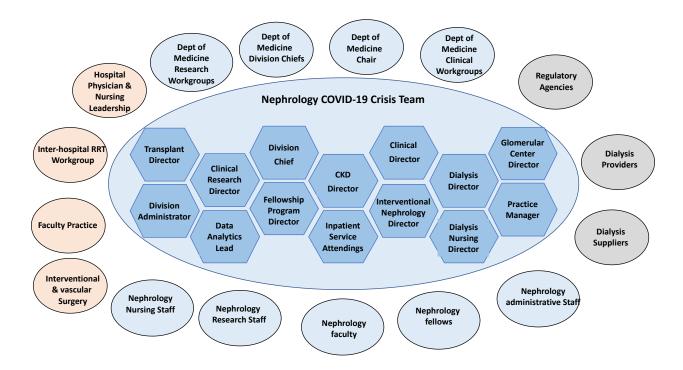
# **Supplemental Figures**

# Disaster Response to the COVID-19 Pandemic for Patients with Kidney Disease in New York City

The Division of Nephrology, Columbia University Vagelos College of Physicians and Surgeons, New York, NY

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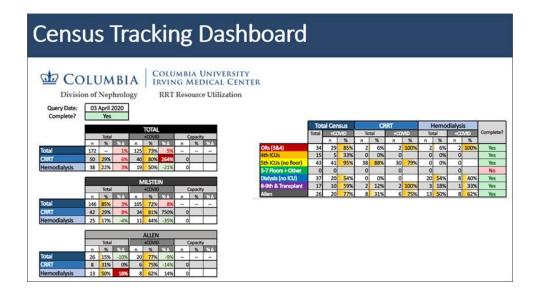
Supplemental Figure 1 Supplemental Figure 2 Supplemental Figure 3 Supplemental Figure 4 Supplemental Figure 5 **Supplemental Figure 1.** Composition of the crisis team (large oval). The team communicated with members of the divisions, the department of medicine leadership and workgroups, hospital leadership, and external vendors and agencies.



# **Supplemental Figure 2:**

Divisional Renal Replacement Therapy Resource Utilization Dashboard

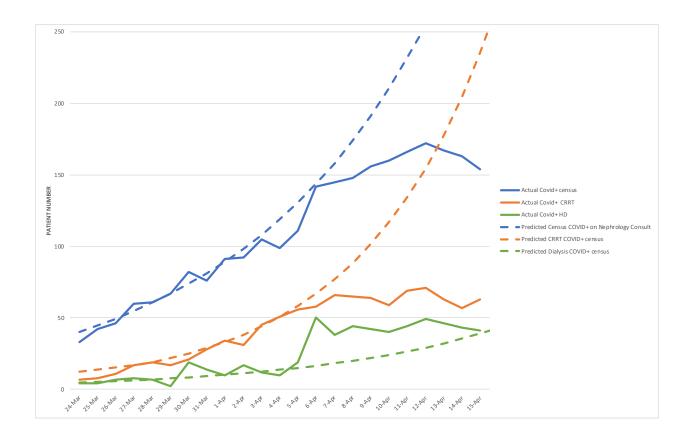
Real-time census growth is tracked based on daily logging of individual census counts by service. The dashboard breaks down counts and growth from the prior day by service, campus, COVID status, and modality of RRT (CRRT and HD). Percent of census that is COVID+ is represented in a yellow bar graph for each service, campus, and modality type to assist with divisional planning of resource allocation. Cells automatically turn green if there is a decrease in census from the prior day, turn light red if within the forecasted growth, and dark red if the growth is exceeding the projected growth rate.



# **Supplemental Figure 3**

Projected growth vs. Actual census growth

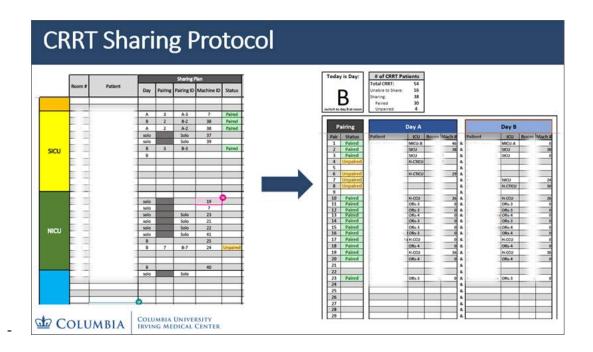
We projected census growth based on the daily growth rate of nephrology services between March 24-29 at Milstein hospital., which conformed to a  $^{\sim}$  10% daily growth rate. We projected the census for the nephrology service (dashed blue line), CCRT census (dashed orange line) and hemodialysis service (dashed green line) at Milstein hospital. The solid lines show the actual observed numbers on our services at Milstein hospital. The Y-axis shows the number of patients. The X-axis shows the date.



### **Supplemental Figure 4**

CRRT Sharing Protocol Tool

Tracking patients requiring CRRT by location (left panel) and identifying whether their clinical status permits sharing CRRT with an every other day model allows for pairing of patients based on proximity to other patients in the hospital on alternating "A" or "B" days to facilitate movement of CRRT machines between patients. The CRRT Sharing Dashboard (right panel) summarizes all of the patients currently sharing in order inform our coordinator to direct the movement of machines.



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### **Supplemental Figure 5:**

Dialysate Conservation Protocol

In order to reduce waste of partially used dialysate bags, we developed a dosing nomogram in order to round to a bag of dialysate rather than a set weight. While this is important for all patients, it is imperative to use this approach when using the sharing CRRT machine protocol as many bags would still be partially full at the end of their 22-hour CRRT session. Using the patient's weight by rows and a given default dosing strategy by columns (based on the projected number of days of dialysate supply we have remaining), the nephrologist is able to determine how many bags of dialysate per patient per day should be used, and eliminates the waste from partially full bags at the end of a PIRRT session.

	Bags of Fluid per Day							Н	Hourly Dialysate Rate						
Continuous Protocol (48/48 hours)	ROUNDED Bags dialysate/pt/d								ROUNDED Dialysate Flow Rate						
	Dose (mL/kg/hr)							- 1	Dose (mL/kg/hr)						
			15	17.5	20	22.5	25			15	17.5	20	22.5	25	
	l _	50	4	4	5	5	6		50	800	800		1000		
	Neight (kg)	60	4	5	6		7	Weight (kg)	60	800	1000	1200			
	Į.	70	5	6	7		8	Į į	70	1000	1200	1400	1600	160	
	i i	80	6	7	8		10	l e	80	1200	1400	1600	1800	200	
	>	90	7	8	9	10	11	>	90	1400	1600	1800	2000	220	
		100	8	9	10	11	12		100	1600	1800	2000	2200	250	
	ROI	ROUNDED Bags dialysate/pt/22 hours (PIRRT Protocol) Dose (mL/kg/hr)							ROUNDED Dialysate Flow Rate (PIRRT Protocol) Dose (mL/kg/hr)						
Shared PIRRT			15	17.5	20	22.5	25	- 1		15	17.5	20	22.5	25	
Sharea Filtiti		50	8	9	11	12	13		50	1800	2000	2500	2700	290	
Protocol	(B)	60	9	11	13	14	15	39	60	2000	2500	2900	3100	340	
	Weight (kg)	70	11	13	15	16	18	Weight (kg)	70	2500	2900	3400	3600	400	
(22/48 hours)	eig	80	13	15	17	19	21	igo i	80	2900	3400	3800	4300	470	
	3	90	14	17	19	21	24	3	90	3100	3800	4300	4700	540	
		100	16	18	21	24	26		100	3600	4000	4700	5400	590	

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