Supplementary Materials: Appendices

Table of Contents

APPENDIX B: CODING KEY	3
Table 1: Coding Key	
Table 2: MS DRG Code	7
APPENDIX C- MODELS USED FOR THE ANALYSIS	10
PRIMARY OUTCOME	10
Question 1a: a. Did the post-acute care (PAC) disposition differ by the patient's principal diagnosis at the time of acute-care hospital discharge durin early phase of the pandemic?	
Question 1b: Did the PAC disposition differ by the patient's principal diagnosis at the time of acute-care hospital discharge during the early phase of pandemic?	the
Question 2: Does the PAC disposition at the 18-month study follow up time differ by gender among COVID-19 survivors? Using a 3-level categorization the PAC disposition outcome.	on of
Question 3a : Do the odds of PAC disposition among COVID-19 discharged patients during the 18-month follow up period of 2020-2021 differ from th odds of PAC disposition among discharged patients in the financial years of 2018-2019?	ie
Question 3b: Do the odds of PAC disposition among COVID-19 discharged patients during the 18-month follow up period of 2020-2021 differ from the odds of PAC disposition among discharged patients in the financial years of 2018-2019?	е
SECONDARY OUTCOME	
Question 4: Do the odds of death among COVID-19 survivors discharged from acute-care hospitals differ by gender at the end of the 18-month study	
follow up period? Question 5 : Do the odds of death among COVID-19 survivors discharged from acute-hospital during the 18-month follow up period of 2020-2021 diff from the odds of death among acute-care hospital discharged patients in the financial years of 2018 and 2019?	fer
APPENDIX D: ADDITIONAL RESULTS	20
TABLE 1: CHARACTERISTICS OF PATIENTS ON THE 1 st EMR encounter by the post-acute care disposition	20
TABLE 2A: CHARACTERISTICS OF PATIENTS ON THE 2 ND EMR ENCOUNTER BY THE COVID-19 DIAGNOSIS	22
TABLE 2B: COMORBIDITIES AND COMPLICATIONS OF PATIENTS ON THE 2 ND EMR ENCOUNTER (MS_DRG FULL NAMES)	24
TABLE 2C: CHARACTERISTICS OF PATIENTS ON THE 2 ND EMR ENCOUNTER BY THEIR POST-ACUTE CARE DISPOSITION AND COVID-19 STATUS	
TABLE 3: CHARACTERISTICS OF PARTICIPANTS ON THE 3 RD EMR ENCOUNTER BY THEIR ACUTE CARE HOSPITALS	32
TABLE 4A: CHARACTERISTICS OF ACUTE CARE HOSPITAL DISCHARGED PATIENTS FOR THE FINANCIAL YEARS 2018 AND 2019	
TABLE 4B: CHARACTERISTICS OF ACUTE CARE HOSPITAL DISCHARGED PATIENTS BY PAC DISPOSITION STATUS AND FINANCIAL YEARS 2018 AND 2019	
TABLE 5: TABLE SHOWING HOW THE DISPOSITION AND UTILIZATION OF POST-ACUTE CARE SERVICES BY PANDEMIC YEARS (2018-2019) VS PRE-PANDEMIC YEARS (2020-2021)	42
Table 6: Baseline characteristics of study participants at the 3 EMR encounters by gender	43

APPENDIX B: Coding Key

Table 1: Coding Key

Pos	Post-Acute Care Disposition Among COVID-19 discharges in Atlanta					
	Variables	Original variable in the excel datasheets	Description	Code		
1	id	MRN	switched it from MRN to id			
2	entity	Entity	Acute care hospital patient was discharged from	0: EJCH, 1: ESJH, 2: EUH, 3: EUHM		
3	type	Туре	Type of Encounter	0: ER, 1: IN, 2: OV, 3:TR, 4: IV		
4	gender	Gender	Sex assigned at birth for the participant	0: Male, 1: Female		
5	race	Race	Race of the participant	0: Caucasian/white, 1: African American, 2: Asian, 3: American Indian/Alaskan Native, 4: Multiple, 5: Unknown/Unreported/Unavailable		
6	age	Age	Age of the participant at first encounter	Continuous		
7	age_cat	age_cat	age of the participant as a categorical variable	OR as a categorical variable: 0: <18 years, 1: 18 < 50 years, 2: 50 < 65, 3: ≥ 65 years		
8	admit_day	Admit Day	Day patient was admitted to the acute- care hospital	Dates, continuous variable		
9	discharge_day	Disch Day	Day patient was discharged from the acute-care hospital	Dates, continuous variable		

				0: Expired, 1: Home health services, 2: Home Self
				Care, 3: Short Term Care, 4: Long Term Care, 5:
				Skilled Nursing, 6: Hospice, 7: Still admitted, 8:
				Others (Other Rehab, D/XFR CANCR OR
			Post-acute facility that	CHILD, To Psych Hosp, Disaster Alt Site, To
		Dispo/Discharge	the patient was	Court/Law ENFORCE, Left AMA, Intermed
10	diana			Care Fac, DISCH/XFR To Other)
10	dispo	Disposition	discharged to	Care Fac, DISCH/ XFK 10 Other)
		D' /D' 1	Post-acute facility that	
		Dispo/Discharge	the patient was	
11	Dispo_3level	Disposition	discharged to	
			Hospital Unit where	
			participant was	
12	disch_unit	Disch Unit	discharged from	0: No_ICU, 1: ICU
			Length of stay in the	
13	los	LOS	hospital	Continuous
			Length of stay in the	
14	los_cat	los_cat	hospital categorized	0: 0-1 days, 1: 2 ≤ 7 days, 2: 8 ≤ 14 days, 3: ≥ 15
			Medicare Severity	
			Diagnosis Related	
15	ms_drg	MS DRG	Groups	0: no ms_drg, 1: Any ms_drg
			Categories of different	
			types of MS_DRGs	
			categorized as whether	2: condition with major
			they have a major	complications/comorbidities; 1: condition
			complication or	without a major complication or comorbidity; 0:
16	ms_drg_cat	ms_drg_cat	comorbidity	no condition or comorbidity or complication
				0: Government; 1: Commercial; 2: Self-Pay
				Health insurance was coded this way
			Type of health	0: Government [CHAMPUS/CHAMPVA;
	financial_recode		insurance that patient	CHAMPUS/MANAGED CARE;
17	d	Financial Class	has	CHAMPUS/MEDICAID; GOVERNMENTAL;
11	~		1000	

				18GOVT/MISC; MANAGED CARE; MANAGED CARE/CHAMPUS; MANAGED CARE/COMM; MANAGED CARE/MISC; MEDICAID; MEDICARE; MEDICARE A; MEDICARE B; MEDICARE/CHAMPUS; MEDICARE B/MEDICAID; MEDICARE B/MGD CARE; MEDICARE PART B ONLY; MEDICARE/CHAMPUS; MEDICARE/MEDICAID; MEDICARE/MGD CARE; MGD CARE/MEDICAID; MGD CARE; MGD CARE/MEDICAID; MGD CARE; MGD CARE; MISC/MEDICAID; MISC/MEDICARE] 1: Commercial: [BLUE CROSS; BLUE CROSS/COMM; BLUE CROSS; BLUE CROSS/COMM; BLUE CROSS/BLUE CROS; BLUE CROSS/MEDICARE; COMMERCIAL; COMMERCIAL/COMM; COMMERCIAL/MEDICAID; COMMERCIAL/MEDICARE; MANAGED CARE/COMM; MEDICARE/BCBS; MEDICARE B/COMM; MEDICARE/BLUE CROSS; MEDICARE/COMMERCIAL} 2: [SELF PAY, SELF-PAY, Self-Pay]
18	princ-diag	Principal Diagnosis	The principal diagnosis that the patient had	0: any other code apart from U07 1: 1: U07 1
10	princ-ulag	Diagnosis	Diagnosis that the	0: any other code apart from U07.1; 1: U07.1
			patient had at hospital	0: any other diagnosis apart from 2019-nCOV
19	diag	Dx	discharge	acute respiratory dse; 1: 2019-nCOVID
			Type of health	
20	navor	Payor Group	insurance that patient	Same as Financial status above
20	payor	r ayor Group	insurance that patient	Same as rmancial status above

			has in the FY 18 & FY	
			19	
			Year in with patient	
		Enc-Discharge	was discharged from	0: 2018-2019
21	disch_year	Fiscal Year	the acute care facility	1: 2020-2021
			Number of cases	
			discharged from an	
			acute care facility in FY	
22	cases	Cases	2018 & FY 2019	Continuous
			Number of days	
			patients lasted in	
			hospital for the FY	
23	patient_days	Patient Days	2018-2019	Continuous
			Total amount of money	
24	total_charges	Total Charges	paid as hospital bills	Continuous

Table 2: MS DRG Code

MS		
DRG		Severit
Code	Condition	y score
	missing	0
OO1	Heart Transplant or implant of heart assist system with MCC	2
	ECMO or Tracheostomy with MV > 96 hours or principal diagnosis except face mouth, and neck with	
OO3	major O.R. procedures	2
	Tracheostomy with MV > 96 hours or principal diagnosis except face, mouth, and neck without major	
004	O.R procedures	2
O14	Allogenic Bone Marrow Transplant	1
O64	Intracranial Haemorrhage or cerebral infarction with MCC	2
O69	Transient Ischemia without thrombolytic	1
100	Seizures with MCC	2
152	Otitis Media and URI with MCC	2
153	Otitis Media and URI without MCC	1
175	Pulmonary Embolism with MCC or acute cor pulmonale	2
177	Respiratory infections and Inflammations with MCC	2
178	Respiratory infections and Inflammations with CC	2
179	Respiratory infections and Inflammations without CC/MCC	1
189	Pulmonary Edema and Respiratory Failure	2
192	Chronic Obstructive Pulmonary Disease without CC/MCC	1
193	Simple Pneumonia and Pleurisy with MCC	2
194	Simple Pneumonia and Pleurisy with CC	2
195	Simple Pneumonia and Pleurisy without CC/MCC	1
196	Interstitial Lung Disease with MCC	2
202	Bronchitis and Asthma with CC/MCC	2
203	Bronchitis and Asthma without CC/MCC	1
204	Respiratory Signs and Symptoms	1

205	Other Respiratory System Diagnoses with MCC	2
206	Other Respiratory System Diagnoses without MCC	1
207	Respiratory System Diagnosis with ventilator support > 96 hours	2
208	Respiratory Diagnosis with ventilator support <= 96 hours	2
239	Amputation for circulatory system disorders except upper limb and toe with MCC	2
	PERCUTANEOUS CARDIOVASCULAR PROCEDURES WITH DRUG-ELUTING STENT WITH	
246	MCC OR 4+ ARTERIES OR STENTS	2
266	Endovascular Cardiac valve replacement and supplement procedures with MCC	2
270	Other major cardiovascular procedures with MCC	2
291	Heart failure and shock with MCC	2
292	Heart Failure and shock with CC	2
299	Peripheral vascular disorders with MCC	2
306	Cardiac congenital and valvular disorders with MCC	2
308	Cardiac Arrhythmias with conduction disorders with MCC	2
314	Other circulatory system diagnoses with MCC	2
377	Gastrointestinal hemorrhage with MCC	2
380	Complicated Peptic Ulcer with MCC	2
391	Esophagitis, gastroenteritis, and miscellaneous digestive disorders with MCC	2
392	Esophagitis, gastroenteritis, and miscellaneous digestive disorders without MCC	1
393	Other Digestive system disorders with MCC	2
405	Pancreas, liver, and shunt procedures with MCC	2
	Major hip and knee joint replacement or reattachment of lower extremity with MCC or total ankle	
469	replacement	2
535	Fractures of hip and pelvis with MCC	2
553	Bone diseases and arthropathies with MCC	2
558	Tendonitis, myositis, and bursitis without MCC	1
637	Diabetes with MCC	2
640	Miscellaneous disorders of nutrition, metabolism, fluids, and electrolytes with MCC	2

643	Endocrine disorders with MCC	2
682	Renal Failure with MCC	2
760	Menstrual and other female reproductive system disorders with CC/MCC	2
783	Caesarean section with sterilization with MCC	2
808	Major hematological and immunological diagnoses except sickle cell crisis and coagulation disorders with MCC	2
811	Red blood cell disorders with MCC	2
831	Other antepartum diagnoses without O.R. procedures with MCC	2
853	Infectious and parasitic diseases with O.R. procedures with MCC	2
862	Postoperative and Post-traumatic infections with MCC	2
864	Fever and inflammatory conditions	1
866	Viral illness without MCC	1
870	Septicaemia or severe sepsis with MV > 96 hours	2
871	Septicaemia or severe sepsis without MV > 96 hours with MCC	2
872	Septicaemia or severe sepsis without MV > 96 hours without MCC	2
919	Complications of Treatment with MCC	2
974	HIV with major related condition with MCC	2
975	HIV with major related condition with CC	2
981	Extensive O.R. procedures unrelated to principal diagnosis	2

APPENDIX C- Models used for the analysis PRIMARY OUTCOME

Question 1a: a. Did the post-acute care (PAC) disposition differ by the patient's principal diagnosis at the time of acute-care hospital discharge during the early phase of the pandemic?

- Used a 7-level category for the outcome of interest.
- Data used: second encounter spreadsheet--- May 07, 2020.
- Rationale for using this database- to assess the PAC disposition during the midst of a pandemic.

Variable Description	Variable Name	Notes	Notes
		0: Home Health Services	Outcome
		1: Home Self Care	
		2: Short Term Hospital	
		3: Long Term Care Hosp	
		4: Skilled Nursing Fac	
Post-Acute Care	dispo	5: Expired	
Facility	uispo	6: Others (hospice, still admitted, Other	
		Rehab, D/XFR CANCR OR CHILD, To	
		Psych Hosp, Disaster Alt Site, To	
		Court/Law ENFORCE, Left AMA,	
		Intermediate Care Facility, DISCH/XFR to	
		other)	
COVID-19 diagnosis	diagnosis	0: No	Exposure
COVID-19 diagnosis	ulagilosis	1: Yes	
Age	age	Continuous	Covariate
Gender	gender	0: Male	Covariate
	gender	1: Female	
		0: EJCH	Covariate
Entity (discharging	entity	1: ESJH	
hospital)	entity	2: EUH	
		3: EUHM	
Discharging Unit	disch_unit	0: non-ICU	Covariate
	une	1: ICU	
Any comorbidity	ms_drg_2	0: No	Covariate
		1: Yes	
		0: Caucasian or White	Covariate
		1: American Indian or Alsakan Native	
Race	race	2: Asian	
		3: African American	
		4: Multiple	

		5: Native Hawaiian 6: missing	
Financial status	<i>(</i> ¹ · 1 1 1	0: Government 1: Commercial	Covariate
Financial status	financial_recoded	2: Self_pay 3: Others	

a. Full model for the alternative 7-level category for the outcome of post-acute care disposition

 $ln[\frac{P(dispo=g)}{P(dispo=0)}] = \alpha g + \beta g1 * diagnosis + \gamma g1 * age + \gamma g2 * race + \gamma g3 * gender + \gamma g4 * disch_{unit} + \gamma g4 * ms_{drg} + \gamma g6 * financial_recoded Where: g =1, 2, 3, 4, 5, 6.$

b. Crude model for the alternative 7-level category for the outcome of post-acute care disposition

 $\ln\left[\frac{P(\text{dispo}=g)}{P(\text{dispo}=0)}\right] = \alpha g + \beta g1 * diagnosis$

Where: g =1, 2, 3, 4, 5, 6

Question 1b: Did the PAC disposition differ by the patient's principal diagnosis at the time of acute-care hospital discharge during the early phase of the pandemic?

- Used a 3-level category for the outcome of interest. At the second encounter.
- Data used: second encounter spreadsheet--- May 07, 2020.
- Rationale for using this database- to assess the PAC disposition during the midst of a pandemic.

Variable Description	Variable Name	Notes	Notes
Post-Acute Care Facility	dispo	0: Out-patient services (i.e., home health services; home self-care; hospice-home; left against medical advice (ama); and to court/law enforce etc.) 1: Facility based services (intermediate care facilities; long- and short-term care hospitals; skilled nursing facilities, hospice- medical facilities; other rehabilitation facilities; to psychiatric hospital; still admitted; and discharged or transferred to another facility) 2: Expired	Outcome

COVID-19	diagnosis	0: No	Exposure
diagnosis	ulagilosis	1: Yes	
Age	age	Continuous	Covariate
Gender	gondor	0: Male	Covariate
Genuer	gender	1: Female	
Entity		0: EJCH	Covariate
(discharging	entity	1: ESJH	
hospital)	entity	2: EUH	
nospital)		3: EUHM	
Discharging Unit	disch_unit	0: non-ICU	Covariate
Discharging Unit	discn_unit	1: ICU	
Any comorbidity	me dra	0: No	Covariate
Any comorbidity	ms_drg	1: Yes	
		0: Caucasian or White	Covariate
		1: American Indian or Alsakan Native	
		2: Asian	
Race	race	3: African American	
		4: Multiple	
		5: Native Hawaiian	
		6: missing	
		0: Government	Covariate
Financial status	financial recorded	1: Commercial	
Financial status	financial_recoded	2: Self_pay	
		3: Others	

a. General model (full model) for the alternative 3-level category for the outcome of post-acute care disposition

 $\ln\left[\frac{P(\text{dispo=g})}{P(\text{dispo=0})}\right] = \alpha g + \beta g1 * diagnosis + \gamma g1 * age + \gamma g2 * race + \gamma g3 * gender + \gamma g4 * disch_{\text{unit}} + \gamma g4 * ms_{\text{drg}} + \gamma g6 * financial_recoded$

Where: g = 1, 2. Where the reference is the outpatient services; g=1 refers to facilitybased services and g=2, those who expired.

b. Crude model for the alternative 3-level category for the outcome of post-acute care disposition

 $\ln\left[\frac{P(\text{dispo}=g)}{P(\text{dispo}=0)}\right] = \alpha g + \beta g1 * diagnosis$

Where: g = 1, 2. Where the reference is the outpatient services; g=1 refers to facilitybased services and g= those who expired. Question 2: Does the PAC disposition at the 18-month study follow up time differ by gender among COVID-19 survivors? Using a 3-level categorization of the PAC disposition outcome.

- Answered with the 3-level categorization of the PAC disposition outcome.
- Data used: third encounter spreadsheet--- October 25, 2021.
- Rationale for using this database to assess the odds of mortality and any related factors at the end of the study.

Variable Description	Variable Name	Notes	Notes
Post-Acute Care Facility	Dispo_3level	0: Out-patient services (i.e., home health services; home self-care; hospice-home; left against medical advice (ama); and to court/law enforce etc.) 1: Facility based services (intermediate care facilities; long- and short-term care hospitals; skilled nursing facilities, hospice- medical facilities; other rehabilitation facilities; to psychiatric hospital; still admitted; and discharged or transferred to another facility) 2: Expired	Outcome
Gender	gender	0: Male 1: Female	Exposure
Age	age	Continuous	Covariate
Entity (discharging hospital)	entity	0: EJCH 1: ESJH 2: EUH 3: EUHM	Covariate
Discharging Unit	disch_unit	0: non-ICU 1: ICU	Covariate
Race	race	0: Caucasian or White 1: American Indian or Alsakan Native 2: Asian 3: African American 4: Multiple 5: Native Hawaiian 6: missing	Covariate
Financial status	financial_recoded	0: Government 1: Commercial 2: Self_pay 3: Others	Covariate

a. General model (full model) for the 3-level category for the outcome of post-acute care disposition

 $ln[\frac{P(dispo_3level=g)}{P(dispo_3level=0)}] = \alpha g + \beta g1 * gender + \gamma g1 * age + \gamma g2 * race + \gamma g3 * entity + \gamma g4 * disch_{unit} + \gamma g5 * financial_recoded$

Where: g = 1, 2. Where the reference is the outpatient services; g=1 refers to facilitybased services and g=2, those who expired.

b. Crude model for the 3-level category for the outcome of post-acute care disposition

 $\ln[\frac{P(\text{dispo}=g)}{P(\text{dispo}=0)}] = \alpha g + \beta g1 * gender$

Question 3a: Do the odds of PAC disposition among COVID-19 discharged patients during the 18month follow up period of 2020-2021 differ from the odds of PAC disposition among discharged patients in the financial years of 2018-2019?

- Answered with the 7-level categorization of the PAC disposition outcome.
- Data used: third encounter spreadsheet (October 25, 2021), and the FY 2018/2019 datasheet.
- Rationale for using these databases to assess whether post-acute care dispositions and any related factors varied by the study period i.e., 2018-2019 vs. 2020-2021

Variable Description	Variable Name	Notes	Notes
Post-acute care disposition	dispo	0: Home Health Services 1: Home Self Care 2: Short Term Hospital 3: Long Term Care Hosp 4: Skilled Nursing Fac 5: Expired 6: Others (hospice, still admitted, Other Rehab, D/XFR CANCR OR CHILD, To Psych Hosp, Disaster Alt Site, To Court/Law ENFORCE, Left AMA, Intermed Care Fac, DISCH/XFR to other)	Outcome
Year data were collected	year	0: 2018-2019 1: 2020-2021	Exposure ¹
COVID-19 status	covid_status	0: non-COVID 1: COVID-19	Exposure ²

	entity	0: EJCH	Covariate
Entity (discharging hospital)		1: ESJH	
		2: EUH	
		3: EUHM	
Financial status	financial_recoded	0: Government	Covariate
		1: Commercial	
		2: Self_pay 3: Others	
		3: Others	

NB: The datasets for PAC dispositions for the financial years 2018, 2019 and 2020-2021 had only 3 variables in common (i.e., entity, health insurance status and PAC disposition)

a. Full model for the alternative 7-level category for the outcome of post-acute care disposition

 $ln[\frac{P(dispo=g)}{P(dispo=0)}] = \alpha g + \beta g1 * covid_status + \gamma g1 * entity + \gamma g2 * financial_recoded Where: g = 1, 2, 3, 4, 5, 6.$

b. Crude model for the alternative 7-level category for the outcome of post-acute care disposition

 $ln[\frac{P(dispo=g)}{P(dispo=0)}] = \alpha g + \beta g1 * covid_status, Where: g = 1, 2, 3, 4, 5, 6$

Question 3b: Do the odds of PAC disposition among COVID-19 discharged patients during the 18month follow up period of 2020-2021 differ from the odds of PAC disposition among discharged patients in the financial years of 2018-2019?

- Answered with the 3-level categorization of the PAC disposition outcome.
- Data used: third encounter spreadsheet (October 25, 2021), and the FY 2018/2019 datasheet.
- Rationale for using these databases to assess whether post-acute care dispositions and any related factors varied by the study period i.e., 2018-2019 vs. 2020-2021

Variable Description	Variable Name	Notes	Notes
Post-acute care disposition	Dispo_3level	0: Out-patient services (i.e., home health services; home self-care; hospice-home; left against medical advice (ama); and to court/law enforce etc.)	Outcome

		1: Facility based services (intermediate care facilities; long- and short-term care hospitals; skilled nursing facilities, hospice- medical facilities; other rehabilitation facilities; to psychiatric hospital; still admitted; and discharged or transferred to another facility) 2: Expired	
Year data were collected	year	0: 2018-2019 1: 2020-2021	Exposure ¹
COVID-19 status	covid_status	0: non-COVID 1: COVID-19	Exposure ²
Entity (discharging hospital)	entity	0: EJCH 1: ESJH 2: EUH 3: EUHM	Covariate
Financial status	financial_recoded	0: Government 1: Commercial 2: Self_pay 3: Others	Covariate

a. Full model for the alternative 3-level category for the outcome of post-acute care disposition

 $ln[\frac{P(dispo_3level=g)}{P(dispo_3level=0)}] = \alpha g + \beta g1 * covid_status + \gamma g1 * entity + \gamma g2 * financial_recoded Where: g =1, 2, 3, 4, 5, 6.$

b. Crude model for the alternative 7-level category for the outcome of post-acute care disposition

 $ln[\frac{P(dispo=g)}{P(dispo=0)}] = \alpha g + \beta g1 * covid_status$ Where: g =1, 2, 3, 4, 5, 6

SECONDARY OUTCOME

Question 4: Do the odds of death among COVID-19 survivors discharged from acute-care hospitals differ by gender at the end of the 18-month study follow up period?

- Answered with the 3-level categorization of the PAC disposition outcome.
- Data used: third encounter spreadsheet--October 25, 2021.
- Rationale for using this database to assess the odds of mortality and any related factors at the end of the study.

Variable Description	Variable Name	Notes	Notes
Post-Acute Care Mortality	dispo	0: Out-patient services (i.e., home health services; home self-care; hospice-home; left against medical advice (ama); and to court/law enforce etc.) and Facility based services (intermediate care facilities; long- and short-term care hospitals; skilled nursing facilities, hospice-medical facilities; other rehabilitation facilities; to psychiatric hospital; still admitted; and discharged or transferred to another facility) 1: Expired	Outcome
Gender	gender	0: Male 1: Female	Exposure
Age	age	Continuous	Covariate
Entity (discharging hospital)	entity	0: EJCH 1: ESJH 2: EUH 3: EUHM	Covariate- not included
Discharging Unit	disch_unit	0: non-ICU 1: ICU	Covariate
Any comorbidity	ms_drg	0: No 1: Yes	Covariate
Length of stay	los	Continuous	Covariate
Race	race	0: Caucasian or White 1: American Indian or Alsakan Native 2: Asian 3: African American 4: Multiple 5: Native Hawaiian 6: missing	Covariate
Financial status	financial_recoded	0: Government 1: Commercial 2: Self_pay	Covariate

3: Others

- a. Full model: Logistics model: ln(death) = α + β 1* gender + γ 1*age + γ 2*disch_unit + γ 3*ms_drg + γ 4*race + γ 5*financial_recoded + γ 6*los
- b. Crude Model: Logistics model: $\ln(\text{death}) = \alpha + \beta 1^*$ gender

Question 5: Do the odds of death among COVID-19 survivors discharged from acute-hospital during the 18-month follow up period of 2020-2021 differ from the odds of death among acute-care hospital discharged patients in the financial years of 2018 and 2019?

- Answered with the 3-level categorization of the PAC disposition outcome.
- Data used: Spreadsheet dated October 25, 2021, and the 2018 & 2019 database.
- Rationale for using this database to assess the odds of mortality and any related factors at the end of the study.

Variable Description	Variable Name	Notes	Notes
Death	dispo	0: Home Health Services; Home Self Care; Short Term Hospital; Long Term Care Hosp; Skilled Nursing Fac; Others (hospice, still admitted, Other Rehab, D/XFR CANCR OR CHILD, To Psych Hosp, Disaster Alt Site, To Court/Law ENFORCE, Left AMA, Intermediate Care Fac, DISCH/XFR to other) 1: Expired/Death	Outcome
Year data were collected	year	0: 2018-2019 1: 2020-2021	Exposure ¹
COVID-19 status	covid_status	0: non-COVID 1: COVID-19	Exposure ²
Entity (discharging hospital) entity		0: EJCH 1: ESJH 2: EUH 3: EUHM	Covariate
Financial status	financial_recoded	0: Government 1: Commercial 2: Self_pay 3: Others	Covariate

Exposure¹ for when the exposure of interest in the model was "year of study" when participants were admitted and discharged (i.e., 2018-2019 or 2020-2021); and Exposure² of interest is the COVID-19 status. But when we run the first logistic regression model with as the exposure of

interest and had COVID-19 status as a variable in the model, the model did not run because the values were highly collinear.

Results from the logistic regression-- \rightarrow full model.

- a. Full Model: Logistics model: $\ln(\text{death}) = \alpha + \beta 1^* \text{ covid-19 status} + \gamma 1^* \text{financial_recoded} + \gamma 2^* \text{year} + \gamma 3^* \text{entity}$ Outcome of interest-- death Exposure of interest --> COVID-19 status Variables of interest --> financial status, entity
- b. Crude Model: Logistics model: $\ln(\text{death}) = \alpha + \beta 1^* \text{ covid-19 status}$

APPENDIX D: Additional Results

Table 1: Characteristics of patients on the 1st EMR encounter by the post-acute care disposition

		T •1•		·
	EXPIRED (N=60)	Facility Based Services (N=38)	Out-Patient Services (N=582)	Overall (N=680)
Age				
Mean (SD)	71.1 (14.5)	64.9 (17.8)	52.1 (16.1)	54.5 (17.1)
Median [Min, Max]	71.5 [23.0, 96.0]	67.5 [27.0, 99.0]	53.0 [14.0, 95.0]	55.0 [14.0, 99.0]
Age Categories				
0-17	0 (0%)	0 (0%)	1 (0.2%)	1 (0.1%)
18-49	4 (6.7%)	6 (15.8%)	254 (43.6%)	264 (38.8%)
50-64	12 (20.0%)	9 (23.7%)	189 (32.5%)	210 (30.9%)
65+	44 (73.3%)	23 (60.5%)	138 (23.7%)	205 (30.1%)
Gender				
Female	29 (48.3%)	13 (34.2%)	313 (53.8%)	355 (52.2%)
Male	31 (51.7%)	25 (65.8%)	269 (46.2%)	325 (47.8%)
Race				
African American or Black	39 (65.0%)	21 (55.3%)	392 (67.4%)	452 (66.5%)
Asian	2 (3.3%)	2 (5.3%)	18 (3.1%)	22 (3.2%)
Caucasian or White	11 (18.3%)	15 (39.5%)	120 (20.6%)	146 (21.5%)
Unknown, Unavailable or Unreported	8 (13.3%)	0 (0%)	50 (8.6%)	58 (8.5%)
American Indian or Alaskan Native	0 (0%)	0 (0%)	1 (0.2%)	1 (0.1%)
Multiple	0 (0%)	0 (0%)	1 (0.2%)	1 (0.1%)
Acute Care Hospital				
EJCH	1 (1.7%)	13 (34.2%)	38 (6.5%)	52 (7.6%)
ESJH	12 (20.0%)	7 (18.4%)	121 (20.8%)	140 (20.6%)
EUH	15 (25.0%)	8 (21.1%)	217 (37.3%)	240 (35.3%)
EUHM	32 (53.3%)	10 (26.3%)	206 (35.4%)	248 (36.5%)
Discharging Unit within the Acute	Care Hospital			
ICU	39 (65.0%)	17 (44.7%)	2 (0.3%)	58 (8.5%)
non_ICU	21 (35.0%)	21 (55.3%)	580 (99.7%)	622 (91.5%)
Length of Stay				

	EXPIRED (N=60)	Facility Based Services (N=38)	Out-Patient Services (N=582)	Overall (N=680)
Mean (SD)	8.27 (5.25)	6.97 (6.13)	4.20 (4.59)	4.72 (4.91)
Median [Min, Max]	7.00 [1.00, 23.0]	4.50 [1.00, 20.0]	2.00 [1.00, 29.0]	3.00 [1.00, 29.0]
Length of Stay categories				
0-1	6 (10.0%)	8 (21.1%)	232 (39.9%)	246 (36.2%)
2-7	25 (41.7%)	16 (42.1%)	254 (43.6%)	295 (43.4%)
8-14	21 (35.0%)	7 (18.4%)	70 (12.0%)	98 (14.4%)
15+	8 (13.3%)	7 (18.4%)	26 (4.5%)	41 (6.0%)
Comorbidities				
NO	2 (3.3%)	1 (2.6%)	200 (34.4%)	203 (29.9%)
YES	58 (96.7%)	37 (97.4%)	382 (65.6%)	477 (70.1%)

	COVID-19 (N=505)	No COVID-19 (N=489)	Overall (N=994)
Age			
Mean (SD)	55.5 (17.7)	56.7 (17.7)	56.1 (17.7)
Median [Min, Max]	56.0 [14.0, 101]	58.0 [19.0, 98.0]	57.0 [14.0, 101]
Age Categories			
0-17	1 (0.2%)	0 (0%)	1 (0.1%)
18-49	190 (37.6%)	170 (34.8%)	360 (36.2%)
50-64	156 (30.9%)	145 (29.7%)	301 (30.3%)
65+	158 (31.3%)	174 (35.6%)	332 (33.4%)
Gender			
Female	252 (49.9%)	247 (50.5%)	499 (50.2%)
Male	253 (50.1%)	242 (49.5%)	495 (49.8%)
Race			
African American or Black	326 (64.6%)	315 (64.4%)	641 (64.5%)
American Indian or Alaskan Native	1 (0.2%)	1 (0.2%)	2 (0.2%)
Asian	19 (3.8%)	15 (3.1%)	34 (3.4%)
Caucasian or White	109 (21.6%)	113 (23.1%)	222 (22.3%)
Native Hawaiian or Other Pacific Islander	1 (0.2%)	0 (0%)	1 (0.1%)
Unknown, Unavailable or Unreported	49 (9.7%)	42 (8.6%)	91 (9.2%)
Multiple	0 (0%)	3 (0.6%)	3 (0.3%)
Post-Acute Care Discharge (7-level outcome)			
EXPIRED	36 (7.1%)	62 (12.7%)	98 (9.9%)
HOME HEALTH SERVICE	51 (10.1%)	32 (6.5%)	83 (8.4%)
HOME SELF CARE	372 (73.7%)	347 (71.0%)	719 (72.3%)
HOSPICE-HOME	4 (0.8%)	3 (0.6%)	7 (0.7%)
LEFT AMA	1 (0.2%)	2 (0.4%)	3 (0.3%)
LONG TERM CARE HOSP	1 (0.2%)	2 (0.4%)	3 (0.3%)
OTHER REHAB FACILITY	1 (0.2%)	4 (0.8%)	5 (0.5%)
SHORT TERM HOSPITAL	9 (1.8%)	20 (4.1%)	29 (2.9%)
SKILLED NURSING FAC	30 (5.9%)	15 (3.1%)	45 (4.5%)
HOSPICE-MED FACILITY	0 (0%)	1 (0.2%)	1 (0.1%)
INTERMED CARE FAC	0 (0%)	1 (0.2%)	1 (0.1%)
Post-Acute Care Disposition (3-level outcome)		
EXPIRED	36 (7.1%)	62 (12.7%)	98 (9.9%)

Table 2A: Characteristics of patients on the 2nd EMR encounter by the COVID-19 diagnosis

	COVID-19 (N=505)	No COVID-19 (N=489)	Overall (N=994)
Facility Based Services	41 (8.1%)	43 (8.8%)	84 (8.5%)
Out- Patient Services	428 (84.8%)	384 (78.5%)	812 (81.7%)
Discharging Unit with Acute Care Hospital			
ICU	31 (6.1%)	54 (11.0%)	85 (8.6%)
non_ICU	474 (93.9%)	435 (89.0%)	909 (91.4%)
Acute Care Hospital			
EJCH	34 (6.7%)	30 (6.1%)	64 (6.4%)
ESJH	85 (16.8%)	122 (24.9%)	207 (20.8%)
EUH	189 (37.4%)	180 (36.8%)	369 (37.1%)
EUHM	197 (39.0%)	157 (32.1%)	354 (35.6%)
Length of Stay			
Mean (SD)	5.84 (6.90)	5.60 (7.00)	5.72 (6.95)
Median [Min, Max]	3.00 [1.00, 43.0]	3.00 [1.00, 55.0]	3.00 [1.00, 55.0]
Length of Stay Categories			
0-1	198 (39.2%)	176 (36.0%)	374 (37.6%)
2-7	179 (35.4%)	195 (39.9%)	374 (37.6%)
8-14	76 (15.0%)	73 (14.9%)	149 (15.0%)
15+	52 (10.3%)	45 (9.2%)	97 (9.8%)
Health Insurance Status			
Commercial	65 (12.9%)	56 (11.5%)	121 (12.2%)
Government	365 (72.3%)	368 (75.3%)	733 (73.7%)
Self-Pay	75 (14.9%)	65 (13.3%)	140 (14.1%)

	COVID-19 (N=505)	No COVID-19 (N=489)	Overall (N=994)
Comorbidities or complications			
ECMO or Tracheostomy with MV > 96 hours or principal diagnosis except face mouth, and neck with major O.R. procedures	4 (0.8%)	1 (0.2%)	5 (0.5%)
Extensive O.R. procedures unrelated to prinicipal diagnosis	2 (0.4%)	0 (0%)	2 (0.2%)
HIV with major related condition with CC	1 (0.2%)	0 (0%)	1 (0.1%)
HIV with major related condition with MCC	1 (0.2%)	2 (0.4%)	3 (0.3%)
NA	172 (34.1%)	135 (27.6%)	307 (30.9%)
Respiratory Diagnosis with ventilator support <= 96 hours	21 (4.2%)	13 (2.7%)	34 (3.4%)
Respiratory infections and Inflammations with CC	27 (5.3%)	1 (0.2%)	28 (2.8%)
Respiratory infections and Inflammations with MCC	218 (43.2%)	1 (0.2%)	219 (22.0%)
Respiratory infections and Inflammations without CC/MCC	10 (2.0%)	0 (0%)	10 (1.0%)
Respiratory System Diagnosis with ventilator support > 96 hours	47 (9.3%)	5 (1.0%)	52 (5.2%)
Tracheostomy with MV > 96 hours or principal diagnosis except face, mouth, and neck without major O.R procedures	2 (0.4%)	0 (0%)	2 (0.2%)
Allogenic Bone Marrow Transplant	0 (0%)	1 (0.2%)	1 (0.1%)
Amputation for circulatory system disorders except upper limb and toe with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Bone diseases and arthropathies with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Bronchitis and Asthma with CC/MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Bronchitis and Asthma without CC/MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Cardiac Arrhythmias with conduction disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Cardiac congenital and valvular disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)

Table 2B: Comorbidities and complications of patients on the 2nd EMR encounter (MS_DRG Full names)

	COVID-19 (N=505)	No COVID-19 (N=489)	Overall (N=994)
Caesarean section with sterilization with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Chronic Obstructive Pulmonary Disease without CC/MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Complicated Peptic Ulcer with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Complications of Treatment with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Diabetes with MCC	0 (0%)	3 (0.6%)	3 (0.3%)
Endocrine disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Endovascular Cardiac valve replacement and supplement procedures with MCC	0 (0%)	2 (0.4%)	2 (0.2%)
Esophagitis, gastroenteritis, and miscellaneous digestive disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Esophagitis, gastroenteritis, and miscellaneous digestive disorders without MCC	0 (0%)	3 (0.6%)	3 (0.3%)
Fever and inflammatory conditions	0 (0%)	1 (0.2%)	1 (0.1%)
Fractures of hip and pelvis with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Gastrointestinal hemorrhage with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Heart failure and shock with CC	0 (0%)	1 (0.2%)	1 (0.1%)
Heart failure and shock with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Heart Transplant or implant of heart assist system with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Infectious and parasitic diseases with O.R. procedures with MCC	0 (0%)	3 (0.6%)	3 (0.3%)
Interstitial Lung Disease with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Intracranial Haemorrhage or cerebral infarction with MCC	0 (0%)	3 (0.6%)	3 (0.3%)
Major hematological and immunological diagnoses except sickle cell crisis and coagulation disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Major hip and knee joint replacement or reattachment of lower extremity with MCC or total ankle replacement	0 (0%)	2 (0.4%)	2 (0.2%)

	COVID-19 (N=505)	No COVID-19 (N=489)	Overall (N=994)
Menstrual and other female reproductive system disorders with CC/MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Miscellaneous disorders of nutrition, metabolism, fluids, and electrolytes with MCC	0 (0%)	2 (0.4%)	2 (0.2%)
Other antepartum diagnoses without O.R. procedures with MCC	0 (0%)	3 (0.6%)	3 (0.3%)
Other circulatory system diagnoses with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Other digestive system disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Other Digestive system disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Other major cardiovascular procedures with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Other Respiratory System Diagnoses with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Other Respiratory System Diagnoses without MCC	0 (0%)	5 (1.0%)	5 (0.5%)
Other vascular procedures with MCC	0 (0%)	2 (0.4%)	2 (0.2%)
Otitis Media and URI with MCC	0 (0%)	2 (0.4%)	2 (0.2%)
Otitis Media and URI without MCC	0 (0%)	2 (0.4%)	2 (0.2%)
Pancreas, liver, and shunt procedures with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Percutaneous Cardiovascular Procedures with Drug-Eluting Stent with MCC Or 4+ Arteries or Stents	0 (0%)	1 (0.2%)	1 (0.1%)
Peripheral vascular disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Postoperative and Post-traumatic infections with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Pulmonary Edema and Respiratory Failure	0 (0%)	2 (0.4%)	2 (0.2%)
Pulmonary Embolism with MCC or acute Cor pulmonale	0 (0%)	1 (0.2%)	1 (0.1%)
Red blood cell disorders with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Renal Failure with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Respiratory Signs and Symptoms	0 (0%)	2 (0.4%)	2 (0.2%)

	COVID-19 (N=505)	No COVID-19 (N=489)	Overall (N=994)
Seizures with MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Septicaemia or severe sepsis with MV > 96 hours	0 (0%)	41 (8.4%)	41 (4.1%)
Septicaemia or severe sepsis without MV > 96 hours with MCC	0 (0%)	117 (23.9%)	117 (11.8%)
Septicaemia or severe sepsis without MV > 96 hours without MCC	0 (0%)	3 (0.6%)	3 (0.3%)
Simple Pneumonia and Pleurisy with CC	0 (0%)	32 (6.5%)	32 (3.2%)
Simple Pneumonia and Pleurisy with MCC	0 (0%)	32 (6.5%)	32 (3.2%)
Simple Pneumonia and Pleurisy without CC/MCC	0 (0%)	32 (6.5%)	32 (3.2%)
Tendonitis, myositis, and bursitis without MCC	0 (0%)	1 (0.2%)	1 (0.1%)
Transient Ischemia without thrombolytic	0 (0%)	1 (0.2%)	1 (0.1%)
Viral illness without MCC	0 (0%)	1 (0.2%)	1 (0.1%)

	EXPI	RED	Facility Bas	ed Services	Outpatier	t Services	Ove	erall
	COVID- 19 (N=36)	No COVID- 19 (N=62)	COVID- 19 (N=41)	No COVID- 19 (N=43)	COVID- 19 (N=428)	No COVID- 19 (N=384)	COVID- 19 (N=505)	No COVID- 19 (N=489)
Age								
Mean (SD)	74.0 (12.8)	73.6 (14.0)	72.5 (13.4)	66.2 (18.2)	52.3 (16.5)	53.0 (16.1)	55.5 (17.7)	56.7 (17.7)
Median [Min, Max]	75.0 [53.0, 101]	74.5 [23.0, 95.0]	71.0 [34.0, 99.0]	66.0 [21.0, 98.0]	53.0 [14.0, 97.0]	53.5 [19.0, 94.0]	56.0 [14.0, 101]	58.0 [19.0, 98.0]
Age Categories								
0-17	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.2%)	0 (0%)	1 (0.2%)	0 (0%)
18-49	0 (0%)	4 (6.5%)	2 (4.9%)	6 (14.0%)	188 (43.9%)	160 (41.7%)	190 (37.6%)	170 (34.8%)
50-64	8 (22.2%)	8 (12.9%)	6 (14.6%)	11 (25.6%)	142 (33.2%)	126 (32.8%)	156 (30.9%)	145 (29.7%)
65+	28 (77.8%)	50 (80.6%)	33 (80.5%)	26 (60.5%)	97 (22.7%)	98 (25.5%)	158 (31.3%)	174 (35.6%)
Gender								
Female	17 (47.2%)	27 (43.5%)	13 (31.7%)	17 (39.5%)	222 (51.9%)	203 (52.9%)	252 (49.9%)	247 (50.5%)
Male	19 (52.8%)	35 (56.5%)	28 (68.3%)	26 (60.5%)	206 (48.1%)	181 (47.1%)	253 (50.1%)	242 (49.5%)
Race								
African American	27 (75.0%)	36 (58.1%)	23 (56.1%)	27 (62.8%)	276 (64.5%)	252 (65.6%)	326 (64.6%)	315 (64.4%)
Asian	1 (2.8%)	3 (4.8%)	1 (2.4%)	1 (2.3%)	17 (4.0%)	11 (2.9%)	19 (3.8%)	15 (3.1%)

Table 2C: Characteristics of patients on the 2nd EMR encounter by their post-acute care disposition and COVID-19 status

	EXPI	RED	Facility Bas	ed Services	Outpatien	t Services	Ove	erall
	COVID- 19 (N=36)	No COVID- 19 (N=62)	COVID- 19 (N=41)	No COVID- 19 (N=43)	COVID- 19 (N=428)	No COVID- 19 (N=384)	COVID- 19 (N=505)	No COVID- 19 (N=489)
Caucasian or White	6 (16.7%)	16 (25.8%)	17 (41.5%)	13 (30.2%)	86 (20.1%)	84 (21.9%)	109 (21.6%)	113 (23.1%)
Unknown, Unavailable or Unreported	2 (5.6%)	6 (9.7%)	0 (0%)	2 (4.7%)	47 (11.0%)	34 (8.9%)	49 (9.7%)	42 (8.6%)
American Indian or Alaskan Native	0 (0%)	1 (1.6%)	0 (0%)	0 (0%)	1 (0.2%)	0 (0%)	1 (0.2%)	1 (0.2%)
Native Hawaiian or Other Pacific Islander	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.2%)	0 (0%)	1 (0.2%)	0 (0%)
Multiple	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (0.8%)	0 (0%)	3 (0.6%)
Post-Acute Care Disposition								
EXPIRED	36 (100%)	62 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	36 (7.1%)	62 (12.7%)
LONG TERM CARE HOSP	0 (0%)	0 (0%)	1 (2.4%)	2 (4.7%)	0 (0%)	0 (0%)	1 (0.2%)	2 (0.4%)
OTHER REHAB FACILITY	0 (0%)	0 (0%)	1 (2.4%)	4 (9.3%)	0 (0%)	0 (0%)	1 (0.2%)	4 (0.8%)
SHORT TERM HOSPITAL	0 (0%)	0 (0%)	9 (22.0%)	20 (46.5%)	0 (0%)	0 (0%)	9 (1.8%)	20 (4.1%)
SKILLED NURSING FAC	0 (0%)	0 (0%)	30 (73.2%)	15 (34.9%)	0 (0%)	0 (0%)	30 (5.9%)	15 (3.1%)
HOSPICE-MED FACILITY	0 (0%)	0 (0%)	0 (0%)	1 (2.3%)	0 (0%)	0 (0%)	0 (0%)	1 (0.2%)
INTERMED CARE FAC	0 (0%)	0 (0%)	0 (0%)	1 (2.3%)	0 (0%)	0 (0%)	0 (0%)	1 (0.2%)
HOME HEALTH SERVICE	0 (0%)	0 (0%)	0 (0%)	0 (0%)	51 (11.9%)	32 (8.3%)	51 (10.1%)	32 (6.5%)
HOME SELF CARE	0 (0%)	0 (0%)	0 (0%)	0 (0%)	372 (86.9%)	347 (90.4%)	372 (73.7%)	347 (71.0%)

	EXPIRED		Facility Bas	ed Services	Outpatier	nt Services	Ove	erall
	COVID- 19 (N=36)	No COVID- 19 (N=62)	COVID- 19 (N=41)	No COVID- 19 (N=43)	COVID- 19 (N=428)	No COVID- 19 (N=384)	COVID- 19 (N=505)	No COVID- 19 (N=489)
HOSPICE-HOME	0 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (0.9%)	3 (0.8%)	4 (0.8%)	3 (0.6%)
LEFT AMA	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.2%)	2 (0.5%)	1 (0.2%)	2 (0.4%)
Discharging Unit at Acute Care	Hospital							
ICU	22 (61.1%)	40 (64.5%)	8 (19.5%)	12 (27.9%)	1 (0.2%)	2 (0.5%)	31 (6.1%)	54 (11.0%)
non_ICU	14 (38.9%)	22 (35.5%)	33 (80.5%)	31 (72.1%)	427 (99.8%)	382 (99.5%)	474 (93.9%)	435 (89.0%)
Acute-Care Hospital								
ESJH	3 (8.3%)	14 (22.6%)	5 (12.2%)	11 (25.6%)	77 (18.0%)	97 (25.3%)	85 (16.8%)	122 (24.9%)
EUH	13 (36.1%)	17 (27.4%)	14 (34.1%)	14 (32.6%)	162 (37.9%)	149 (38.8%)	189 (37.4%)	180 (36.8%)
EUHM	20 (55.6%)	29 (46.8%)	17 (41.5%)	9 (20.9%)	160 (37.4%)	119 (31.0%)	197 (39.0%)	157 (32.1%)
EJCH	0 (0%)	2 (3.2%)	5 (12.2%)	9 (20.9%)	29 (6.8%)	19 (4.9%)	34 (6.7%)	30 (6.1%)
Length of Stay								
Mean (SD)	12.4 (9.02)	9.32 (8.78)	11.3 (9.93)	10.3 (10.7)	4.77 (5.72)	4.47 (5.64)	5.84 (6.90)	5.60 (7.00)
Median [Min, Max]	11.0 [1.00, 43.0]	7.00 [1.00, 55.0]	9.00 [1.00, 39.0]	6.00 [1.00, 44.0]	2.00 [1.00, 35.0]	2.00 [1.00, 33.0]	3.00 [1.00, 43.0]	3.00 [1.00, 55.0]
Length of Stay Categories (days	6)							
0-1	2 (5.6%)	7 (11.3%)	7 (17.1%)	10 (23.3%)	189 (44.2%)	159 (41.4%)	198 (39.2%)	176 (36.0%)
2-7	11 (30.6%)	25 (40.3%)	11 (26.8%)	13 (30.2%)	157 (36.7%)	157 (40.9%)	179 (35.4%)	195 (39.9%)

	EXPI	RED	Facility Bas	sed Services	Outpatier	t Services	Ove	erall
	COVID- 19 (N=36)	No COVID- 19 (N=62)	COVID- 19 (N=41)	No COVID- 19 (N=43)	COVID- 19 (N=428)	No COVID- 19 (N=384)	COVID- 19 (N=505)	No COVID- 19 (N=489)
8-14	13 (36.1%)	20 (32.3%)	11 (26.8%)	8 (18.6%)	52 (12.1%)	45 (11.7%)	76 (15.0%)	73 (14.9%)
15+	10 (27.8%)	10 (16.1%)	12 (29.3%)	12 (27.9%)	30 (7.0%)	23 (6.0%)	52 (10.3%)	45 (9.2%)
Health Insurance Status								
Commercial	6 (16.7%)	11 (17.7%)	5 (12.2%)	11 (25.6%)	54 (12.6%)	34 (8.9%)	65 (12.9%)	56 (11.5%)
Government	29 (80.6%)	48 (77.4%)	35 (85.4%)	30 (69.8%)	301 (70.3%)	290 (75.5%)	365 (72.3%)	368 (75.3%)
Self-Pay	1 (2.8%)	3 (4.8%)	1 (2.4%)	2 (4.7%)	73 (17.1%)	60 (15.6%)	75 (14.9%)	65 (13.3%)
Comorbidities								
NO	1 (2.8%)	2 (3.2%)	4 (9.8%)	4 (9.3%)	167 (39.0%)	129 (33.6%)	172 (34.1%)	135 (27.6%)
YES	35 (97.2%)	60 (96.8%)	37 (90.2%)	39 (90.7%)	261 (61.0%)	255 (66.4%)	333 (65.9%)	354 (72.4%)

	EUHM (N=2371)	EJCH (N=932)	ESJH (N=2437)	EUH (N=1906)	Overall (N=7646)
Age					
Mean (SD)	58.0 (16.2)	60.6 (16.4)	59.3 (16.9)	59.8 (16.9)	59.2 (16.6)
Median [Min, Max]	58.0 [18.0, 104]	60.0 [18.0, 99.0]	59.0 [18.0, 102]	61.0 [19.0, 104]	59.0 [18.0, 104]
Age Categories					
0-17	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
18-49	706 (29.8%)	232 (24.9%)	696 (28.6%)	508 (26.7%)	2142 (28.0%)
50-64	824 (34.8%)	339 (36.4%)	837 (34.3%)	610 (32.0%)	2610 (34.1%)
65+	841 (35.5%)	361 (38.7%)	904 (37.1%)	788 (41.3%)	2894 (37.8%)
Gender					
Female	1281 (54.0%)	412 (44.2%)	1195 (49.0%)	994 (52.2%)	3882 (50.8%)
Male	1090 (46.0%)	520 (55.8%)	1242 (51.0%)	912 (47.8%)	3764 (49.2%)
Race					
African American or Black	1781 (75.1%)	161 (17.3%)	865 (35.5%)	1146 (60.1%)	3953 (51.7%)
American Indian or Alaskan Native	3 (0.1%)	4 (0.4%)	6 (0.2%)	4 (0.2%)	17 (0.2%)
Asian	20 (0.8%)	113 (12.1%)	76 (3.1%)	61 (3.2%)	270 (3.5%)
Caucasian or White	273 (11.5%)	567 (60.8%)	1049 (43.0%)	612 (32.1%)	2501 (32.7%)
Multiple	6 (0.3%)	2 (0.2%)	13 (0.5%)	8 (0.4%)	29 (0.4%)
Native Hawaiian or Other Pacific Islander	2 (0.1%)	2 (0.2%)	10 (0.4%)	3 (0.2%)	17 (0.2%)
Unknown, Unavailable or Unreported	286 (12.1%)	83 (8.9%)	418 (17.2%)	72 (3.8%)	859 (11.2%)
Post-Acute Care Disposition					
D/XFR CANCR OR CHILD	8 (0.3%)	0 (0%)	0 (0%)	10 (0.5%)	18 (0.2%)
DISASTER ALT SITE	1 (0.0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)
DISCH/XFR TO OTHER	1 (0.0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)

Table 3: Characteristics of participants on the 3rd EMR encounter by their Acute Care Hospitals

EUHM (N=2371)	EJCH (N=932)	ESJH (N=2437)	EUH (N=1906)	Overall (N=7646)
170 (7.2%)	46 (4.9%)	121 (5.0%)	160 (8.4%)	497 (6.5%)
340 (14.3%)	182 (19.5%)	311 (12.8%)	216 (11.3%)	1049 (13.7%)
1576 (66.5%)	628 (67.4%)	1811 (74.3%)	1261 (66.2%)	5276 (69.0%)
15 (0.6%)	24 (2.6%)	40 (1.6%)	22 (1.2%)	101 (1.3%)
19 (0.8%)	5 (0.5%)	5 (0.2%)	29 (1.5%)	58 (0.8%)
30 (1.3%)	7 (0.8%)	19 (0.8%)	18 (0.9%)	74 (1.0%)
35 (1.5%)	6 (0.6%)	15 (0.6%)	33 (1.7%)	89 (1.2%)
16 (0.7%)	5 (0.5%)	15 (0.6%)	25 (1.3%)	61 (0.8%)
21 (0.9%)	15 (1.6%)	8 (0.3%)	24 (1.3%)	68 (0.9%)
137 (5.8%)	14 (1.5%)	86 (3.5%)	106 (5.6%)	343 (4.5%)
1 (0.0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)
1 (0.0%)	0 (0%)	2 (0.1%)	0 (0%)	3 (0.0%)
0 (0%)	0 (0%)	4 (0.2%)	1 (0.1%)	5 (0.1%)
0 (0%)	0 (0%)	0 (0%)	1 (0.1%)	1 (0.0%)
170 (7.2%)	46 (4.9%)	121 (5.0%)	160 (8.4%)	497 (6.5%)
239 (10.1%)	45 (4.8%)	135 (5.5%)	228 (12.0%)	647 (8.5%)
1962 (82.7%)	841 (90.2%)	2181 (89.5%)	1518 (79.6%)	6502 (85.0%)
189 (8.0%)	51 (5.5%)	104 (4.3%)	147 (7.7%)	491 (6.4%)
2182 (92.0%)	881 (94.5%)	2333 (95.7%)	1759 (92.3%)	7155 (93.6%)
90 (3.8%)	197 (21.1%)	276 (11.3%)	303 (15.9%)	866 (11.3%)
	170 (7.2%) 340 (14.3%) 1576 (66.5%) 15 (0.6%) 19 (0.8%) 30 (1.3%) 35 (1.5%) 16 (0.7%) 21 (0.9%) 137 (5.8%) 1 (0.0%) 0 (0%) 0 (0%) 170 (7.2%) 239 (10.1%) 1962 (82.7%) 189 (8.0%) 2182 (92.0%)	170 (7.2%) 46 (4.9%) 340 (14.3%) 182 (19.5%) 1576 (66.5%) 628 (67.4%) 15 (0.6%) 24 (2.6%) 19 (0.8%) 5 (0.5%) 30 (1.3%) 7 (0.8%) 35 (1.5%) 6 (0.6%) 16 (0.7%) 5 (0.5%) 21 (0.9%) 15 (1.6%) 137 (5.8%) 14 (1.5%) 1 (0.0%) 0 (0%) 0 (0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 0 (0%) 1 (0.0%) 1 (0.0%) </td <td>170 (7.2%)$46 (4.9%)$$121 (5.0%)$$340 (14.3%)$$182 (19.5%)$$311 (12.8%)$$1576 (66.5%)$$628 (67.4%)$$1811 (74.3%)$$15 (0.6%)$$24 (2.6%)$$40 (1.6%)$$19 (0.8%)$$5 (0.5%)$$5 (0.2%)$$30 (1.3%)$$7 (0.8%)$$19 (0.8%)$$35 (1.5%)$$6 (0.6%)$$15 (0.6%)$$16 (0.7%)$$5 (0.5%)$$15 (0.6%)$$21 (0.9%)$$15 (1.6%)$$8 (0.3%)$$137 (5.8%)$$14 (1.5%)$$86 (3.5%)$$1 (0.0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$170 (7.2%)$$46 (4.9%)$$121 (5.0%)$$239 (10.1%)$$45 (4.8%)$$135 (5.5%)$$189 (8.0%)$$51 (5.5%)$$104 (4.3%)$$2182 (92.0%)$$881 (94.5%)$$2333 (95.7%)$</td> <td>170 (7.2%)$46 (4.9%)$$121 (5.0%)$$160 (8.4%)$$340 (14.3%)$$182 (19.5%)$$311 (12.8%)$$216 (11.3%)$$1576 (66.5%)$$628 (67.4%)$$1811 (74.3%)$$1261 (66.2%)$$15 (0.6%)$$24 (2.6%)$$40 (1.6%)$$22 (1.2%)$$19 (0.8%)$$5 (0.5%)$$5 (0.2%)$$29 (1.5%)$$30 (1.3%)$$7 (0.8%)$$19 (0.8%)$$18 (0.9%)$$35 (1.5%)$$6 (0.6%)$$15 (0.6%)$$33 (1.7%)$$16 (0.7%)$$5 (0.5%)$$15 (0.6%)$$25 (1.3%)$$21 (0.9%)$$15 (1.6%)$$8 (0.3%)$$24 (1.3%)$$137 (5.8%)$$14 (1.5%)$$86 (3.5%)$$106 (5.6%)$$1 (0.0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$0 (0%)$$1 (0.1%)$$0 (0%)$$0 (0%)$$0 (0%)$$1 (0.1%)$$0 (0%)$$0 (0%)$$1 (0.1%)$$10 (1%)$$0 (0%)$$0 (0%)$$1 (0.1%)$$10 (0%)$$170 (7.2%)$$46 (4.9%)$$121 (5.0%)$$160 (8.4%)$$239 (10.1%)$$45 (4.8%)$$135 (5.5%)$$228 (12.0%)$$1962 (82.7%)$$841 (90.2%)$$2181 (89.5%)$$1518 (79.6%)$$189 (8.0%)$$51 (5.5%)$$104 (4.3%)$$147 (7.7%)$$2182 (92.0%)$$881 (94.5%)$$2333 (95.7%)$$1759 (92.3%)$</td>	170 (7.2%) $46 (4.9%)$ $121 (5.0%)$ $340 (14.3%)$ $182 (19.5%)$ $311 (12.8%)$ $1576 (66.5%)$ $628 (67.4%)$ $1811 (74.3%)$ $15 (0.6%)$ $24 (2.6%)$ $40 (1.6%)$ $19 (0.8%)$ $5 (0.5%)$ $5 (0.2%)$ $30 (1.3%)$ $7 (0.8%)$ $19 (0.8%)$ $35 (1.5%)$ $6 (0.6%)$ $15 (0.6%)$ $16 (0.7%)$ $5 (0.5%)$ $15 (0.6%)$ $21 (0.9%)$ $15 (1.6%)$ $8 (0.3%)$ $137 (5.8%)$ $14 (1.5%)$ $86 (3.5%)$ $1 (0.0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $170 (7.2%)$ $46 (4.9%)$ $121 (5.0%)$ $239 (10.1%)$ $45 (4.8%)$ $135 (5.5%)$ $189 (8.0%)$ $51 (5.5%)$ $104 (4.3%)$ $2182 (92.0%)$ $881 (94.5%)$ $2333 (95.7%)$	170 (7.2%) $46 (4.9%)$ $121 (5.0%)$ $160 (8.4%)$ $340 (14.3%)$ $182 (19.5%)$ $311 (12.8%)$ $216 (11.3%)$ $1576 (66.5%)$ $628 (67.4%)$ $1811 (74.3%)$ $1261 (66.2%)$ $15 (0.6%)$ $24 (2.6%)$ $40 (1.6%)$ $22 (1.2%)$ $19 (0.8%)$ $5 (0.5%)$ $5 (0.2%)$ $29 (1.5%)$ $30 (1.3%)$ $7 (0.8%)$ $19 (0.8%)$ $18 (0.9%)$ $35 (1.5%)$ $6 (0.6%)$ $15 (0.6%)$ $33 (1.7%)$ $16 (0.7%)$ $5 (0.5%)$ $15 (0.6%)$ $25 (1.3%)$ $21 (0.9%)$ $15 (1.6%)$ $8 (0.3%)$ $24 (1.3%)$ $137 (5.8%)$ $14 (1.5%)$ $86 (3.5%)$ $106 (5.6%)$ $1 (0.0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $1 (0.1%)$ $0 (0%)$ $0 (0%)$ $0 (0%)$ $1 (0.1%)$ $0 (0%)$ $0 (0%)$ $1 (0.1%)$ $10 (1%)$ $0 (0%)$ $0 (0%)$ $1 (0.1%)$ $10 (0%)$ $170 (7.2%)$ $46 (4.9%)$ $121 (5.0%)$ $160 (8.4%)$ $239 (10.1%)$ $45 (4.8%)$ $135 (5.5%)$ $228 (12.0%)$ $1962 (82.7%)$ $841 (90.2%)$ $2181 (89.5%)$ $1518 (79.6%)$ $189 (8.0%)$ $51 (5.5%)$ $104 (4.3%)$ $147 (7.7%)$ $2182 (92.0%)$ $881 (94.5%)$ $2333 (95.7%)$ $1759 (92.3%)$

	EUHM (N=2371)	EJCH (N=932)	ESJH (N=2437)	EUH (N=1906)	Overall (N=7646)
Government	2188 (92.3%)	706 (75.8%)	2108 (86.5%)	1541 (80.9%)	6543 (85.6%)
Self-Pay	93 (3.9%)	29 (3.1%)	53 (2.2%)	62 (3.3%)	237 (3.1%)
Length of Stay					
Mean (SD)	7.69 (8.70)	6.57 (6.64)	6.54 (6.93)	9.57 (12.1)	7.66 (9.06)
Median [Min, Max]	5.00 [1.00, 78.0]	5.00 [1.00, 60.0]	4.00 [1.00, 59.0]	5.00 [1.00, 126]	5.00 [1.00, 126]
Length of Stay Categories					
0-1	250 (10.5%)	46 (4.9%)	154 (6.3%)	141 (7.4%)	591 (7.7%)
2-7	1386 (58.5%)	664 (71.2%)	1691 (69.4%)	1077 (56.5%)	4818 (63.0%)
8-14	429 (18.1%)	151 (16.2%)	370 (15.2%)	343 (18.0%)	1293 (16.9%)
15+	306 (12.9%)	71 (7.6%)	222 (9.1%)	345 (18.1%)	944 (12.3%)

	2018 (N=5336)	2019 (N=5682)	Overall (N=11018)
Acute Care Hospital			
EJCH	820 (15.4%)	834 (14.7%)	1654 (15.0%)
ESJH	1069 (20.0%)	1269 (22.3%)	2338 (21.2%)
EUH	1698 (31.8%)	1732 (30.5%)	3430 (31.1%)
EUHM	1484 (27.8%)	1658 (29.2%)	3142 (28.5%)
Post-Acute Care Disposition			
CANCER CHILD HOSP WITH PLANNED READMIT	2 (0.0%)	5 (0.1%)	7 (0.1%)
CUST/SUPP CARE	50 (0.9%)	66 (1.2%)	116 (1.1%)
D/XFR CANCR OR CHILD	1 (0.0%)	53 (0.9%)	54 (0.5%)
DISCH/XFR TO CAH	1 (0.0%)	1 (0.0%)	2 (0.0%)
DISCH/XFR TO OTHER	63 (1.2%)	13 (0.2%)	76 (0.7%)
EXPIRED	365 (6.8%)	390 (6.9%)	755 (6.9%)
HOME HEALTH SERVICE	989 (18.5%)	1050 (18.5%)	2039 (18.5%)
HOME HEALTH SERVICE WITH PLANNED READMIT	2 (0.0%)	0 (0%)	2 (0.0%)
HOME SELF CARE	1663 (31.2%)	1679 (29.5%)	3342 (30.3%)
HOME-SELF CARE WITH PLANNED READMIT	9 (0.2%)	7 (0.1%)	16 (0.1%)
HOSPICE-HOME	259 (4.9%)	312 (5.5%)	571 (5.2%)
HOSPICE-MED FACILITY	223 (4.2%)	268 (4.7%)	491 (4.5%)
LEFT AMA	210 (3.9%)	242 (4.3%)	452 (4.1%)
LONG TERM CARE HOSP	107 (2.0%)	112 (2.0%)	219 (2.0%)
MCR-APPRVD SWING BED	5 (0.1%)	7 (0.1%)	12 (0.1%)
OTHER INSTITUTION WITH PLANNED READMIT	1 (0.0%)	2 (0.0%)	3 (0.0%)
OTHER REHAB FACILITY	366 (6.9%)	388 (6.8%)	754 (6.8%)

Table 4A: Characteristics of acute care hospital discharged patients for the financial years 2018 and 2019

	2018 (N=5336)	2019 (N=5682)	Overall (N=11018)
PSYCHIATRIC HOSPITAL/UNIT WITH PLANNED READMIT	1 (0.0%)	1 (0.0%)	2 (0.0%)
REHAB FACILITY/UNIT WITH PLANNED READMIT	4 (0.1%)	4 (0.1%)	8 (0.1%)
SHORT TERM HOSPITAL	347 (6.5%)	391 (6.9%)	738 (6.7%)
SHORT TERM HOSPITAL WITH PLANNED READMIT	1 (0.0%)	5 (0.1%)	6 (0.1%)
SKILLED NURSING FAC	469 (8.8%)	550 (9.7%)	1019 (9.2%)
SNF WITH PLANNED READMIT	2 (0.0%)	3 (0.1%)	5 (0.0%)
STILL A PATIENT	13 (0.2%)	3 (0.1%)	16 (0.1%)
SWING BED WITH PLANNED READMIT	1 (0.0%)	2 (0.0%)	3 (0.0%)
TO A FEDERAL HOSP	17 (0.3%)	11 (0.2%)	28 (0.3%)
TO COURT/LAW ENFORCE	9 (0.2%)	12 (0.2%)	21 (0.2%)
TO PSYCH HOSP	62 (1.2%)	94 (1.7%)	156 (1.4%)
EXPIRED PLACE UNKN	0 (0%)	2 (0.0%)	2 (0.0%)
TO MCD CERT NOT CARE	0 (0%)	1 (0.0%)	1 (0.0%)
Missing	94 (1.8%)	8 (0.1%)	102 (0.9%)
Post-Acute Care Disposition by Services offered			
EXPIRED	365 (6.8%)	392 (6.9%)	757 (6.9%)
Facility Based Services	1685 (31.6%)	1911 (33.6%)	3596 (32.6%)
Out-Patient Services	3192 (59.8%)	3371 (59.3%)	6563 (59.6%)
Missing	94 (1.8%)	8 (0.1%)	102 (0.9%)
Health Insurance Status			
Commercial	3415 (64.0%)	3742 (65.9%)	7157 (65.0%)
Government	1384 (25.9%)	1358 (23.9%)	2742 (24.9%)
NA	2 (0.0%)	0 (0%)	2 (0.0%)

	2018 (N=5336)	2019 (N=5682)	Overall (N=11018)
OTHER	174 (3.3%)	188 (3.3%)	362 (3.3%)
Self-Pay	361 (6.8%)	394 (6.9%)	755 (6.9%)
Cases			
Mean (SD)	169 (4430)	15.8 (68.8)	89.8 (3080)
Median [Min, Max]	2.00 [1.00, 261000]	2.00 [1.00, 2560]	2.00 [1.00, 261000]
Total Hospital Charges			
Mean (SD)	931000 (4720000)	844000 (2270000)	886000 (3670000)
Median [Min, Max]	167000 [-3840, 242000000]	189000 [68.0, 51300000]	178000 [-3840, 242000000]
Length of Stay			
Mean (SD)	238 (4430)	87.2 (301)	160 (3090)
Median [Min, Max]	18.0 [-118, 261000]	19.0 [-25.0, 10900]	19.0 [-118, 261000]
Acute Care Facility			
Emory Hospital Midtown (EUHM)	1484 (27.8%)	1658 (29.2%)	3142 (28.5%)
Emory Johns Creek Hospital (EJCH)	820 (15.4%)	834 (14.7%)	1654 (15.0%)
Emory University Hospital (EUH)	1698 (31.8%)	1732 (30.5%)	3430 (31.1%)
Emory Saint Joseph's Hospital (ESJH)	1069 (20.0%)	1269 (22.3%)	2338 (21.2%)

Table 4B: Characteristics of acute care hospital discharged patients by PAC disposition status and financial years 2018 and2019.

	EXPIRED		Facility Bas	ed Services	Out-Patient	Services	Overall		
	2018 N=365	2019 N=392	2018 N=1685	2019 N=1911	2018 N=3192	2019 N=3371)	2018 N=5336	2019 N=5682	
Post-Acute Care Disposition									
Expired	365 (100%)	390 (99.5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	365 (6.8%)	390 (6.9%)	
Expired Place Unknown	0 (0%)	2 (0.5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0.0%)	
Cancer Child Hosp with Planned Readmit	0 (0%)	0 (0%)	2 (0.1%)	5 (0.3%)	0 (0%)	0 (0%)	2 (0.0%)	5 (0.1%)	
Discharge/Transfer to Cancer or Child	0 (0%)	0 (0%)	1 (0.1%)	53 (2.8%)	0 (0%)	0 (0%)	1 (0.0%)	53 (0.9%)	
Discharge/Transfer to CAH	0 (0%)	0 (0%)	1 (0.1%)	1 (0.1%)	0 (0%)	0 (0%)	1 (0.0%)	1 (0.0%)	
Discharge/Transfer to Other	0 (0%)	0 (0%)	63 (3.7%)	13 (0.7%)	0 (0%)	0 (0%)	63 (1.2%)	13 (0.2%)	
Hospice-Med Facility	0 (0%)	0 (0%)	223 (13.2%)	268 (14.0%)	0 (0%)	0 (0%)	223 (4.2%)	268 (4.7%)	
Long Term Care Hosp	0 (0%)	0 (0%)	107 (6.4%)	112 (5.9%)	0 (0%)	0 (0%)	107 (2.0%)	112 (2.0%)	
MCR-Approved Swing Bed	0 (0%)	0 (0%)	5 (0.3%)	7 (0.4%)	0 (0%)	0 (0%)	5 (0.1%)	7 (0.1%)	
Other Rehab Facility	0 (0%)	0 (0%)	366 (21.7%)	388 (20.3%)	0 (0%)	0 (0%)	366 (6.9%)	388 (6.8%)	
Psychiatric Hospital/Unit with Planned Readmit	0 (0%)	0 (0%)	1 (0.1%)	1 (0.1%)	0 (0%)	0 (0%)	1 (0.0%)	1 (0.0%)	
Rehab Facility/Unit with Planned Readmit	0 (0%)	0 (0%)	4 (0.2%)	4 (0.2%)	0 (0%)	0 (0%)	4 (0.1%)	4 (0.1%)	
Short Term Hospital	0 (0%)	0 (0%)	347 (20.6%)	391 (20.5%)	0 (0%)	0 (0%)	347 (6.5%)	391 (6.9%)	

	EXPIRED Facility Based Services Out-Patient Services						Overall	
	2018 N=365	2019 N=392	2018 N=1685	2019 N=1911	2018 N=3192	2019 N=3371)	2018 N=5336	2019 N=5682
Short Term Hospital with Planned Readmit	0 (0%)	0 (0%)	1 (0.1%)	5 (0.3%)	0 (0%)	0 (0%)	1 (0.0%)	5 (0.1%)
Skilled Nursing Fac	0 (0%)	0 (0%)	469 (27.8%)	550 (28.8%)	0 (0%)	0 (0%)	469 (8.8%)	550 (9.7%)
SNF With Planned Readmit	0 (0%)	0 (0%)	2 (0.1%)	3 (0.2%)	0 (0%)	0 (0%)	2 (0.0%)	3 (0.1%)
Still A Patient	0 (0%)	0 (0%)	13 (0.8%)	3 (0.2%)	0 (0%)	0 (0%)	13 (0.2%)	3 (0.1%)
Swing Bed with Planned Readmit	0 (0%)	0 (0%)	1 (0.1%)	2 (0.1%)	0 (0%)	0 (0%)	1 (0.0%)	2 (0.0%)
To A Federal Hospital	0 (0%)	0 (0%)	17 (1.0%)	11 (0.6%)	0 (0%)	0 (0%)	17 (0.3%)	11 (0.2%)
To Psychiatry Hospital	0 (0%)	0 (0%)	62 (3.7%)	94 (4.9%)	0 (0%)	0 (0%)	62 (1.2%)	94 (1.7%)
Cust/Supp Care	0 (0%)	0 (0%)	0 (0%)	0 (0%)	50 (1.6%)	66 (2.0%)	50 (0.9%)	66 (1.2%)
Home Health Service	0 (0%)	0 (0%)	0 (0%)	0 (0%)	989 (31.0%)	1050 (31.1%)	989 (18.5%)	1050 (18.5%)
Home Health Service with Planned Readmit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0.1%)	0 (0%)	2 (0.0%)	0 (0%)
Home Self Care	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1663 (52.1%)	1679 (49.8%)	1663 (31.2%)	1679 (29.5%)
Home-Self Care with Planned Readmit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	9 (0.3%)	7 (0.2%)	9 (0.2%)	7 (0.1%)
Hospice-Home	0 (0%)	0 (0%)	0 (0%)	0 (0%)	259 (8.1%)	312 (9.3%)	259 (4.9%)	312 (5.5%)
Left AMA	0 (0%)	0 (0%)	0 (0%)	0 (0%)	210 (6.6%)	242 (7.2%)	210 (3.9%)	242 (4.3%)

	EXPIRED		Facility Bas	ed Services	Out-Patient S	ervices	Overall	
	2018 N=365	2019 N=392	2018 N=1685	2019 N=1911	2018 N=3192	2019 N=3371)	2018 N=5336	2019 N=5682
Other Institution with Planned Readmit	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)	2 (0.1%)	1 (0.0%)	2 (0.0%)
To Court/Law Enforce	0 (0%)	0 (0%)	0 (0%)	0 (0%)	9 (0.3%)	12 (0.4%)	9 (0.2%)	12 (0.2%)
To MCD Cert Not Care	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)	0 (0%)	1 (0.0%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	94 (1.8%)	8 (0.1%)
Health Insurance Status								
Commercial	221 (60.5%)	254 (64.8%)	991 (58.8%)	1191 (62.3%)	2143 (67.1%)	2292 (68.0%)	3415 (64.0%)	3742 (65.9%)
Government	103 (28.2%)	100 (25.5%)	537 (31.9%)	539 (28.2%)	726 (22.7%)	718 (21.3%)	1384 (25.9%)	1358 (23.9%)
OTHER	10 (2.7%)	9 (2.3%)	62 (3.7%)	58 (3.0%)	97 (3.0%)	121 (3.6%)	174 (3.3%)	188 (3.3%)
Self-Pay	31 (8.5%)	29 (7.4%)	95 (5.6%)	123 (6.4%)	226 (7.1%)	240 (7.1%)	361 (6.8%)	394 (6.9%)
NA	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (0.0%)	0 (0%)
Length of hospital stay								
Mean (SD)	40.5 (84.2)	40.9 (76.8)	59.0 (168)	56.0 (157)	105 (354)	110 (370)	238 (4430)	87.2 (301)
Median [Min, Max]	16.0 [- 1.00, 1160]	17.0 [0, 642]	16.0 [0, 3030]	17.0 [0, 2670]	21.0 [-118, 9970]	22.0 [-25.0, 10900]	18.0 [-118, 261000]	19.0 [-25.0, 10900]
Acute-Care Hospital								
Emory Hospital Midtown (EUHM)	100 (27.4%)	110 (28.1%)	482 (29.7%)	591 (31.9%)	884 (29.0%)	954 (29.4%)	1484 (29.3%)	1658 (30.2%)
Emory Johns Creek Hospital (EJCH)	42 (11.5%)	41 (10.5%)	224 (13.8%)	245 (13.2%)	539 (17.7%)	546 (16.9%)	820 (16.2%)	834 (15.2%)

	EXPIRED		Facility Based Services Out-Patient Services				Overall		
	2018	2019	2018	2019	2018	2019	2018	2019	
	N=365	N=392	N=1685	N=1911	N=3192	N=3371)	N=5336	N=5682	
Emory University Hospital	137	144	605	606	955	982	1698	1732	
(EUH)	(37.5%)	(36.8%)	(37.3%)	(32.7%)	(31.3%)	(30.3%)	(33.5%)	(31.5%)	
Emory Saint Joseph's Hospital	86 (23.6%)	96	311	411	670	759	1069	1269	
(ESJH)		(24.6%)	(19.2%)	(22.2%)	(22.0%)	(23.4%)	(21.1%)	(23.1%)	

	2018 (N=5035)	2019 (N=5485)	2020-2021 (N=7646)
Facility participant was discharged from	om, n (%)		
EJCH	805 (16.0%)	832 (15.2%)	932 (12.2%)
ESJH	1067 (21.2%)	1266 (23.1%)	2437 (31.9%)
EUH	1697 (33.7%)	1732 (31.6%)	1906 (24.9%)
EUHM	1466 (29.1%)	1655 (30.2%)	2371 (31.0%)
Post-Acute Care Dispositions, n (%)		-	
Home Health Services	931 (18.5%)	990 (18.0%)	1049 (13.7%)
Home Self Care	1586 (31.5%)	1614 (29.4%)	5276 (69.0%)
Short Term Care Facilities	307 (6.1%)	358 (6.5%)	68 (0.9%)
Long Term Care Facilities	107 (2.1%)	112 (2.0%)	89 (1.2%)
Skilled Nursing Facilities	452 (9.0%)	535 (9.8%)	343 (4.5%)
Expired	365 (7.2%)	391 (7.1%)	497 (6.5%)
Other dispositions	1287 (25.6%)	1485 (27.1%)	324 (4.2%)
Post-Acute Care Dispositions by Serv	ices, n (%)	-	
Outpatient services	3048 (60.5%)	3241 (59.1%)	6502 (85.0%)
Facility-based services	1622 (32.2%)	1853 (33.8%)	647 (8.5%)
Death	365 (7.2%)	391 (7.1%)	497 (6.5%)
Health Insurance Utilized, n (%)			
Government	1327 (26.4%)	1321 (24.1%)	6543 (85.6%)
Commercial	3212 (63.8%)	3602 (65.7%)	866 (11.3%)
Self-Pay	335 (6.7%)	380 (6.9%)	237 (3.1%)
Others	161 (3.2%)	182 (3.3%)	0 (0%)

Table 5: Table showing how the disposition and utilization of post-acute care services by pandemic years (2018-2019) vs pre-pandemic years (2020-2021)

	1 st EMR e	encounter	2 nd EMR	encounter	3rd EMR enc	ounter	Overall	
	Female (N=355)	Male (N=325)	Female (N=499)	Male (N=495)	Female (N=3882)	Male (N=3764)	Female (N=4736)	Male (N=4584)
Age								
Mean (SD)	54.0 (17.7)	55.1 (16.4)	55.7 (18.6)	56.5 (16.7)	59.4 (17.2)	58.9 (16.0)	58.6 (17.5)	58.4 (16.2)
Median [Min, Max]	55.0 [14.0, 96.0]	56.0 [19.0, 99.0]	56.0 [14.0, 101]	57.0 [19.0, 99.0]	59.0 [18.0, 104]	59.0 [18.0, 101]	59.0 [14.0, 104]	59.0 [18.0, 101]
Age categories								
0-17	1 (0.3%)	0 (0%)	1 (0.2%)	0 (0%)	0 (0%)	0 (0%)	2 (0.0%)	0 (0%)
18-49	139 (39.2%)	125 (38.5%)	184 (36.9%)	176 (35.6%)	1094 (28.2%)	1048 (27.8%)	1417 (29.9%)	1349 (29.4%)
50-64	110 (31.0%)	100 (30.8%)	148 (29.7%)	153 (30.9%)	1309 (33.7%)	1301 (34.6%)	1567 (33.1%)	1554 (33.9%)
65+	105 (29.6%)	100 (30.8%)	166 (33.3%)	166 (33.5%)	1479 (38.1%)	1415 (37.6%)	1750 (37.0%)	1681 (36.7%)
Race								
African American or Black	235 (66.2%)	217 (66.8%)	322 (64.5%)	319 (64.4%)	2231 (57.5%)	1722 (45.7%)	2788 (58.9%)	2258 (49.3%)
Asian	13 (3.7%)	9 (2.8%)	18 (3.6%)	16 (3.2%)	99 (2.6%)	171 (4.5%)	130 (2.7%)	196 (4.3%)
Caucasian or White	77 (21.7%)	69 (21.2%)	116 (23.2%)	106 (21.4%)	1118 (28.8%)	1383 (36.7%)	1311 (27.7%)	1558 (34.0%)
Multiple	1 (0.3%)	0 (0%)	1 (0.2%)	2 (0.4%)	11 (0.3%)	18 (0.5%)	13 (0.3%)	20 (0.4%)
Unknown, Unavailable or Unreported	29 (8.2%)	29 (8.9%)	42 (8.4%)	49 (9.9%)	405 (10.4%)	454 (12.1%)	476 (10.1%)	532 (11.6%)

Table 6: Baseline characteristics of study participants at the 3 EMR encounters by gender

	1 st EMR	encounter	2nd EMR	encounter	3rd EMR enc	ounter	Ove	erall
	Female (N=355)	Male (N=325)	Female (N=499)	Male (N=495)	Female (N=3882)	Male (N=3764)	Female (N=4736)	Male (N=4584)
American Indian or Alaskan Native	0 (0%)	1 (0.3%)	0 (0%)	2 (0.4%)	11 (0.3%)	6 (0.2%)	11 (0.2%)	9 (0.2%)
Native Hawaiian or Other Pacific Islander	0 (0%)	0 (0%)	0 (0%)	1 (0.2%)	7 (0.2%)	10 (0.3%)	7 (0.1%)	11 (0.2%)
Acute Care Hospital								
EJCH	26 (7.3%)	26 (8.0%)	33 (6.6%)	31 (6.3%)	412 (10.6%)	520 (13.8%)	471 (9.9%)	577 (12.6%)
ESJH	70 (19.7%)	70 (21.5%)	96 (19.2%)	111 (22.4%)	1195 (30.8%)	1242 (33.0%)	1361 (28.7%)	1423 (31.0%)
EUH	132 (37.2%)	108 (33.2%)	191 (38.3%)	178 (36.0%)	994 (25.6%)	912 (24.2%)	1317 (27.8%)	1198 (26.1%)
EUHM	127 (35.8%)	121 (37.2%)	179 (35.9%)	175 (35.4%)	1281 (33.0%)	1090 (29.0%)	1587 (33.5%)	1386 (30.3%)
Post-Acute Care Disposition								
EXPIRED	29 (8.2%)	31 (9.5%)	44 (8.8%)	54 (10.9%)	224 (5.8%)	273 (7.3%)	297 (6.3%)	358 (7.8%)
HOME HEALTH SERVICE	30 (8.5%)	18 (5.5%)	45 (9.0%)	38 (7.7%)	608 (15.7%)	441 (11.7%)	683 (14.4%)	497 (10.8%)
HOME SELF CARE	280 (78.9%)	247 (76.0%)	374 (74.9%)	345 (69.7%)	2644 (68.1%)	2632 (69.9%)	3298 (69.6%)	3224 (70.3%)
HOSPICE-HOME	3 (0.8%)	1 (0.3%)	5 (1.0%)	2 (0.4%)	60 (1.5%)	41 (1.1%)	68 (1.4%)	44 (1.0%)
INTERMED CARE FAC	1 (0.3%)	0 (0%)	1 (0.2%)	0 (0%)	2 (0.1%)	3 (0.1%)	4 (0.1%)	3 (0.1%)
SHORT TERM HOSPITAL	8 (2.3%)	15 (4.6%)	12 (2.4%)	17 (3.4%)	28 (0.7%)	40 (1.1%)	48 (1.0%)	72 (1.6%)
SKILLED NURSING FAC	4 (1.1%)	9 (2.8%)	13 (2.6%)	32 (6.5%)	182 (4.7%)	161 (4.3%)	199 (4.2%)	202 (4.4%)
LEFT AMA	0 (0%)	3 (0.9%)	1 (0.2%)	2 (0.4%)	26 (0.7%)	48 (1.3%)	27 (0.6%)	53 (1.2%)

	1 st EMR e	encounter	2nd EMR	encounter	3rd EMR enc	ounter	Ove	erall
	Female (N=355)	Male (N=325)	Female (N=499)	Male (N=495)	Female (N=3882)	Male (N=3764)	Female (N=4736)	Male (N=4584)
LONG TERM CARE HOSP	0 (0%)	1 (0.3%)	1 (0.2%)	2 (0.4%)	41 (1.1%)	48 (1.3%)	42 (0.9%)	51 (1.1%)
HOSPICE-MED FACILITY	0 (0%)	0 (0%)	1 (0.2%)	0 (0%)	32 (0.8%)	26 (0.7%)	33 (0.7%)	26 (0.6%)
OTHER REHAB FACILITY	0 (0%)	0 (0%)	2 (0.4%)	3 (0.6%)	26 (0.7%)	35 (0.9%)	28 (0.6%)	38 (0.8%)
D/XFR CANCR OR CHILD	0 (0%)	0 (0%)	0 (0%)	0 (0%)	6 (0.2%)	12 (0.3%)	6 (0.1%)	12 (0.3%)
TO PSYCH HOSP	0 (0%)	0 (0%)	0 (0%)	0 (0%)	3 (0.1%)	0 (0%)	3 (0.1%)	0 (0%)
DISASTER ALT SITE	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)	0 (0%)	1 (0.0%)
DISCH/XFR TO OTHER	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)	0 (0%)	1 (0.0%)
STILL A PATIENT	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)	0 (0%)	1 (0.0%)
TO COURT/LAW ENFORCE	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (0.0%)	0 (0%)	1 (0.0%)
Post-Acute Care Disposition by	Services							
EXPIRED	29 (8.2%)	31 (9.5%)	44 (8.8%)	54 (10.9%)	224 (5.8%)	273 (7.3%)	297 (6.3%)	358 (7.8%)
Facility Based Services	13 (3.7%)	25 (7.7%)	30 (6.0%)	54 (10.9%)	320 (8.2%)	327 (8.7%)	363 (7.7%)	406 (8.9%)
Outpatient Services	313 (88.2%)	269 (82.8%)	425 (85.2%)	387 (78.2%)	3338 (86.0%)	3164 (84.1%)	4076 (86.1%)	3820 (83.3%)
Discharging Unit from Acute-Ca	are Hospital							
ICU	28 (7.9%)	30 (9.2%)	41 (8.2%)	44 (8.9%)	234 (6.0%)	257 (6.8%)	303 (6.4%)	331 (7.2%)
non-ICU	327 (92.1%)	295 (90.8%)	458 (91.8%)	451 (91.1%)	3648 (94.0%)	3507 (93.2%)	4433 (93.6%)	4253 (92.8%)
Health Insurance Status								
0	355 (100%)	325 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	355 (7.5%)	325 (7.1%)

	1 st EMR e	encounter	2nd EMR	encounter	3rd EMR enc	ounter	Ove	erall
	Female (N=355)	Male (N=325)	Female (N=499)	Male (N=495)	Female (N=3882)	Male (N=3764)	Female (N=4736)	Male (N=4584)
Commercial	0 (0%)	0 (0%)	66 (13.2%)	55 (11.1%)	407 (10.5%)	459 (12.2%)	473 (10.0%)	514 (11.2%)
Government	0 (0%)	0 (0%)	375 (75.2%)	358 (72.3%)	3351 (86.3%)	3192 (84.8%)	3726 (78.7%)	3550 (77.4%)
Self-Pay	0 (0%)	0 (0%)	58 (11.6%)	82 (16.6%)	0 (0%)	0 (0%)	58 (1.2%)	82 (1.8%)
Self-Pay	0 (0%)	0 (0%)	0 (0%)	0 (0%)	124 (3.2%)	113 (3.0%)	124 (2.6%)	113 (2.5%)
Length of Stay								
Mean (SD)	4.36 (4.30)	5.10 (5.48)	4.86 (5.47)	6.59 (8.08)	7.23 (8.43)	8.09 (9.65)	6.77 (7.99)	7.72 (9.29)
Median [Min, Max]	3.00 [1.00, 21.0]	3.00 [1.00, 29.0]	3.00 [1.00, 33.0]	3.00 [1.00, 55.0]	5.00 [1.00, 126]	5.00 [1.00, 126]	4.00 [1.00, 126]	5.00 [1.00, 126]
Length of Stay Categories								
0-1	135 (38.0%)	111 (34.2%)	201 (40.3%)	173 (34.9%)	317 (8.2%)	274 (7.3%)	653 (13.8%)	558 (12.2%)
2-7	155 (43.7%)	140 (43.1%)	192 (38.5%)	182 (36.8%)	2491 (64.2%)	2327 (61.8%)	2838 (59.9%)	2649 (57.8%)
8-14	51 (14.4%)	47 (14.5%)	77 (15.4%)	72 (14.5%)	663 (17.1%)	630 (16.7%)	791 (16.7%)	749 (16.3%)
15+	14 (3.9%)	27 (8.3%)	29 (5.8%)	68 (13.7%)	411 (10.6%)	533 (14.2%)	454 (9.6%)	628 (13.7%)