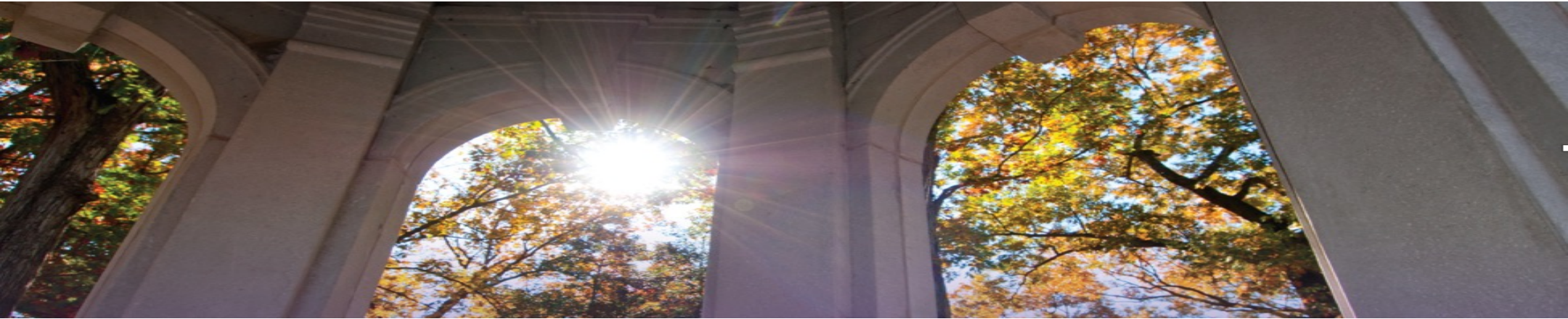




NORTH CAROLINA  
STATEWIDE TELEPSYCHIATRY PROGRAM

# Quarterly Progress Update



**Sy Atezaz Saeed, MD, MS, FACPsych,**

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Brody School of Medicine - East Carolina University

*Executive Director*

North Carolina Statewide Telepsychiatry Program (NC-STeP)



# NC-STeP Quality Management and Outcomes Monitoring Processes: April – June 2021

- 41 hospitals in the network, 40 hospitals were live
- 28 hospitals reporting Telepsychiatry patients in their ED
  - not all live hospitals had telepsychiatry patients
- Total number of assessments for this quarter = 1,406
- Total number of encounters for this quarter = 1,213
- Patient assessments billed for Model 1 hospitals = 924

# NC-STeP Quality Management and Outcomes Monitoring Processes: April – June 2021

- The Median Length of Stay was 29.0 hours
- The Average Length of Stay was 53.5 hours
  - 54.1 hours for those discharged to home
  - 52.2 hours for those transferred to another facility
- Average Consult Elapsed Time (in Queue to Exam Complete) for Model 1 hospitals was 4 hours and 24 minutes.

# NC-STeP Quality Management and Outcomes Monitoring Processes: April – June 2021

- 799 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
  - 323 (40.4%) of those patients did not have an IVC in place when discharged.
- Of the ED patients who received telepsychiatry services:
  - 45.3% were discharged to home
  - 48.2% were discharged to another facility

# NC-STeP Quality Management and Outcomes Monitoring Processes: April – June 2021

- 16 Community based sites were live as of 6/30/21 with 15 sites reporting Telepsychiatry patients.
- There were 1,060 total behavioral health visits.
  - 58 visits with a Psychiatrist.
  - 1,002 visits with a behavioral health manager.
  - 28 visits with a Maternal and Fetal Medicine Specialist.



	Since project inception in November 2013	Quarter Jul- Sep 2020	Quarter Oct- Dec 2020	Quarter Jan- Mar 2021	Quarter Apr- Jun 2021
<b>Total Patient Encounters</b>	35,386	1,179	1,074	1,105	1,213
<b>Model 1 Hospital Patient Encounters</b>	21,512	620	544	688	731
<b>Model 2 Hospital Patient Encounters</b>	13,847	559	530	417	482
<b>Total Number of Assessments</b> (Billed Assessments for Model 1 Hospitals + Number of Patient Encounters for Model 2 Hospitals)	46,904	1,334	1,201	1,296	1,406

# NC-STeP Benchmarks



Goals	Values Reached		
Cumulative Target to be reached by (06/30/2021)	Value Reached as of most recent previous quarter (03/31/2021)	Value Reached as of this reporting quarter (06/30/2021)	Year-to-Date Total with % of the Yearly Target (06/30/2021)
<b>Number of IVCs</b>	1,700	781	3,090 182% of Yearly Target
<b>Number of IVCs Overturned</b>	505	320	1,236 245% of Yearly Target
<b>Total Number of Assessments</b> (Billed assessments for Model 1 hospitals + Number of patient encounters for Model 2 hospitals.)	4,251	1,307	5,249 123% of Yearly Target

# NC-STeP Status as of June 30, 2021

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020	TARGET TO BE REACHED BY 06/30/2021	VALUES/MEASURES REACHED AS OF 06/30/2021
1. The number of full-time equivalent (FTE) positions supported by these contracts	4.02 FTEs	4.30 FTEs	4.10 FTEs
2. The number of overturned involuntary commitments (inpatient admission prevented)	711	505	323 in this quarter  Cumulative total since program inception 7,339
3. The number of participating consultant providers	48	48	42



# NC-STeP Status as of June 30, 2021

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020	TARGET TO BE REACHED BY 06/30/2021	VALUES/MEASURES REACHED AS OF 06/30/2021
4. The number of telepsychiatry assessments conducted.	5,105	4,251	1,406 in this quarter  Cumulative total since program inception 48,322
5. The number of telepsychiatry referring sites	58	48	41 40 Live
6. The reports of involuntary commitments to enrolled hospitals	2,061	1,700	799 in this quarter  Cumulative total since program inception 21,347

# NC-STeP Status as of June 30, 2021

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020	TARGET TO BE REACHED BY 06/30/2021	VALUES/MEASURES REACHED AS OF 06/30/2021
7. The average (mean) Length of Stay for all patients with a primary mental health diagnosis across all dispositions.	55 hours	55 hours	QTD Average = 53.5 QTD Median = 29.0
8. The rate of "satisfied" or "strongly satisfied" among emergency department staff participating in NC-STeP.	80%	80%	Survey not conducted this quarter

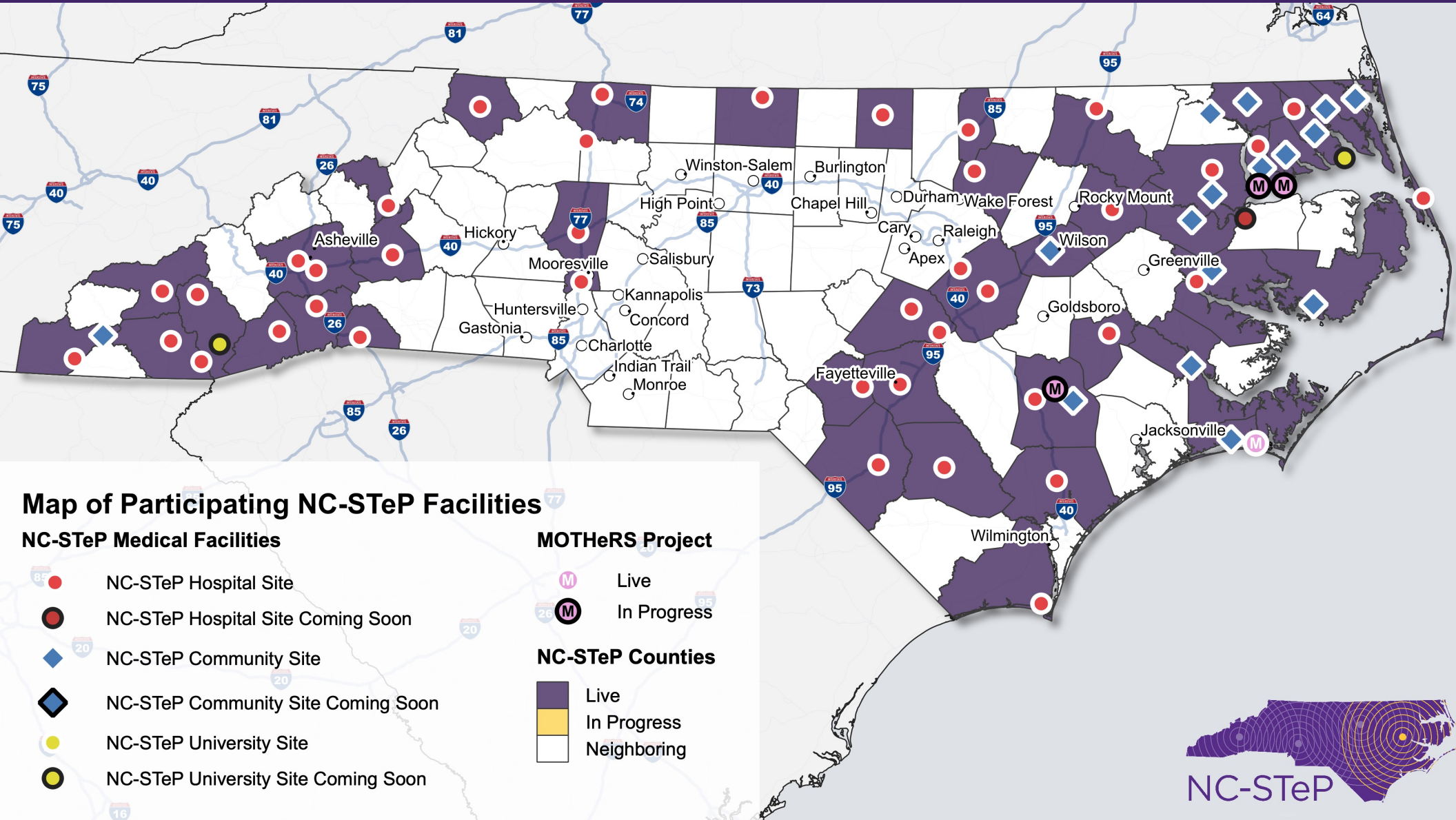
# NC-STeP Status as of June 30, 2021

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020	TARGET TO BE REACHED BY 06/30/2021	VALUES/MEASURES REACHED AS OF 06/30/2021
9. The rate of "satisfied" or "strongly satisfied" among hospital CEOs/COOs participating in NC-STeP.	100%	100%	Survey not conducted this quarter
10. The rate of "satisfied" or "strongly satisfied" among consulting (hub) providers participating in NC-STeP.	100%	100%	Survey not conducted this quarter

# NC-STeP Status as of June 30, 2021

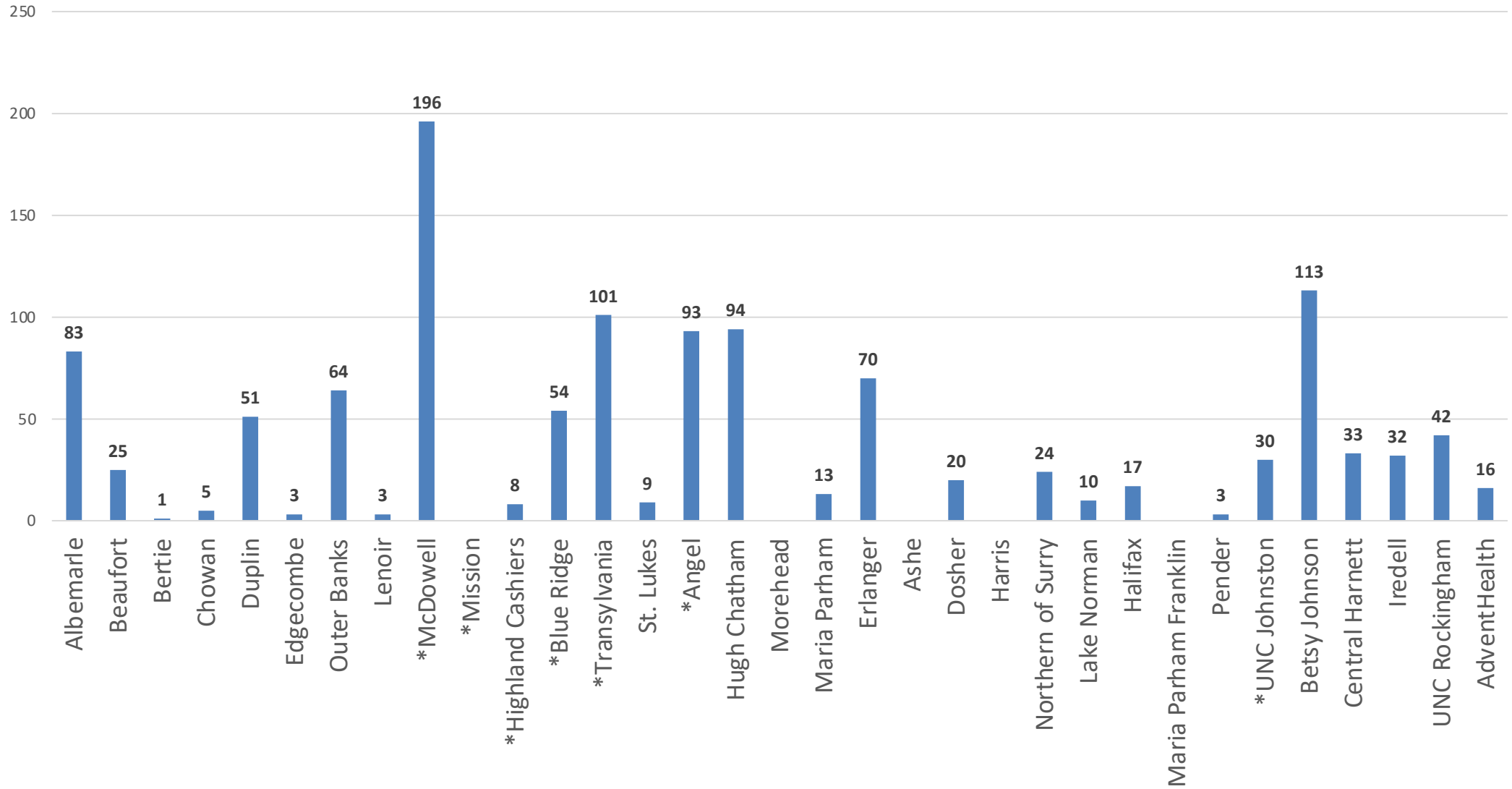
EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020	TARGET TO BE REACHED BY 06/30/2021	VALUES/MEASURES REACHED AS OF 06/30/2021
11. The rate of "satisfied" or "strongly satisfied" among emergency department physicians participating in the statewide telepsychiatry program.	85%	85%	Survey not conducted this quarter
12. Cumulative return on investment to state psychiatric facilities through overturned involuntary commitments (inpatient admission prevented)	\$3,839,400	\$3,213,403	\$1,744,200 Cumulative average since program inception \$39,630,600

# NC-STeP Status as of June 30, 2021



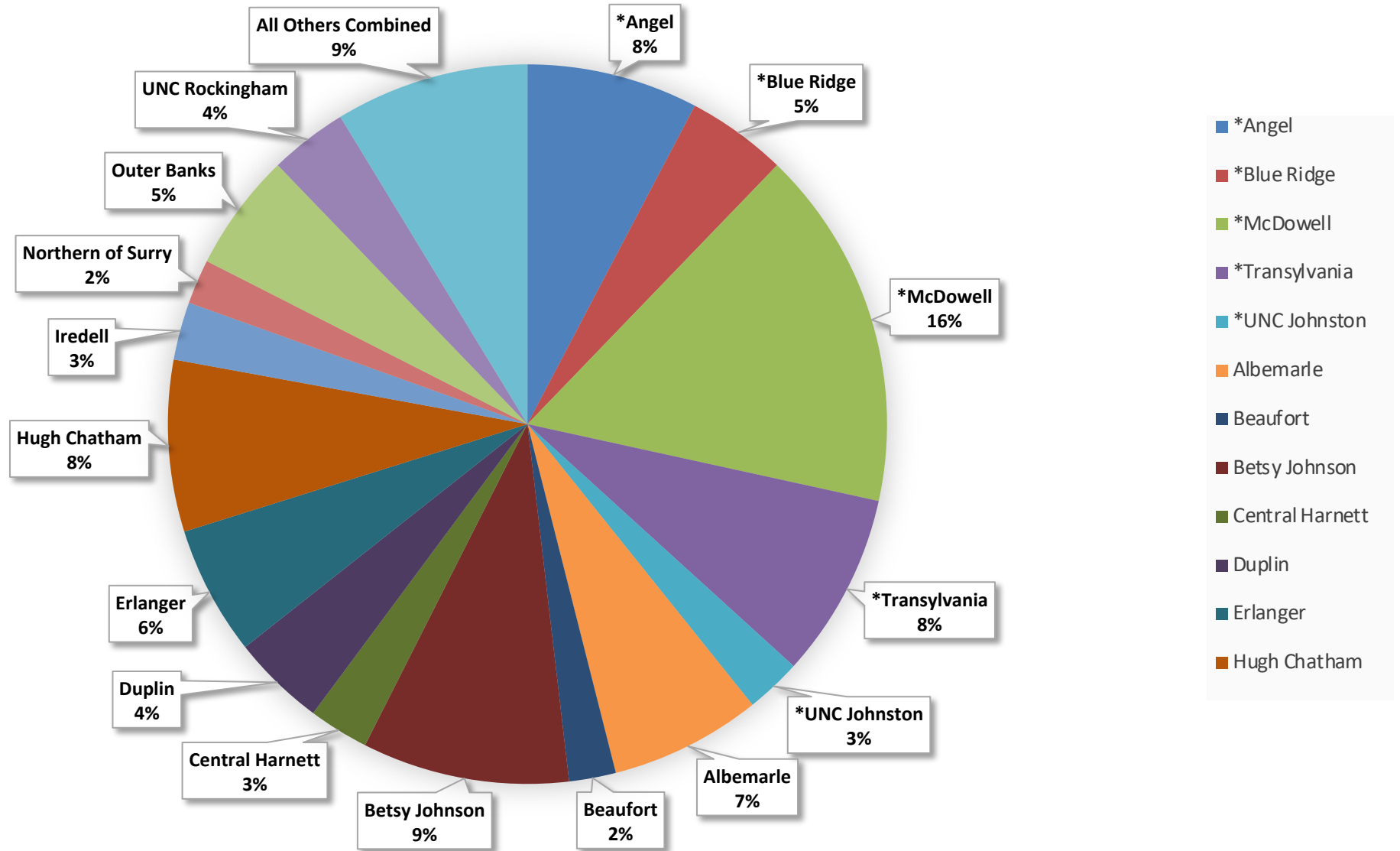
# Number of NC-STeP Patients by Hospital

## April - June 2021



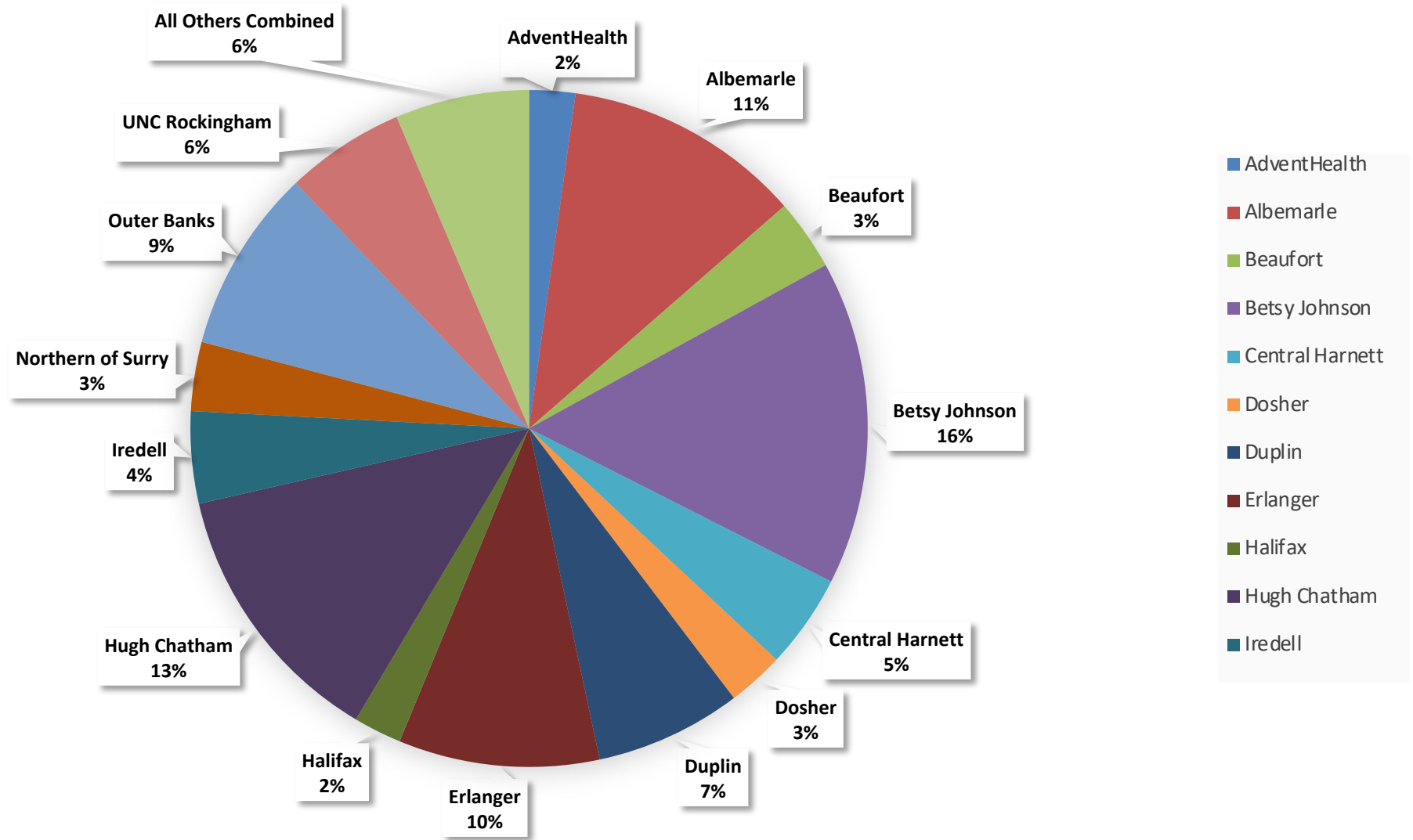
# Percent of use by hospital Apr-Jun 2021

(based on number of encounters)



# Percent of use for Model 1 Hospital Apr-Jun 2021

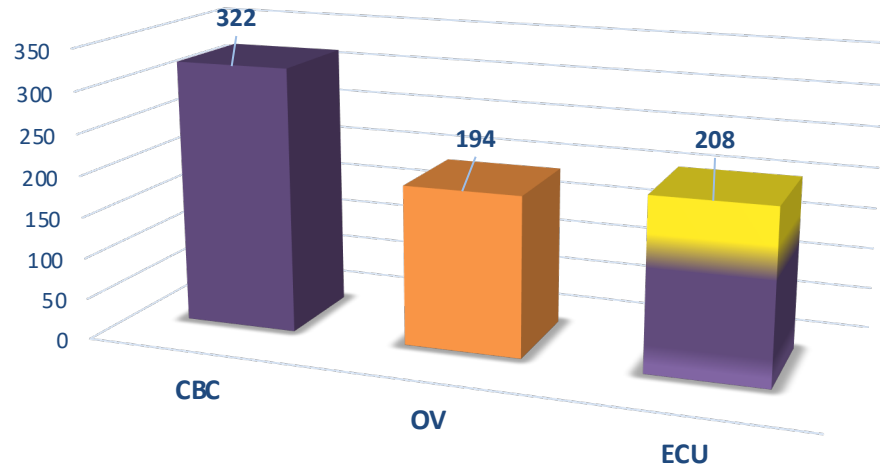
(based on number of encounters)



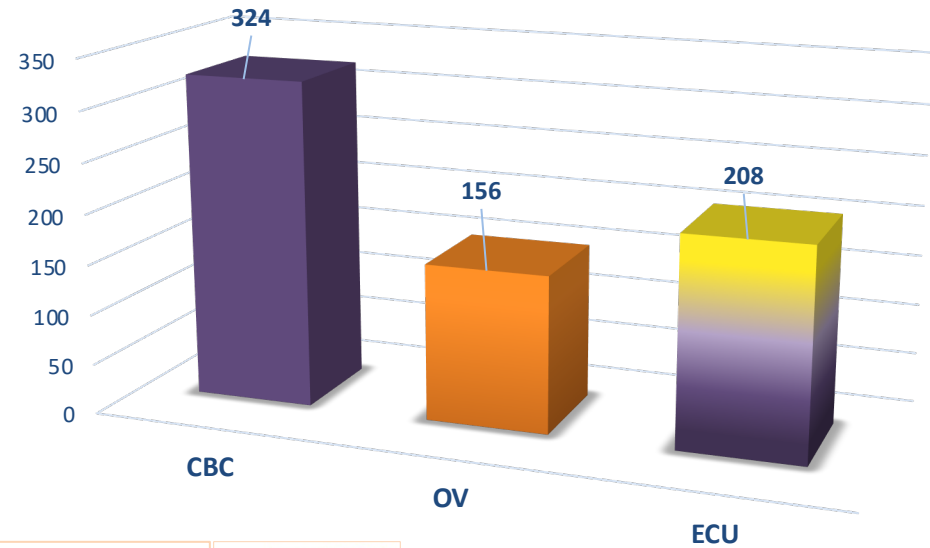


# Number of Patients by Provider (Model 1)

Apr-Jun 2021

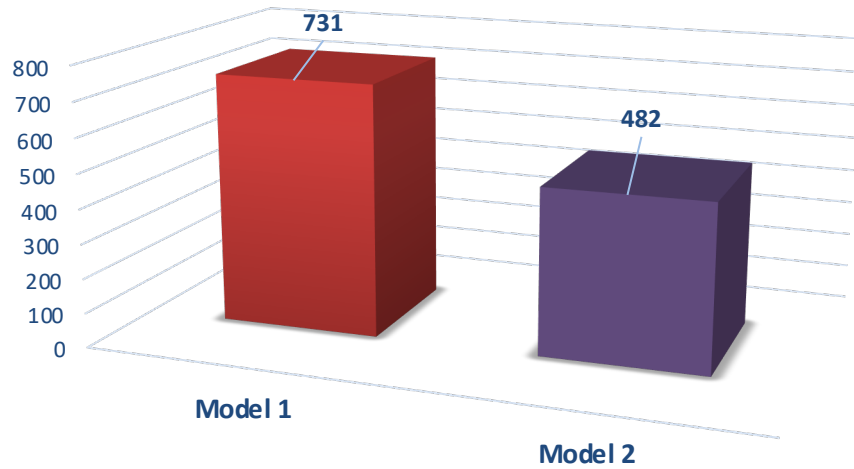


Jan-Mar 2021

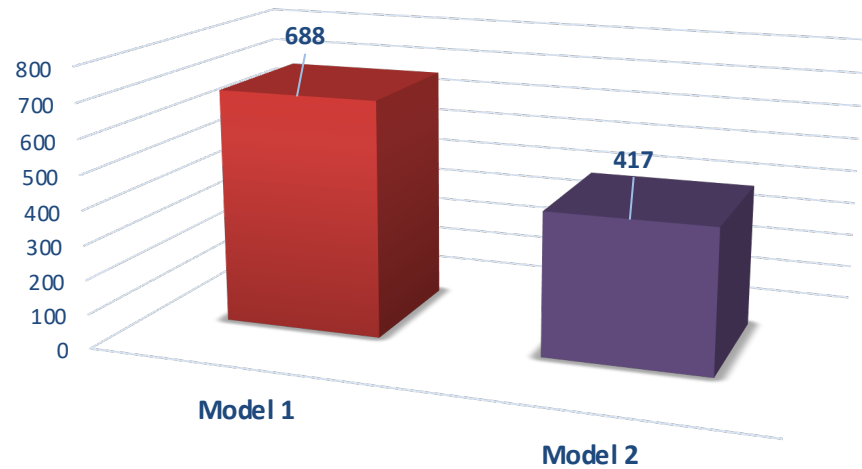


# Number of Patients by Model

Apr-Jun 2021

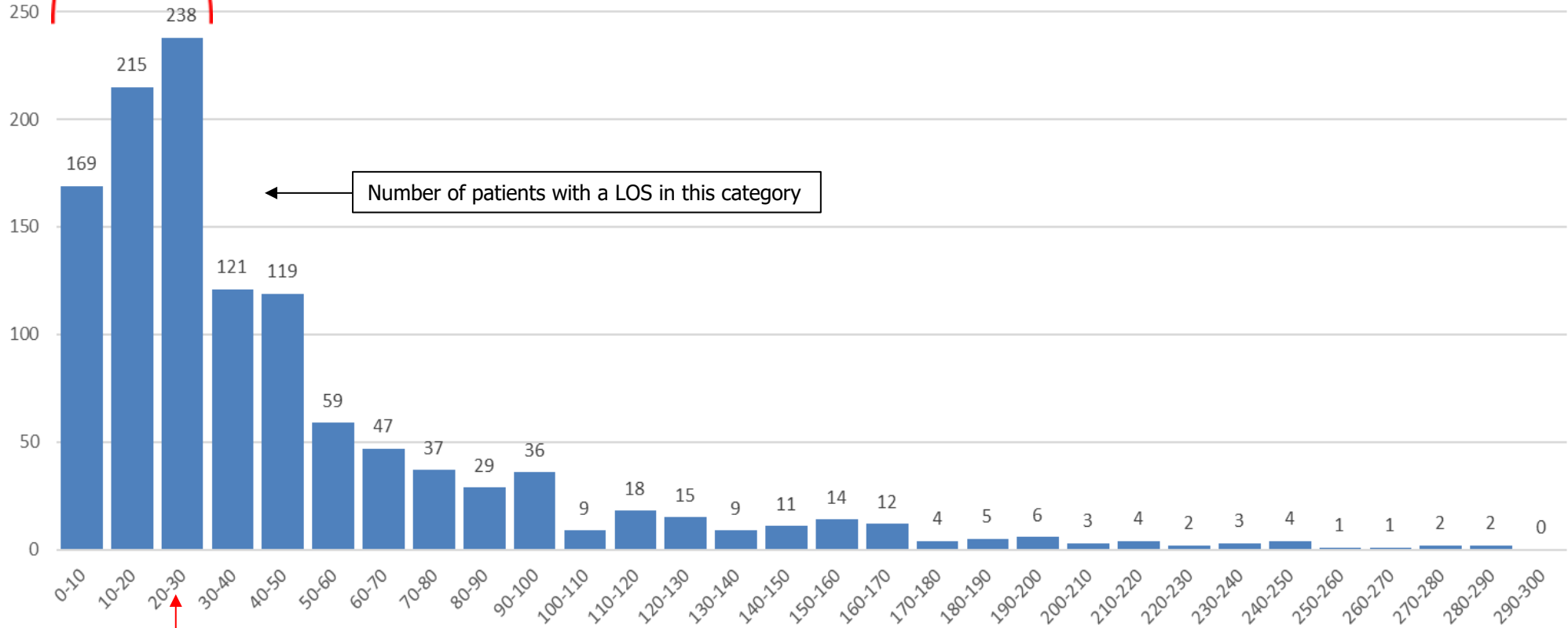


Jan-Mar 2021



51% percent of patients had a LOS of 30 hours or less

### Number of NC-STeP Patients by LOS Category Apr - Jun 2021 in hours



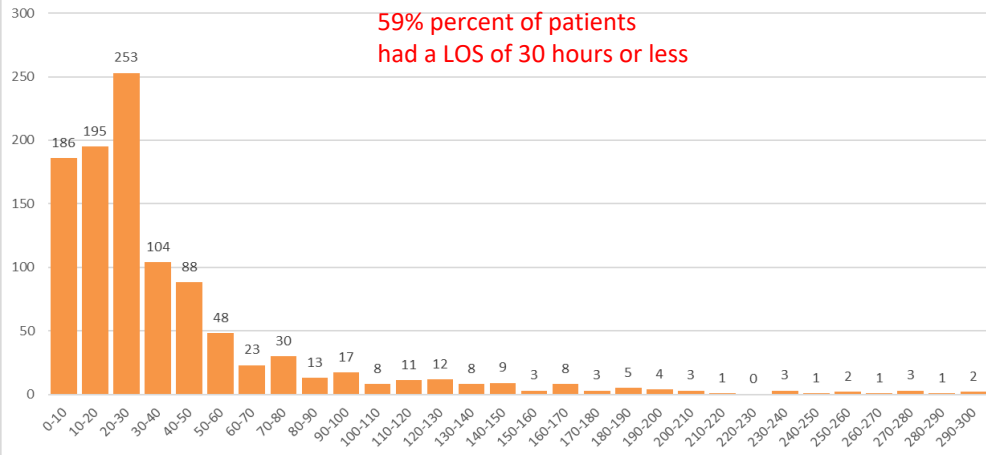
Median Length of Stay for Apr-Jun 2021 = 29 Hours

18 patients had a LOS longer than 300 hours



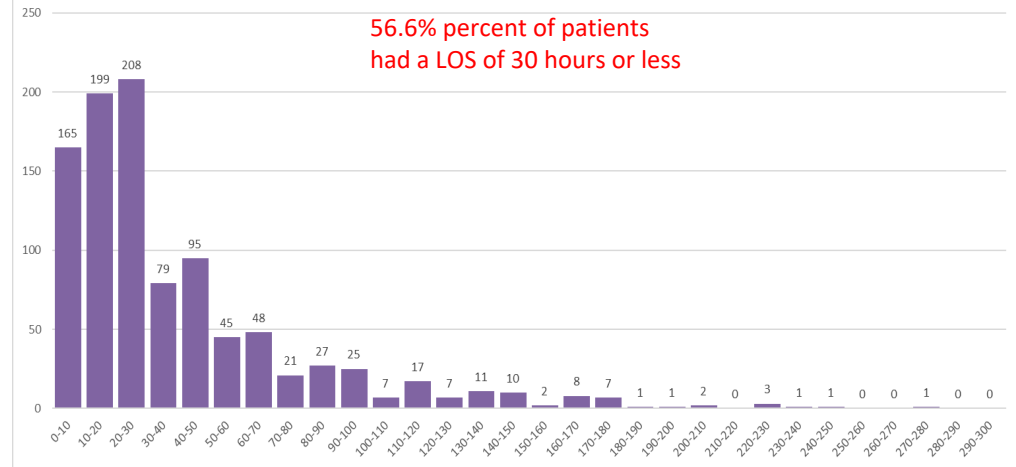
**Number of NC-STEP Patients by LOS Category**  
**Oct - Dec 2020**  
 in hours

59% percent of patients  
 had a LOS of 30 hours or less



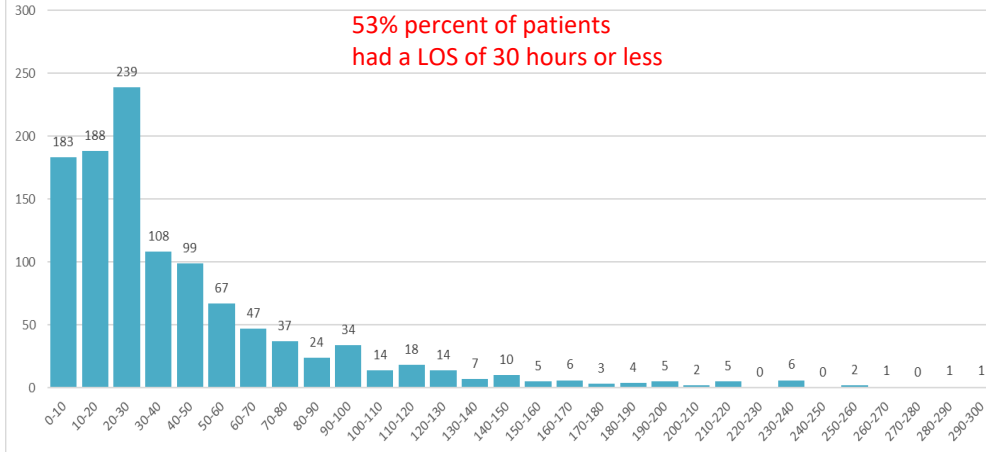
**Number of NC-STEP Patients by LOS Category**  
**Jan-Mar 2020**  
 (in hours)

56.6% percent of patients  
 had a LOS of 30 hours or less



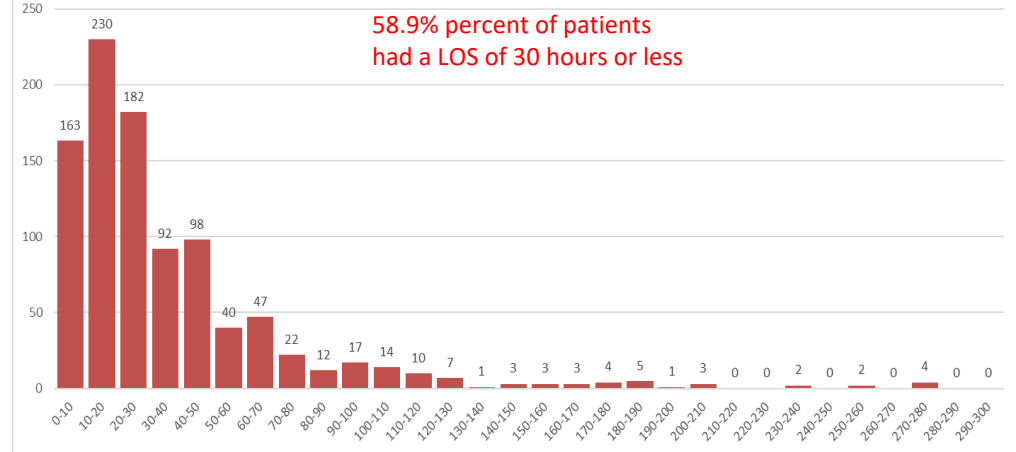
**Number of NC-STEP Patients by LOS Category**  
**Jul - Sep 2020**  
 (in hours)

53% percent of patients  
 had a LOS of 30 hours or less



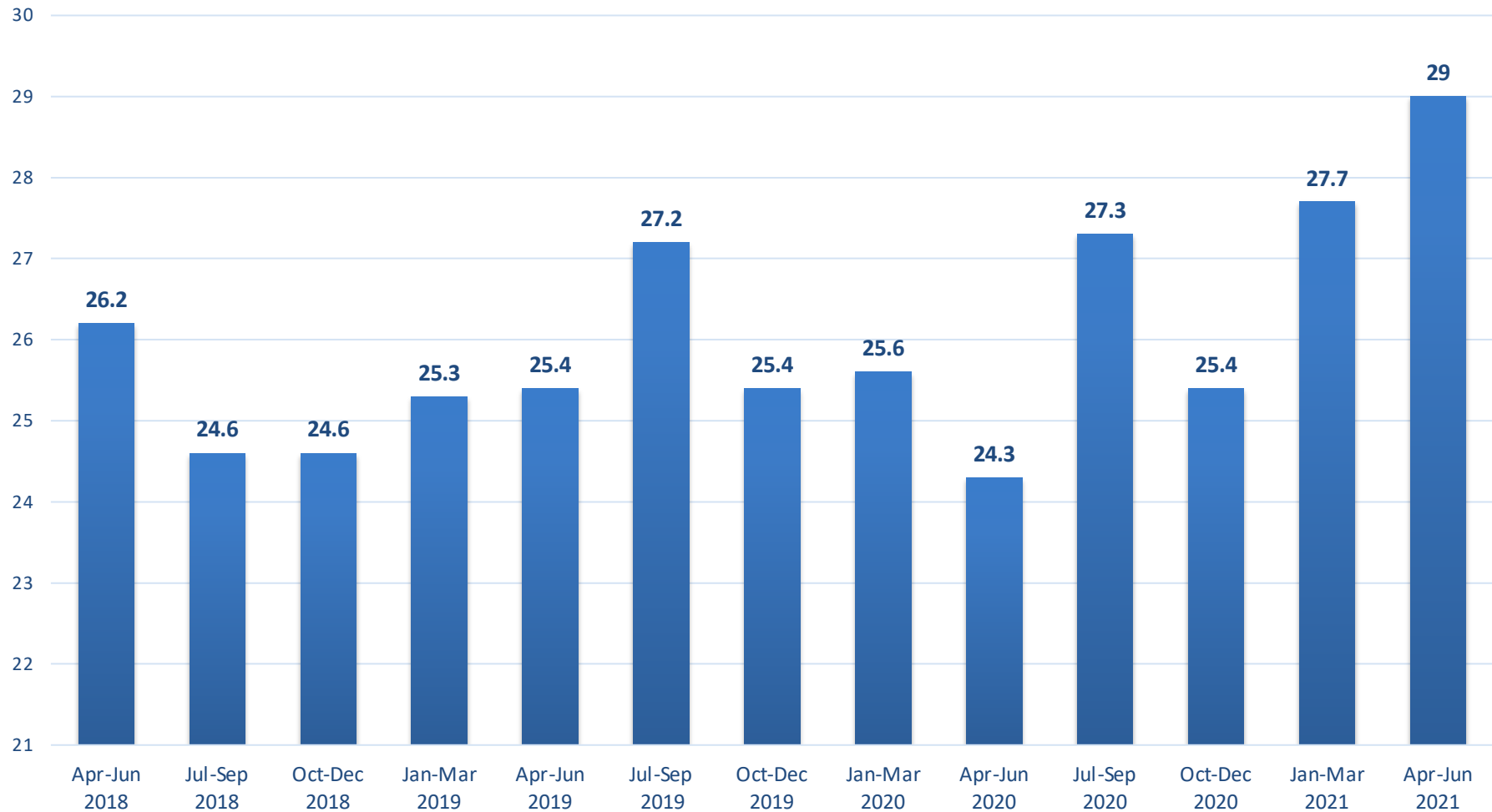
**Number of NC-TeP Patients by LOS Category**  
**Apr-Jun 2020**  
 (in hours)

58.9% percent of patients  
 had a LOS of 30 hours or less

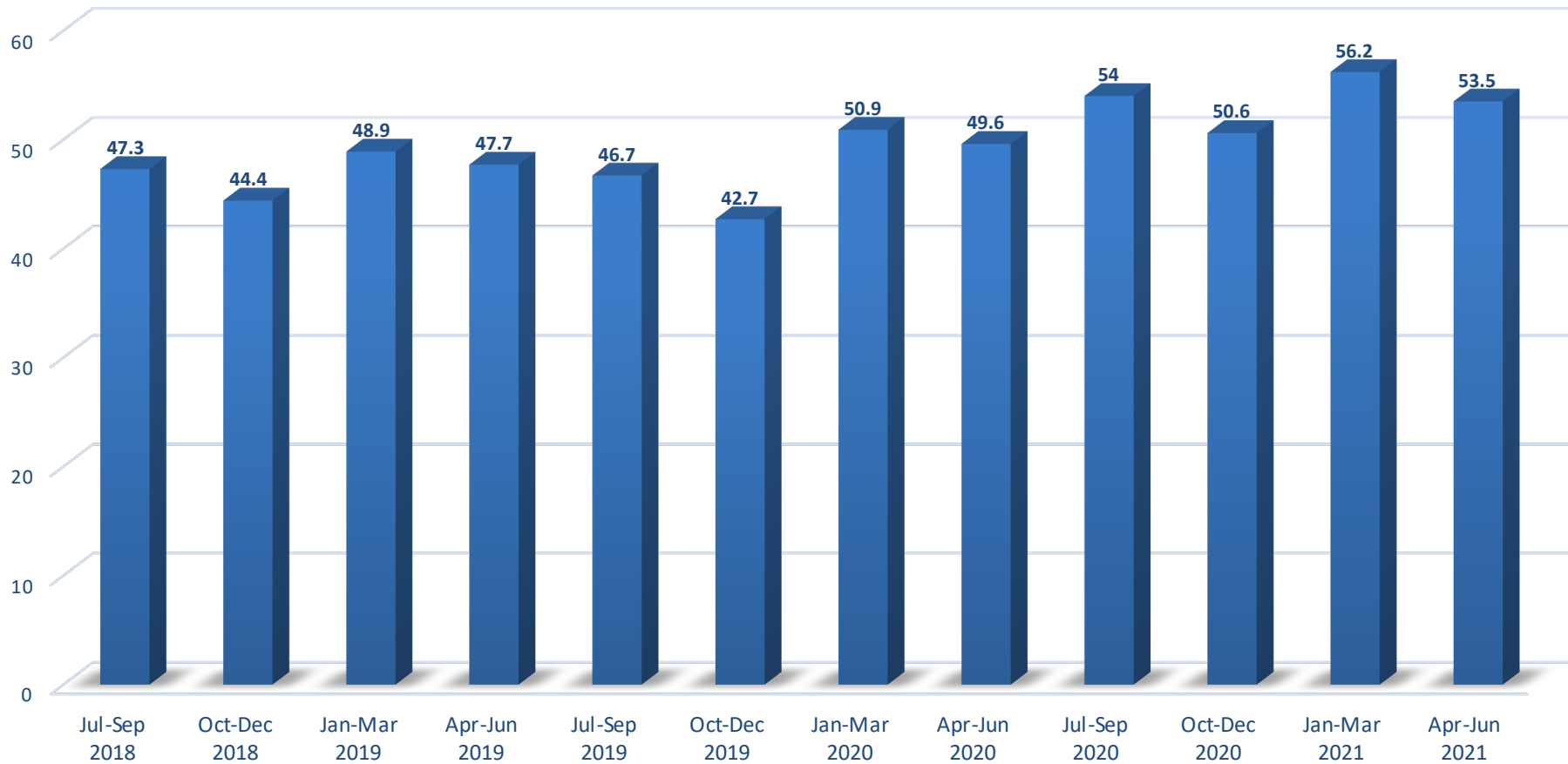


# Median Length of Stay by Quarter

(in hours)



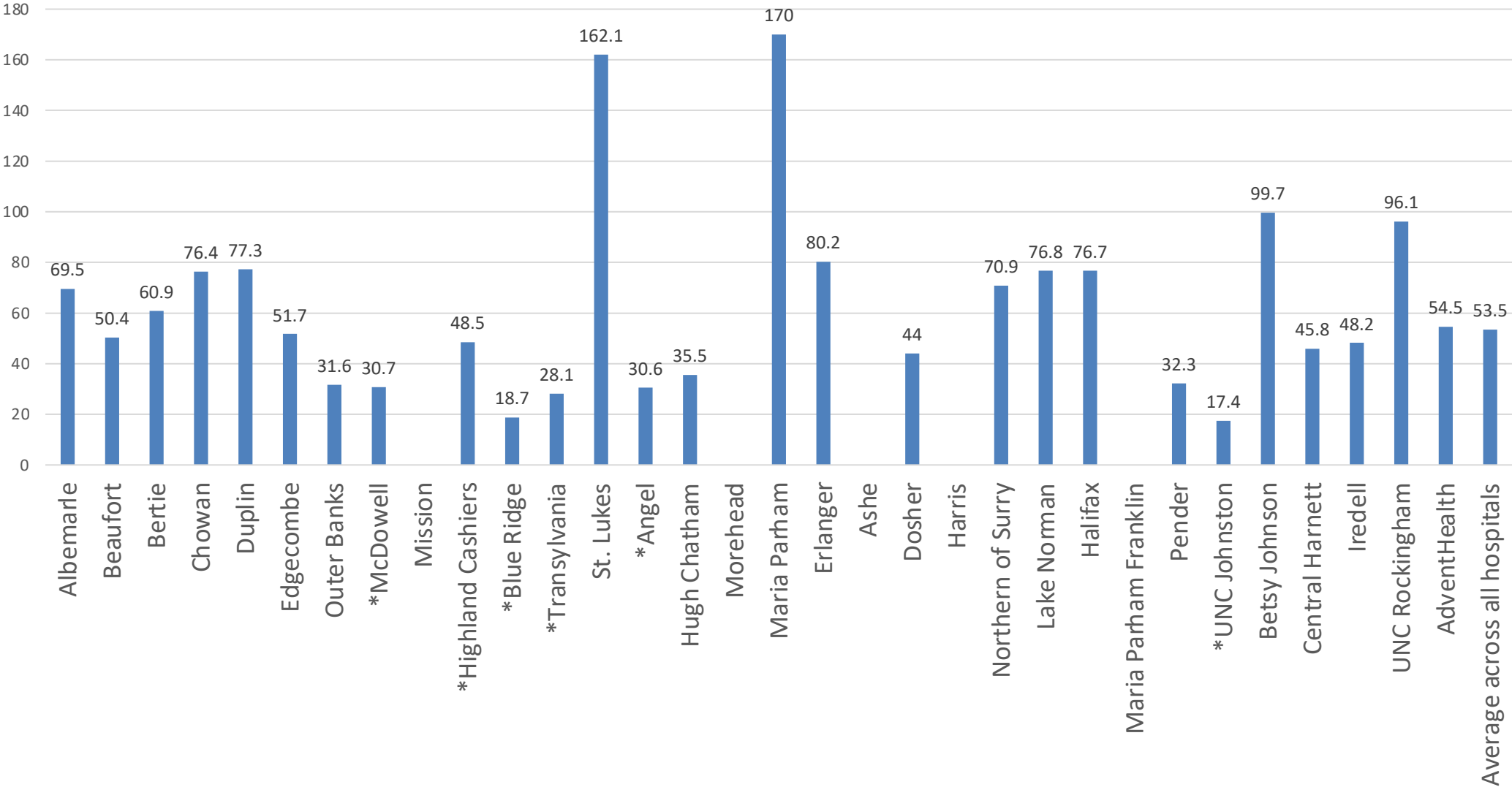
## Average Length of Stay by Quarter for Hospitals Participating in NC-Step (in hours)



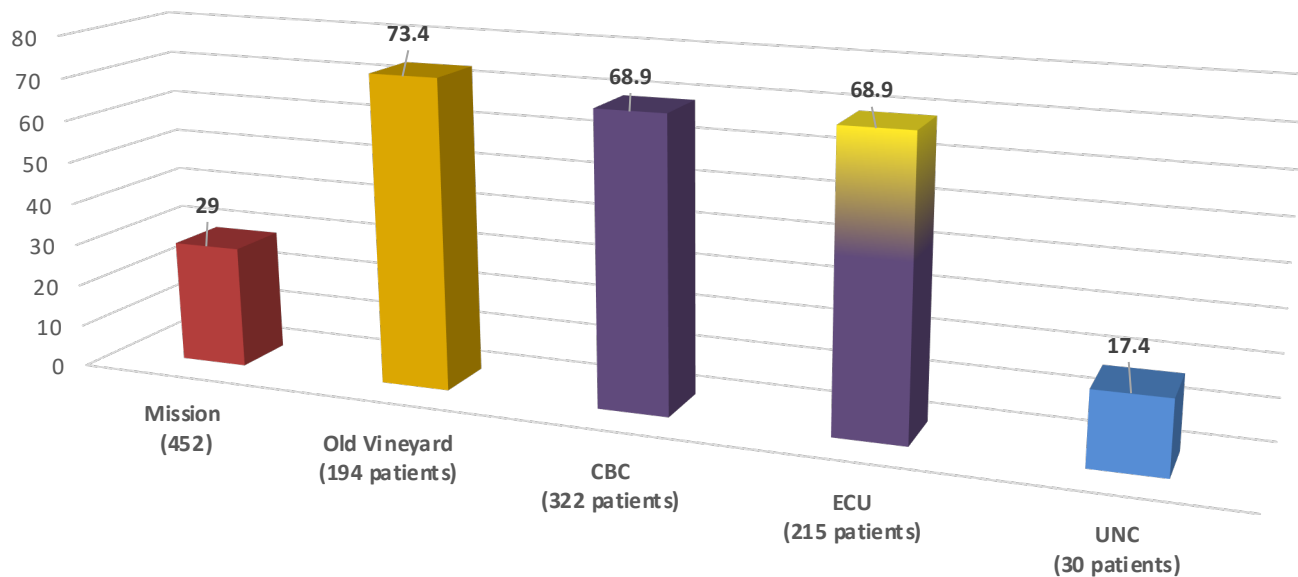
# Average Length of Stay for NC-STeP Patients by Hospital

April - June 2021

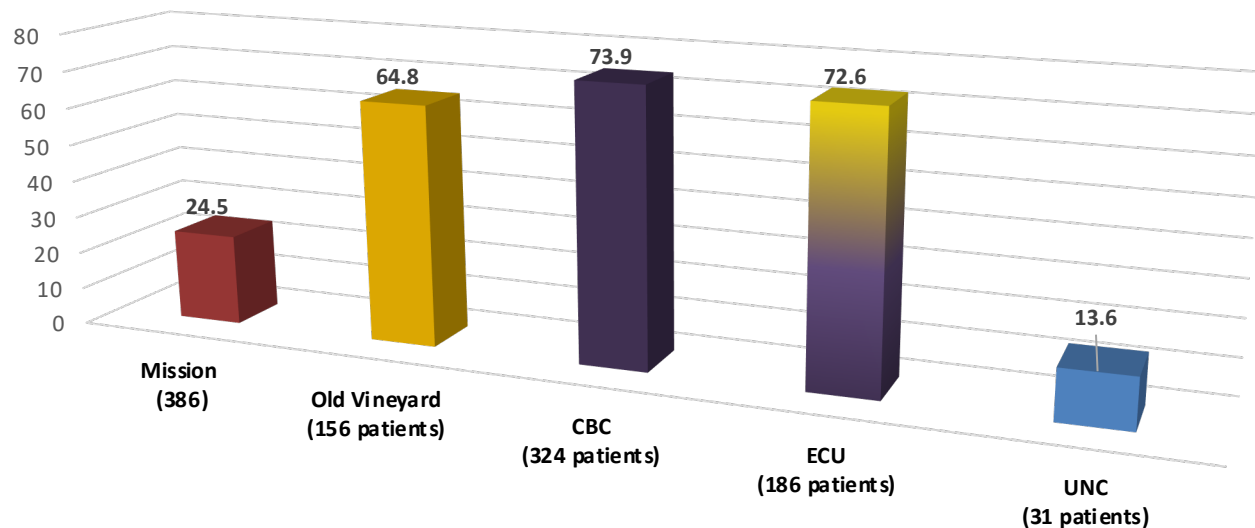
(in hours)



Apr-Jun 2021 (in hours)



Jan-Mar 2021 (in hours)

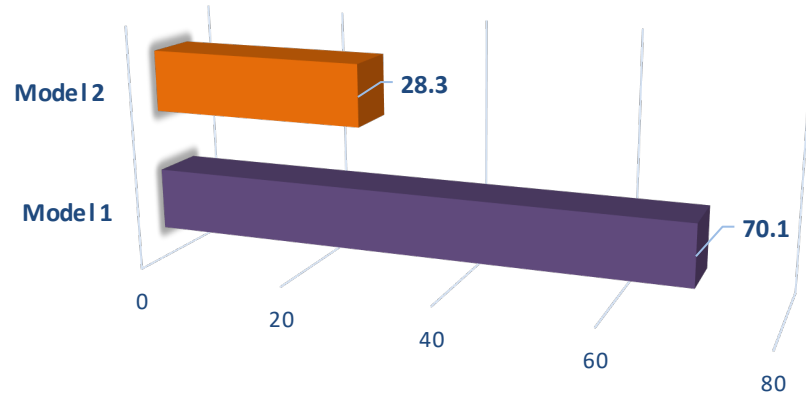


## Average Length of Stay by Provider

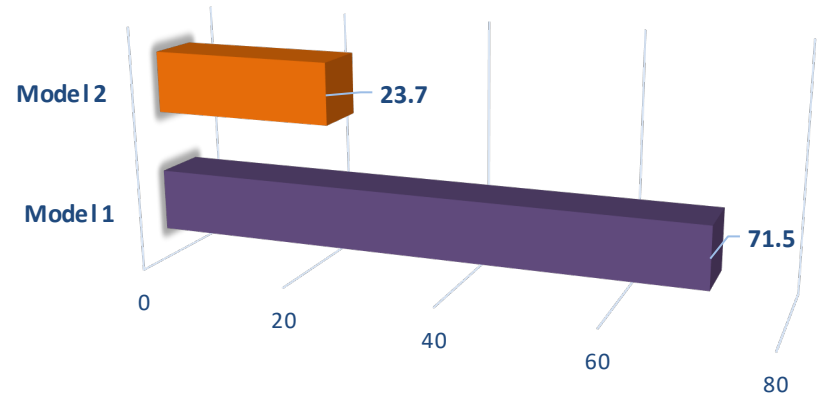


# Average LOS by Model

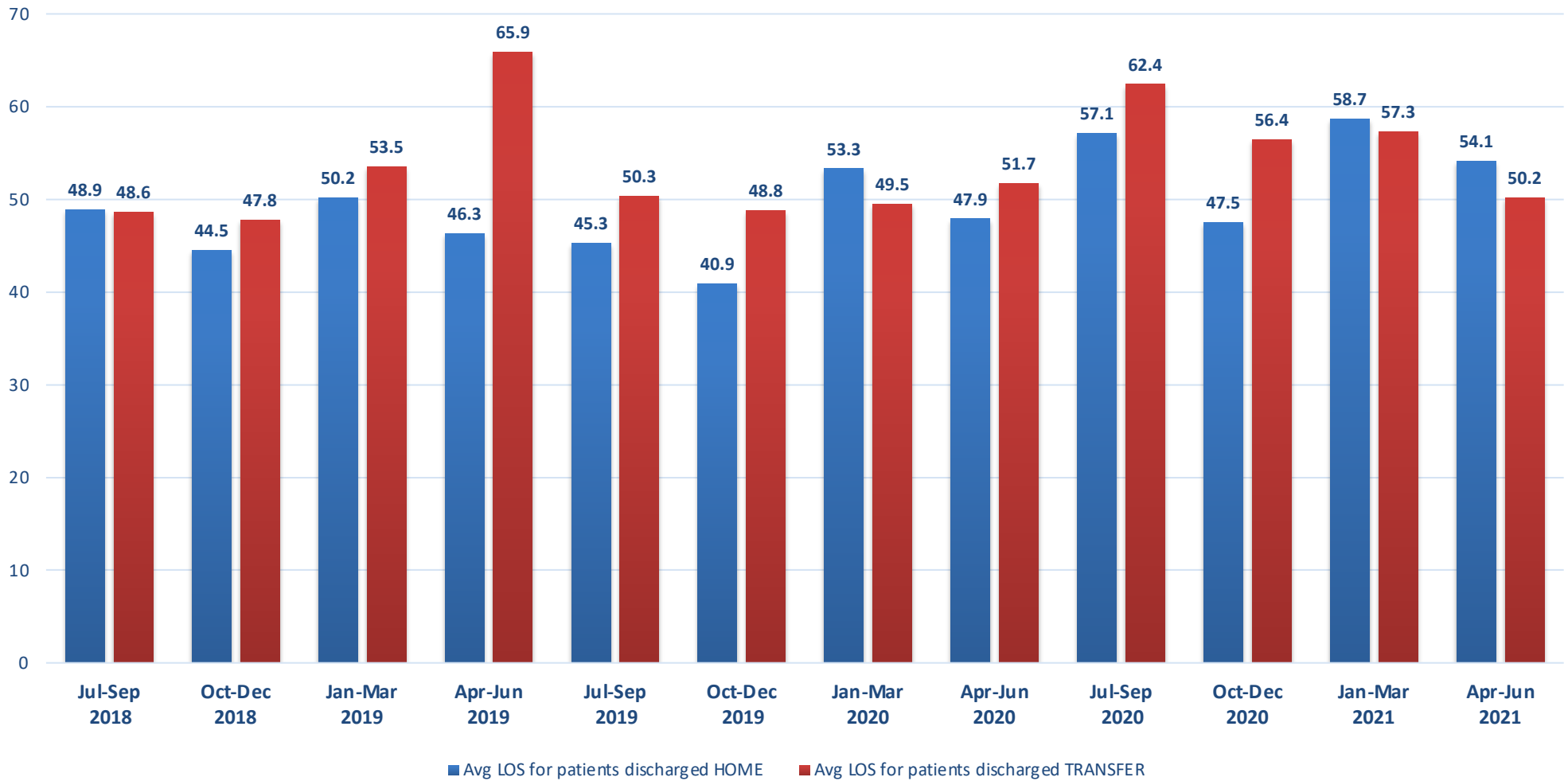
Apr-Jun 2021 (in hours)



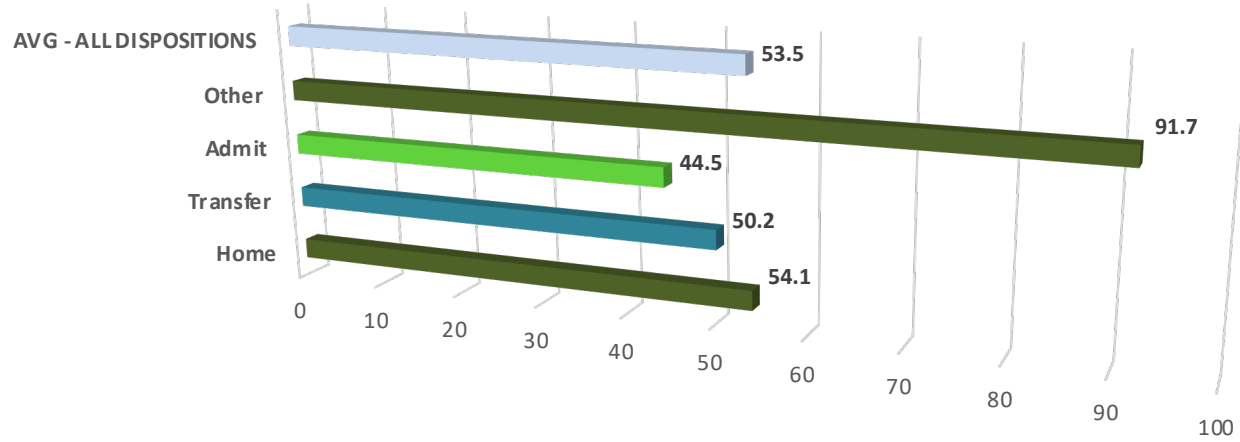
Jan-Mar 2021 (in hours)



## Average Length of Stay by Quarter for Patients Discharged to Home or Transfer (in hours)

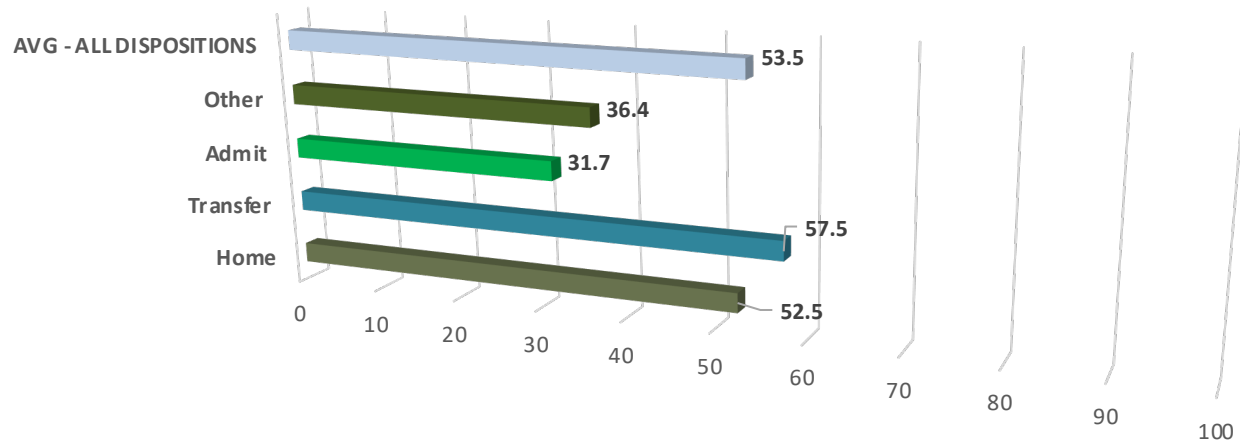


Apr-Jun 2021 (in hours)



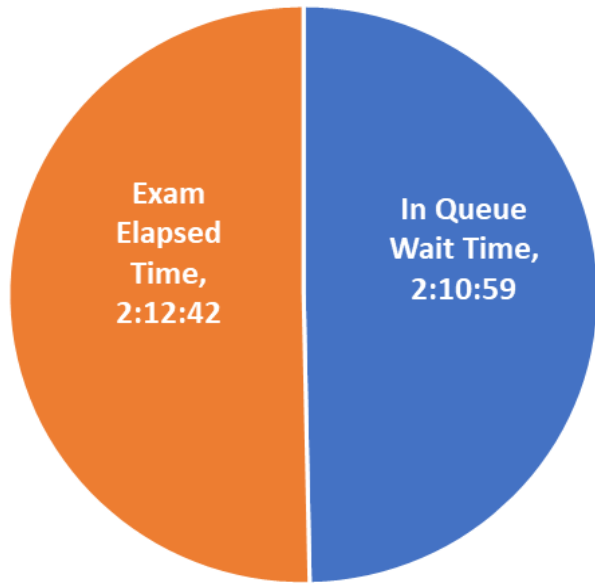
## Average LOS by Discharge Disposition

Jan-Mar 2021 (in hours)

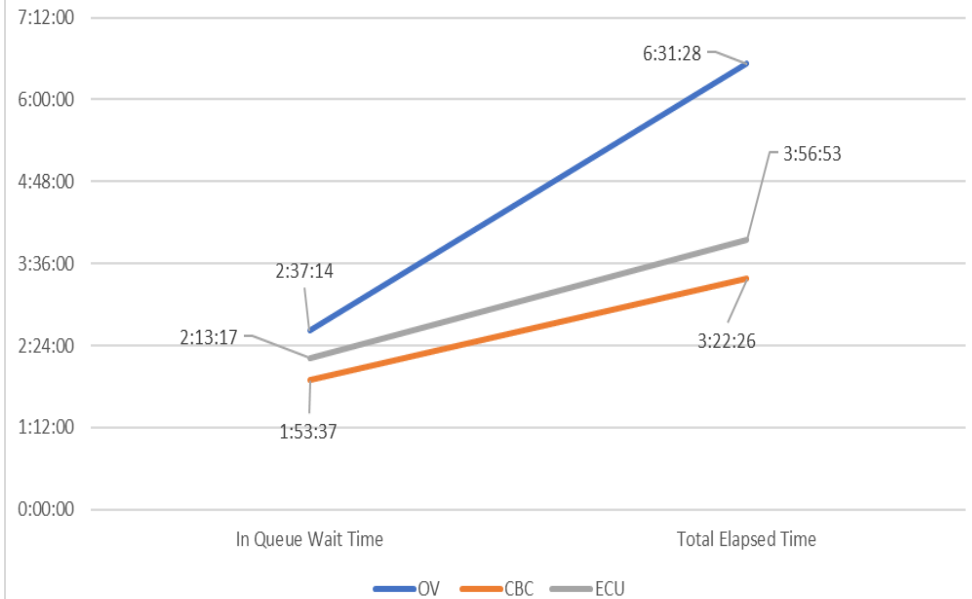


# Consult Elapsed Time: April – June 2021

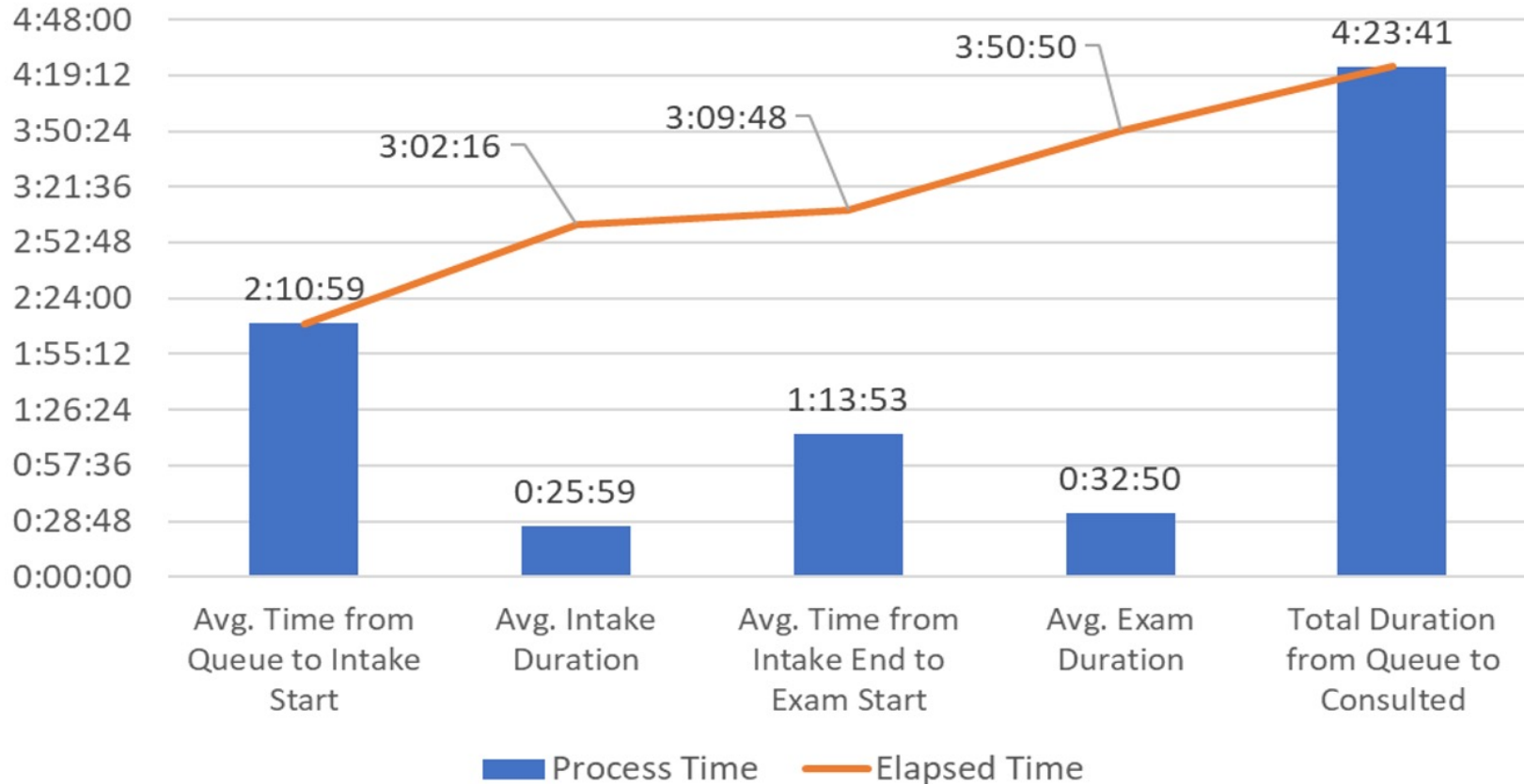
CBC, OV & ECU  
 Average Consult Exam Elapsed Time  
 In Queue to Exam Complete  
 FY21-Q4 April - June  
 (4 hrs. 24 min.)



Comparison CBC, OV & ECU  
 Average Consult Elapsed Time  
 In Queue to Exam Complete  
 FY21-Q4 April - June 2021  
 (hh:mm:ss)

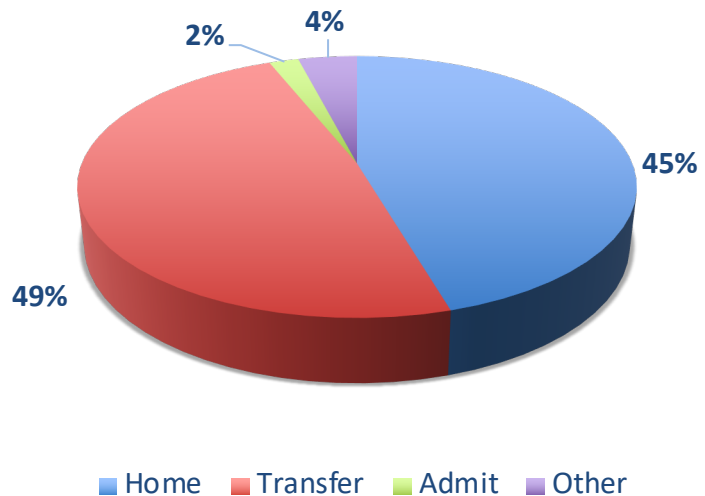


# Key Processes and Elapsed Times Averages CBC, OV, ECU: April – June 2021

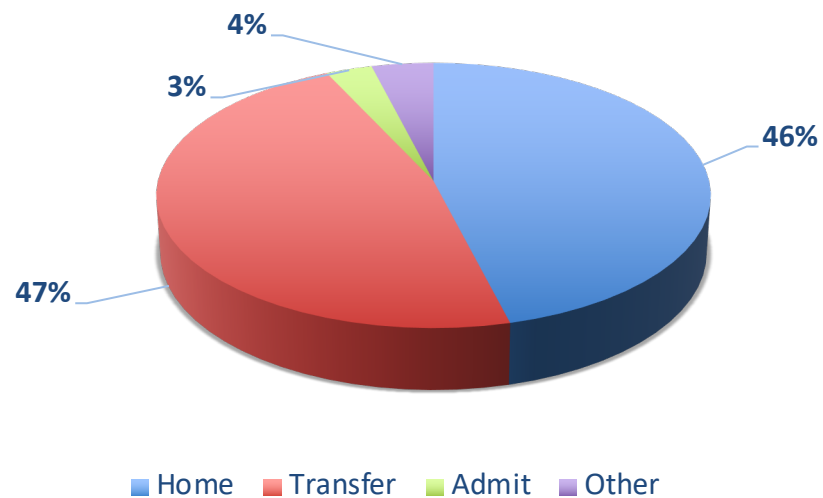


# Percent of Patients by Discharge Disposition

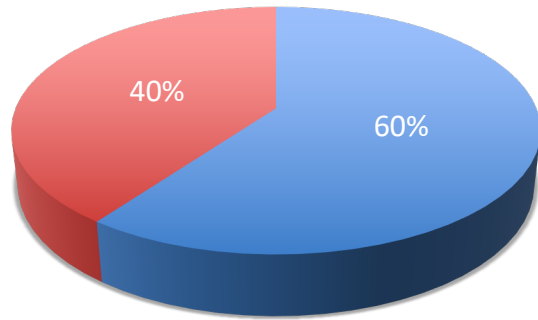
Apr-Jun 2021



Jan-Mar 2021



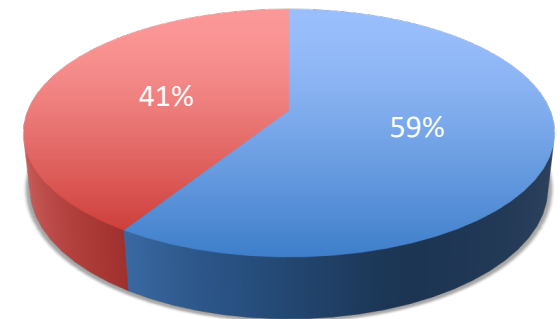
## Apr-Jun 2021



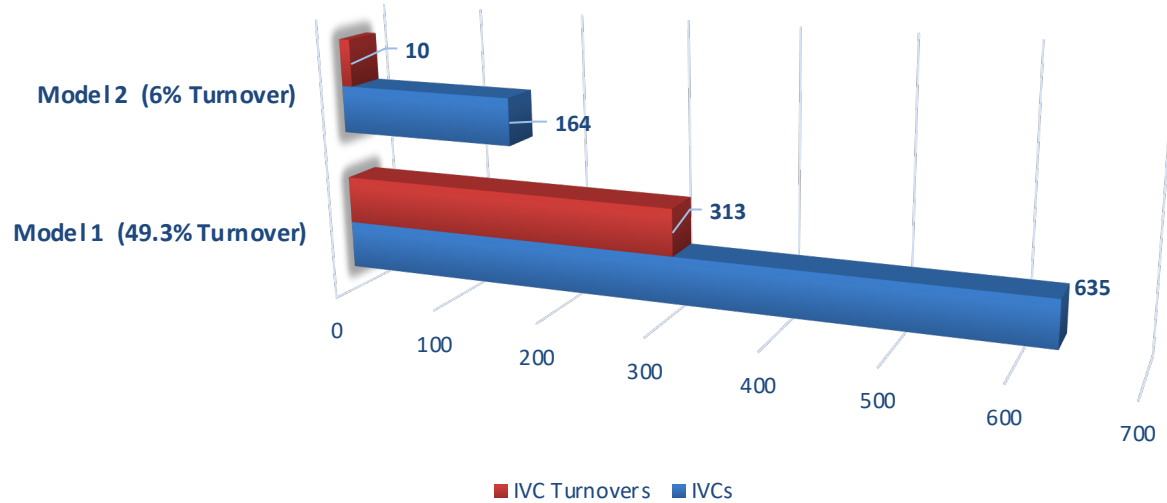
## IVCs – By Release Status

- IVCs - percent not released
- IVCs - percent released

## Jan-Mar 2021

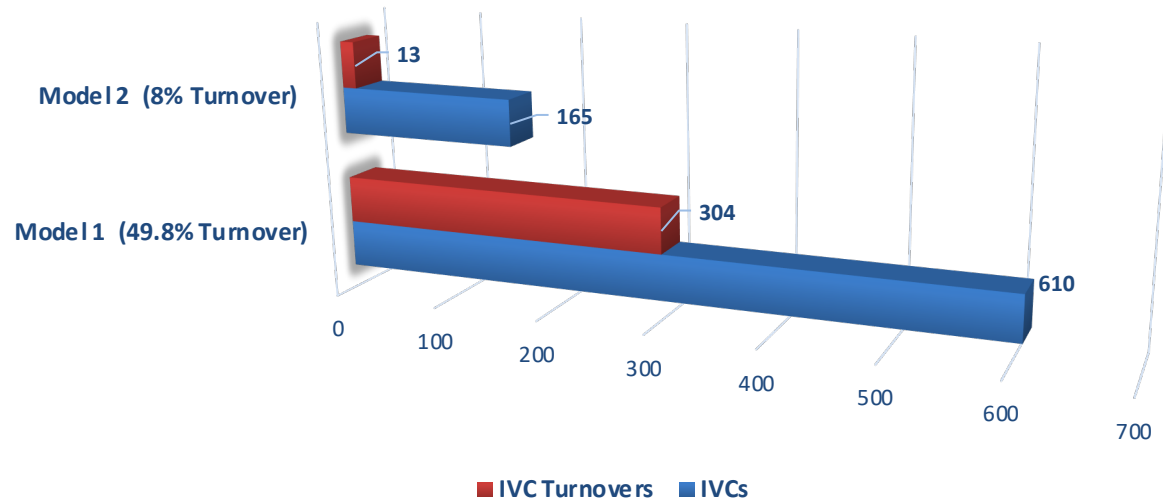


## Apr-Jun 2021



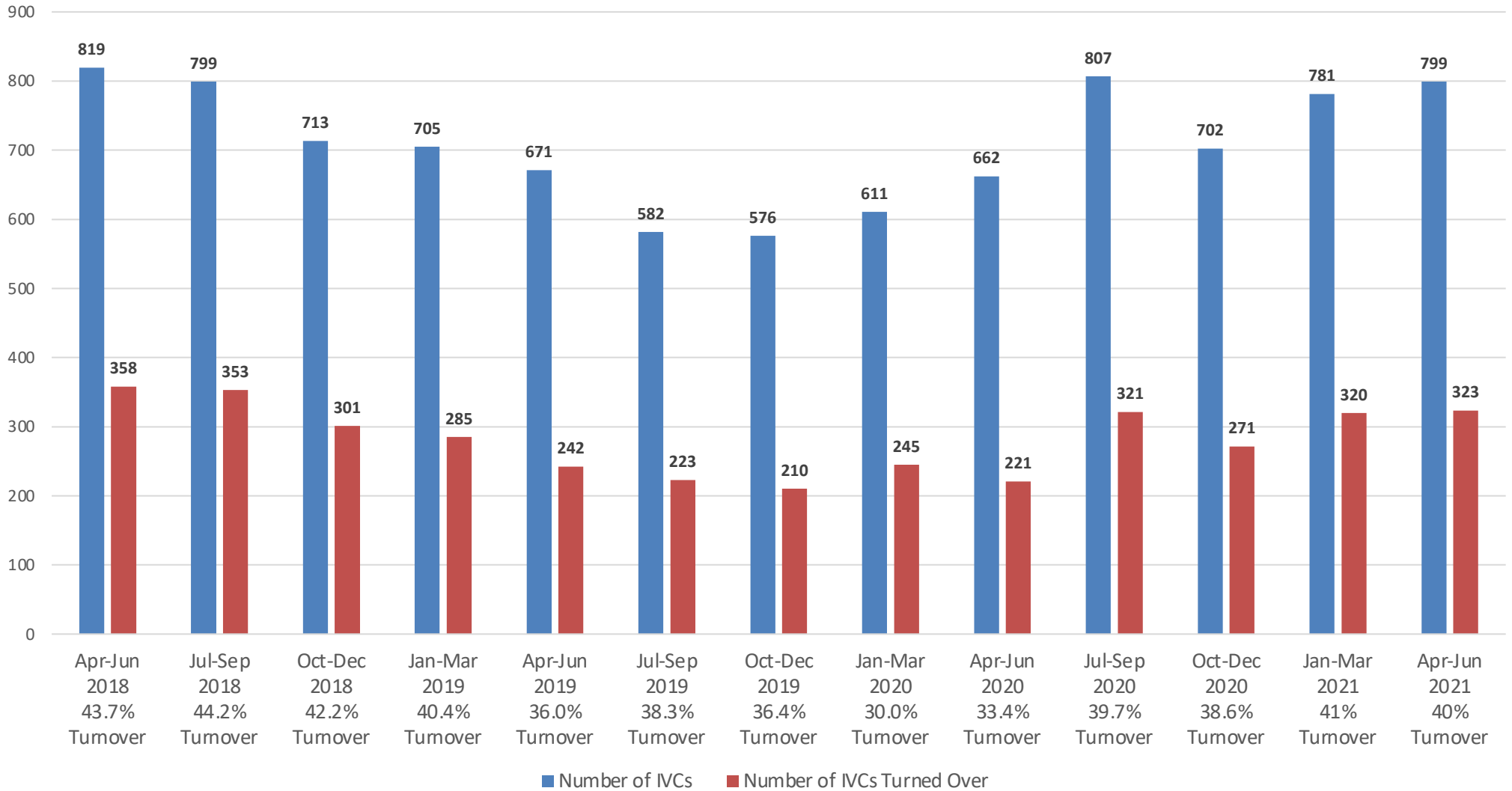
## Number of IVCs and IVC Turnovers by Model

## Jan-Mar 2021

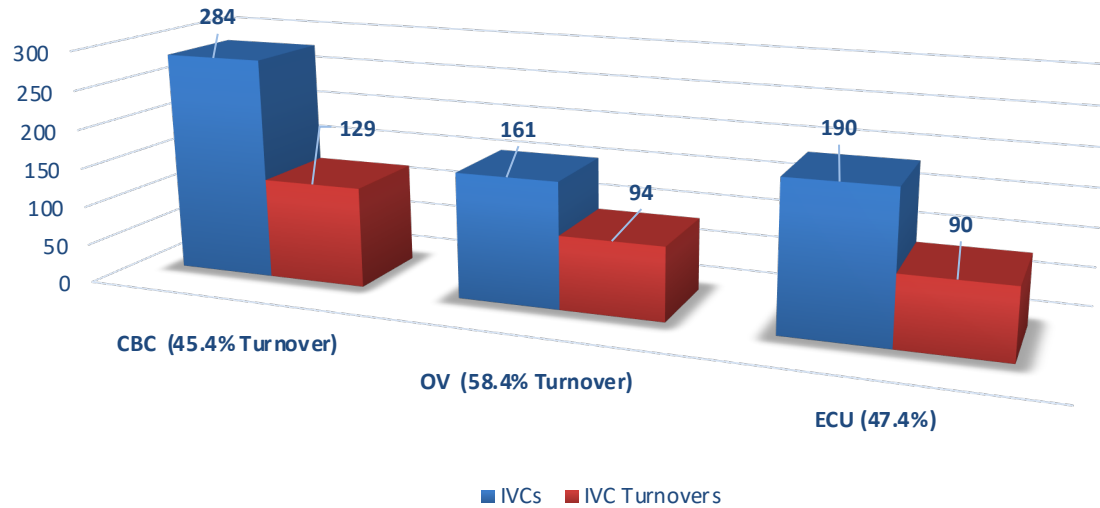




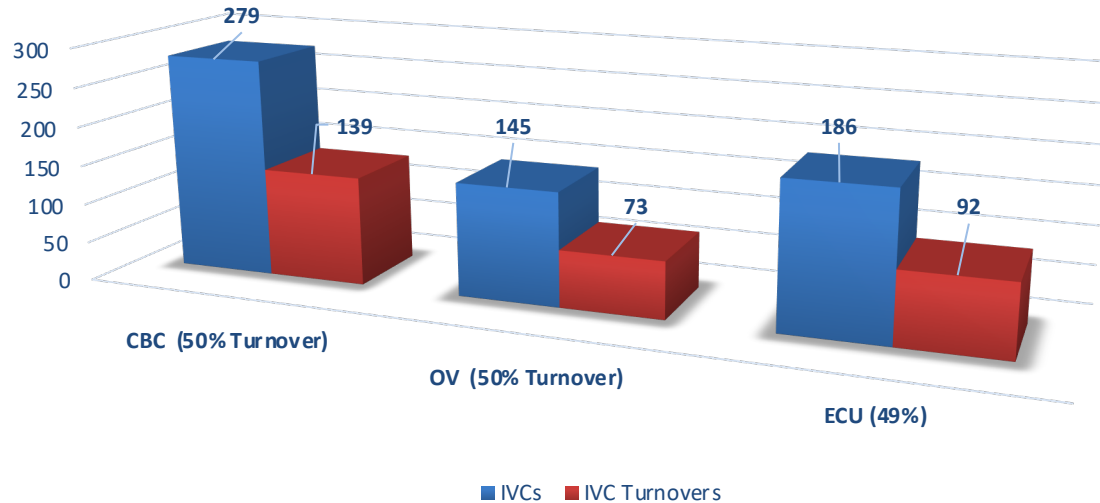
## Number of IVCs and IVCs Turned Over by Quarter



## Apr-Jun 2021



## Jan-Mar 2021



# Number of IVCs and IVC Turnovers by Provider

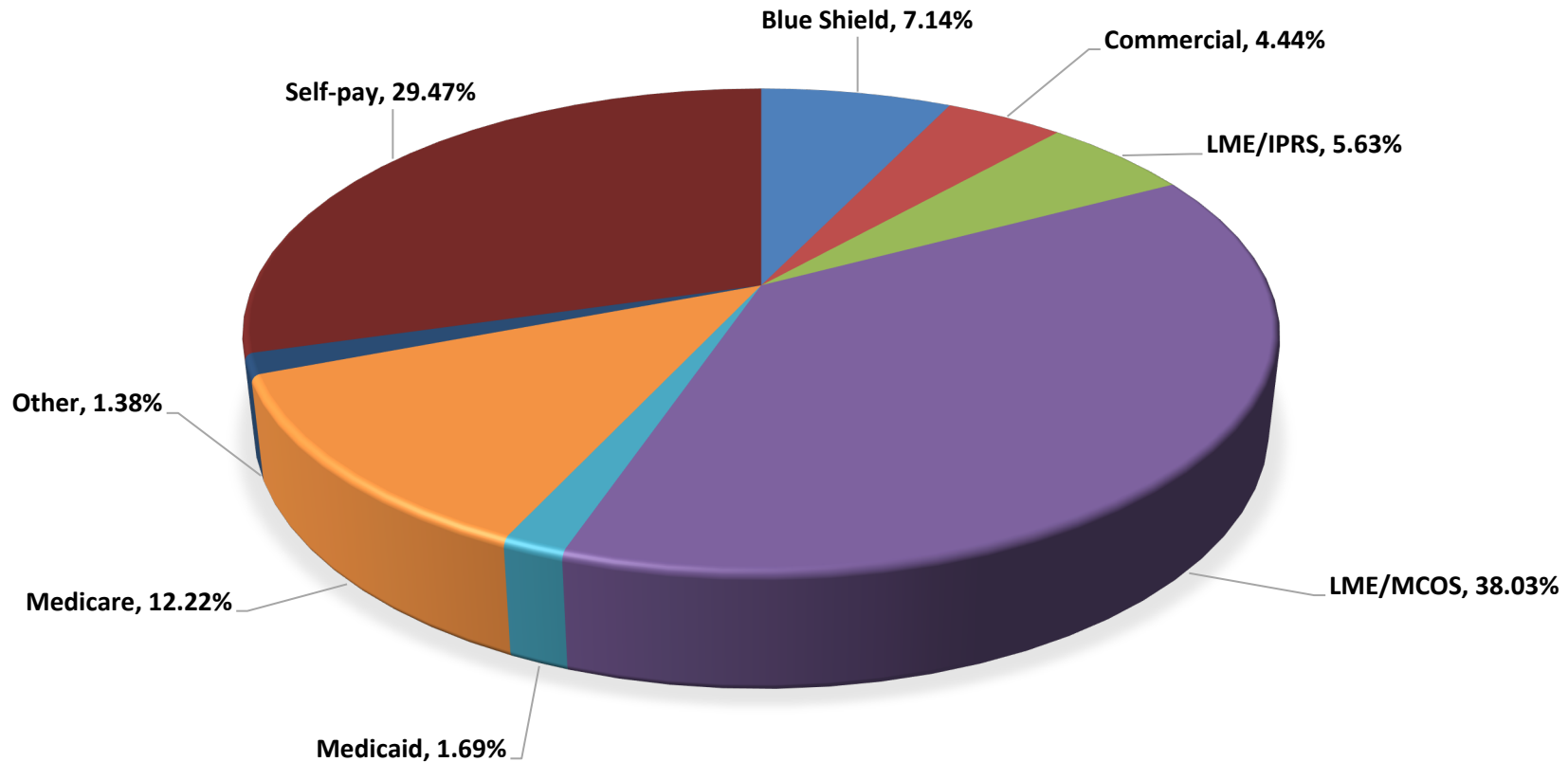
# Satisfaction Surveys

- Satisfaction surveys are done twice a year
- The most recent survey was completed in March of 2021 with 9 groups with an overall satisfaction rate of 89%.



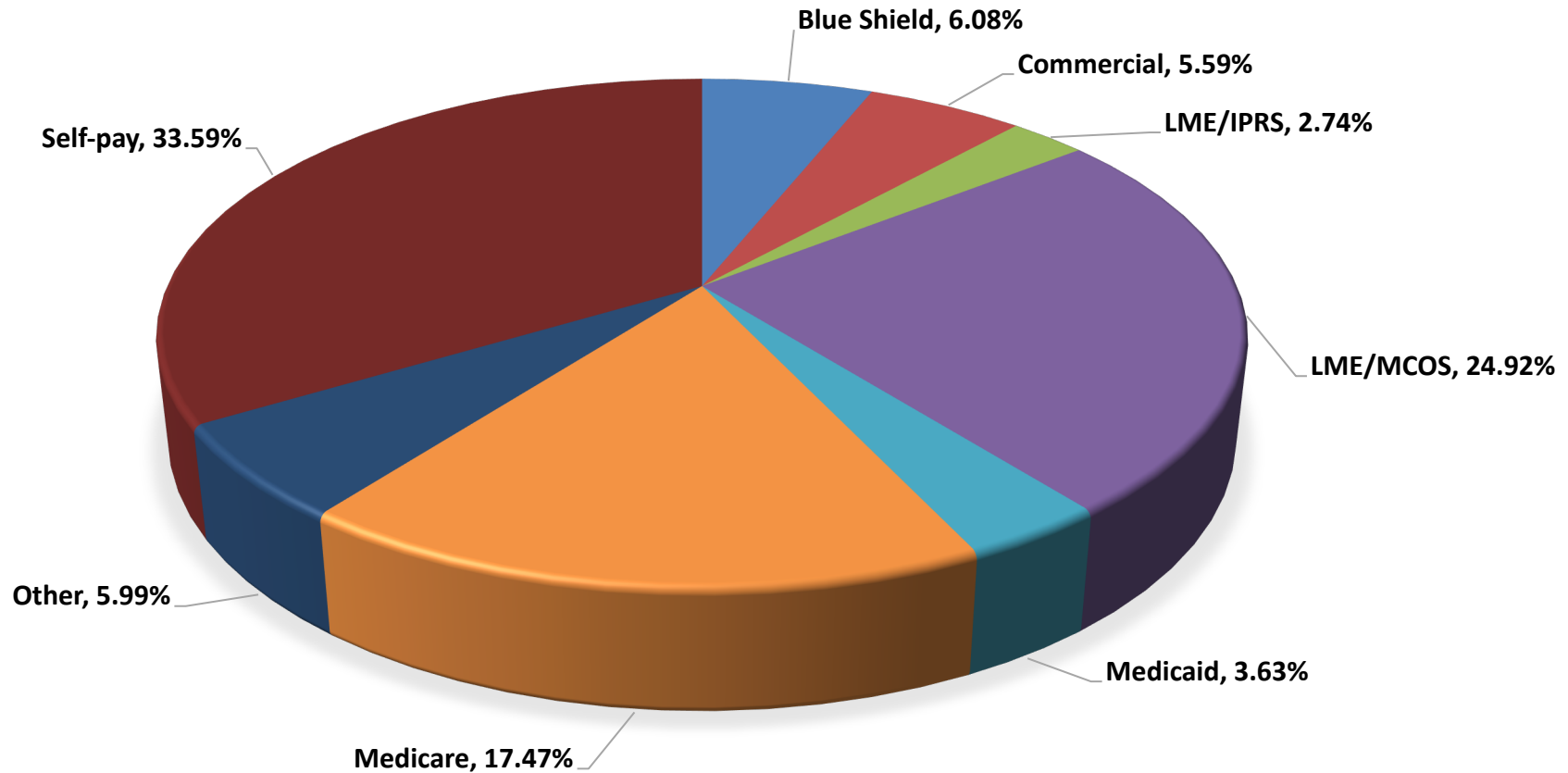
# NC-STeP Charge Mix

QTD 2021 - Quarter 4



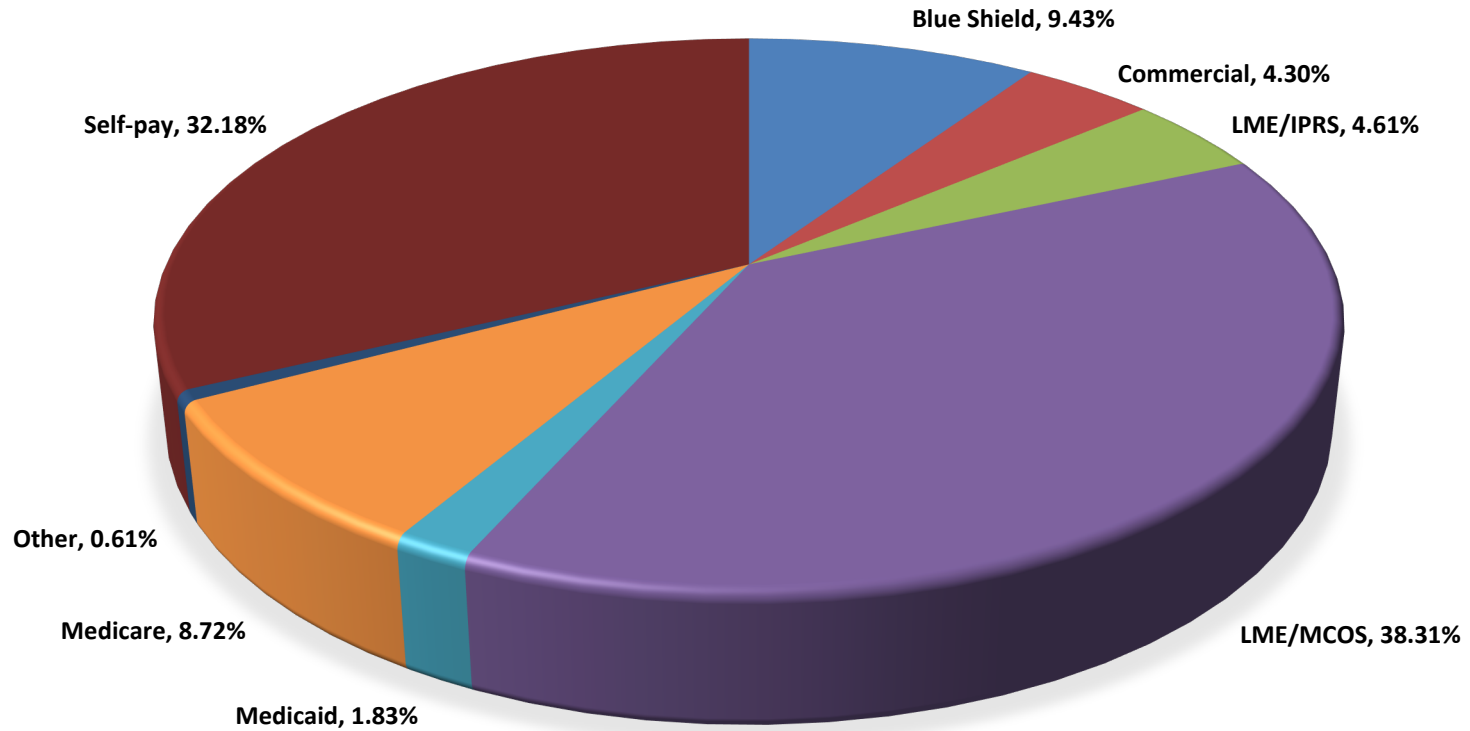
# NC-STeP Charge Mix - Project to Date

Service Dates: October 1, 2013 – June 30, 2021



# NC-STeP Charge Mix

QTD 2021 - Quarter 3



# Community-Based Sites as of June 30, 2021

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 3/31/2020	VALUES/MEASURES REACHED AS OF 06/30/2021
1. The number of full-time equivalent (FTE) providers supporting the program	.70 FTEs	.70 FTEs
2. The number of community-based sites contracted	8	16
3. Number of patient visits with medical (psychiatric) doctor	81	58 YTD= 268 PTD= 944
4. The number return visits	524	832 YTD= 3,208 PTD= 6,540
5. The number of patient visits with a mid-level provider	613	1,002 YTD= 3,714 PTD= 7,247
6. The number of new patient visits	169	211 YTD= 751 PTD= 1,700

# NC-STeP Community Patient Visits

Patient Visits	Since project inception in October 2018	During Calendar Year 2018	During Calendar Year 2019	During Calendar Year 2020	During Quarter Jan-Mar 2021	During Quarter Apr- Jun 2021
With Medical Doctor	944	8	536	265	77	58
With Mid-Level Provider	7,247	7	2,006	3,217	1,015	1,002
<b>Total Patient Visits</b>	<b>8,288</b>	<b>15</b>	<b>2,633</b>	<b>3,477</b>	<b>1,103</b>	<b>1,060</b>

- Since project inception there are 92 visits that listed no provider and 5 visits that listed both a mid-level and a doctor.
- There were 28 MFM visits this quarter and 18 Medical Nutrition Specialist visits
- Total visits of 1,060 only includes Behavioral Health Visits.





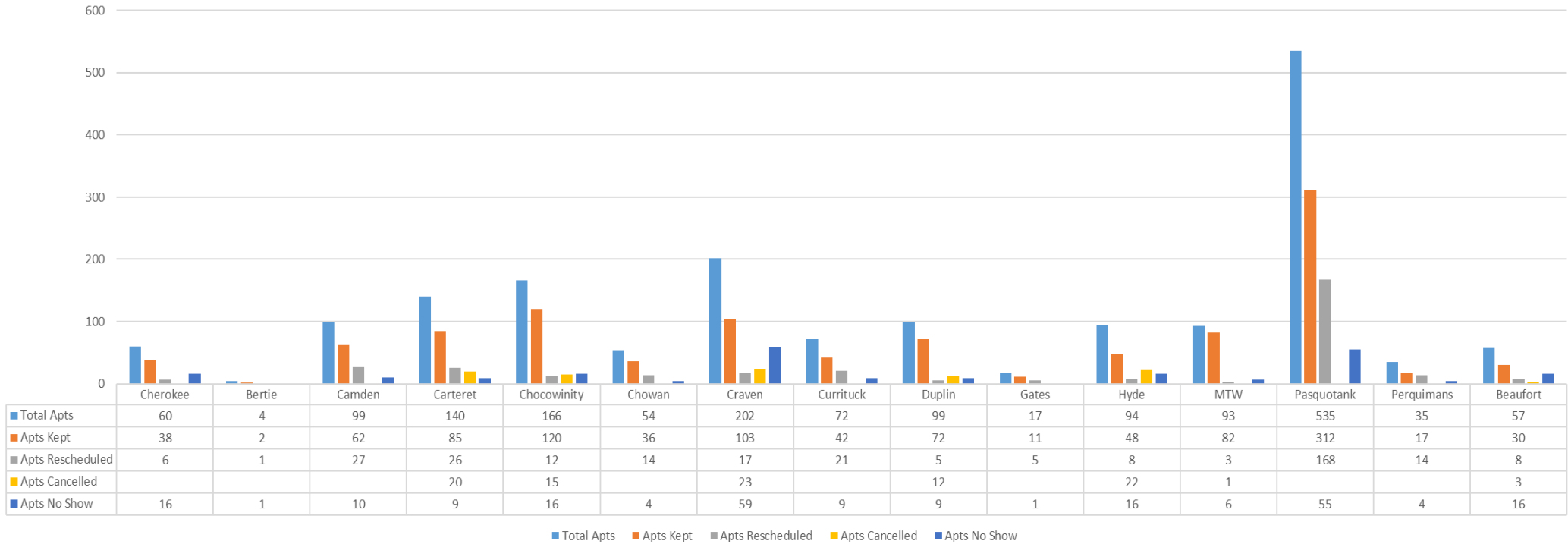
# NC-STeP Community Benchmarks

Patient Visits	Goals*	Values Reached	
	Total for most recent full fiscal year (July 1, 2020 - June 30, 2021)	Value Reached as of most recent previous quarter (03/31/2021)	Value reached as of this reporting quarter (06/30/2021)
With medical doctor	268	77	58
With mid-level provider	3,714	1,015	1,002
New patient visits	751	214	211
Return patient visits	3,208	877	832

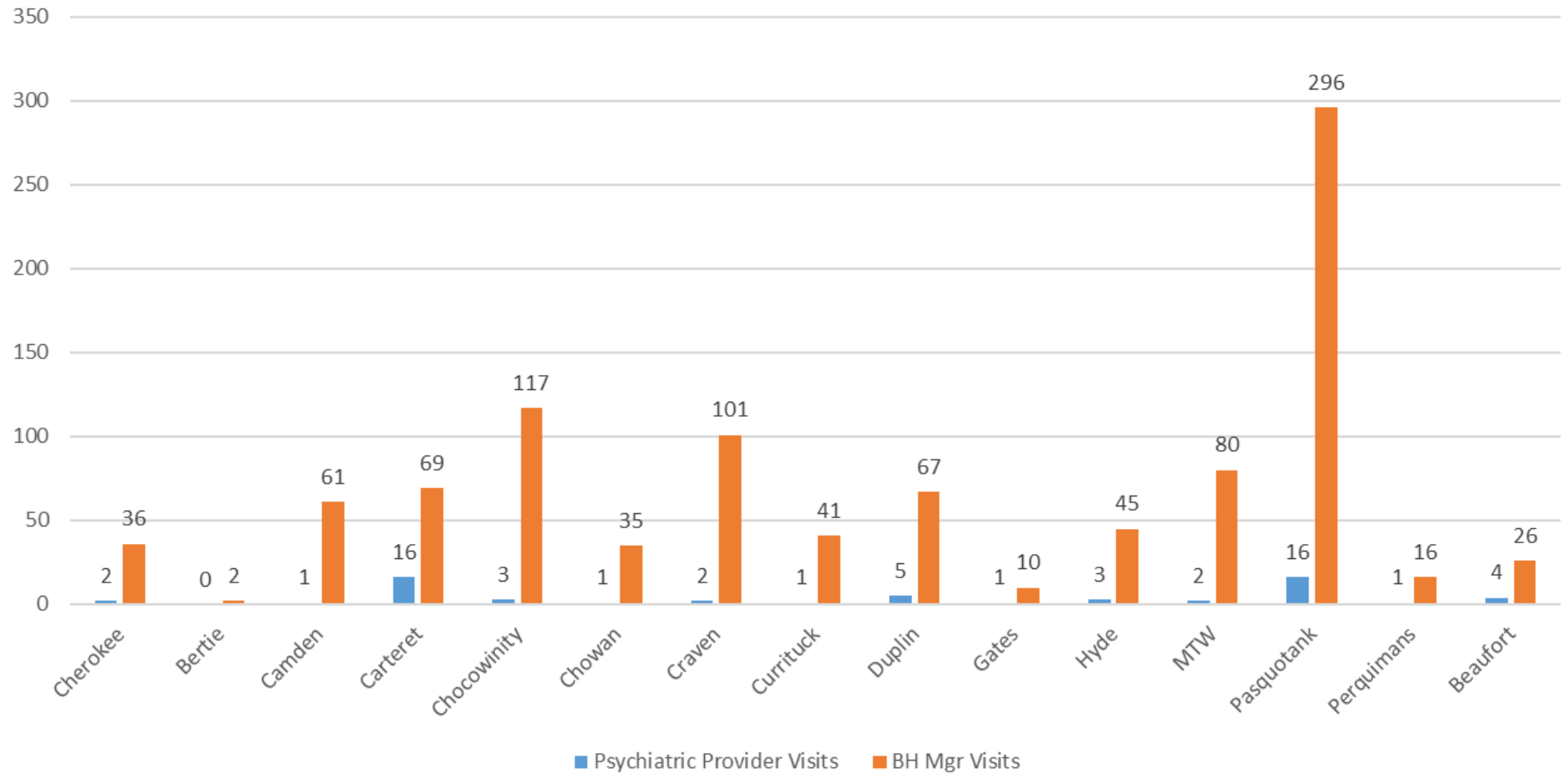
7/27/21

- \*DHHS no longer has targets. Goals column shows totals for the most recent 12-month fiscal year period.
- 171 visits did not specify if it was new or return.

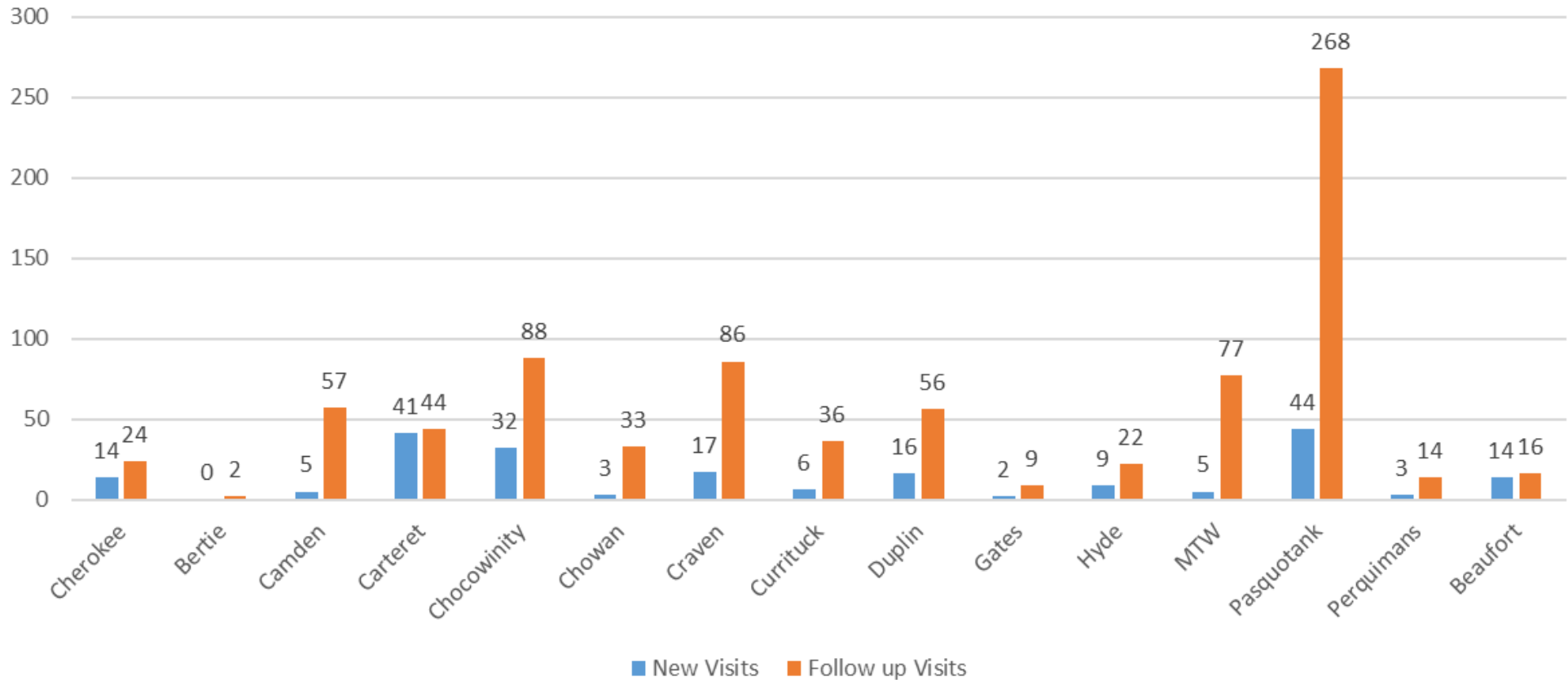
**NC-STeP Community Appointments by Site**  
**Appointments, Visits Kept, Rescheduled Cancelled, No Show**  
**April - June 2021**



## NC-STeP Community Visits by Site by provider type April - June 2021



## NC-STeP Community Visits by Site New and Follow up April - June 2021



# NC-STeP Status as of June 30, 2021

- 41 hospitals in the network. 40 live.
- 48,322 total psychiatry assessments since program inception
- 7,339 IVCs overturned
  - Cumulative return on investment = \$39,630,600  
(savings from preventing unnecessary hospitalizations)
- Six Clinical Provider Hubs with 42 consultant providers
- Administrative costs below industry standard
- Over 33% of the patients served had no insurance coverage

# NC-STeP Status as of June 30, 2021

- 16 community-based sites.
- 8,191 total patient visits since program inception in October 2018.
  - 944 total patient visits with a psychiatrist
  - 7,247 total patient visits with a mid-level provider



East Carolina University  
CENTER FOR TELEPSYCHIATRY



## Contact

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*Professor and Chairman*

Department of Psychiatry and Behavioral Medicine  
Brody School of Medicine | East Carolina University

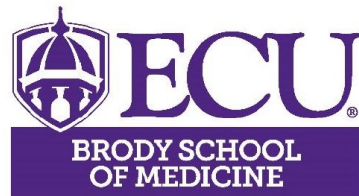
*Executive Director*

North Carolina Statewide Telepsychiatry Program (NC-STEP)

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