

Wake County EMS System Peer Review System Performance Report

May 2020



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Operations Update



Prompt
Compassionate
Clinically Excellent Care

WAKE COUNTY

Incident Highlights

- **Trench Collapse**
 - Unique Geographical Area
 - Multiple patients
 - Large multi-agency response



Special Event and Mass Gathering horizon scan

Dreamville Festival



- Dix Park
- DELAYED: August 29, 2020
- 1200-2300
- Attendance 50,000
 - plus 1000+ staff
- Week long build in and then breakdown
- Improved plan includes 66 EMS personnel onsite, including expanded physician staffed medical tents, carts, venue teams, command staff, and mutual aid (hospital ERTs, 5 surrounding counties).



Stadium Series NHL Game

February 20, 2021

- “We’re going to do everything we can to make as many seats available as possible, because we know how high demand it will be for this game, and the epic tailgate that will accompany it”
 - Tom Dundon, Hurricanes CEO and owner.



Flu Season

- **Miss it yet?**

- We know you all have had record breaking numbers this year.
- We hope you are staying healthy!
- On going discussions with partners on weekly flu call finished last week.





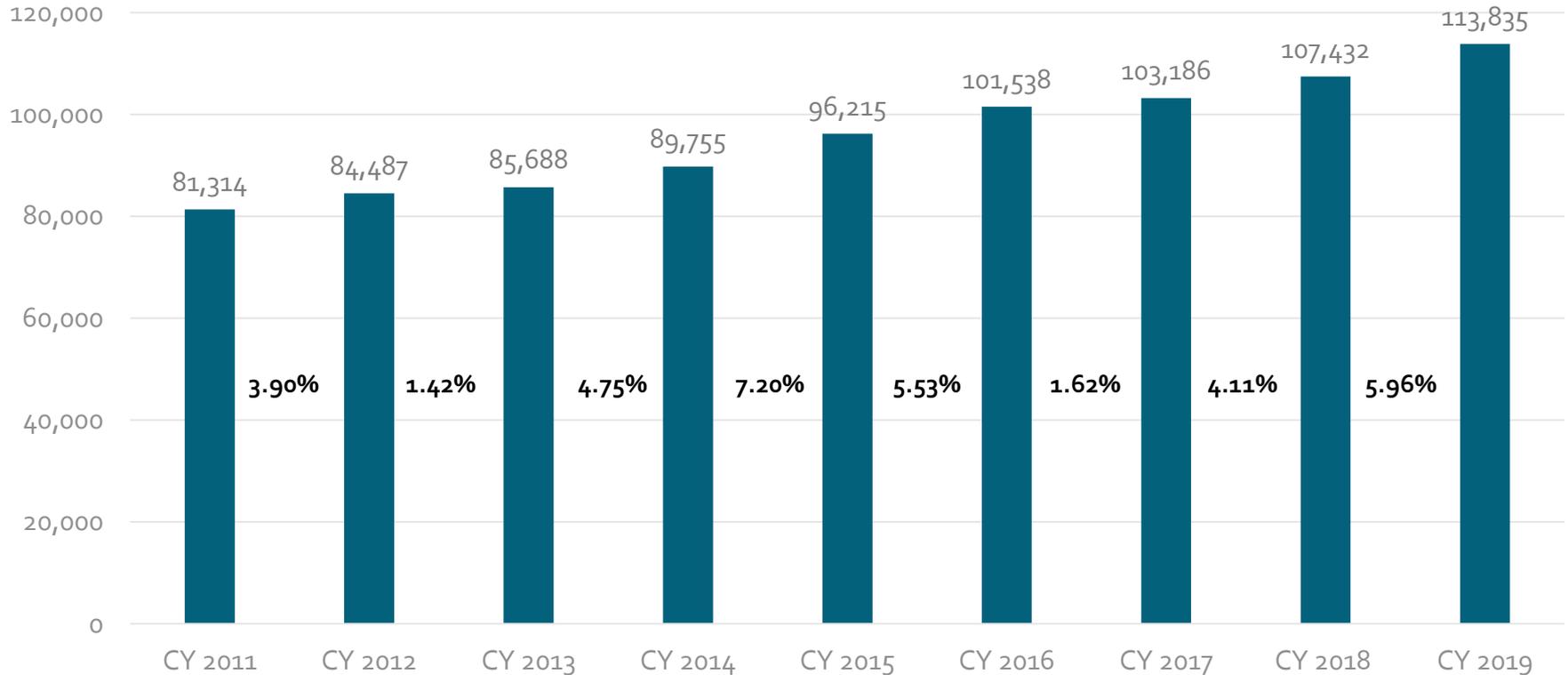
EMS Operations Data

EMS Response Data

2019 Annual Data

- **113,835 incidents**
 - We believe this is a little elevated due to testing with the new CAD system.
- **Increase of 5.96% over 2018**
- **Average of 311 incidents per day.**

Growth – Call Volume Data



EMS Response Data

January through March 2020

- **28,213 incidents 1Q2020**
- **Average of incidents per day:**
 - January 2020: average of **316** calls/day
 - February 2020: average of **320** calls/day
 - March 2020: average of **295** calls/day
 - April 2020: average of **244** calls/day
- **Highest call volume day in history on 1/14/20 with 388 calls in 24 hours.**
 - Previous record 365 in 24 hours in 11/2018.

Admin Ops^{1 2}

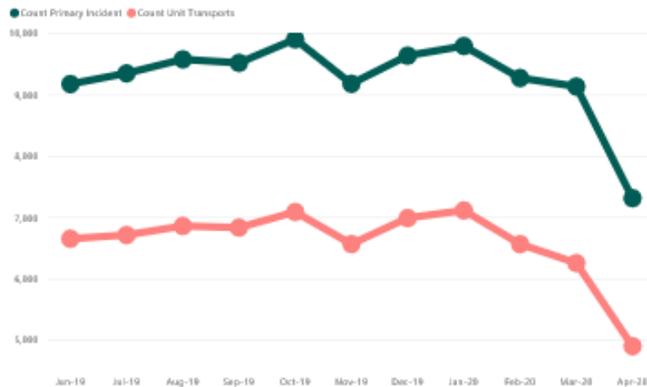
12 Month Trend (Calendar Months)

Incidents and Transports

MonthYear Incidents Transports % Of Transports

MonthYear	Incidents	Transports	% Of Transports
Jun-19	9,179	6,657	72.5%
Jul-19	9,353	6,717	71.8%
Aug-19	9,580	6,864	71.6%
Sep-19	9,523	6,838	71.8%
Oct-19	9,908	7,093	71.6%
Nov-19	9,183	6,570	71.5%
Dec-19	9,641	6,995	72.6%
Jan-20	9,798	7,118	72.6%
Feb-20	9,276	6,569	70.8%
Total	101,897	72,588	71.2%

EMS Incidents and Transports



% Change Incidents Month Over Month

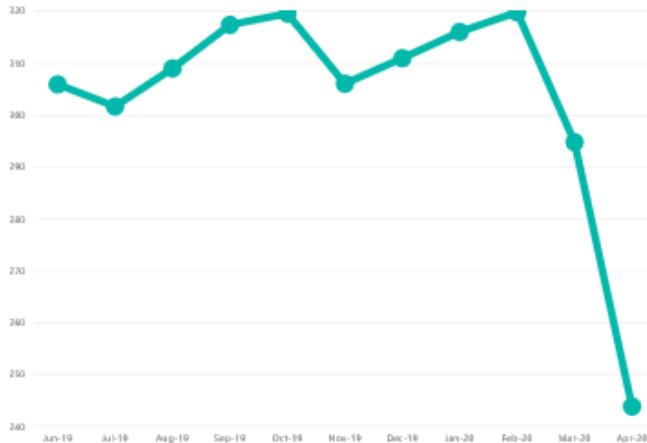


Average Calls Per Day/Hour

MonthYear Calls Per Day Calls Per Hour

MonthYear	Calls Per Day	Calls Per Hour
Jun-19	306	12.7
Jul-19	302	12.6
Aug-19	309	12.9
Sep-19	317	13.2
Oct-19	320	13.3
Nov-19	306	12.8
Dec-19	311	13.0
Jan-20	316	13.2
Feb-20	320	13.3
Mar-20	295	12.3
Apr-20	244	10.2
Total	304	12.7

Average Calls Per Day/Hour



% Change Avg. Calls Per Day Month Over Month



Low System Resources (ESTAT) Update

EMS Operations ESTAT Summary ⁱ

2019 ended the year with overall more estat events than in prior 2018; while estat was lower in Q1&Q2, in Q3&Q4 2019 estat outpaced 2018. Duration of estat (length of time) outpaced 2018 across the entire year with the exception of February. The number of estat and the duration of estat continues to climb, along with overall demand for ems (calls for ems 911).

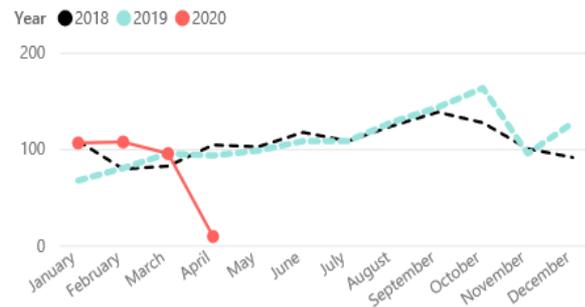
ESTAT Events by Year



ESTAT Events by Quarter and Year



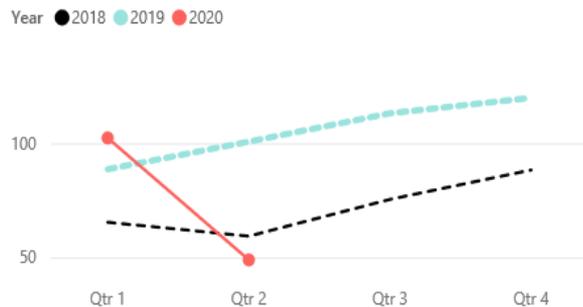
ESTAT Events by Month and Year



ESTAT 90th Percentile Duration by Year



ESTAT 90th Percentile Duration by Quarter and Year



ESTAT 90th Percentile Duration by Month and Year



Hospital Diversion Total for 2019

EMS Hospital Diversion Trend ⁱ

Analytics Insight: Diversion Correlates with Overall Demand

Time of day may have influence on driving diversion and duration based on increasing demand over time
Overall diversion hours duration is trending down over the years (as of to date)

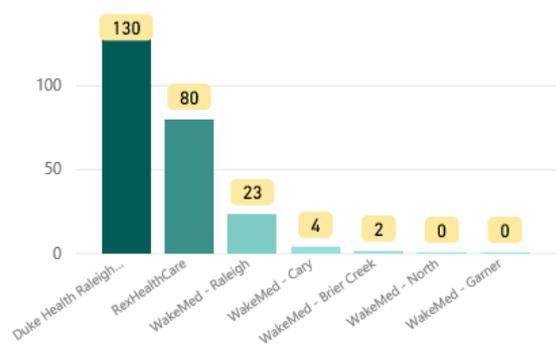
Year

2016 2017 2018 2019 2020

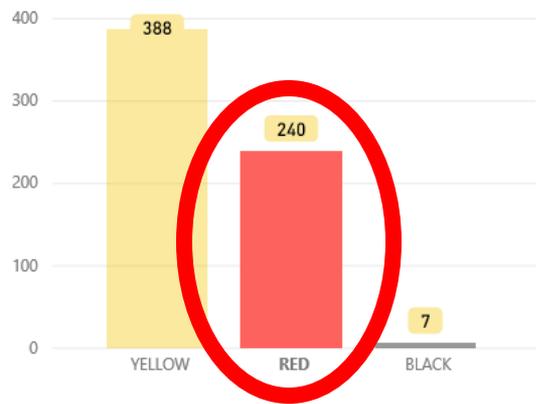
Quarter (Q1-Q4)

1 2 3 4

Total Diversion Hours Hospital



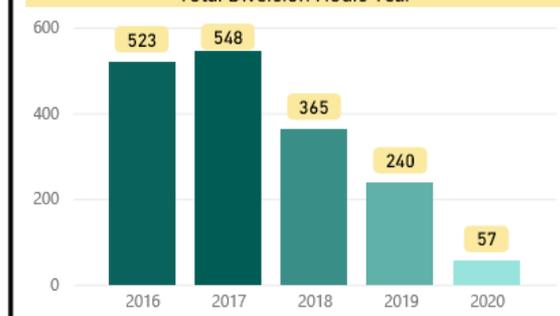
Total Diversion Hours Status



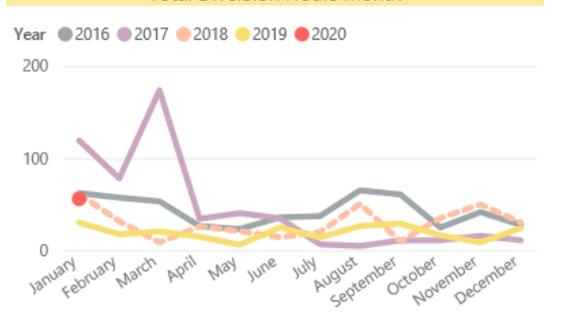
Total Diversion Hours Hospital

Hospital	RED	Total
Duke Health Raleigh Hospital	130	130
RexHealthCare	80	80
WakeMed - Raleigh	23	23
WakeMed - Cary	4	4
WakeMed - Brier Creek	2	2
WakeMed - North	0	0
WakeMed - Garner	0	0
Total	240	240

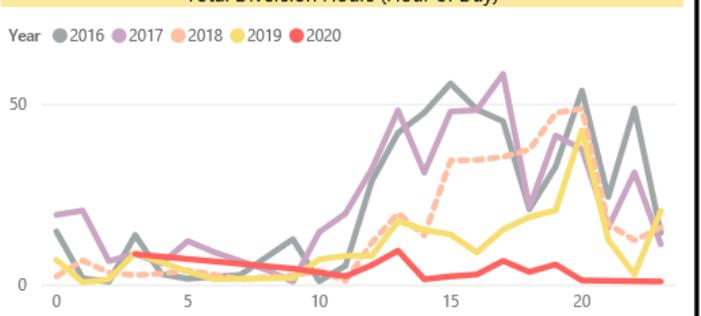
Total Diversion Hours Year



Total Diversion Hours Month



Total Diversion Hours (Hour of Day)



EMS Hospital Diversion Trend ⁱ

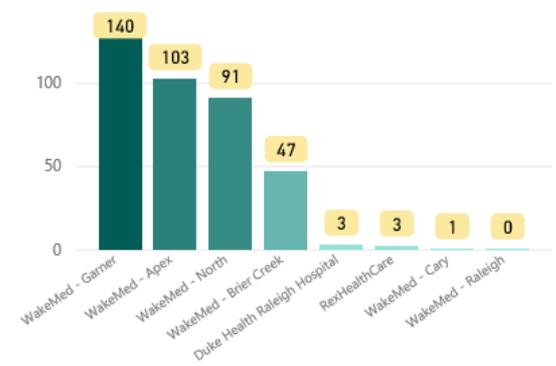
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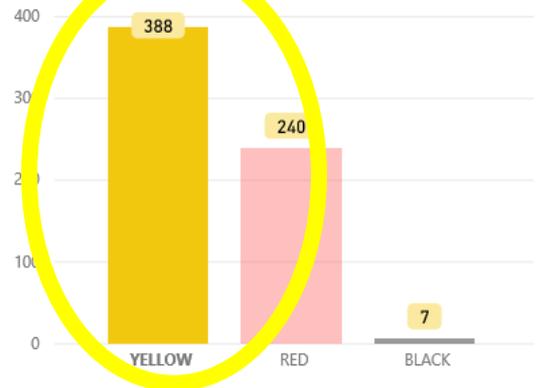
Year				
2016	2017	2018	2019	2020

Quarter (Q1-Q4)			
1	2	3	4

Total Diversion Hours Hospital



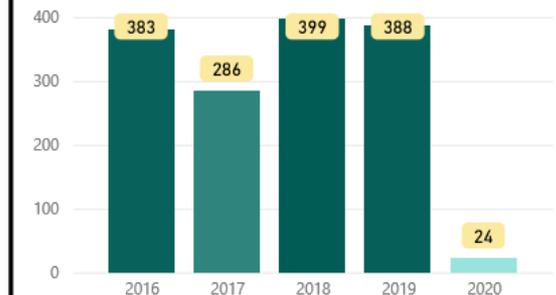
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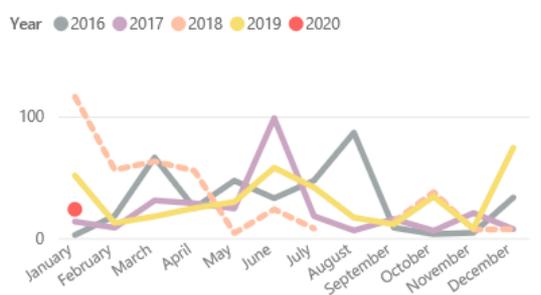
Total Diversion Hours Hospital

Hospital	YELLOW	Total
WakeMed - Garner	140	140
WakeMed - Apex	103	103
WakeMed - North	91	91
WakeMed - Brier Creek	47	47
Duke Health Raleigh Hospital	3	3
RexHealthCare	3	3
WakeMed - Cary	1	1
WakeMed - Raleigh	0	0
Total	388	388

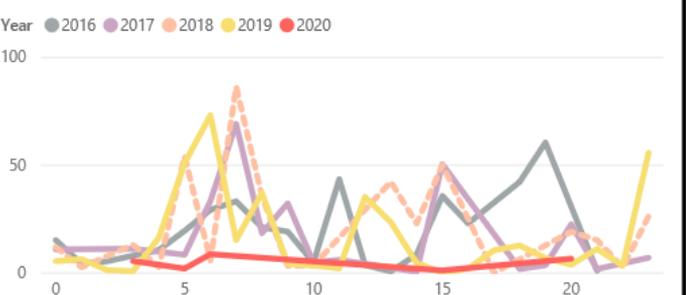
Total Diversion Hours Year



Total Diversion Hours Month



Total Diversion Hours (Hour of Day)



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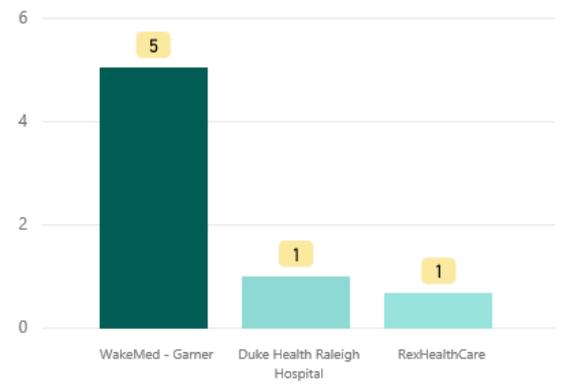
Year

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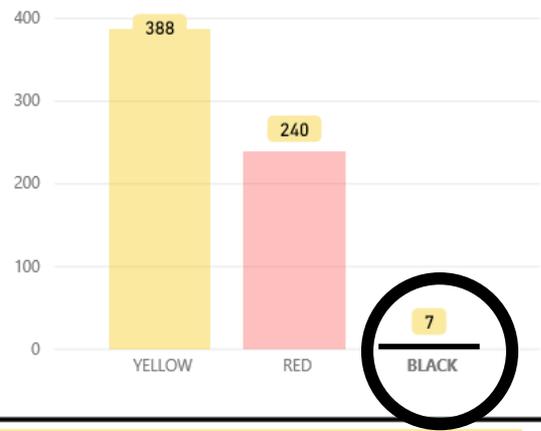
Quarter (Q1-Q4)

1 2 3 4

Total Diversion Hours Hospital



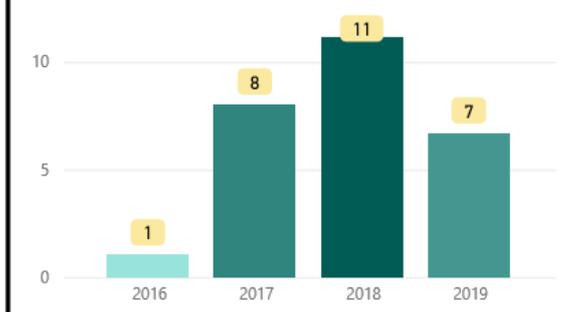
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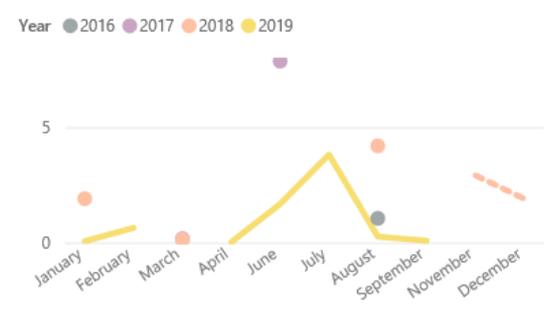
Total Diversion Hours Hospital

Hospital	BLACK	Total
WakeMed - Garner	5	5
Duke Health Raleigh Hospital	1	1
RexHealthCare	1	1
Total	7	7

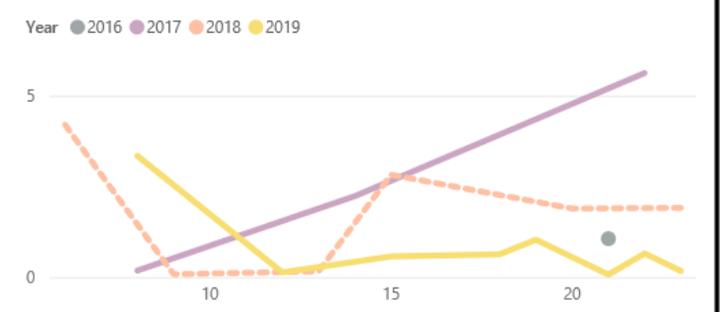
Total Diversion Hours Year



Total Diversion Hours Month



Total Diversion Hours (Hour of Day)



Hospital Diversion 1Q2020

EMS Hospital Diversion Trend

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Year

2016

2017

2018

2019

2020

Quarter (Q1-Q4)

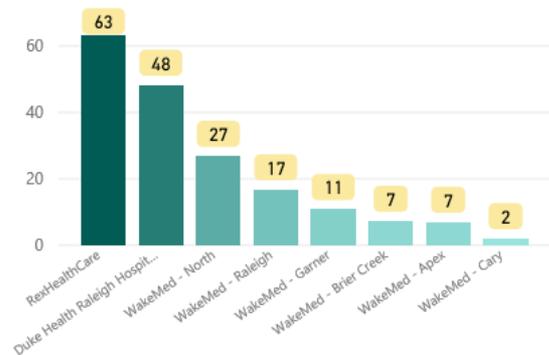
1

2

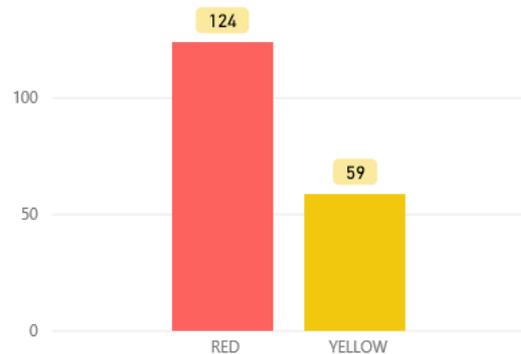
3

4

Total Diversion Hours Hospital



Total Diversion Hours Status



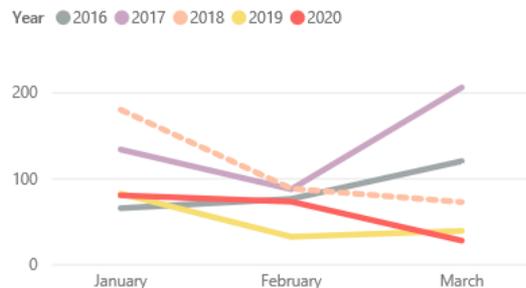
Total Diversion Hours Hospital

Hospital	RED	YELLOW	Total
RexHealthCare	58	6	63
Duke Health Raleigh Hospital	48		48
WakeMed - North		27	27
WakeMed - Raleigh	17		17
WakeMed - Garner		11	11
WakeMed - Brier Creek		7	7
WakeMed - Apex		7	7
WakeMed - Cary	1	1	2
Total	124	59	183

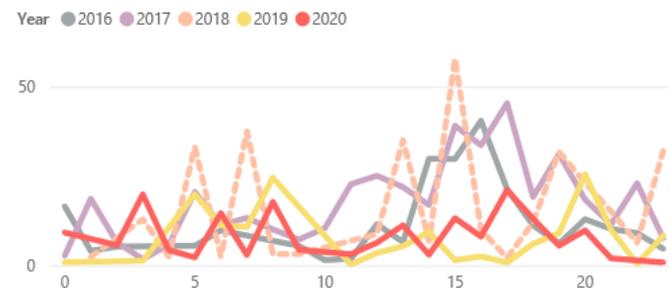
Total Diversion Hours Year



Total Diversion Hours Month



Total Diversion Hours (Hour of Day)



EMS Hospital Diversion Trend i ?

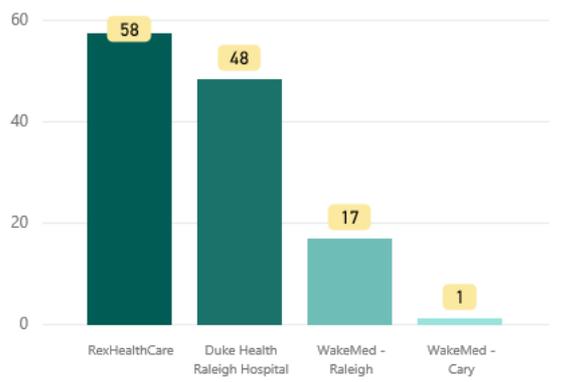
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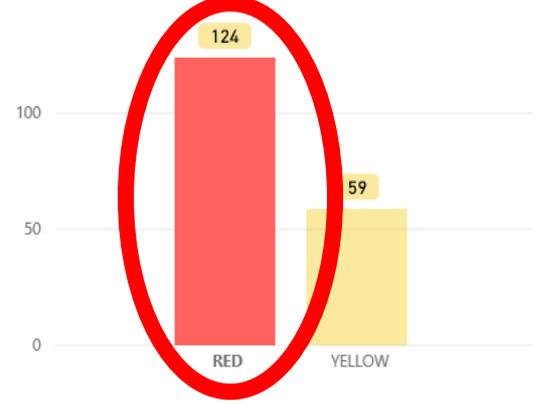
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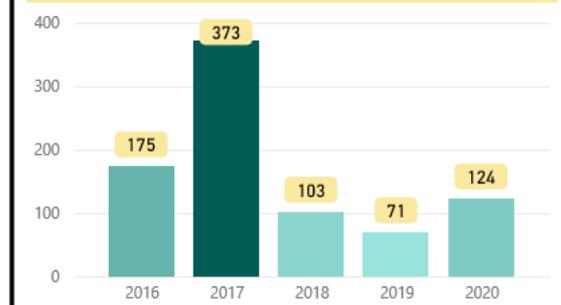
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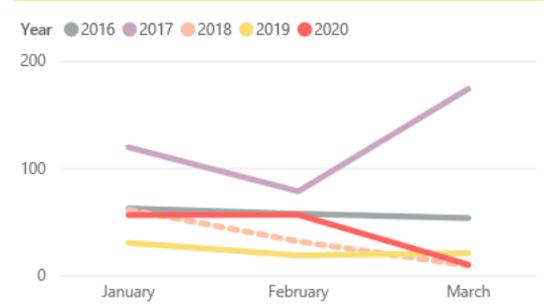
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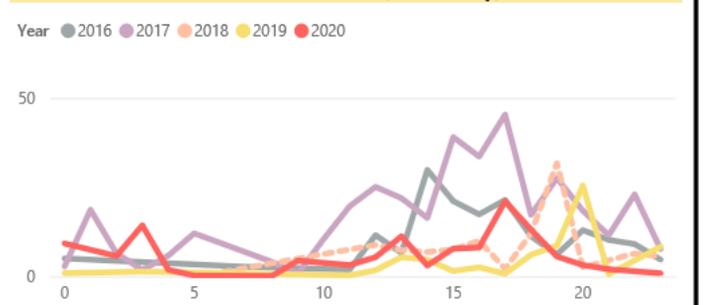
Total Diversion Hours Year



Total Diversion Hours Month



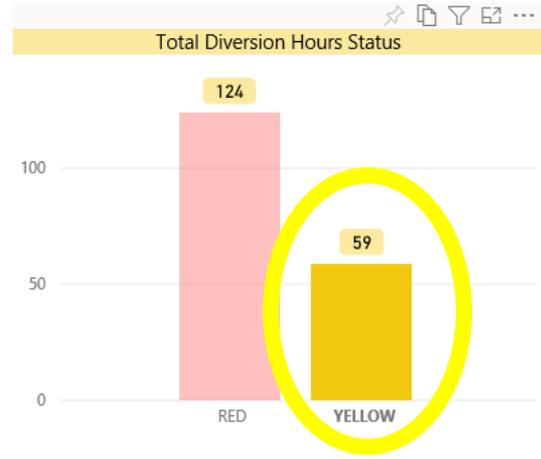
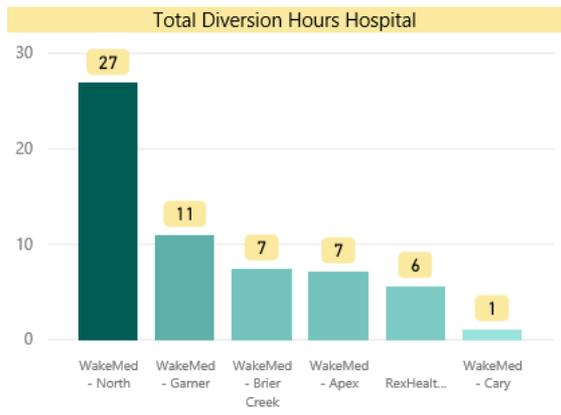
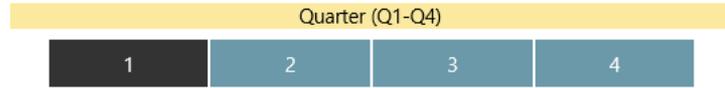
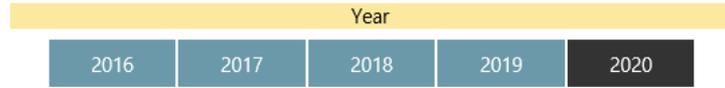
Total Diversion Hours (Hour of Day)



EMS Hospital Diversion Trend i ?

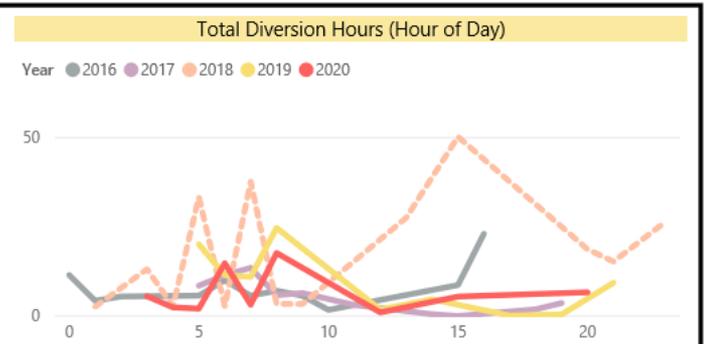
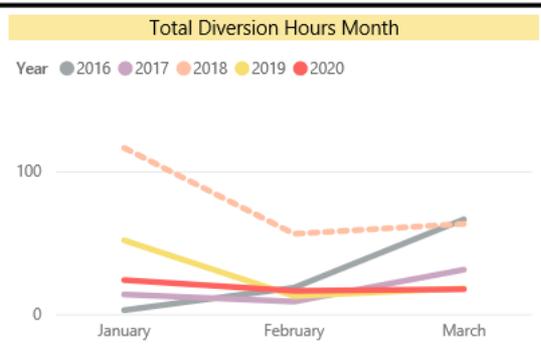
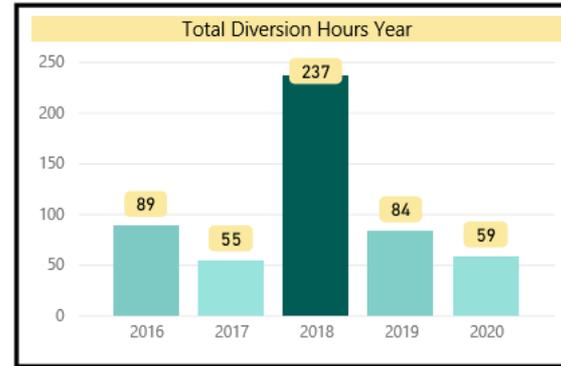
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WakeMed - Brier Creek	7	7
WakeMed - Apex	7	7
RexHealthCare	6	6
WakeMed - Cary	1	1
Total	59	59



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Questions?



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