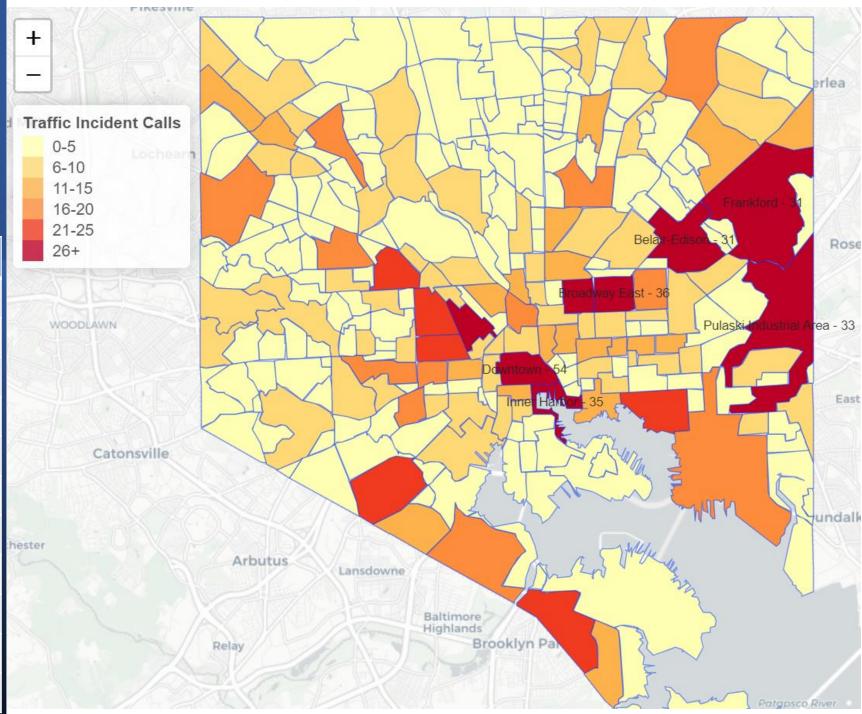
EMS Stat & Operations



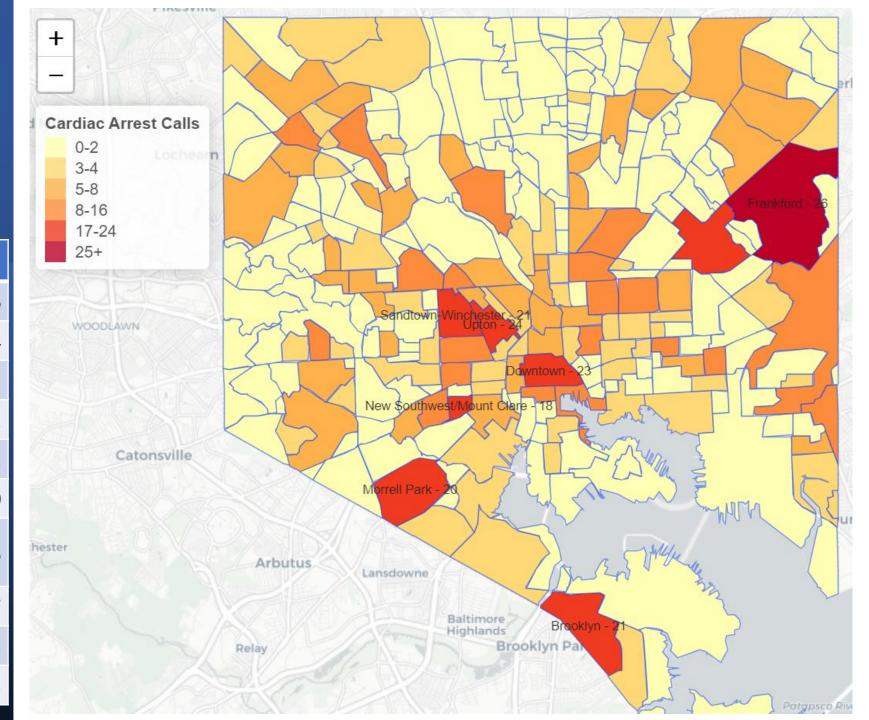
## Q2 2022 Traffic Incidents

Neighborhood	Incidents
Downtown	54
Broadway East	36
Inner Harbor	35
Pulaski Industrial Area	33
Frankford	31
Belair-Edison	31
Oliver	28
Upton	27
Sandtown-Winchester	23
Harlem Park	23
Morrell Park	23



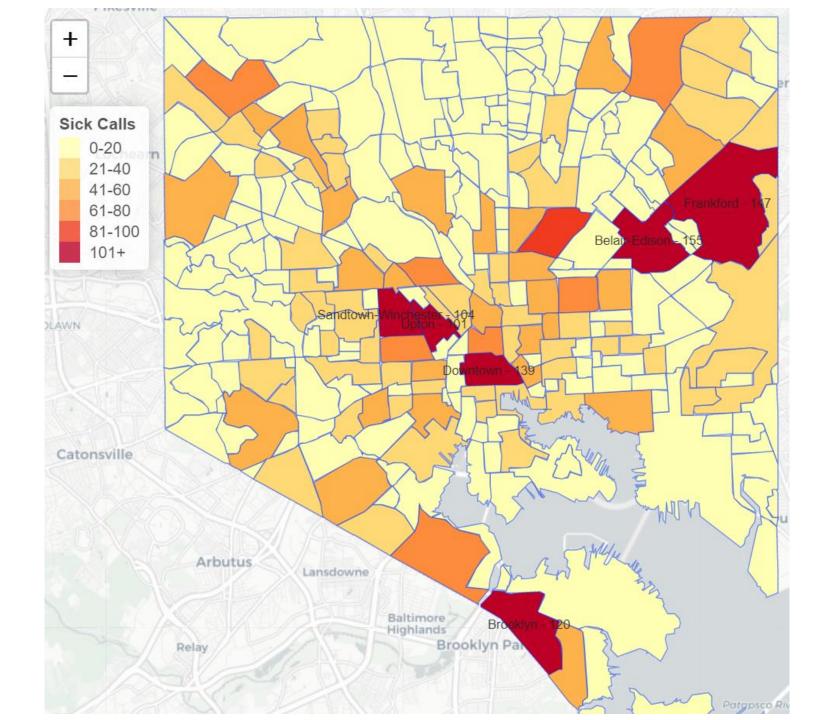
### Q2 2022 Cardiac Arrest

Neighborhood	Incidents
Frankford	26
Upton	24
Downtown	23
Sandtown-Winchester	21
Brooklyn	21
Morrell Park	20
New Southwest/Mount Clare	18
Belair-Edison	17
Carrollton Ridge	15
East Baltimore Midway	15



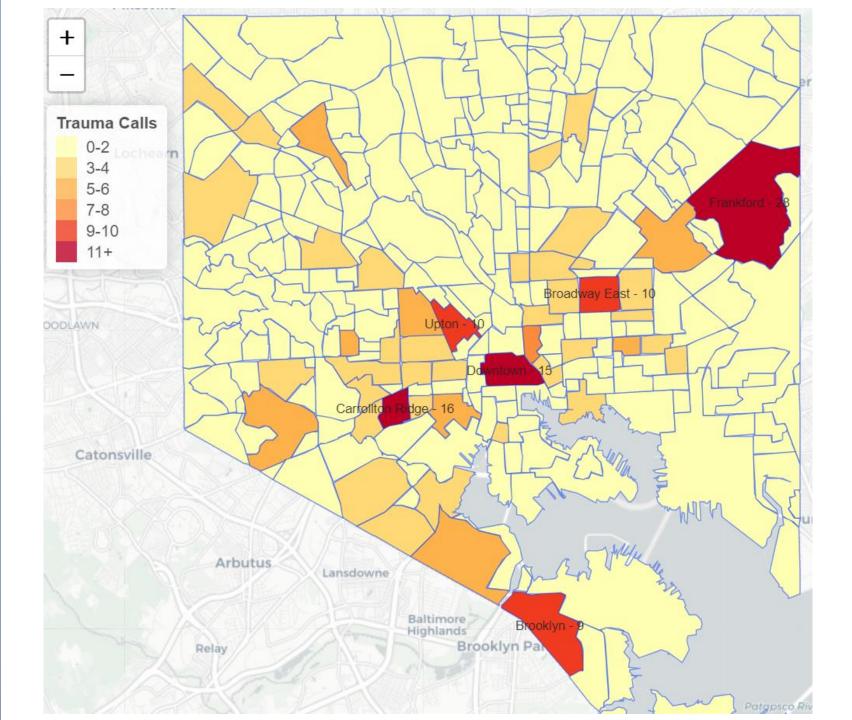
# Q2 2022 Sick Cases

Neighborhood	Incidents
Belair-Edison	155
Frankford	147
Downtown	139
Brooklyn	120
Sandtown-Winchester	104
Upton	101
Coldstream Homestead Montebello	87
Broadway East	76
Mount Vernon	75
Cherry Hill	70



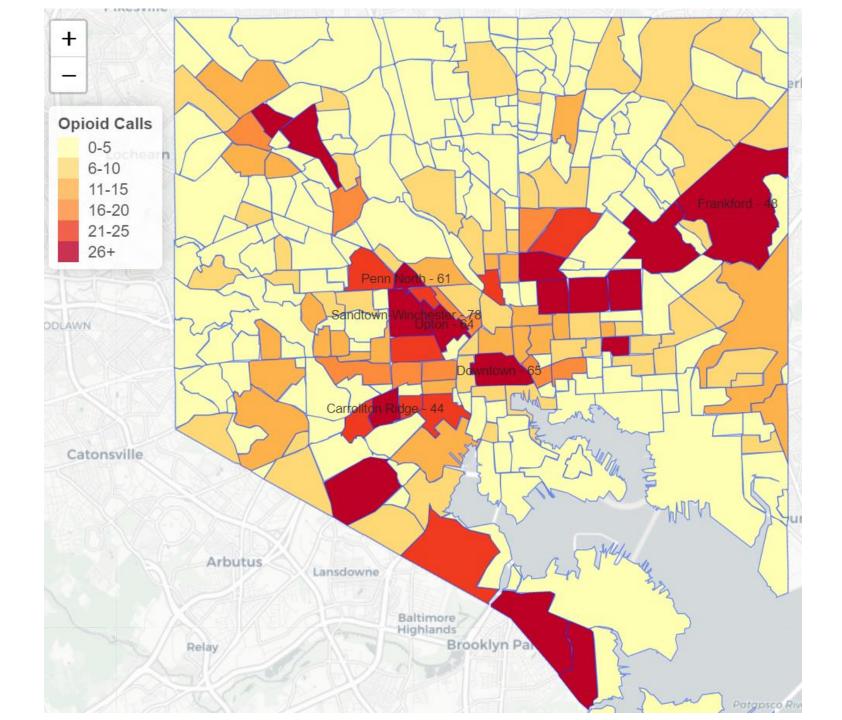
# Q2 2022 Trauma

Neighborhood	Incidents						
Frankford	28						
Carrollton Ridge	16						
Downtown	15						
Upton	10						
Broadway East	10						
Brooklyn	9						
Penn-Fallsway	7						
Belair-Edison	6						
Central Park Heights	6						
Irvington	6						
McElderry Park	6						



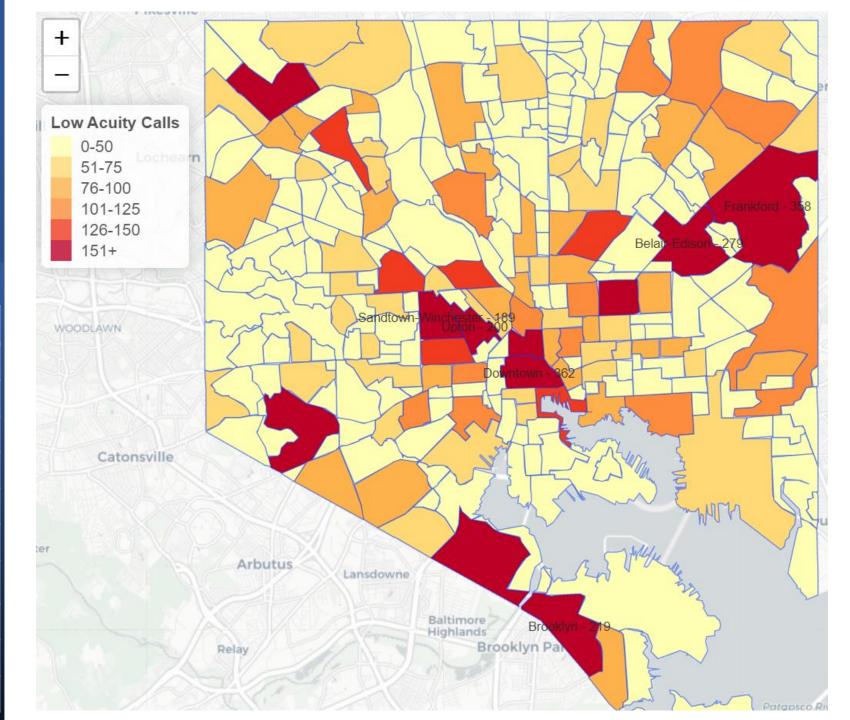
# Q2 2022 Opioid

Neighborhood	Incidents
Sandtown-Winchester	78
Downtown	65
Upton	64
Penn North	61
Frankford	48
Carrollton Ridge	44
McElderry Park	42
Belair-Edison	40
Broadway East	37
Berea	31



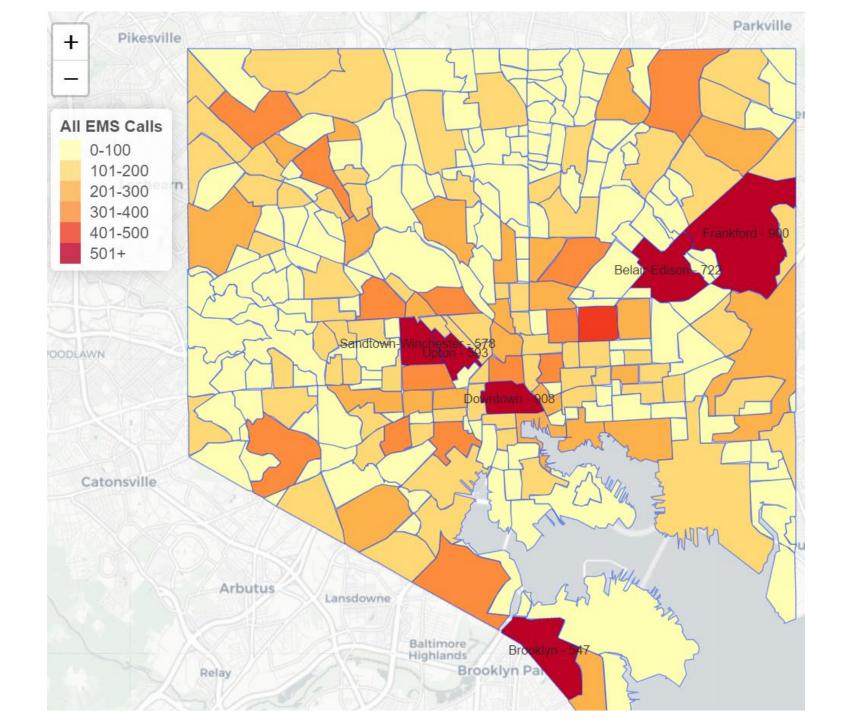
# Q2 2022 Low Acuity

Neighborhood	Incidents
Downtown	362
Frankford	358
Belair-Edison	279
Brooklyn	219
Upton	200
Sandtown-Winchester	189
Glen	187
Mount Vernon	166
Broadway East	153
Cherry Hill	153



## Q2 2022 All EMS Incidents

Neighborhood	Incidents
Downtown	908
Frankford	900
Belair-Edison	722
Upton	593
Sandtown-Winchester	578
Brooklyn	547
Broadway East	405
Cherry Hill	398
Mount Vernon	363
Coldstream Homestead Montebello	345



# EMS Call Volume Q2 2022

# Average calls for service: Daily, weekly and monthly

- Daily 421 Incidents (Q1 = 389)
- Weekly 2,739 Incidents (Q1 = 2498)
- Monthly 12,780 Incidents (Q1 = 11,659)

Peak call volume: Time of day, day of the week, time of the month

- Time of Day 12:00-17:59
- Day of Week Friday
- Time of Month End of month
- Month of Quarter June

# EMS Call Volume

# Q2 2022 Average calls for service: Daily, weekly and monthly

- Daily 421 Incidents
- Weekly 2,739 Incidents
- Monthly 12,780 Incidents

# Q2 2021 Average calls for service: Daily, weekly and monthly

- Daily 462 Incidents
- Weekly 3,002 Incidents
- Monthly 14,010 Incidents

# Q2 2020 Average calls for service: Daily, weekly and monthly

- Daily 388
- Weekly 2,526
- Monthly 11,792

# EMS Call Volume Q2 2022

Incidents by	HOD a	nd DO	W																					
,																								
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MONDAY	188	192	174	140	105	140	155	205	271	329	342	376	350	354	337	364	364	344	327	329	311	315	260	243
TUESDAY	207	145	169	144	124	127	151	236	265	338	344	347	336	337	350	362	348	348	314	326	327	320	261	244
WEDNESDAY	208	160	157	108	123	125	164	196	263	314	352	372	371	373	378	332	369	307	349	333	379	288	272	217
THURSDAY	169	166	158	125	110	126	168	210	243	304	332	336	361	357	326	342	376	321	328	326	342	283	282	254
FRIDAY	220	215	154	146	128	125	153	174	233	287	327	345	345	388	354	384	334	384	318	352	313	358	303	260
SATURDAY	244	229	180	171	135	122	166	184	214	252	289	316	300	312	283	382	341	350	329	332	356	341	316	282
SUNDAY	264	241	240	191	140	133	140	153	187	234	288	288	315	328	313	359	311	287	314	310	316	313	254	247

# Most frequent advanced life support calls for service Q2 2022 - TOP 5

06D02 (Difficulty speaking between breaths)

1736 Incidents

(Q4 = 1837)

31D02 (Overdose Unconscious)

922 Incidents

(Q4 = 819)

31D04 (Overdose Changing Color)

579 Incidents

(Q4 = 514)

10D02 (Chest Pain with Difficulty Speaking between Breaths)

542 Incidents

(Q4 = 527)

06D01 (Breathing problems, not alert)

452 Incidents

(Q4 = 482)

# Most frequent BLS calls for service Q2 2022 - TOP 5

26A10 (Unwell / III) 1185 Incidents (Q1 = 1193) 26C02 (Sick ABD Breath)
1105 Incidents
(Q1 = 1136)

**32D01 (Unknown Prob) 916 Incidents**(Q1 = 698)

**26D01 (Sick Not Alert) 843 Incidents**(Q1 = 875)

**29B01 (Vehicle Accident) 826 Incidents**(Q1 = 761)

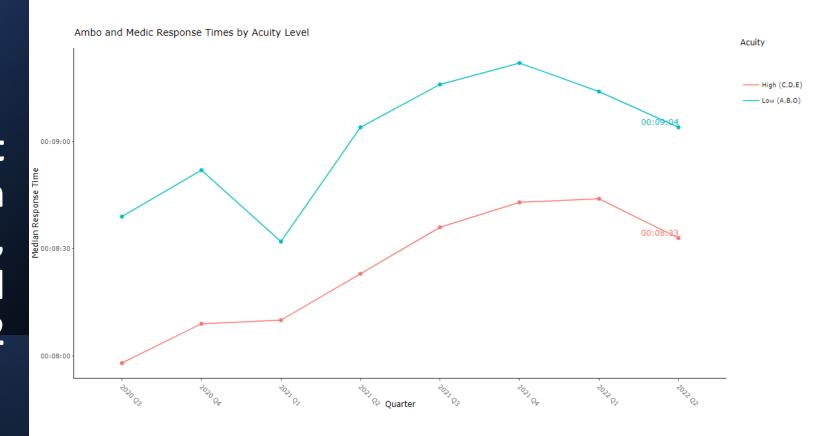
EMS Unit Response Time on EMS Calls for Service Q2 2022

# Total Average – 10min 01sec

Medic Average – 10min 00sec

Ambo Average – 10min 05sec

Transport Unit
Response Time on
EMS Calls for Service,
by Acuity Level
Q2 2022



# Fire Suppression Response Time to EMS Calls for Service Q2 2022

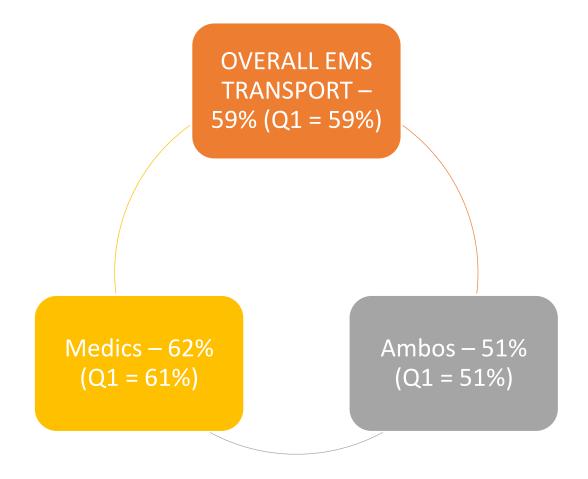
# Suppression Response Time to EMS Calls - 6 Minutes and 16 Seconds (Q1 = 6min 43sec)

• Definition: the difference in time between the first arriving suppression unit's time of dispatch and time of arrival on the scene

Average Wait Time for EMS arrival - 11 Minutes and 10 Seconds (Q1 = 13min 41sec)

 Definition: the difference in time between the first arriving suppression unit's time of arrival and the time of arrival of the first EMS transport unit

# EMS Fleet Utilization (UHU) Q2 2022



■ Definition: the % of time in which a unit is assigned on an incident

# Performance Metrics

**Community Based Metrics** 

**Operational Metrics** 

**Clinical Metrics** 

**Behavioral Health Metrics** 

# Future Community Based Metrics

#### **Community Metrics Requests**

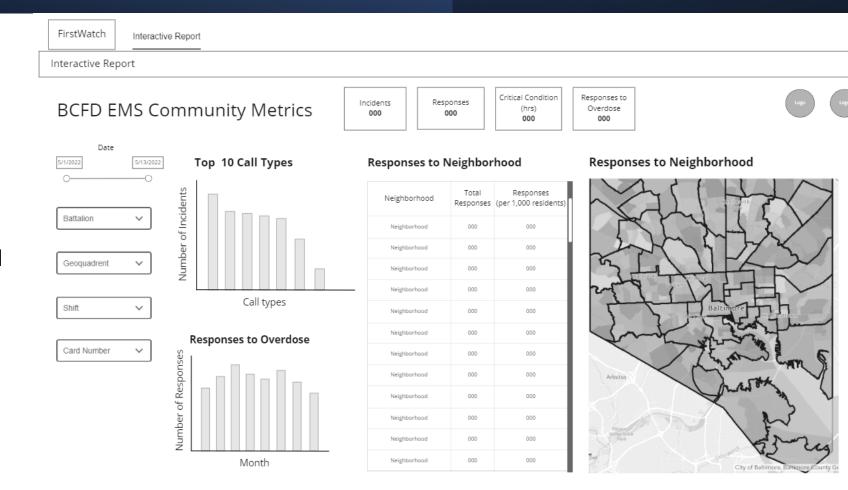
- Most common call types
- Neighborhoods with highest concentration of 911 calls
- Hours in critical condition
- Number of responses related to overdose

#### Metrics OPI can provide through PBI

All desired community metrics

#### **Additional Features**

- Advanced filtering
- Mapping adjacent to metrics with advanced features



Community Metrics

Operational Metrics 1

Operational Metrics 2

Behavioral Health Metrics

Clinical Metrics 1

Clinical Metrics 2

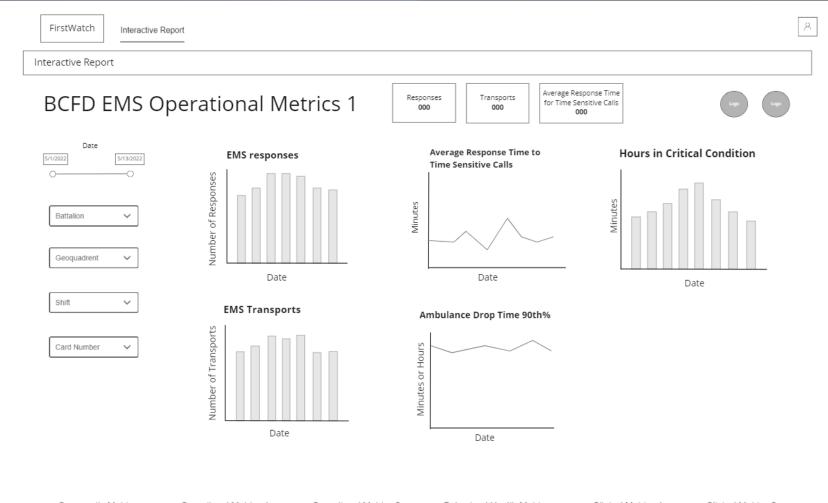
# Future Operational Metrics 1

#### **Metrics Requested**

- Response time to time sensitive calls
- Total number of EMS responses
- Total number of EMS transports
- Hospital offload delay

#### **Metrics OPI can provide through PBI**

- Response time to time sensitive calls
- Total EMS responses
- Total EMS transports
- Hospital offload delay
- Hours in critical condition over time



Community Metrics

Operational Metrics 1

Operational Metrics 2

Behavioral Health Metrics

Clinical Metrics 1

Clinical Metrics 2

# Future Operational Metrics 2

#### **Metrics Requested**

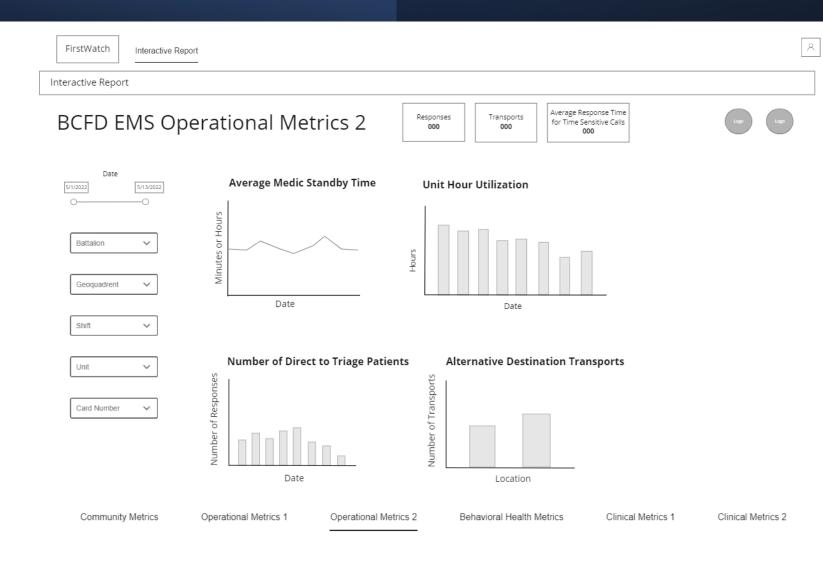
- Average medic standby time
- UHU
- Direct to triage patients
- Alternative destination transports

#### **Metrics OPI can provide through PBI**

- Average Medic standby time
- Unit Hour Utilization
- Direct to Triage patients
- Alternative destination transports

#### **Additional Features**

Advanced filtering



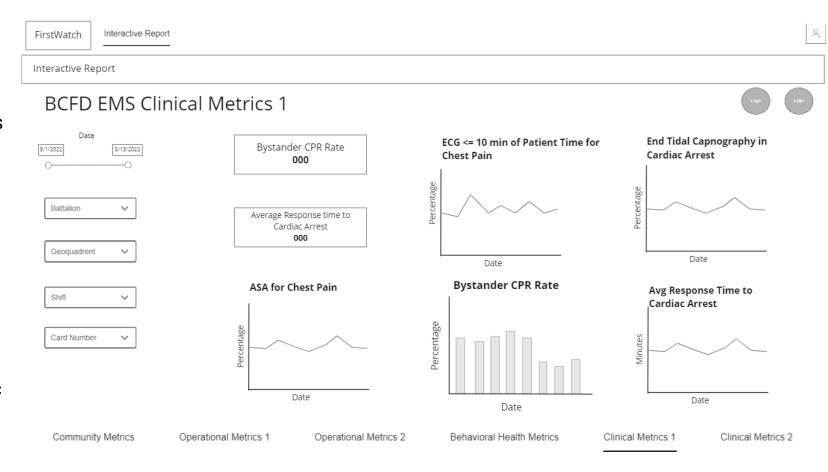
# Future Clinical Metrics 1

#### **Metrics Requested**

- Overall Survival Rate
- Bystander CPR Rate
- Utstein Survival Rate
- Response time and associated intervals for cardiac arrest
- End tidal capnography in cardiac arrest
- ECG obtained within 10 minutes for Chest Pain
- ASA for Chest Pain

# Metrics OPI may be able to provide through PBI

- All clinical metrics
- Bystander CPR Rate
- Response time and intervals for cardiac arrest



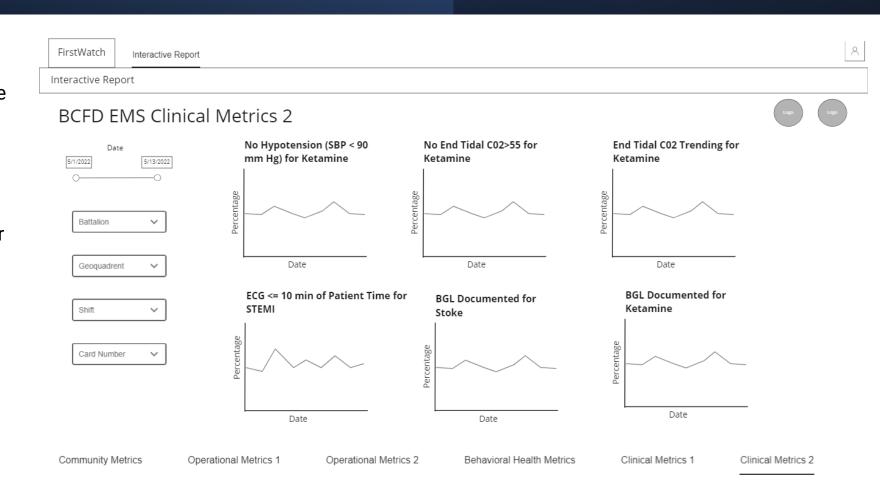
# Future Clinical Metrics 2

#### **Metrics Requested**

- End tidal C02 trending for Ketamine
- BGL documented for Ketamine
- No end tidal C02>55 for Ketamine
- No hypotension (SBP < 90 mm Hg) for Ketamine
- Blood glucose in Stroke
- ECG obtained within 10 minutes for STEMI

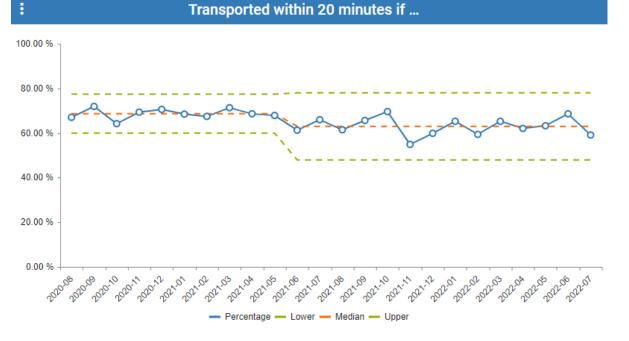
# Metrics OPI may be able to provide through PBI

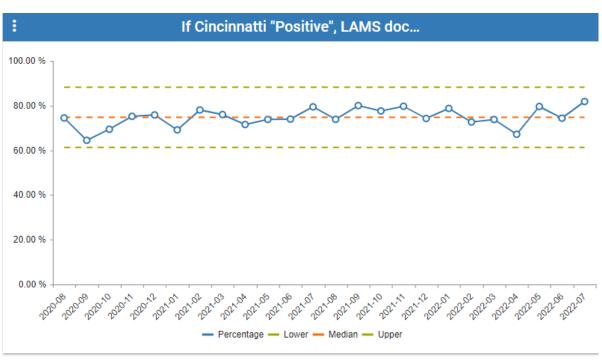
All desired clinical metrics

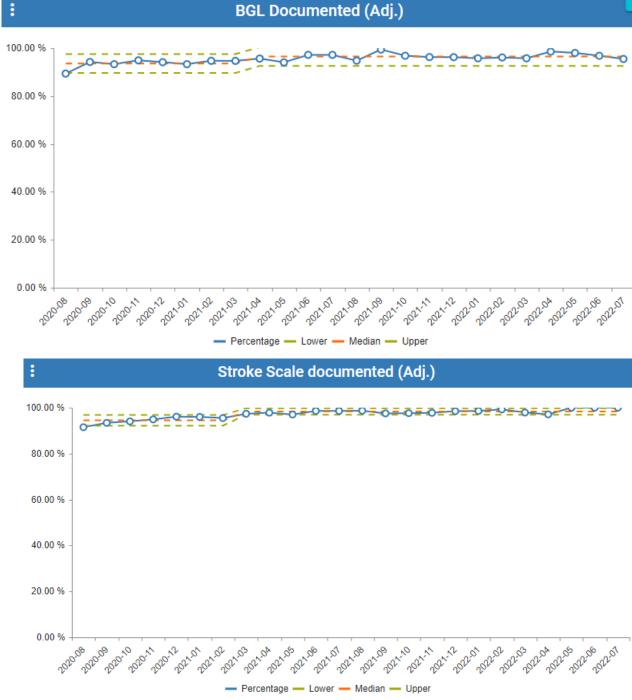


# **BCFD Clinical Performance Metrics**

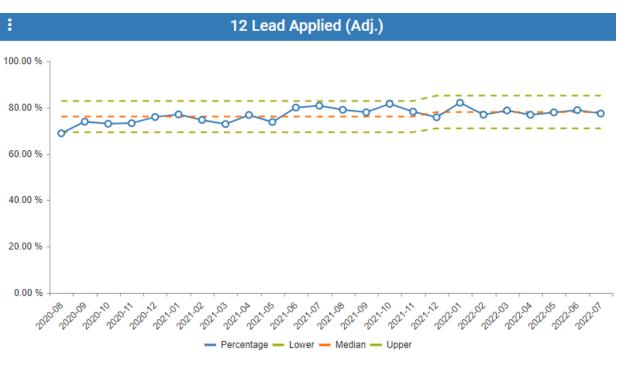
Stroke and Chest Pain

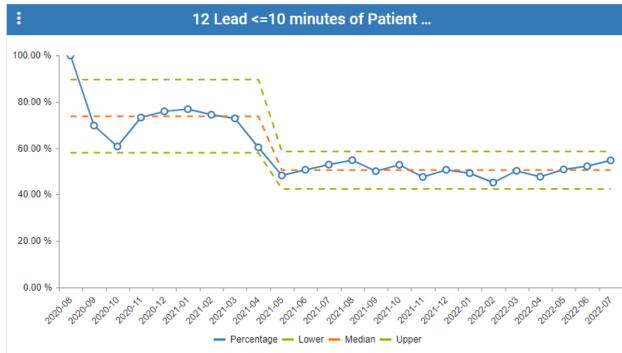






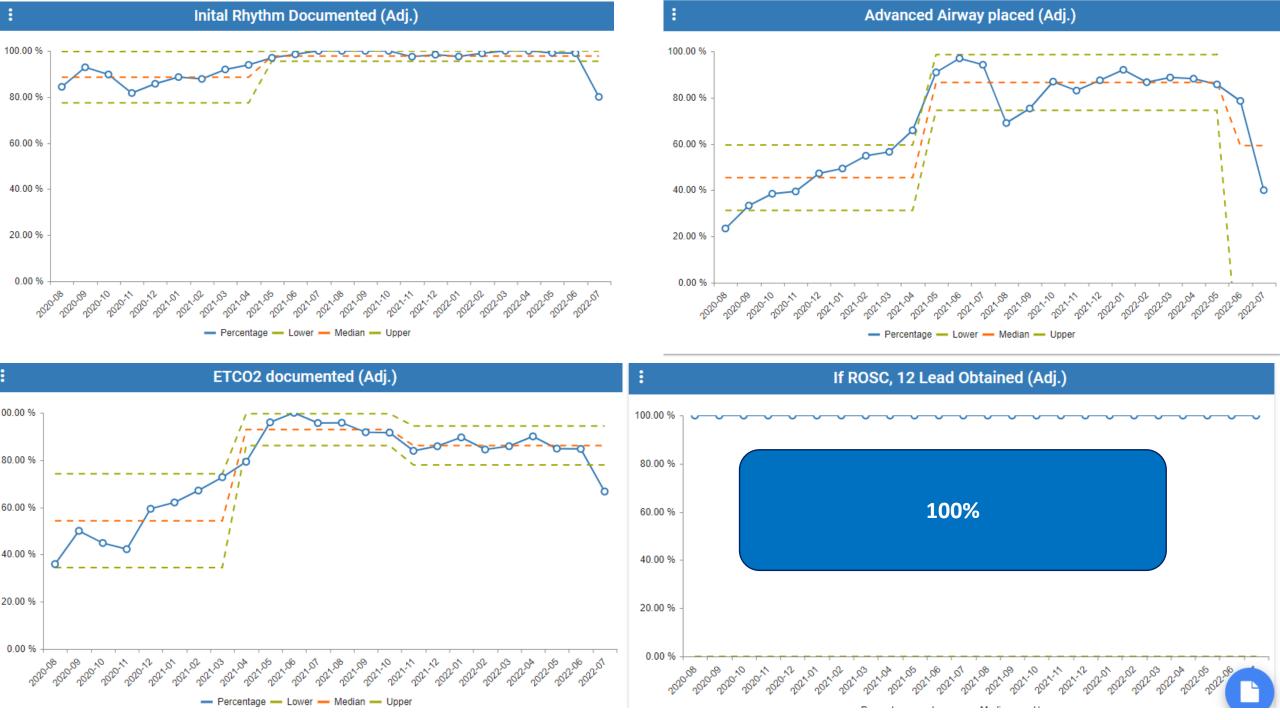
### **Chest Pain**





# **BCFD Clinical Performance Metrics**

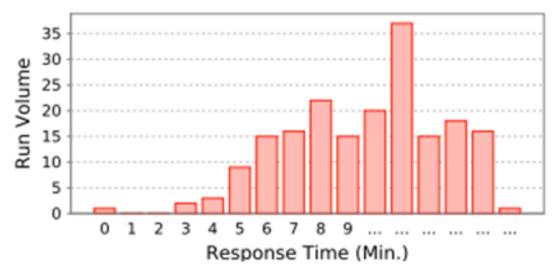
Cardiac Arrest



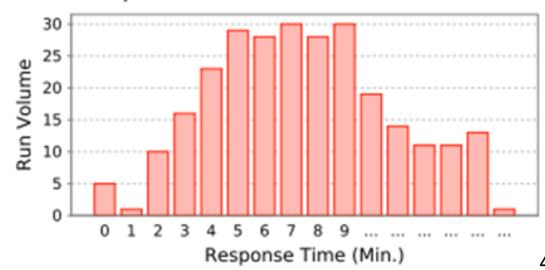
#### **EMS CAD Times**

**Baltimore City Fire Department** 

#### EMS Times: 911 to Arrival



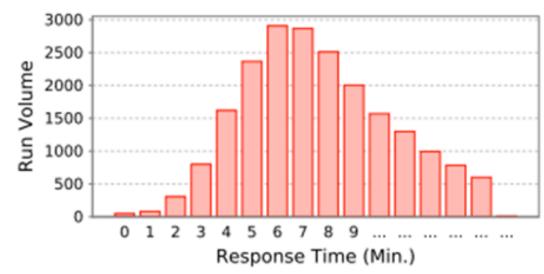
#### **EMS Times: Dispatch to Arrival**



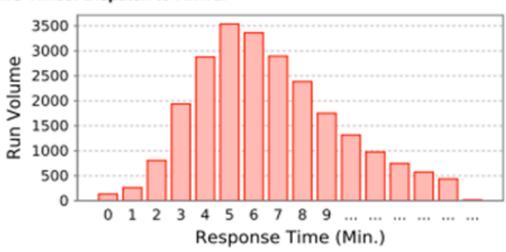
#### **EMS CAD Times**

#### National

#### EMS Times: 911 to Arrival



#### **EMS Times: Dispatch to Arrival**



4/1/22-6/30/22



4/1/22-6/30/22

#### **Baltimore County**

Overall: 5.8% (225)

Bystander Wit'd: 11.0%(82)

Unwitnessed: 1.6% (126)

Utstein<sup>1</sup>: 11.1% (27)

Utstein Bystander<sup>2</sup>: 7.1% (14)

Bystander Intervention Rates <sup>3</sup>

CPR: 39.1% (184)

Public AED Use: 7.7% (26)

#### **PG County**

Overall: 1.6% (253)

Bystander Wit'd: 2.3%(87)

Unwitnessed: 0.0% (133)

Utstein<sup>1</sup>: 12.5% (16)

Utstein Bystander<sup>2</sup>: 28.6% (7)

Bystander Intervention Rates <sup>3</sup>

CPR: 39.1% (179)

Public AED Use: 4.8% (21)

#### **BCFD**

Overall: 2.1% (289)

Bystander Wit'd: 4.4%(68)

Unwitnessed: 0.5% (185)

Utstein<sup>1</sup>: 16.7% (12)

Utstein Bystander<sup>2</sup>: 20.0% (5)

Bystander Intervention Rates <sup>3</sup>

CPR: 19.4% (211)

Public AED Use: 2.6% (39)

#### **State wide W/O Baltimore**

Overall: 5.7% (1342)

Bystander Wit'd: 8.8%(441)

Unwitnessed: 2.3% (748)

Utstein<sup>1</sup>: 16.4% (122)

Utstein Bystander<sup>2</sup>: 17.9% (78)

Bystander Intervention Rates <sup>3</sup>

CPR: 41.7% (1013)

Public AED Use: 6.1% (147)

# Behavioral Health Metrics

BEHAVIORAL HEALTH		
Total number of "behavioral health" related calls	Calls classified as 25a01, 25a02, 25Bb03 other determinant that involves linkage to BCRI	Behavioral health dashboard
Number of diverted 911 calls	Behavioral health related calls that do not result in a response from EMS/fire/police	Behavioral health dashboard
Number of "failed" responses	Calls classified as 25a01, 25a02, and 25b03 that could not be diverted to BCRI	Behavioral health dashboard
Mobile crisis team callouts	Calls resulting in the response of a mobile crisis team	Behavioral health dashboard

