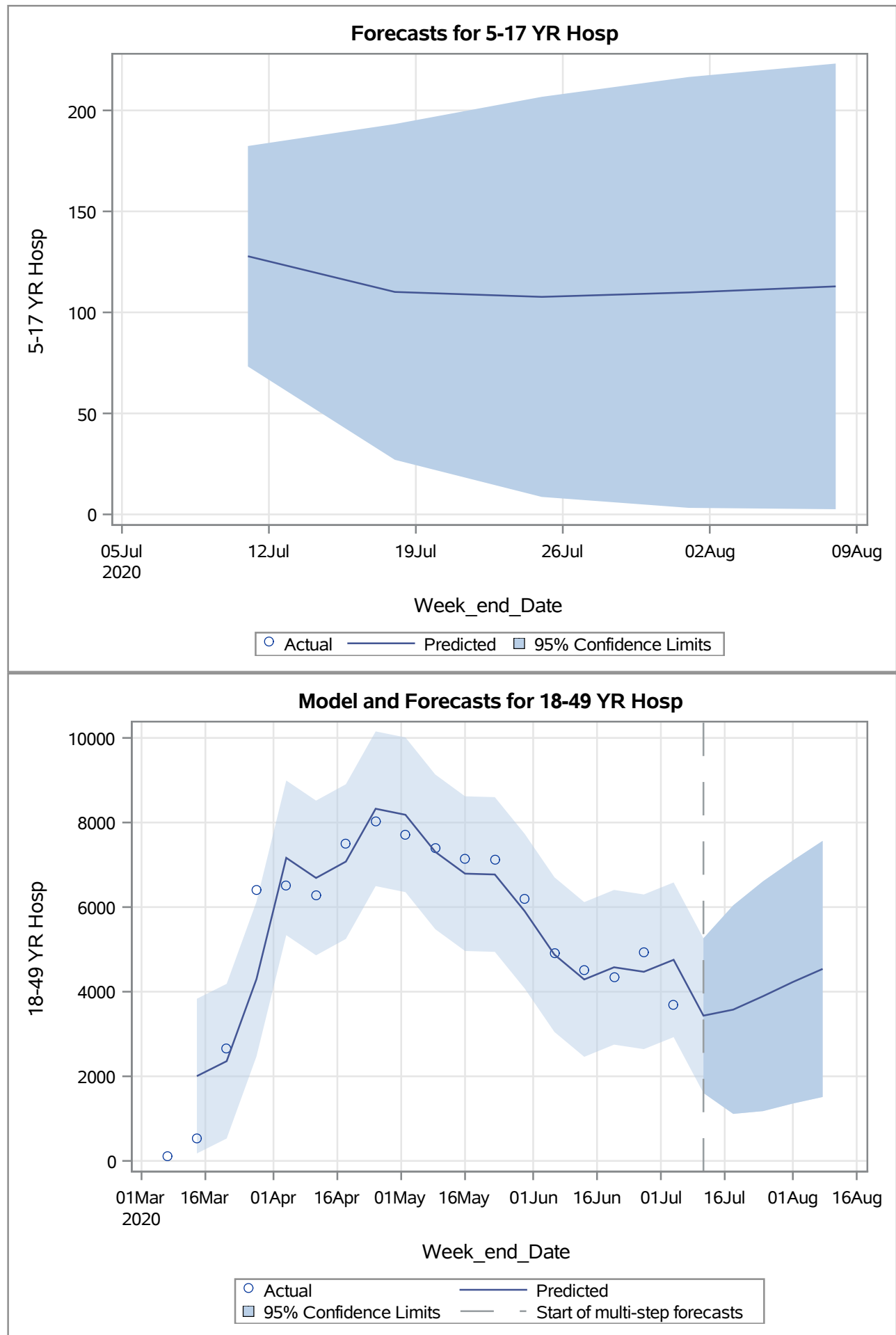
Forecasts						
Variable	Obs	Time	Forecast	Standard Error	95% Confidence Limits	
	21	Sat, 25 Jul 2020	3584.89419	1845.07402	-31.38443	7201.17281
	22	Sat, 1 Aug 2020	4138.27328	1978.03776	261.39051	8015.15604
	23	Sat, 8 Aug 2020	4608.87040	2115.32531	462.90898	8754.83183
65+ YR Hosp	19	Sat, 11 Jul 2020	2816.72381	1319.07967	231.37516	5402.07246
	20	Sat, 18 Jul 2020	3287.49742	2094.93812	-818.50585	7393.50070
	21	Sat, 25 Jul 2020	4159.41160	2557.88327	-853.94748	9172.77068
	22	Sat, 1 Aug 2020	5120.39801	2902.54939	-568.49425	10809.29027
	23	Sat, 8 Aug 2020	5995.28760	3229.61099	-334.63362	12325.20882



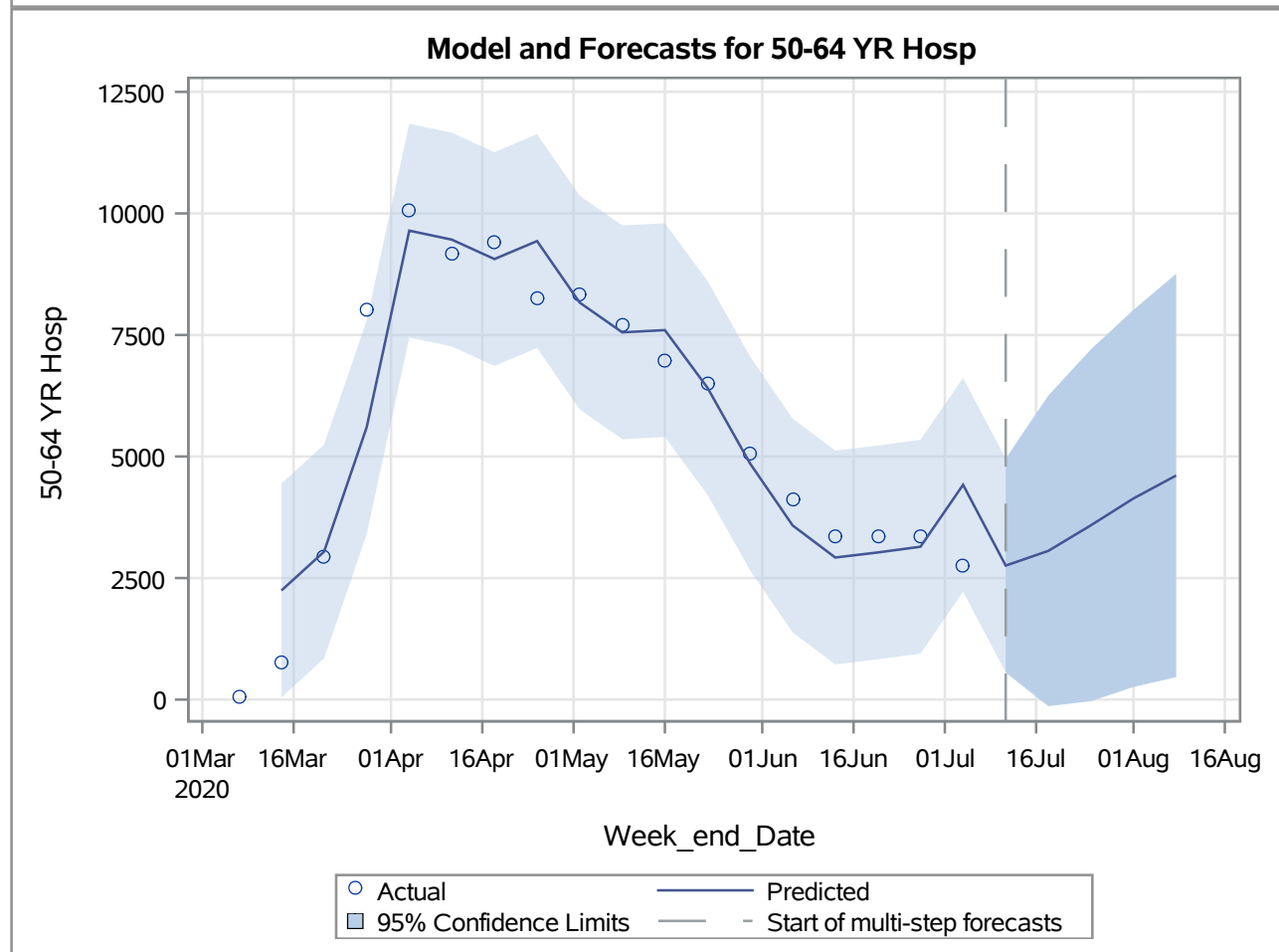
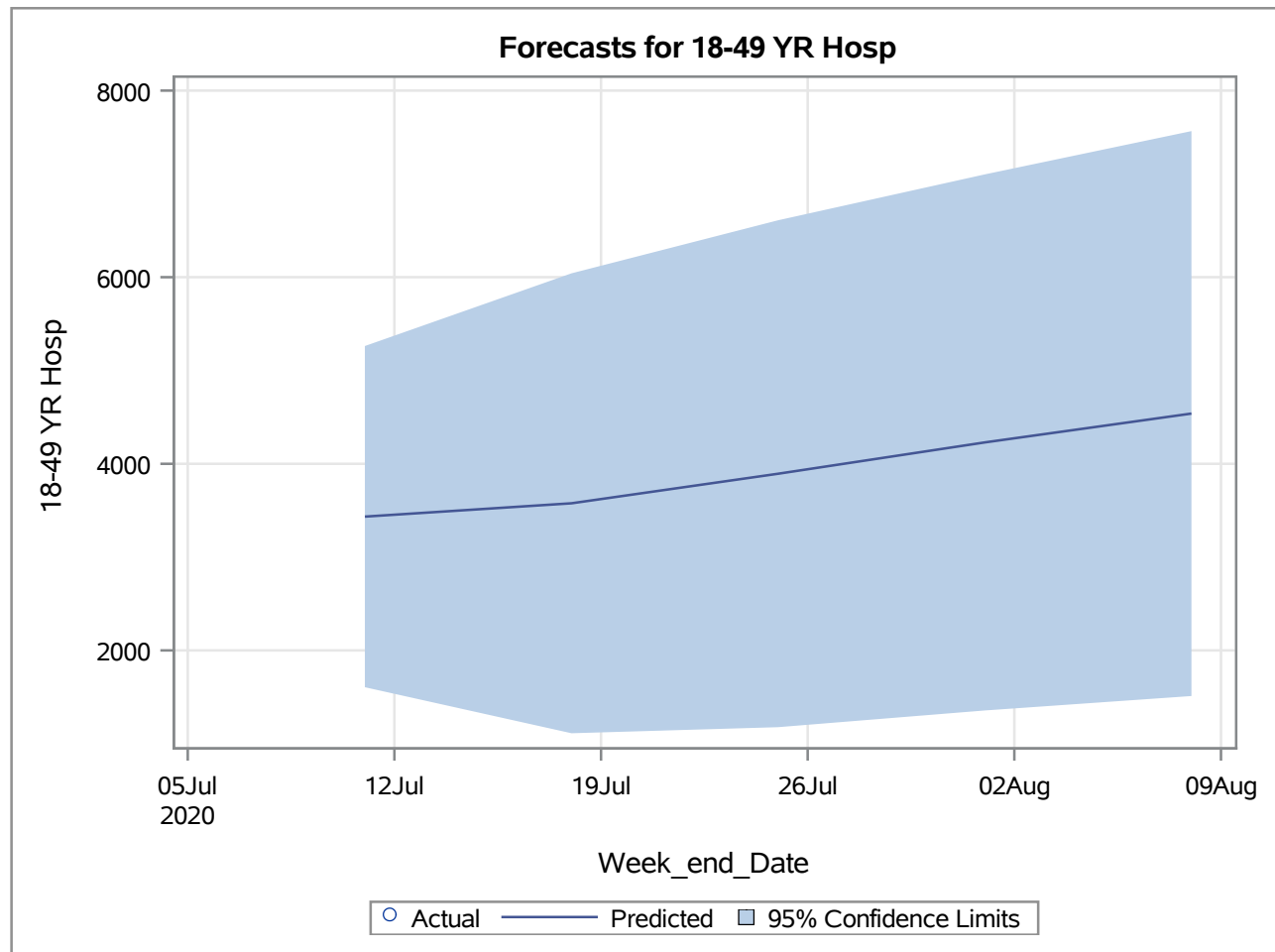
COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS



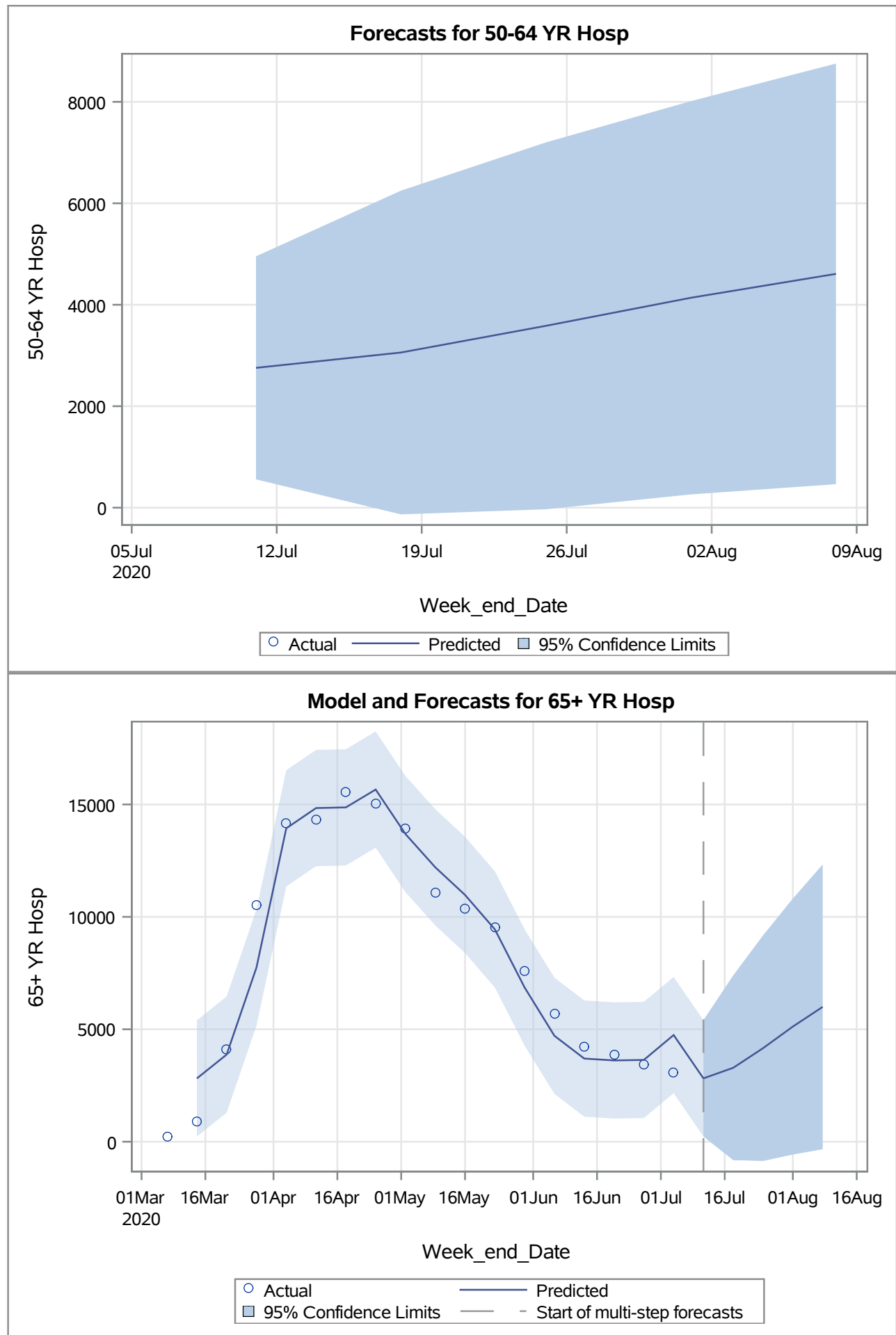
COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

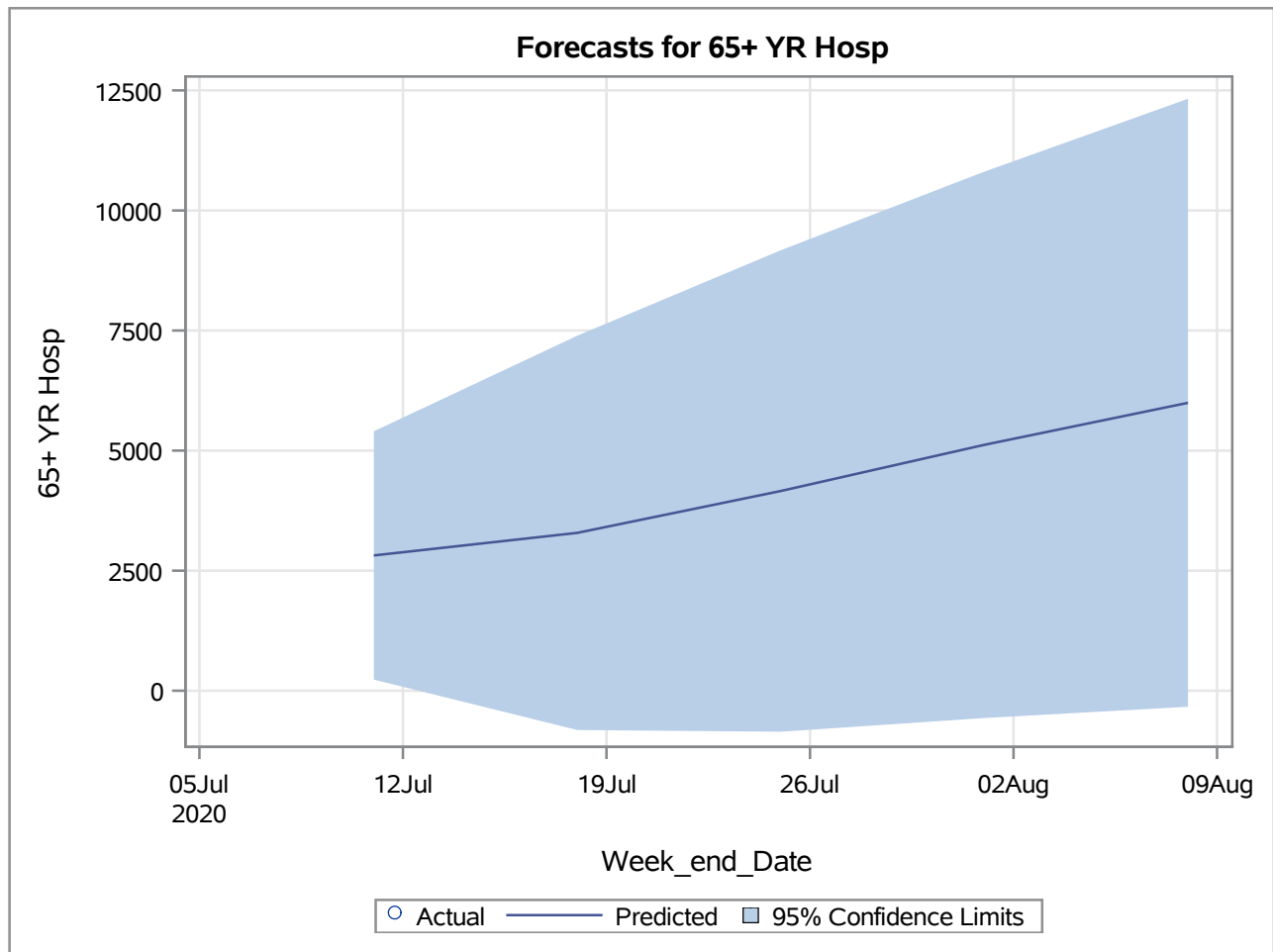


COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS



COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS



COVID 19 HOSPITALIZATION SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

COVID 19 MORTALITY SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

Number of Observations	18
Number of Pairwise Missing	0

Simple Summary Statistics							
Variable	Type	N	Mean	Standard Deviation	Min	Max	Label
0-4 YR Mortality	Dependent	18	1.11111	1.02262	0.00000	3.00000	0-4 YR Mortality
5-17 YR Mortality	Dependent	18	11.00000	7.58481	0.00000	25.00000	5-17 YR Mortality
18-49 YR Mortality	Dependent	18	535.77778	381.38533	0.00000	1253.00000	18-49 YR Mortality
50-64 YR Mortality	Dependent	18	858.44444	665.22665	5.00000	2152.00000	50-64 YR Mortality
65+ YR Mortality	Dependent	18	5649.88889	4525.25730	28.00000	13747.00000	65+ YR Mortality

COVID 19 MORTALITY SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

Type of Model	VAR(1)
Estimation Method	Least Squares Estimation

Model Parameter Estimates						
Equation	Parameter	Estimate	Standard Error	t Value	Pr > t	Variable
0-4 YR Mortality	CONST1	1.04472	0.58158	1.80	0.0999	1
	AR1_1_1	-0.51398	0.43529	-1.18	0.2626	0-4 YR Mortality(t-1)
	AR1_1_2	0.12643	0.15729	0.80	0.4385	5-17 YR Mortality(t-1)
	AR1_1_3	0.00631	0.00641	0.98	0.3463	18-49 YR Mortality(t-1)
	AR1_1_4	-0.00664	0.00625	-1.06	0.3108	50-64 YR Mortality(t-1)
	AR1_1_5	0.00030	0.00041	0.74	0.4766	65+ YR Mortality(t-1)
5-17 YR Mortality	CONST2	2.22578	2.41336	0.92	0.3762	1
	AR1_2_1	0.77541	1.80631	0.43	0.6760	0-4 YR Mortality(t-1)
	AR1_2_2	-0.29789	0.65269	-0.46	0.6570	5-17 YR Mortality(t-1)
	AR1_2_3	0.04188	0.02660	1.57	0.1437	18-49 YR Mortality(t-1)
	AR1_2_4	-0.01540	0.02593	-0.59	0.5645	50-64 YR Mortality(t-1)
	AR1_2_5	0.00042	0.00171	0.25	0.8103	65+ YR Mortality(t-1)
18-49 YR Mortality	CONST3	74.74426	95.30988	0.78	0.4495	1
	AR1_3_1	18.15832	71.33609	0.25	0.8038	0-4 YR Mortality(t-1)
	AR1_3_2	-0.03702	25.77632	-0.00	0.9989	5-17 YR Mortality(t-1)
	AR1_3_3	2.25126	1.05061	2.14	0.0553	18-49 YR Mortality(t-1)
	AR1_3_4	-0.59026	1.02391	-0.58	0.5759	50-64 YR Mortality(t-1)
	AR1_3_5	-0.04062	0.06755	-0.60	0.5598	65+ YR Mortality(t-1)
50-64 YR Mortality	CONST4	28.74857	132.62486	0.22	0.8324	1
	AR1_4_1	-4.71967	99.26504	-0.05	0.9629	0-4 YR Mortality(t-1)
	AR1_4_2	-0.77458	35.86806	-0.02	0.9832	5-17 YR Mortality(t-1)
	AR1_4_3	3.50157	1.46193	2.40	0.0355	18-49 YR Mortality(t-1)
	AR1_4_4	-0.83646	1.42479	-0.59	0.5690	50-64 YR Mortality(t-1)
	AR1_4_5	-0.04839	0.09400	-0.51	0.6169	65+ YR Mortality(t-1)
65+ YR Mortality	CONST5	8.40836	714.57430	0.01	0.9908	1
	AR1_5_1	-99.47194	534.83370	-0.19	0.8558	0-4 YR Mortality(t-1)
	AR1_5_2	-1.26469	193.25481	-0.01	0.9949	5-17 YR Mortality(t-1)
	AR1_5_3	13.29248	7.87680	1.69	0.1196	18-49 YR Mortality(t-1)
	AR1_5_4	-0.44620	7.67667	-0.06	0.9547	50-64 YR Mortality(t-1)
	AR1_5_5	-0.13371	0.50648	-0.26	0.7967	65+ YR Mortality(t-1)

COVID 19 MORTALITY SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

Covariances of Innovations					
Variable	0-4 YR Mortality	5-17 YR Mortality	18-49 YR Mortality	50-64 YR Mortality	65+ YR Mortality
0-4 YR Mortality	1.21285	3.30206	6.38105	11.80313	13.79868
5-17 YR Mortality	3.30206	20.88509	245.98613	355.91184	1991.81435
18-49 YR Mortality	6.38105	245.98613	32573.84618	43888.68320	230079.62996
50-64 YR Mortality	11.80313	355.91184	43888.68320	63072.93213	335972.44838
65+ YR Mortality	13.79868	1991.81435	230079.62996	335972.44838	1830998.3060

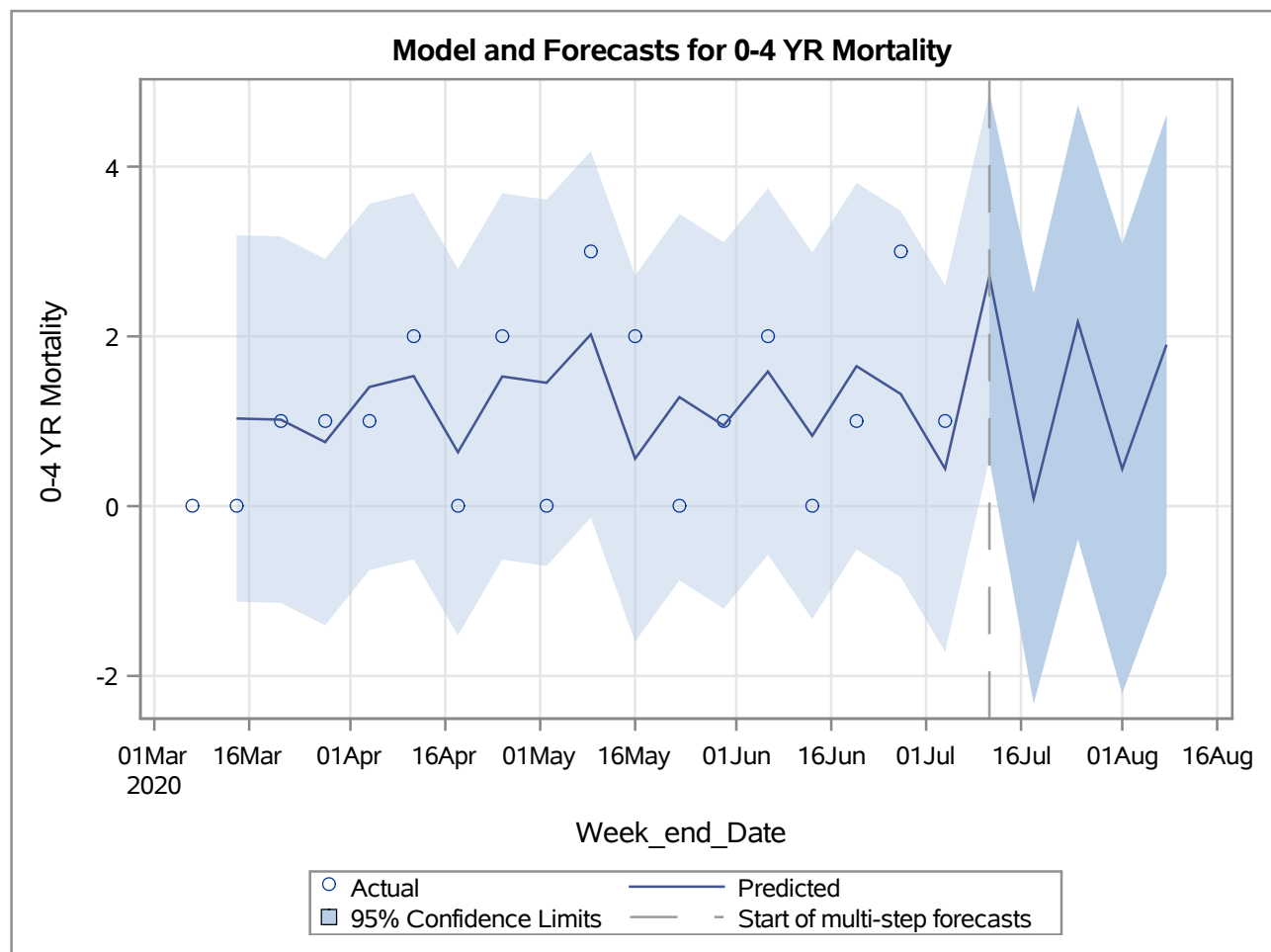
Log-likelihood	-290.809
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AICC	528.8602
HQC	675.3459
AIC	671.6188
SBC	709.1134
FPEC	1.944E14

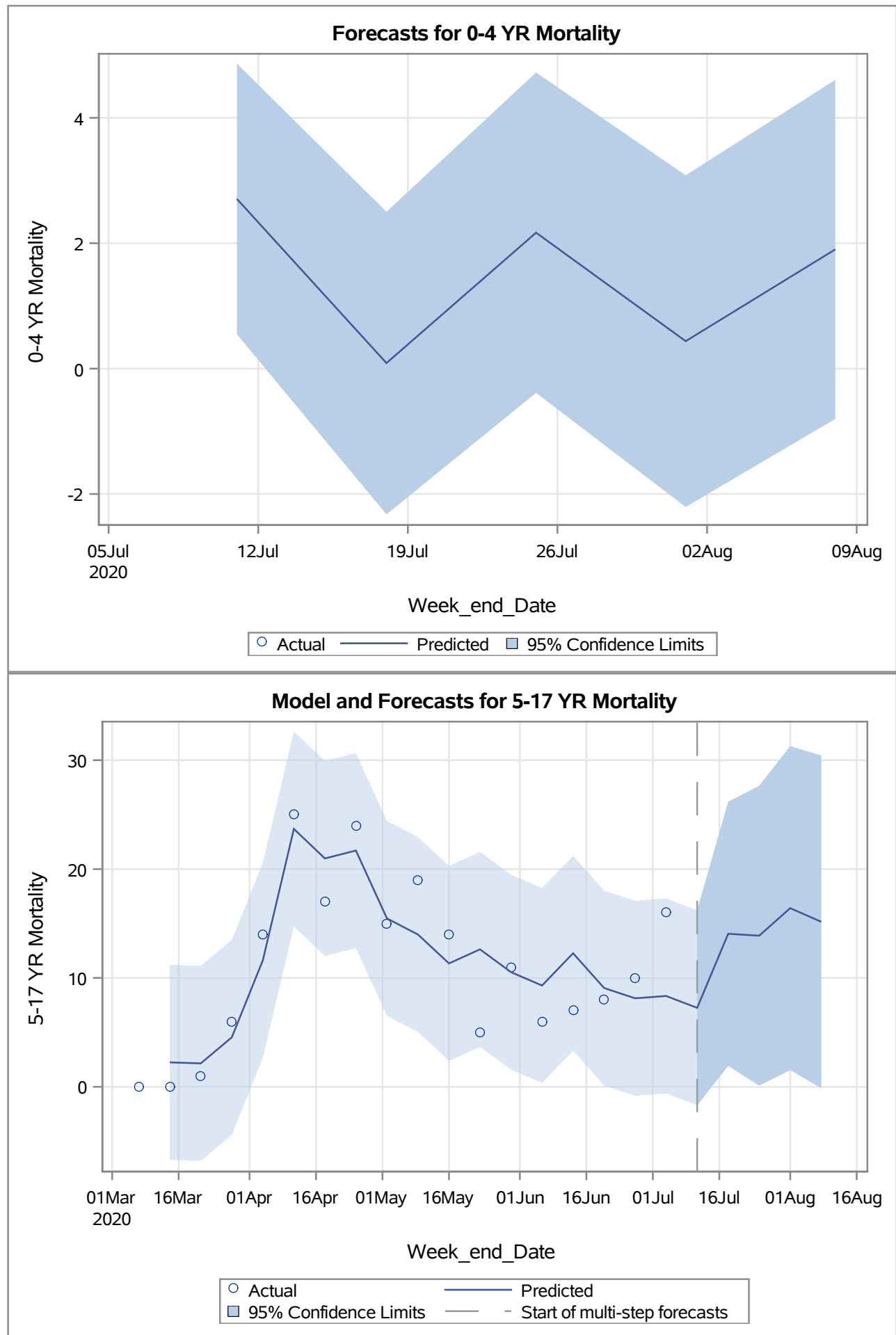
Forecasts						
Variable	Obs	Time	Forecast	Standard Error	95% Confidence Limits	
0-4 YR Mortality	19	Sat, 11 Jul 2020	2.70711	1.10129	0.54862	4.86561
	20	Sat, 18 Jul 2020	0.08831	1.23141	-2.32522	2.50184
	21	Sat, 25 Jul 2020	2.16825	1.30379	-0.38714	4.72364
	22	Sat, 1 Aug 2020	0.43791	1.34969	-2.20744	3.08327
	23	Sat, 8 Aug 2020	1.90202	1.37992	-0.80256	4.60661
5-17 YR Mortality	19	Sat, 11 Jul 2020	7.25345	4.57002	-1.70363	16.21052
	20	Sat, 18 Jul 2020	14.05404	6.18568	1.93032	26.17775
	21	Sat, 25 Jul 2020	13.88094	7.02296	0.11618	27.64569
	22	Sat, 1 Aug 2020	16.41052	7.58750	1.53930	31.28175
	23	Sat, 8 Aug 2020	15.15656	7.79413	-0.11964	30.43277
18-49 YR Mortality	19	Sat, 11 Jul 2020	518.58414	180.48226	164.84541	872.32287
	20	Sat, 18 Jul 2020	690.85528	284.03098	134.16478	1247.54577
	21	Sat, 25 Jul 2020	799.80048	346.93655	119.81733	1479.78363
	22	Sat, 1 Aug 2020	817.48342	375.32595	81.85808	1553.10875
	23	Sat, 8 Aug 2020	783.31599	383.50751	31.65508	1534.97690
50-64 YR Mortality	19	Sat, 11 Jul 2020	745.70568	251.14325	253.47395	1237.93740
	20	Sat, 18 Jul 2020	1011.75851	449.71254	130.33813	1893.17889

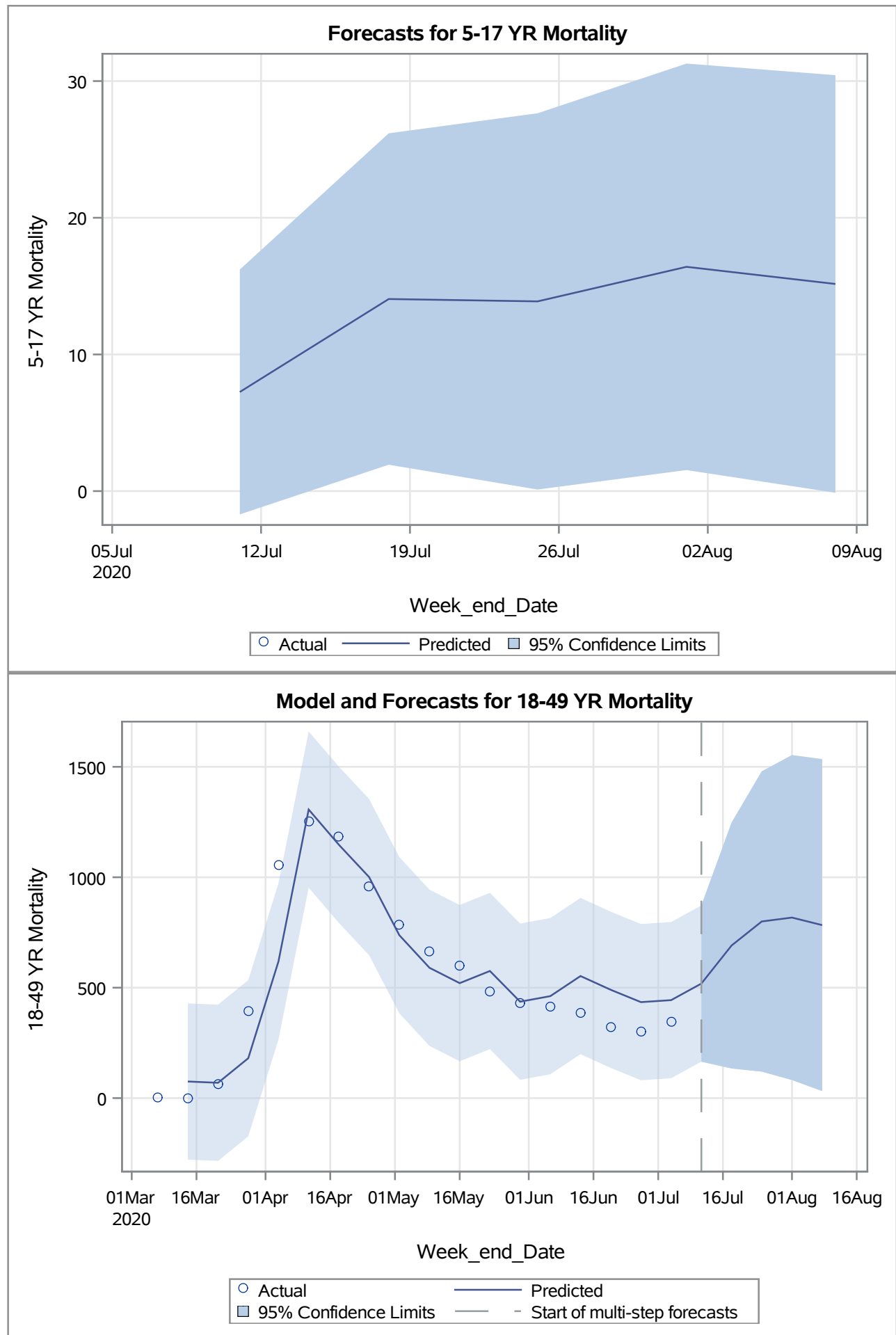
COVID 19 MORTALITY SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

Forecasts						
Variable	Obs	Time	Forecast	Standard Error	95% Confidence Limits	
	21	Sat, 25 Jul 2020	1311.33141	576.57551	181.26418	2441.39863
	22	Sat, 1 Aug 2020	1327.08677	641.85657	69.07100	2585.10254
	23	Sat, 8 Aug 2020	1342.52809	663.57925	41.93665	2643.11952
65+ YR Mortality	19	Sat, 11 Jul 2020	3940.91523	1353.14386	1288.80199	6593.02846
	20	Sat, 18 Jul 2020	5763.52706	2514.66877	834.86684	10692.18729
	21	Sat, 25 Jul 2020	7942.91024	3519.79033	1044.24795	14841.57253
	22	Sat, 1 Aug 2020	8759.29964	4130.92950	662.82660	16855.77267
	23	Sat, 8 Aug 2020	9047.07713	4392.42788	438.07667	17656.07759

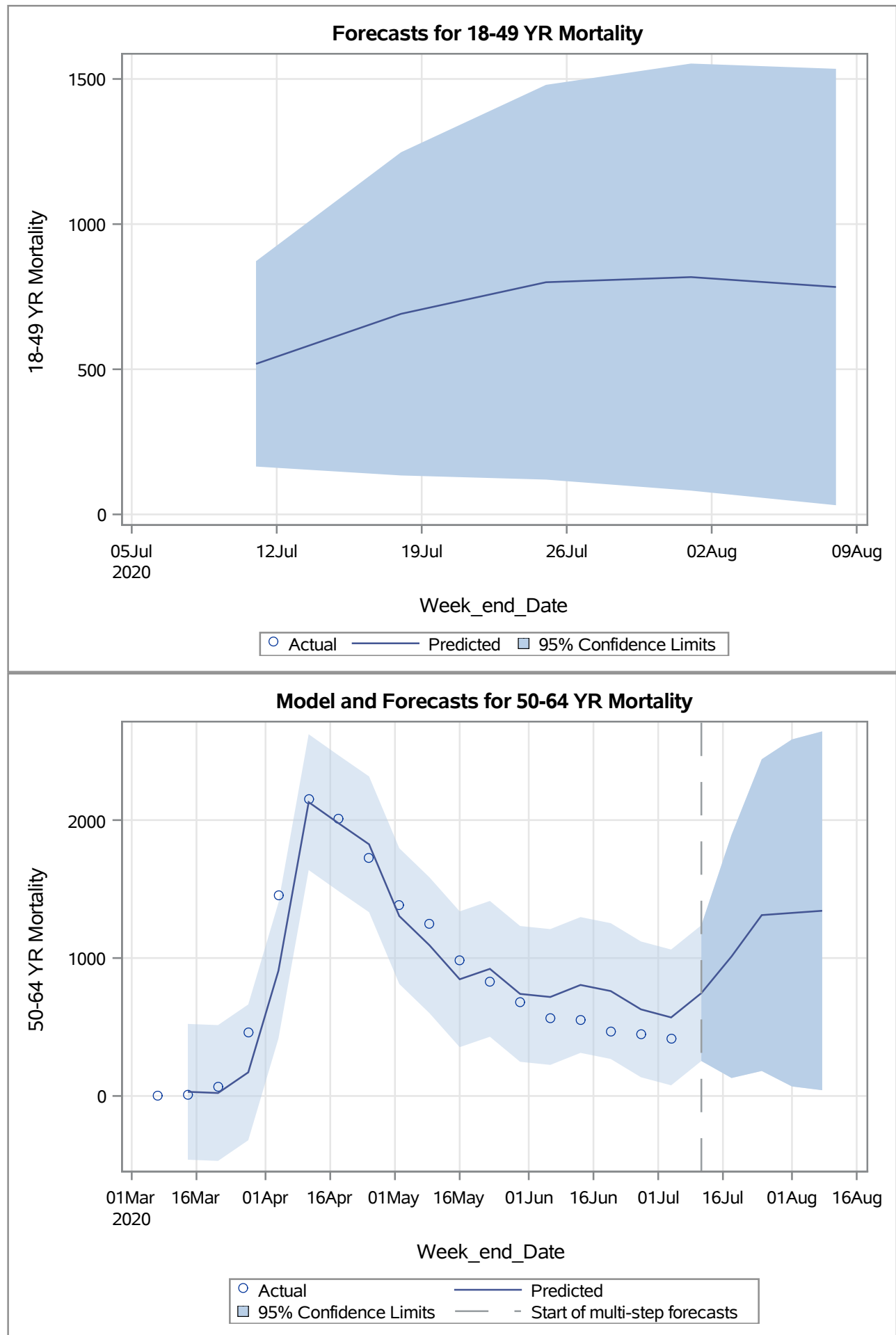


COVID 19 MORTALITY SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

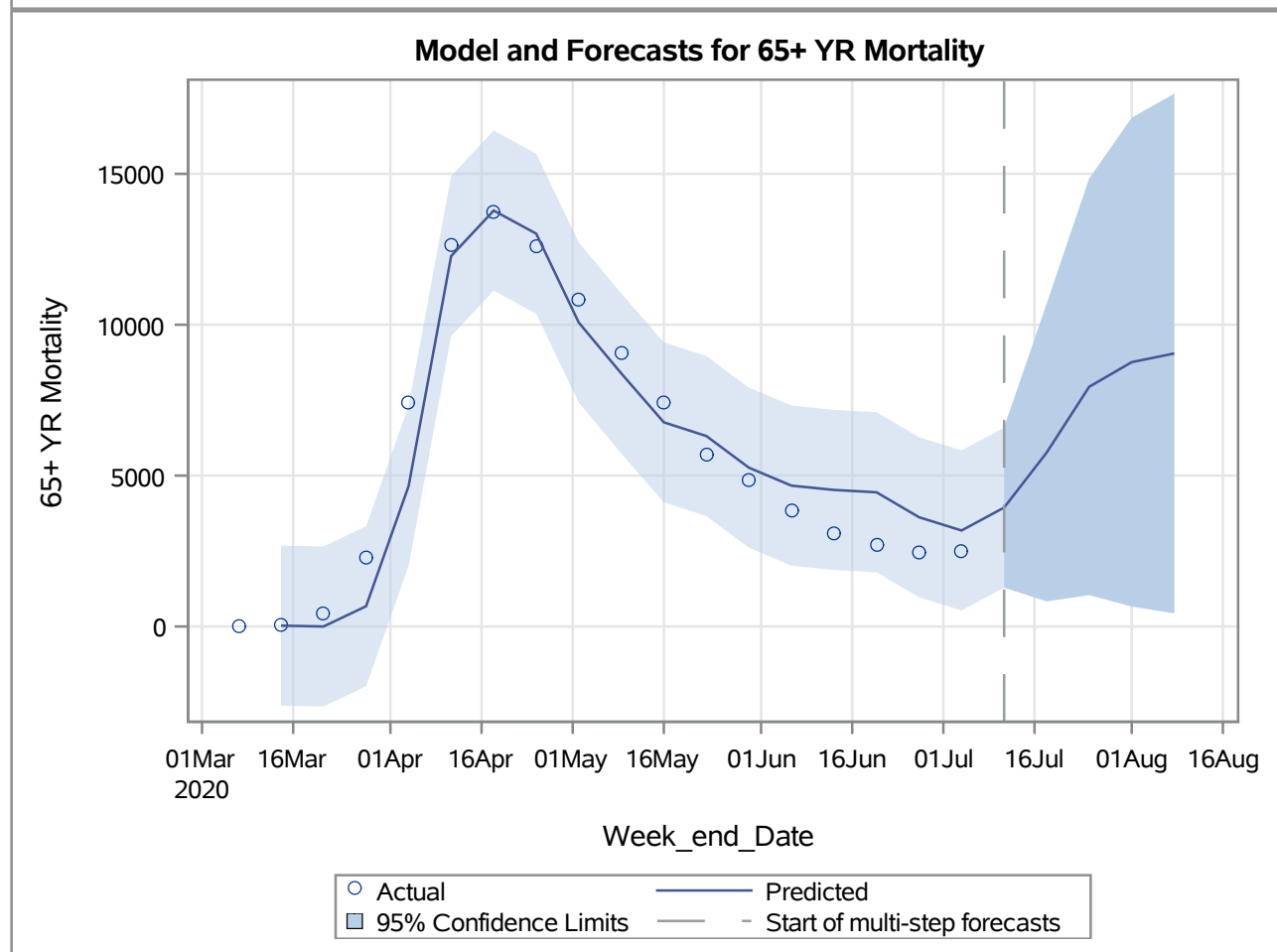
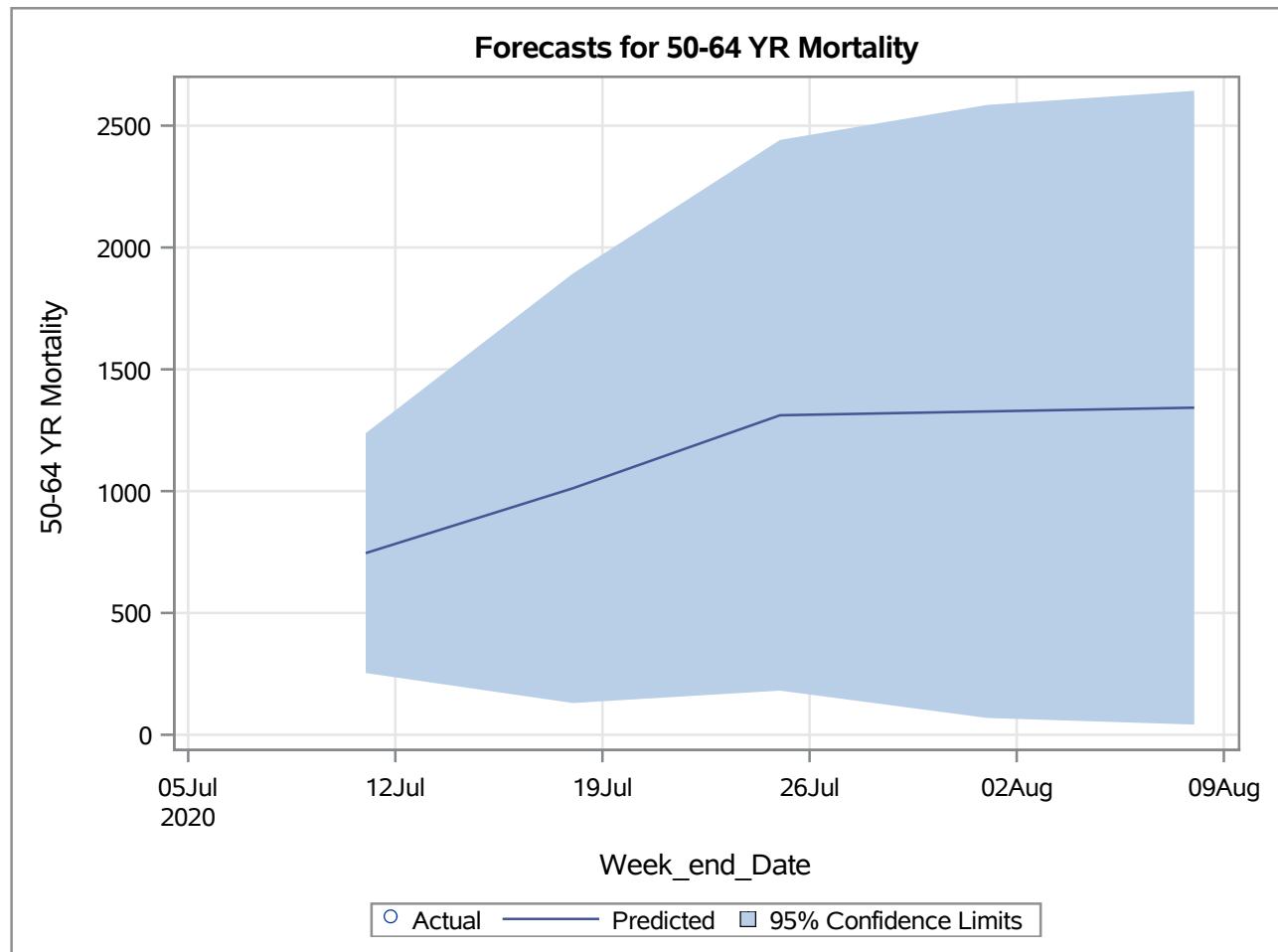


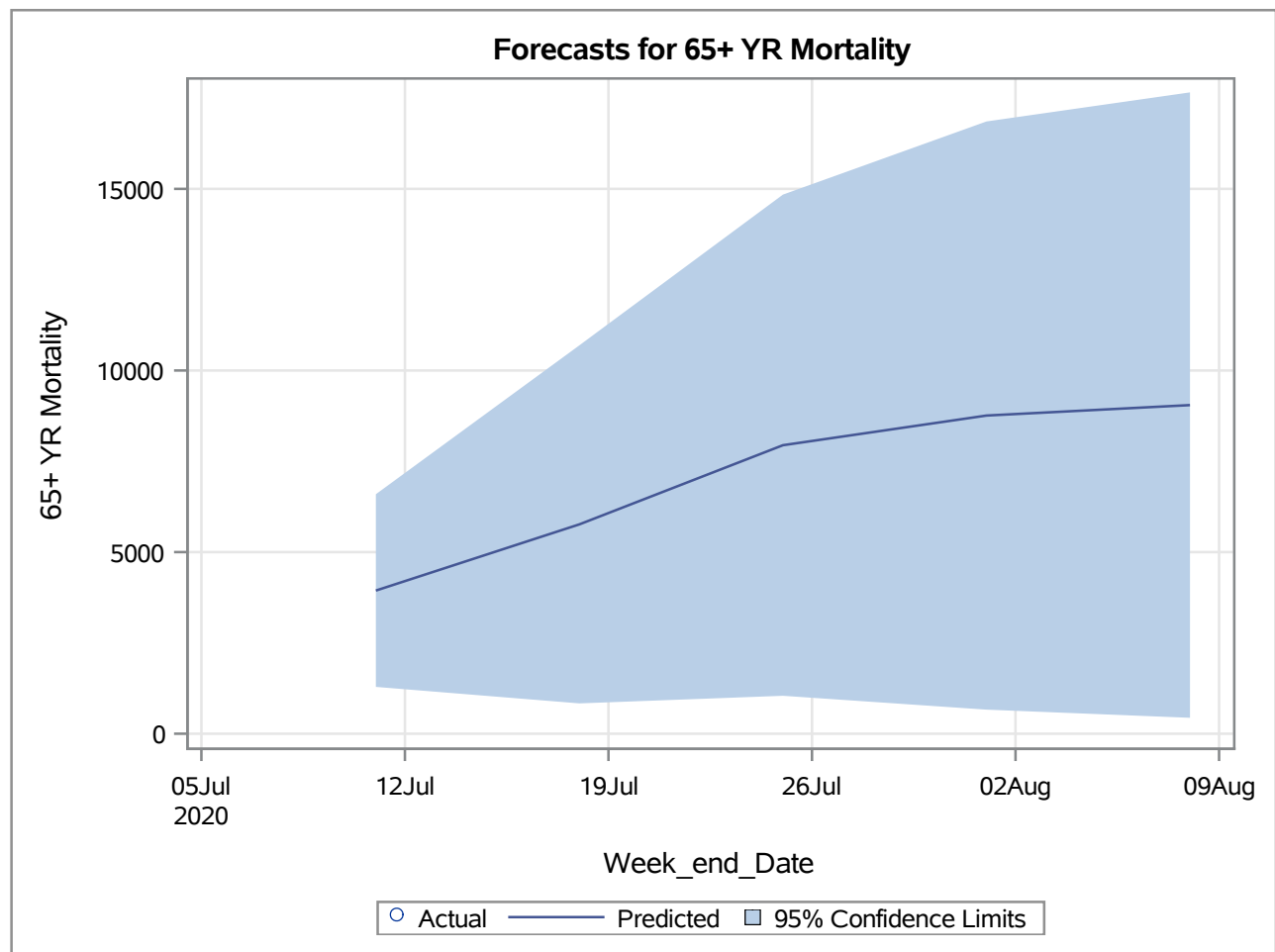
COVID 19 MORTALITY SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

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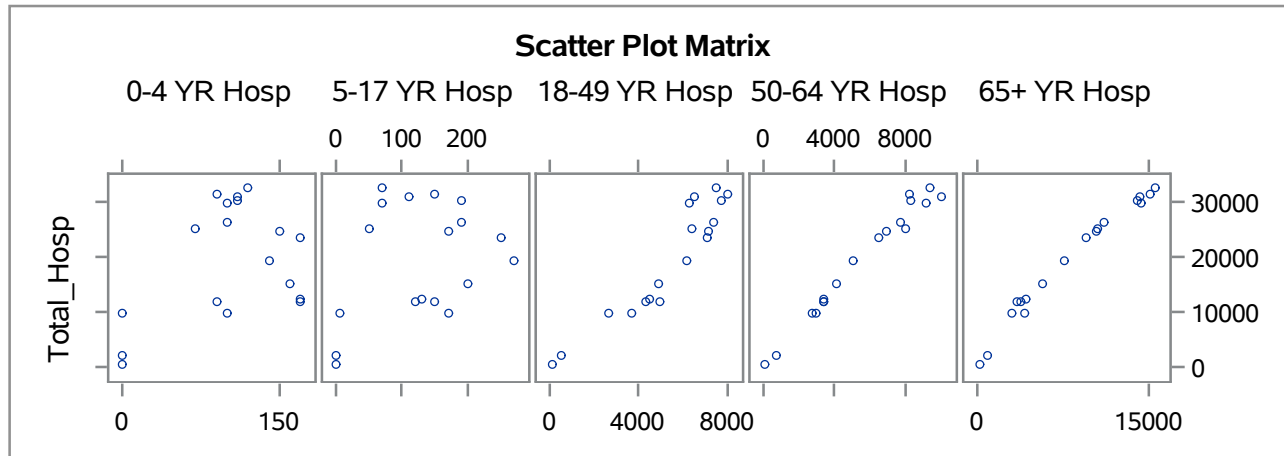


COVID 19 MORTALITY SUMMARY STATISTICS AND FORECAST FOR 5 WEEKS

COVID 19 HOSPITALIZATION TOTAL CASES TO INDIVIDUAL AGE GROUPS

1 With Variables:	Total_Hosp
5 Variables:	0-4 YR Hosp 5-17 YR Hosp 18-49 YR Hosp 50-64 YR Hosp 65+ YR Hosp

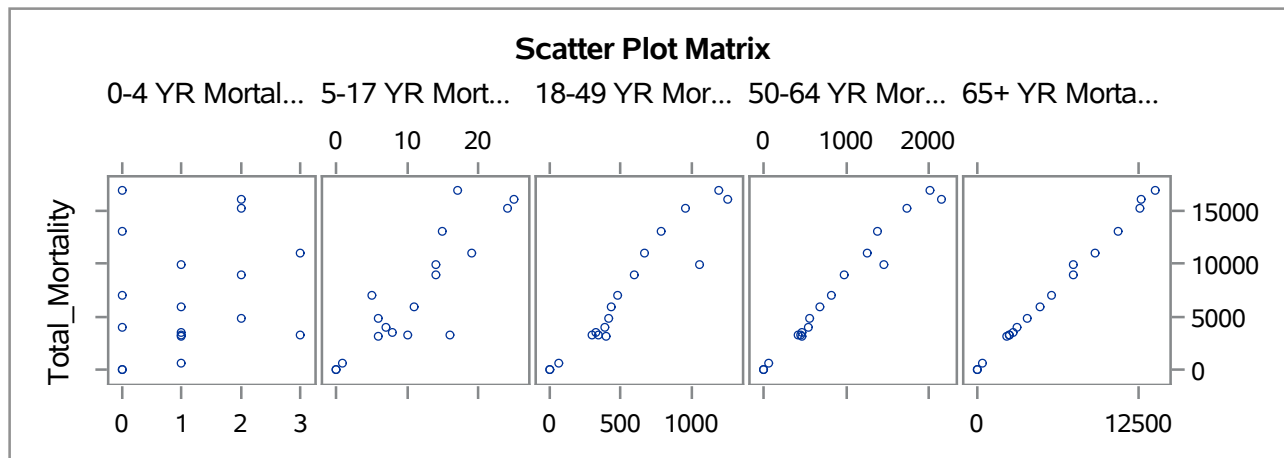
Pearson Correlation Coefficients, N = 18					
	0-4 YR Hosp	5-17 YR Hosp	18-49 YR Hosp	50-64 YR Hosp	65+ YR Hosp
Total_Hosp	0.41621	0.35004	0.93539	0.98897	0.98876



COVID 19 HOSPITALIZATION TOTAL CASES TO INDIVIDUAL AGE GROUPS

1 With Variables:	Total_Mortality
5 Variables:	0-4 YR Mortality 5-17 YR Mortality 18-49 YR Mortality 50-64 YR Mortality 65+ YR Mortality

Pearson Correlation Coefficients, N = 18					
	0-4 YR Mortality	5-17 YR Mortality	18-49 YR Mortality	50-64 YR Mortality	65+ YR Mortality
Total_Mortality	0.19181	0.86755	0.95503	0.98689	0.99886



COVID 19 HOSPITALIZATION TOTAL CASES TO INDIVIDUAL AGE GROUPS

1 With Variables:	Total_Mortality
1 Variables:	Total_Hosp

Pearson Correlation Coefficients, N = 18	
	Total_Hosp
Total_Mortality	0.89744

