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vomiting, patients with history or family history of chronic disease, disorders of lipid metabolism, and myocardial infarction presentations in 2020 compared to 2019. Dispositions also significantly differed in 2020 compared to 2019 with more patients receiving admission or dying in the ED (p<0.001). Patients who presented to the ED often presented with more severe illness in 2020 as reflected in increased length of stay in 2020 (p=0.01) and increased case-medical-index (p<0.001).

Conclusion: The COVID-19 pandemic significantly reduced the total number of ED visits to HMC in Flint, Michigan in 2020, when compared to the same time period in 2019. Notably, patients were more likely to have a longer length-of-stay, present with more severe illness, and more likely to be admitted or pass away in the ED when compared to the same time period in 2019. Analysis also revealed that visits for respiratory diagnoses and other life-threatening conditions like myocardial infarction increased, whereas less life-threatening/acute conditions like sprains, urinary tract infections, and sexually transmitted infections decreased. Interestingly as well, the pandemic drove statistically significant increased visits for mental health and socioeconomic factors. Limitations include analyzing 6 months of data as opposed to the whole calendar year and the use of broad ICD-10 code categories. It is also important to note that diagnosis codes were analyzed versus what the patient subjectively presented for, so there is a gray area between being able to elucidate what motivated the patient to come to the ED and versus what was analyzed in this project as patient’s ICD-10 diagnoses.

Table 1: Comparison of Emergency Department Values in 2019 vs 2020

Year	# of ED Visits
2019	33,648
2020	25,697
<b>Study Total</b>	<b>59,345</b>

Table 2: Comparison of Patient Demographics in 2019 vs 2020

Year	2019 (n=33648)		2020 (n=25697)		P-value
	Number	(%)	Number	(%)	
<b>Sex</b>					<b>&lt;0.001</b>
Male	14857	44.2	12067	47	
Female	18791	55.8	13630	53	
<b>Race</b>					<b>0.071</b>
White	15025	44.7	11559	45	
Black	17175	51	12899	50.2	
Hispanic	752	2.2	660	2.6	
American Indian & Alaskan Native	114	0.3	90	0.4	
Native Hawaiian & Other Pacific Islander	8	0.02	9	0.035	
Asian	46	0.1	33	0.1	
Other	363	1.1	298	1.2	
Unknown	165	0.5	149	0.6	

Table 3: Comparison of Severity Markers in 2019 vs 2020

Year	2019	2020	p-value
Length of Stay (Hours)	6.81	6.97	0.01
Case medical index (CMI)	1.65	1.93	<.001

Table 4: Comparison of Disposition in 2019 vs 2020

Year	2019		2020		P-value
	Number	(%)	Number	(%)	
<b>Disposition</b>					<b>&lt;.001</b>
Discharge	23140	68.8	17721	69	
Admit	7116	21.1	5870	22.8	
SNF	884	2.6	535	2.1	
Death	230	0.7	255	1	

Table 5: Comparison of Diagnoses in 2019 vs 2020

Year	2019		2020		P-value
	Number	(%)	Number	(%)	
<b>Diagnoses</b>					
<b>Infectious Disease</b>	2682	8	2181	11	<.001
COVID-19	0	0	462	1.8	<.001
<b>General Signs/Symptoms</b>	1089	3.2	942	3.7	<.01
Pneumonia	532	1.6	747	2.9	<.001
<b>Lower Respiratory Disease</b>	137	0.4	115	0.4	0.454
<b>Respiratory Failure/Insufficiency/ Arrest</b>	989	2.9	1035	4	<.001
Cardiac Arrest	166	0.5	125	0.5	0.905
<b>Socioeconomic Factors</b>	542	1.6	437	1.8	<.05
Mental Health	1376	4.1	1161	4.5	<.05
Abdominal	4162	12.4	3210	12.5	0.654
Musculoskeletal	3036	9	2238	8.7	0.183
Essential Hypertension	7733	23	19779	23	0.891
Nausea or Vomiting	2320	6.9	2107	8.2	<.001
<b>Upper Respiratory Infection</b>	1322	3.9	1030	4	0.624
Sprain	789	2.3	452	1.8	<.001
<b>Superficial Injury/Contusion</b>	1893	5.6	1496	5.8	0.308
<b>Personal/Family History of Disease</b>	7691	22.9	6373	24.8	<.001
Headache	2021	6	1481	5.8	0.213
Unspecified Injury	567	1.7	378	1.5	<.05
<b>Nonspecific Chest Pain</b>	2934	8.7	2266	8.8	0.674
<b>Tobacco-Related Disorders</b>	13167	39.1	10258	39.9	0.052
<b>Urinary Tract Infection</b>	1491	4.4	995	3.9	<.01
<b>Sexually Transmitted Infection</b>	195	0.6	114	0.4	<.05
Asthma	1542	4.6	1158	4.5	0.658
<b>Disorders of Lipid Metabolism</b>	1941	5.8	1660	6.5	<.001
<b>Skin/Subcutaneous Infection</b>	1146	3.4	836	3.3	0.305
<b>COPD or Bronchiectasis</b>	2494	7.4	1823	7.1	0.14
<b>Myocardial Infarction</b>	457	1.4	414	1.6	<.05
<b>Cerebral Infarction</b>	175	0.5	153	0.6	0.22

## 86 Sexually Transmitted Infection Testing and Prevalence at a Large, Urban Hospital Before and After the SARS-CoV-19 Pandemic



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Study Objectives: To determine whether behavior changes made during the SARS-CoV-19 pandemic impacted the number of patients being tested and the positivity rate of sexually transmitted infections (STI) at a large, urban hospital in the Bronx to identify how to improve the sexual health services available to our patients.

Methods: A retrospective, cross-sectional study using data from the EMR at a public hospital in the Bronx, New York. Included patients were aged 13 and over that had STI testing from Aug. 1, 2019 to Feb. 1, 2020 (Period 1) and Aug. 1, 2020 to Feb. 1, 2021 (Period 2) in any hospital setting. Periods 1 and 2 are 6 month periods before and after the SARS-CoV-19 pandemic in NYC, respectively. Counts and percents were used to quantify STI tests (HIV point of care, HIV 4th generation serum, Gonorrhea Amplification, Chlamydia Amplification, and Treponema Pallidum Ab screen) and

positive results during Period 1 vs. Period 2. A chi-squared test of independence determined significance of positivity rates in Period 1 vs Period 2 with a p-value of .05.

Results: In Period 1, there were 11,752 distinct patients, 33,183 total STI tests, and a mean age of 38 years (S.D. ± 16). They were 58% female, 18% male, and 23% unknown or other self-identified sex. Period 2 had 10,313 distinct patients, 29,797 total STI tests, and a mean age of 37 years (S.D. ± 16). They were 51% female, 18% male, and 31% unknown or other self-identified sex. As described in Table 1, fewer tests were done in Period 2 than Period 1 for all STI categories at our hospital. Gonorrhea had a significantly increased positivity rate in Period 2 than Period 1. There were no significant differences in positivity rates for other STIs between the two time periods.

Conclusion: A lower number of STI tests was done at our hospital in Period 2 vs. Period 1. This may be due to a fear of using health care resources during the pandemic. Gonorrhea positivity rates were higher in Period 2 than Period 1, with no difference for other STIs. A stable or increased positivity rate could imply that despite new SARS-CoV-19 guidelines on social behavior, patients in our population continued to engage in condomless sexual relations. The pandemic may lead to an increase in undiagnosed STIs in the community due to decreased testing; therefore, a special focus should be placed on increasing testing availability. The emergency department is an ideal environment given readily available testing and treatment.

STI	Period 1			Period 2			Period 1 vs. Period 2	
	Tests (n)	Positive results (n)	Percent positive	Tests (n)	Positive results (n)	Percent positive	Percent difference of number of tests performed	Percent positive, p-value
HIV	7894	81	1.0%	7264	72	1.0%	-7.98%	0.83
Chlamydia	8882	316	3.6%	7915	311	3.9%	-10.97%	0.20
Gonorrhea	8890	132	1.5%	7918	156	2.0%	-11.01%	0.02
Syphilis	7487	477	6.4%	6701	414	6.2%	-10.64%	0.65

## 87 Redeployment of Potentially Furloughed Staff During a Pandemic Improves Emergency Department Operations

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Study Objectives: The COVID-19 pandemic resulted in a change in demand for health care employees. While workload increased for many front-line providers, other health care workers were furloughed. Here, we describe the redeployment of occupational therapy (OT) to the ED and the subsequent impact on operations.

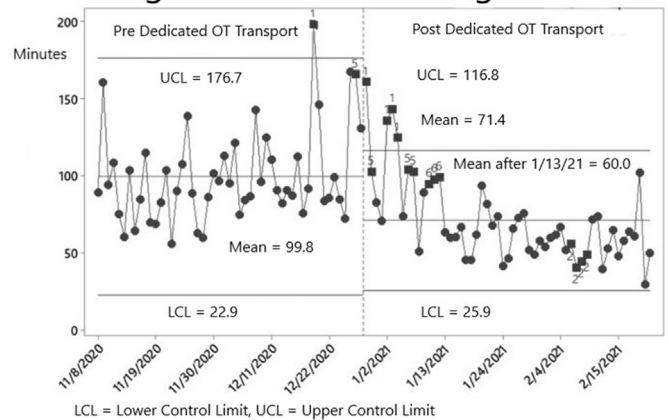
Methods: This project falls under an IRB human subjects research waiver as QI. During the COVID-19 pandemic, OT employees of a regional health care network were reassigned to the ED from inpatient care rather than be furloughed. The ED serves as the regional Level 1 trauma center and comprehensive stroke center and hosts a PGY 1-4 EM residency. Daily average volumes pre-COVID were 265 patients per day. The task assigned to redeployed OT principally involved patient transport. CT turnaround time (TAT) is defined as time from provider order entry to initiation of CT. Data is presented descriptively, with times as means.

Results: CT TAT was tracked from November 2020 through February 2021. OT focus on CT transport began 1/1/21. FTE redeployment averaged 2 staff for 7-3 (day) and 3-11 (evening) shifts. No changes were made to night shift (11-7). Day shift saw CT TAT decrease from 91.4 minutes to 73.0 (20.1%). The impact was greater during evening shift peak demand, with CT TAT falling from 99.8 to 71.4 minutes (28.5%). Figure 1 demonstrates after the first two weeks (1/1 to 1/13/21) of this workflow, CT TAT was down to 60.0 minutes (39.9%) for 1/13/21 onward. Variation also decreased as shown by the control limits. Night shift saw a decrease from 98.0 to 91.7 minutes (6.4%) despite no additional FTE. CT scanner availability, laboratory TAT, and the number of CT scan orders placed were monitored during the time period and did not appear to impact CT TAT.

Conclusion: This single site experience describes a positive impact on ED operations, specifically CT TAT, by engaging health care workers who would have

otherwise been furloughed due to the pandemic. These findings suggest an increase in patient transport staff will improve CT TAT when pandemic redeployment ends.

Figure 1: Mean Evening CT-TAT



## 88 How Did Emergency Physician Fathers Prepare and Cope at the Beginning of the COVID-19 Pandemic?

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Study Objectives: Emergency physicians (EPs) are always on the frontlines and many EPs thrive on the unpredictable. Despite this, the COVID-19 pandemic posed unprecedented challenges to all EPs, including the challenge of how to prepare for and cope with a pandemic. This subset analysis aimed to evaluate the impact of the COVID-19 pandemic specifically on the lives of EP fathers.

Methods: From May 2 through June 16, 2020, a convenience sample of physician fathers was surveyed on their personal and professional preparedness for COVID-19. Surveys were distributed via the Physician Dads Group (PDG), an international Facebook group covering all medical specialties, LinkedIn, via personal contacts and professional organizations.

Results: 260 surveys were completed by EP fathers (Table 1). Of the respondents, 77% were between 30-49 years, 84% were White, 9% Asian, 1% Black; 31 U.S. states were represented. 98% reported they had a partner. At the time of the survey, 63% felt they were in a high-density area with 88% having cared for a COVID+ patient. About half had taken steps to prepare personally or professionally for the local impact of COVID-19 (46% and 67%, respectively). EP fathers' top two concerns were exposing their partner or their child(ren) to COVID-19, followed by personally acquiring COVID-19. 44% of fathers didn't have to change their schedule to care for children, while 37% did; other fathers did not have school-aged children or already had care in the home. In terms of preparation, about 67% made sure they had adequate food, 60% made sure they were financially prepared, while 46% and 41% obtained PPE for self or family, respectively. To prepare professionally, almost all (97%) educated themselves about COVID-19, 68% self-educated about pandemics, and 72% reviewed critical care literature. The three biggest professional concerns were morale of staff (48%), financial challenges (45%), and health of staff (43%). 37% of fathers felt that the balance between their professional and personal responsibilities worsened, while 17% felt the balance improved. When EP fathers were asked if they wished they did not go into medicine, 67% disagreed/strongly disagreed. When asked if they wished they had not gone into their specialty, 89% disagreed/strongly disagreed.

Conclusions: EP fathers felt more prepared professionally than personally for the pandemic. The findings highlight that EP fathers were concerned about their family becoming sick but also concerned with the health and morale of staff at work.