

SUPPLEMENTAL MATERIALS

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SUPPLEMENTAL TABLE 1. Characteristics of study hospitals

Characteristic	Hospital A	Hospital B
Specialty area	Solid organ transplant	Hematology/oncology
Staffed inpatient beds, total	695	520
Intensive care unit beds (percent of total)	134 (19%)	66 (13%)
Non-intensive care unit beds (percent of total)	561 (81%)	454 (87%)
Proportion of non-intensive care unit beds in double-bedded rooms, percent	54%	22%
Total number of hospital units	33	20
Intensive care units, number (percent of total)	9 (27%)	5 (25%)
Non-intensive care units, number (percent of total)	24 (73%)	15 (75%)
Units for care of immunocompromised patients, number (percent of total)*	7 (21%)	4 (20%)

* Includes both intensive care and non-intensive care units.

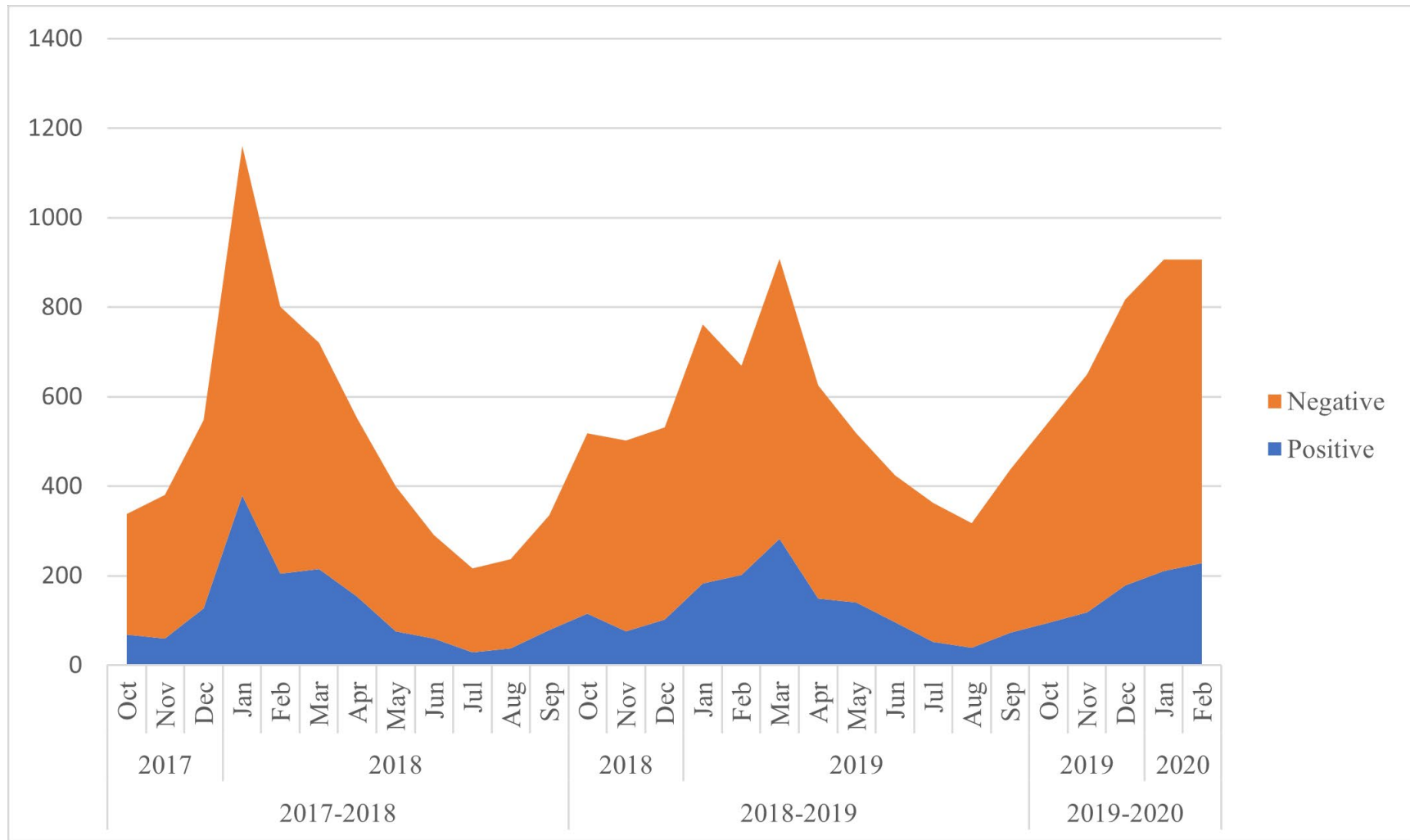
SUPPLEMENTAL TABLE 2. Transmission-based isolation precautions and personal protective equipment required by virus type

Virus	Transmission-based Precautions	Required Personal Protective Equipment (PPE)
<i>Rhinovirus/Enterovirus</i>	Droplet	Surgical mask
<i>Influenza virus A and B</i>		
<i>Respiratory syncytial virus</i>	Contact + Standard	Gown and gloves*
<i>Human metapneumovirus</i>		
<i>Parainfluenza virus</i>		
<i>Adenovirus</i>	Droplet and Contact	Surgical mask
<i>Coronavirus</i>		Gown and gloves

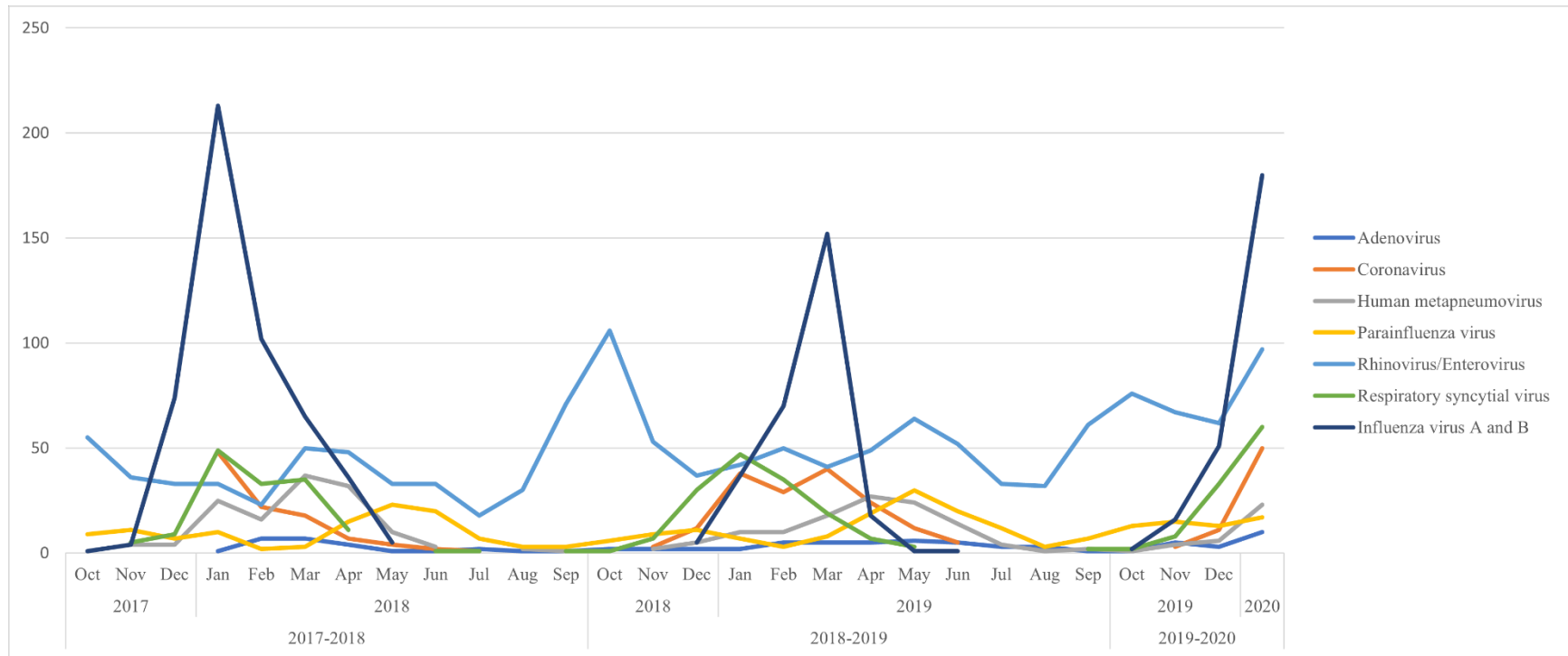
SUPPLEMENTAL TABLE 3. All assays/tests analysis: Respiratory virus assays performed at the two study acute care facilities during three respiratory virus seasons

Respiratory virus season	Hospital A			Hospital B			Hospital A & B		
	Number of assays performed	Positive for ≥ 1 pathogen	Negative for all pathogens	Number of assays performed	Positive for ≥ 1 pathogen	Negative for all pathogens	Number of assays performed	Positive for ≥ 1 pathogen	Negative for all pathogens
<i>2017-2018</i>	3104	656 (21.1%)	2448 (78.9%)	2839	798 (28.1%)	2041 (71.9%)	5943	1454 (24.5%)	4489 (75.5%)
<i>2018-2019</i>	3343	713 (21.3%)	2630 (78.7%)	3198	762 (23.8%)	2436 (76.2%)	6541	1475 (22.6%)	5066 (77.4%)
<i>2019-2020*</i>	1825	387 (21.2%)	1438 (78.8%)	1964	410 (20.9%)	1554 (79.1%)	3789	797 (21.0%)	2992 (79.0%)
<i>Combined seasons</i>	8272	1756 (21.2%)	6516 (78.8%)	8001	1970 (24.6%)	6031 (75.4%)	16273	3726 (22.9%)	12547 (77.1%)

SUPPLEMENTAL FIGURE 1. The number of respiratory virus assays over time at two study hospitals, including assays positive for one or more pathogens (“positive”) and tests negative for all pathogens in the assay (“negative”)



SUPPLEMENTAL FIGURE 2. Positive respiratory virus assay results over time, by virus



SUPPLEMENTAL TABLE 4. Sensitivity analysis of cluster frequency varying definition of temporal association

Virus	Number of clusters using varying criteria for temporal association		
	7-day cutoff (%)	4-day cutoff (%)	2-day cutoff (%)
<i>Rhinovirus/Enterovirus</i>	102 46%	70 40%	45 38%
<i>Influenza virus A and B</i>	78 35%	62 35%	42 35%
<i>Respiratory syncytial virus</i>	13 6%	16 9%	5 4%
<i>Coronavirus</i>	15 7%	14 8%	15 13%
<i>Parainfluenza virus</i>	9 4%	10 6%	8 7%
<i>Human metapneumovirus</i>	3 1%	4 2%	5 4%
<i>Adenovirus</i>	0 0%	0 0%	0 0%
Total	220	176	120

SUPPLEMENTAL TABLE 5. Cluster analysis: Patients with a positive respiratory virus test and proportion involved in a cluster, by virus and hospital

Virus	Hospital A				Hospital B			
	Patients with a positive test	Patients involved in a cluster (%)	Number of clusters	Median cluster size (range)	Patients with a positive test	Patients involved in a cluster (%)	Number of clusters	Median cluster size (range)
<i>Rhinovirus/Enterovirus</i>	441	74 (16.8)	32	2 (2-4)	413	80 (19.4)	38	2 (2-3)
<i>Influenza virus A & B</i>	238	76 (31.9)	31	2 (2-8)	256	82 (32.0)	31	2 (2-7)
<i>Respiratory syncytial virus</i>	109	14 (12.8)	7	2*	129	19 (14.7)	9	2 (2-3)
<i>Coronavirus</i>	93	10 (10.8)	5	2*	118	17 (14.4)	9	2 (2-3)
<i>Parainfluenza virus</i>	100	4 (4.0)	2	2*	109	16 (14.7)	8	2*
<i>Human metapneumovirus</i>	82	6 (7.3)	3	2*	95	2 (2.1)	1	–
<i>Adenovirus</i>	32	0 (0)	0	–	25	0 (0)	0	–

* All clusters N=2

SUPPLEMENTAL TABLE 6. Respiratory virus clusters in immunocompromised patients, by location

Virus	Hospital A		Hospital B	
	Transplant ICU (2 units)	Transplant Stepdown (5 units)	Medical ICU (1 units)	Oncology Stepdown (3 units)
<i>Rhinovirus/Enterovirus</i>	1	3	1	15
<i>Influenza virus A and B</i>	3	2	0	2
<i>Respiratory syncytial virus</i>	0	2	0	3
<i>Parainfluenza virus</i>	0	0	0	2
<i>Coronavirus</i>	0	0	0	1
<i>Human metapneumovirus</i>	0	0	0	0
Total	4	7	1	23

Note: ICU, intensive care unit