



# NORTH CAROLINA

STATEWIDE TELEPSYCHIATRY PROGRAM

## Quarterly Progress Update

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*Executive Director*

North Carolina Statewide Telepsychiatry Program (NC-STeP)

*Professor and Chair Emeritus*

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





**NORTH CAROLINA**  
STATEWIDE TELEPSYCHIATRY PROGRAM

**NC-STeP Advisory Council Meeting**  
Wednesday, March 1, 2023  
10:30 am – 12:00 pm  
Virtual Meeting via Zoom Video Conference

**Agenda**

- |                   |  |
|-------------------|--|
| 10:30- 10:40 a.m. | Welcome and Introductions  |
| 10:40- 10:45 a.m. | Review and Approval of December 14, 2022 Minutes   |
| 10:45- 11:45 a.m. | NC-STeP FY23-Q2 (Oct-Dec) Performance Data   |
| 11:45- 11:50 a.m. | Old Business   |
| 11:50- 11:55 a.m. | New Business   |
| 11:55- 12:00 p.m. | Announcements <ul style="list-style-type: none"><li>• NC-STeP Pediatric Program launch</li><li>• Vermont/ NC-STeP Collaboration</li><li>• NC-STeP Presentations at the Annual Meetings of ATA and APA</li><li>• MOTHeRS Project update and presentation at the NC Rural Summit</li></ul> |
| 12:00 p.m.        | Adjourn  |



Join Zoom Meeting

<https://us06web.zoom.us/j/86993351235?pwd=NXk0a0hSTGV3QTFmUFVJeVZybnN5Zz09>

Meeting ID: 869 9335 1235

Passcode: 198610

# NC-STeP Quality Management and Outcomes Monitoring Processes: October – December 2022

- 38 hospitals in the network, 37 hospitals were live
- 26 hospitals reporting Telepsychiatry patients in their ED
  - not all live hospitals had telepsychiatry patients
- Total number of assessments for this quarter = 1,214
- Total number of encounters for this quarter = 1,114
- Patient assessments billed for Model 1 hospitals = 812

# NC-STeP Quality Management and Outcomes Monitoring Processes: October – December 2022

- The Median Length of Stay was 34.1 hours
- The Average Length of Stay was 62.9 hours
  - 61.9 hours for those discharged to home
  - 49.7 hours for those transferred to another facility
- Average Consult Elapsed Time (in Queue to Exam Complete) for Model 1 hospitals was 5 hours and 34 minutes.

# NC-STeP Quality Management and Outcomes Monitoring Processes: October – December 2022

- 731 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
  - 254 (34.7%) of those patients did not have an IVC in place when discharged.
- Of the ED patients who received telepsychiatry services:
  - 41.6% were discharged to home
  - 49.2% were discharged to another facility

# NC-STeP Quality Management and Outcomes Monitoring Processes: October – December 2022

- 22 Community based sites were live as of 12/31/2022.
- There were 1,666 total behavioral health visits.
  - 215 visits with a Psychiatrist.
  - 1436 visits with a behavioral health manager.
  - 12 visits with a Maternal and Fetal Medicine Specialist.



	Since project inception in November 2013	Quarter Jan- Mar 2022	Quarter Apr- Jun 2022	Quarter Jul- Sep 2022	Quarter Oct- Dec 2022
<b>Total Patient Encounters</b>	44,060	1,235	1,321	1,302	1,114
<b>Model 1 Hospital Patient Encounters</b>	26,993	797	869	891	712
<b>Model 2 Hospital Patient Encounters</b>	17,067	438	452	411	402
<b>Total Number of Assessments</b> (Billed Assessments for Model 1 Hospitals + Number of Patient Encounters for Model 2 Hospitals)	57,052	1,526	1,559	1,458	1,214

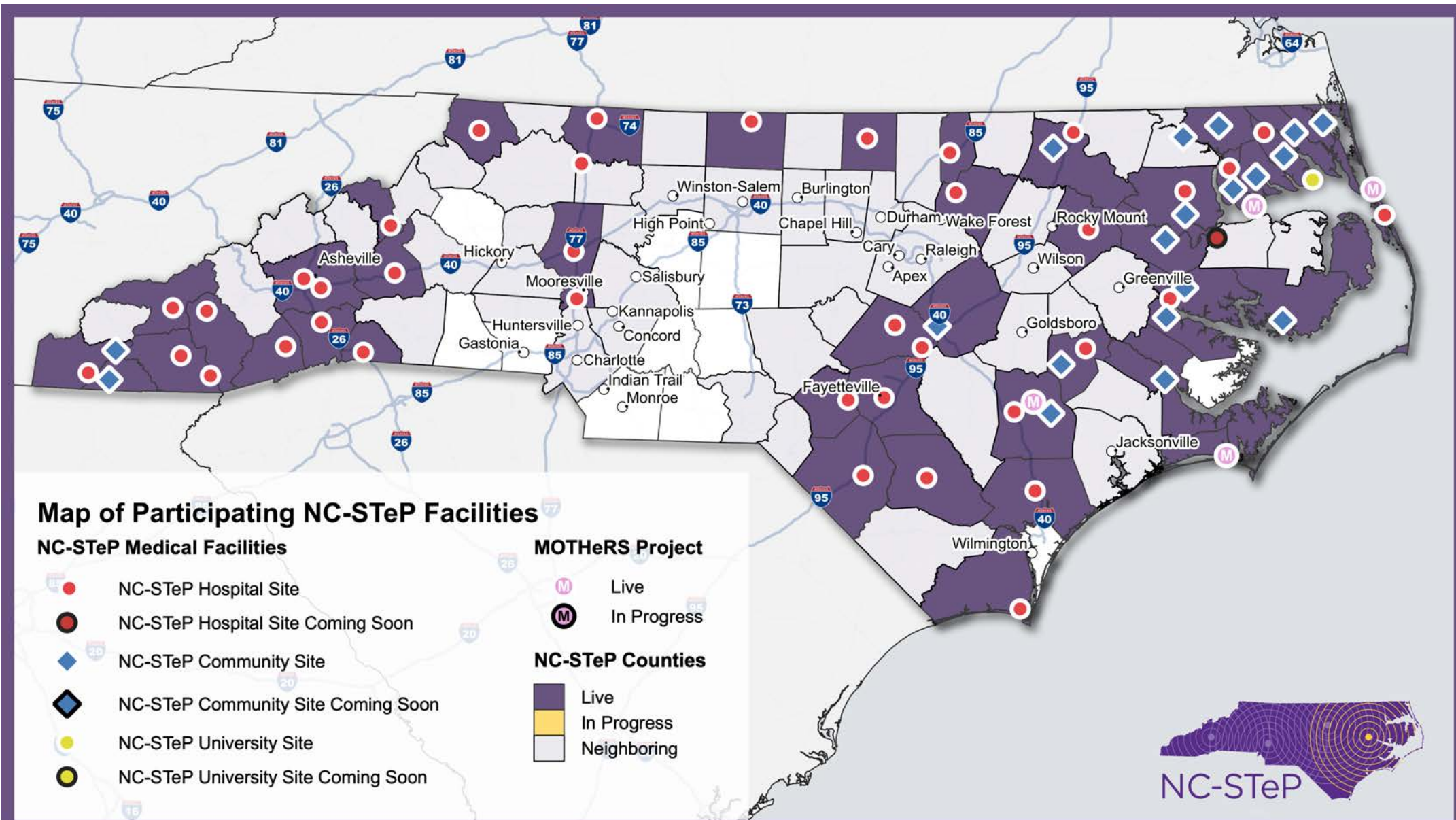
# NC-STeP Benchmarks



Goals	Values Reached		
Cumulative Target to be reached by (06/30/2023)	Value Reached as of most recent previous quarter (09/30/2022)	Value Reached as of this reporting quarter (12/31/2022)	Year-to-Date Total with % of the Yearly Target (12/31/2022)
<b>Number of IVCs</b>	2,815	890	1,636 58% of Yearly Target
<b>Number of IVCs Overturned</b>	1,155	362	626 54% of Yearly Target
<b>Total Number of Assessments</b> (Billed assessments for Model 1 hospitals + Number of patient encounters for Model 2 hospitals.)	5,025	1,432	1,214 2,672 53% of Yearly Target

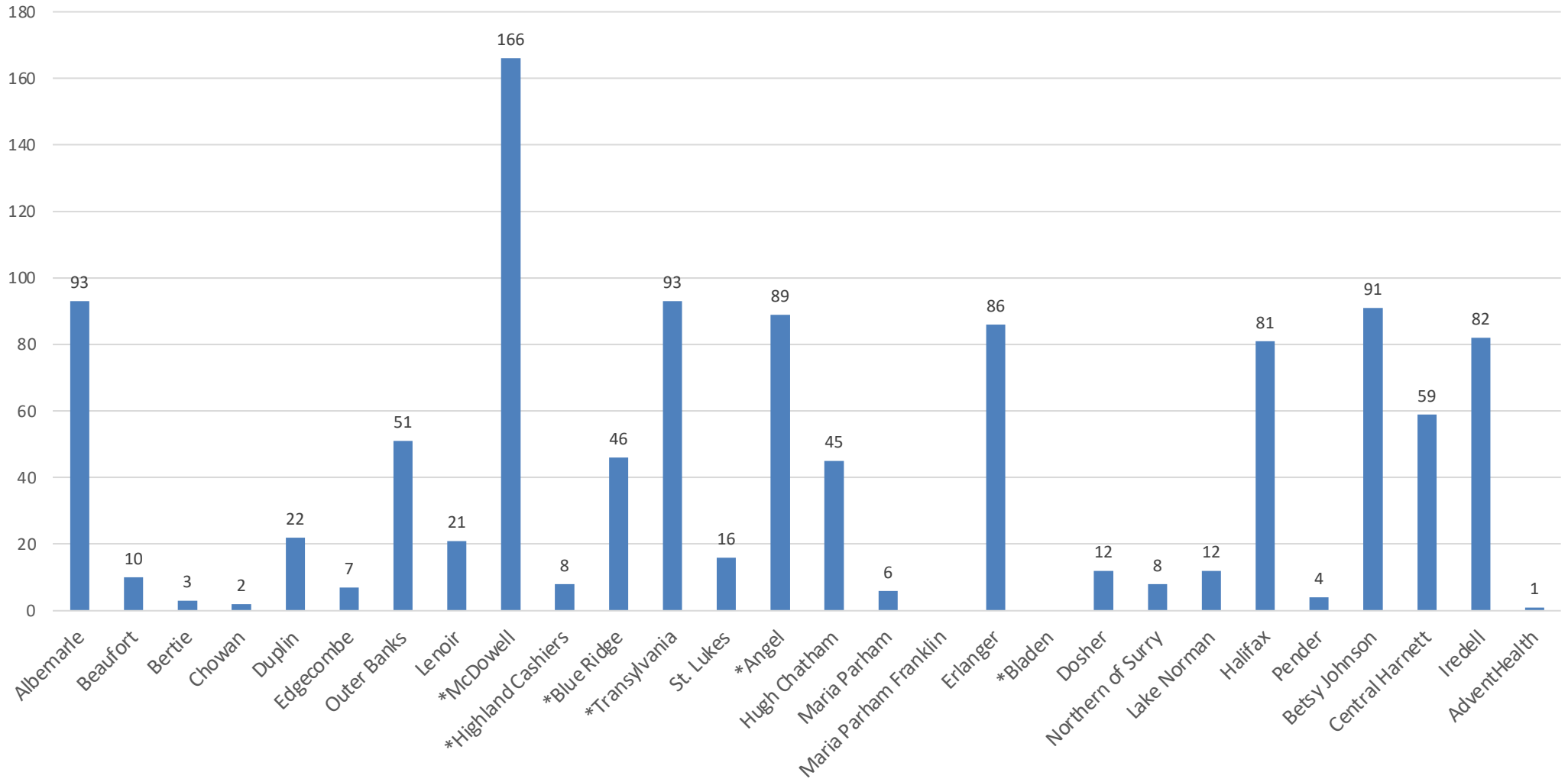


# NC-STeP Status as of December 31, 2022

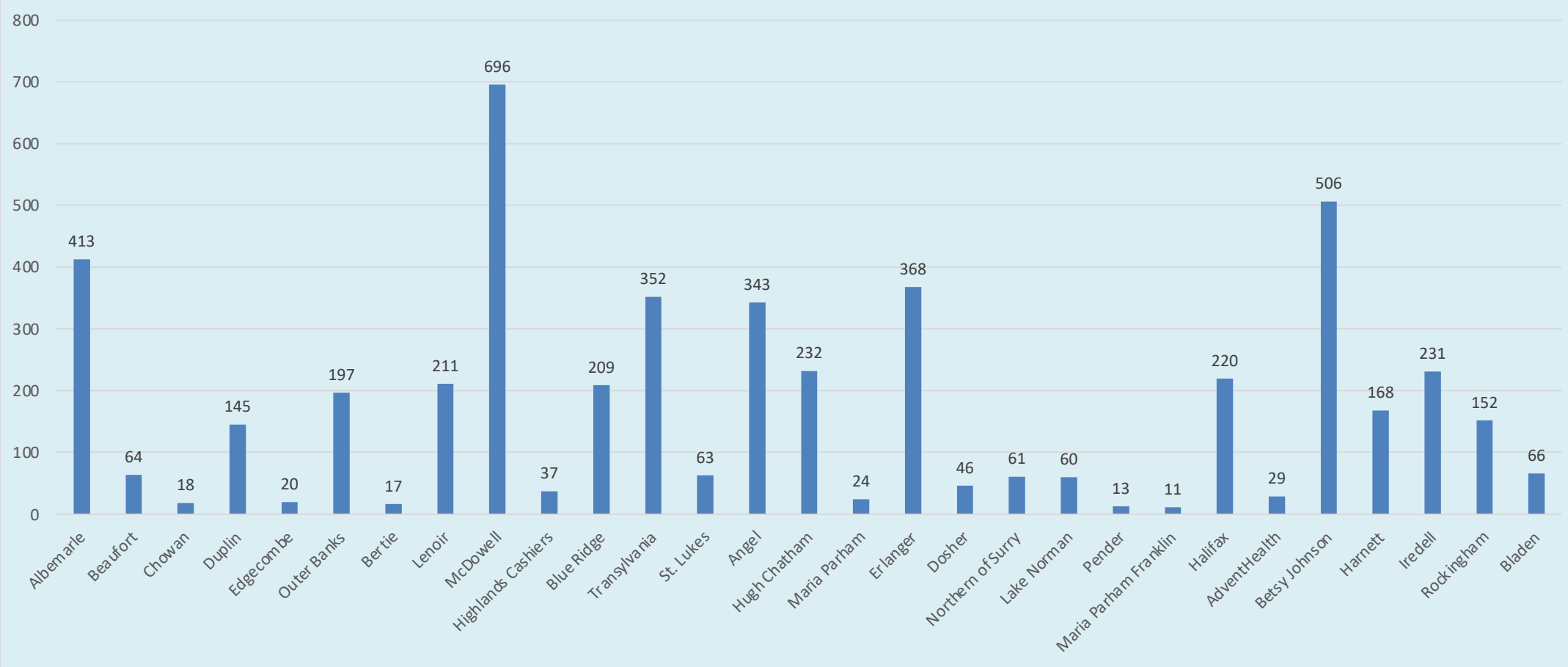


# Number of NC-STEP Patients by Hospital

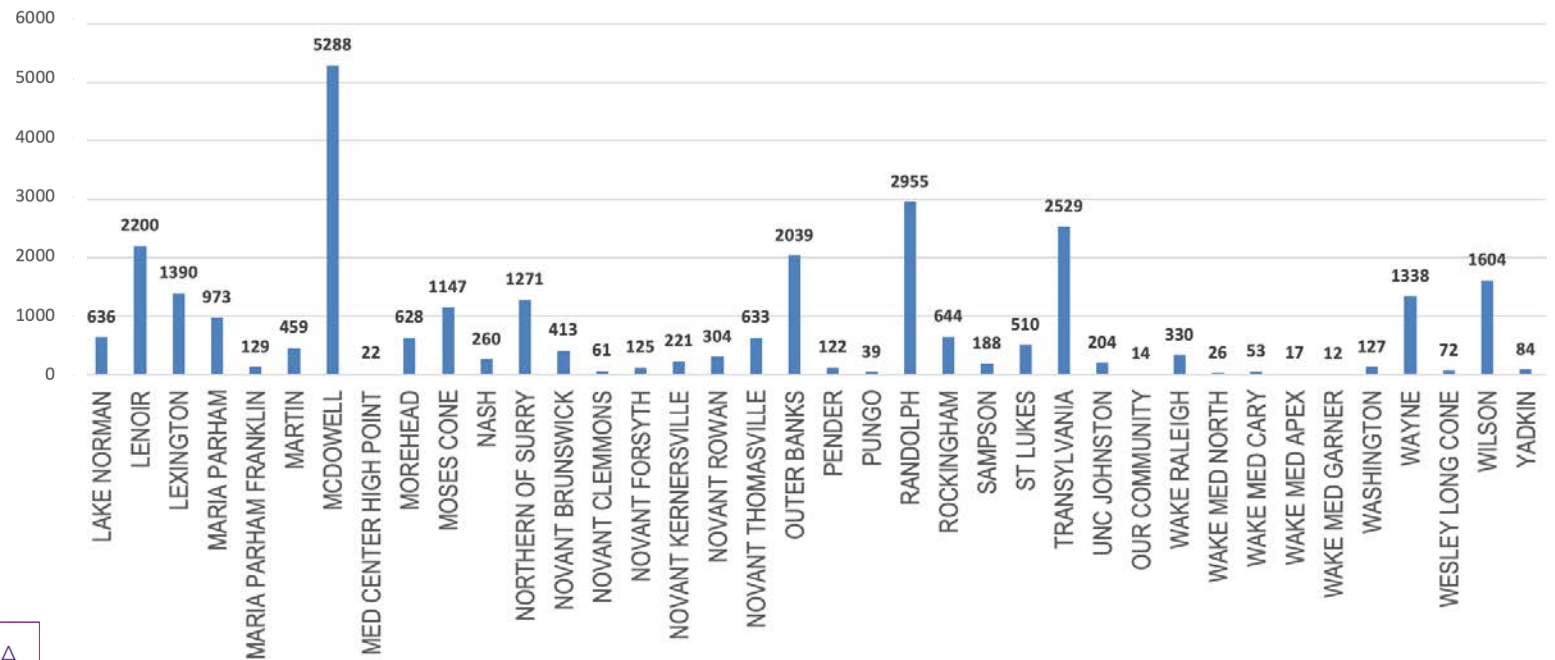
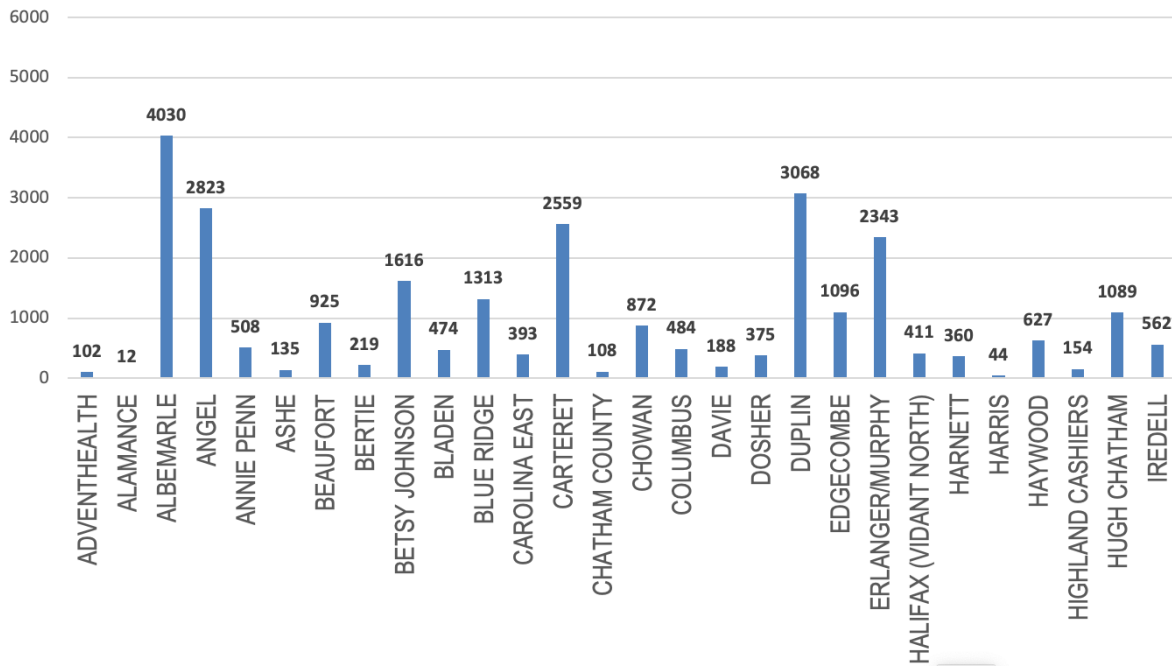
## October - December 2022



## Number of NC-STeP Patients by Hospital January - December 2022

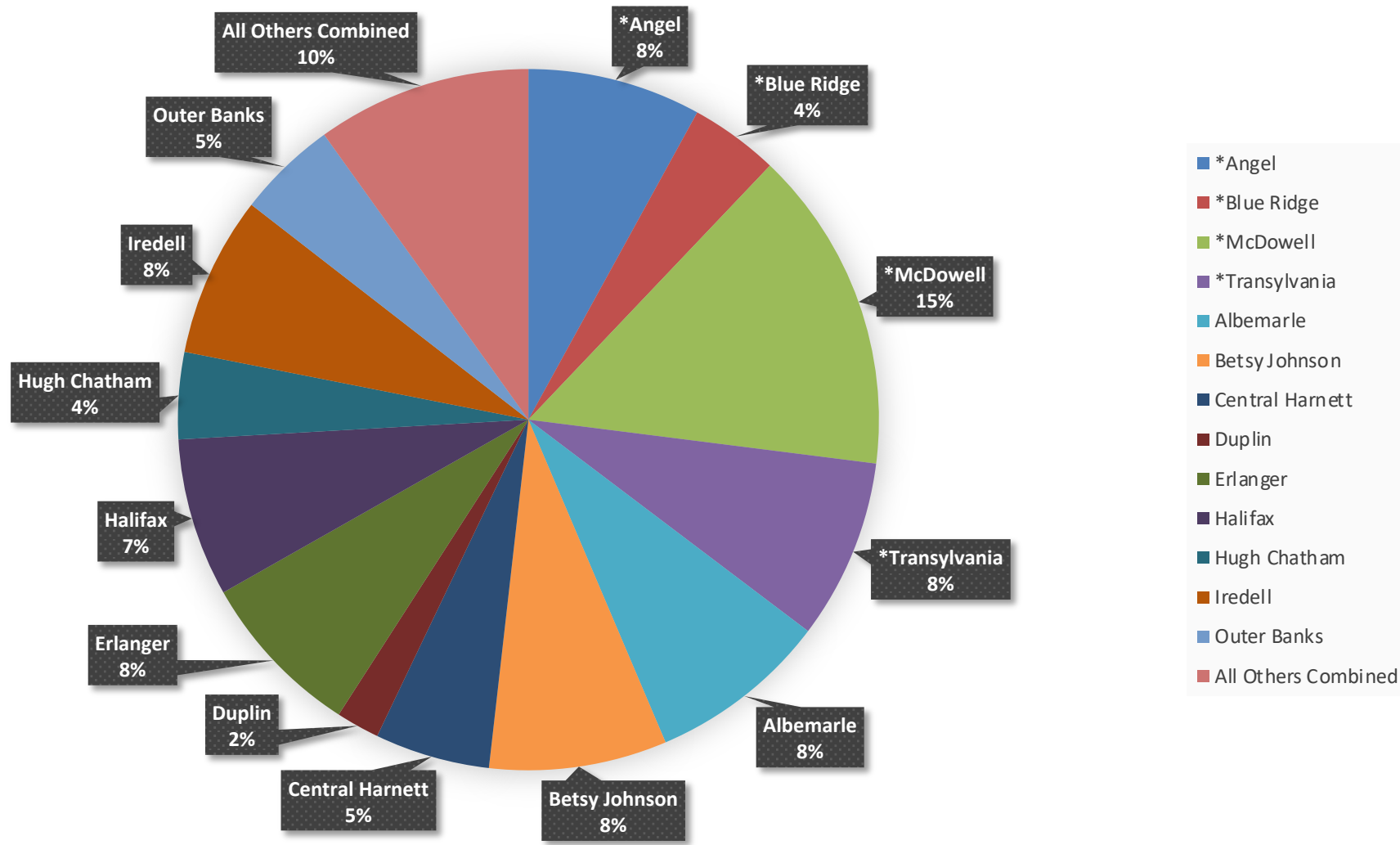


## Number of NC-STeP Assessments by Hospital November 2013- December 31, 2022 (since project inception)



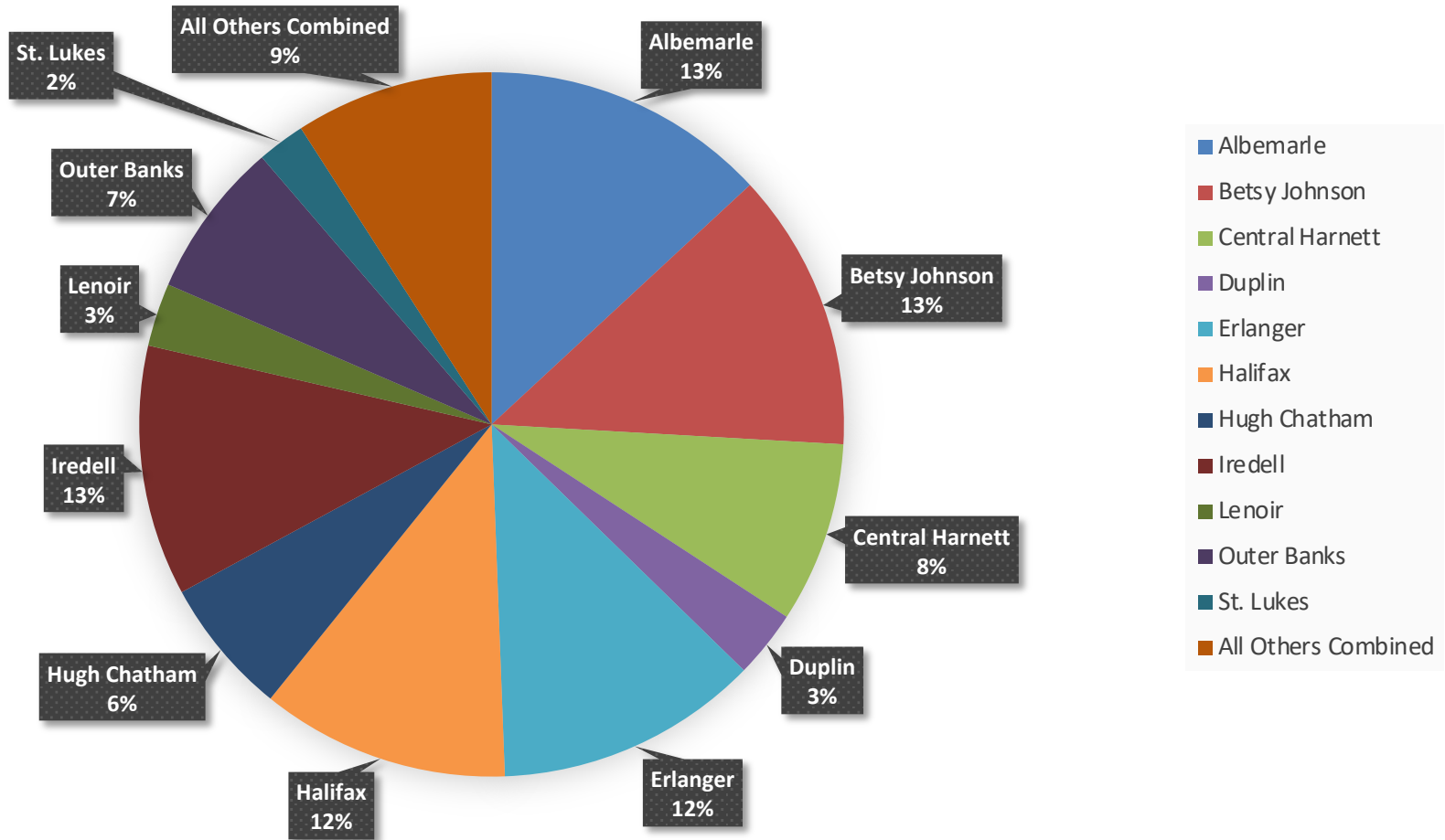
# Percent of Use by Hospital Oct - Dec 2022

(based on number of encounters)

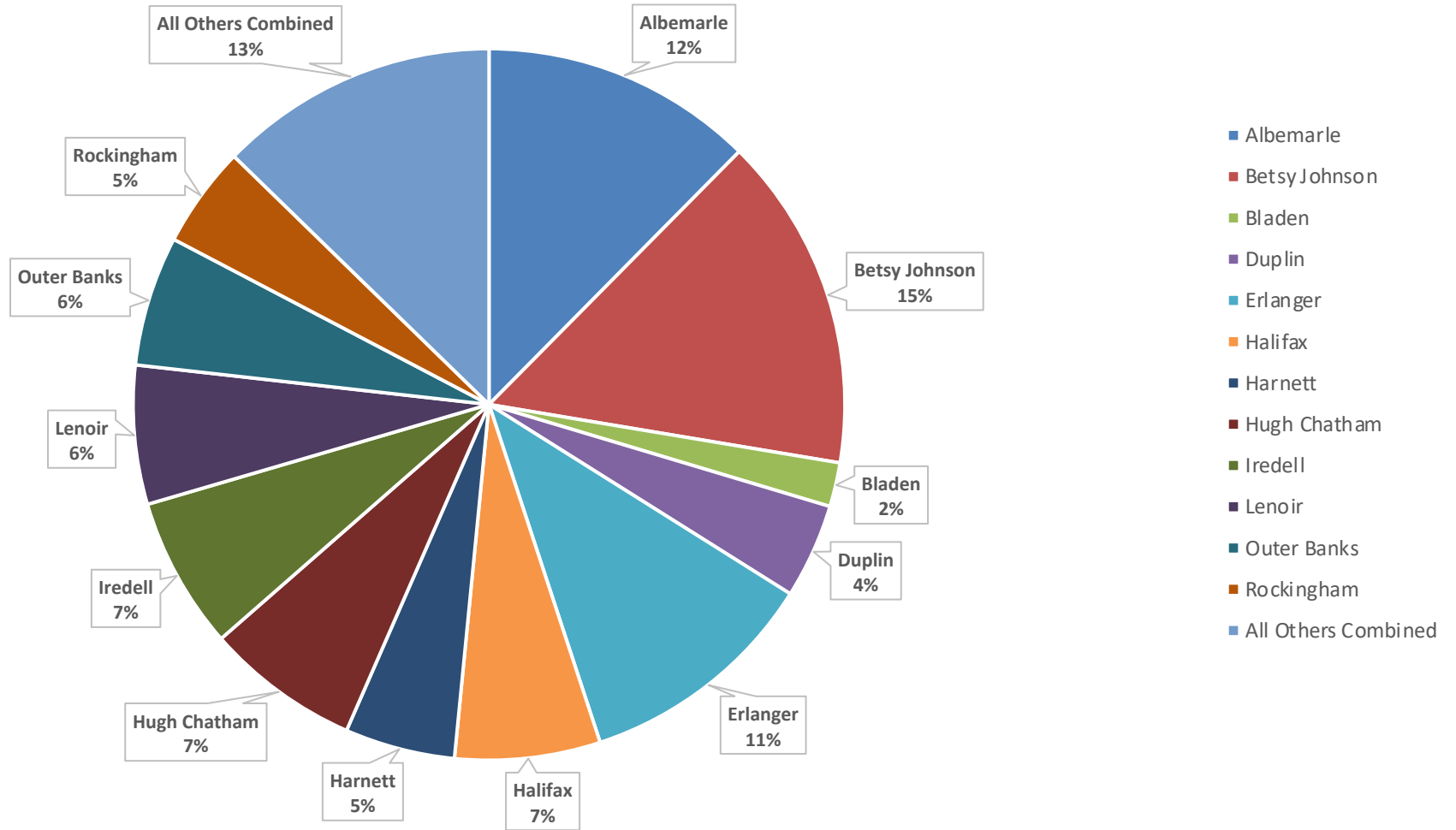


# Percent of Use for Model 1 Hospitals Oct - Dec 2022

(based on number of encounters)

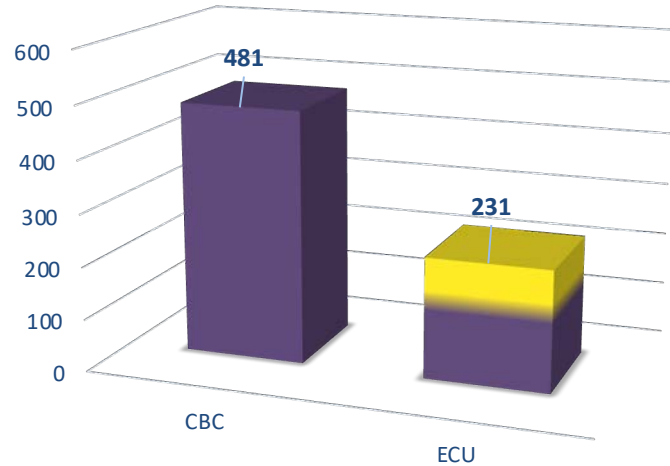


# Percent of Use by Model 1 Hospital Jan - Dec 2022 (based on number of patient encounters)

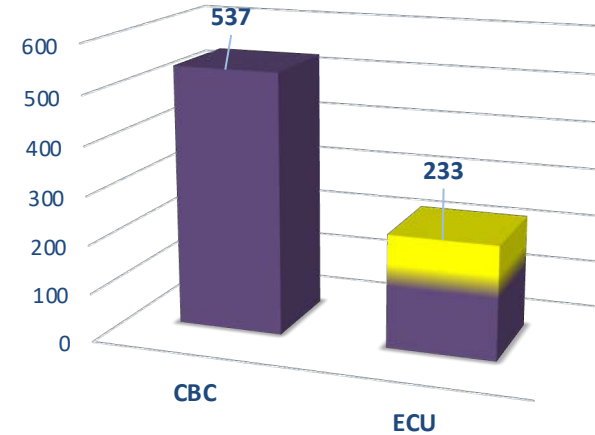


# Number of Patients by Provider (Model 1)

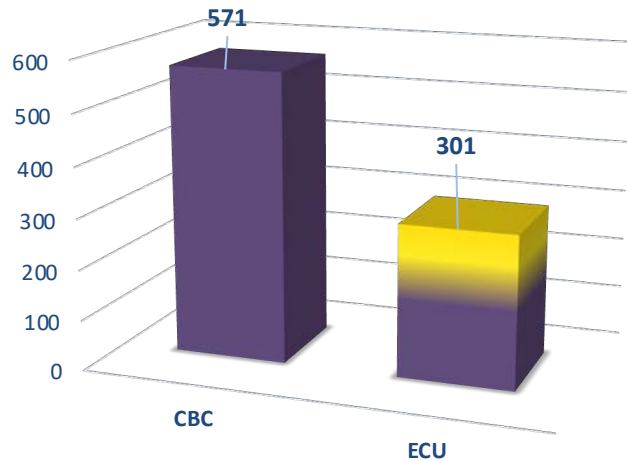
## Oct-Dec 2022



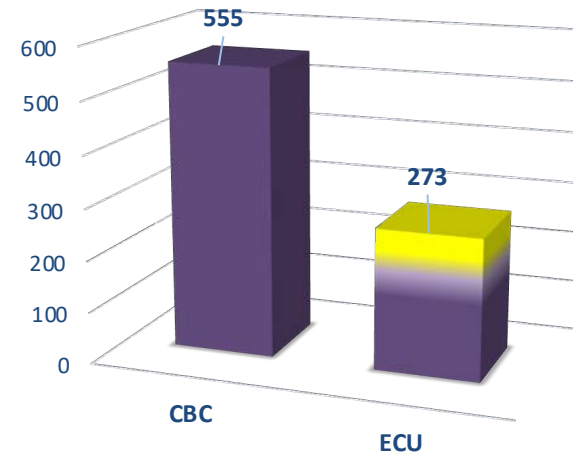
## Jan-Mar 2022



## Jul-Sep 2022



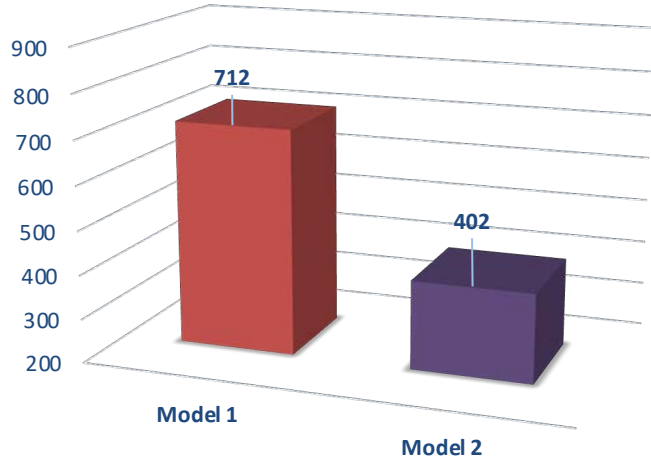
## Apr-Jun 2022



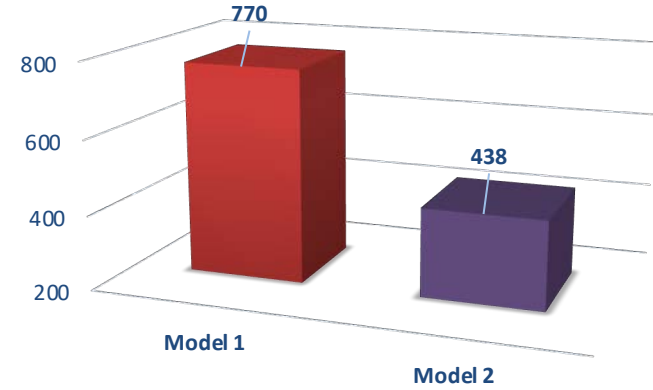


# Number of Patients by Model

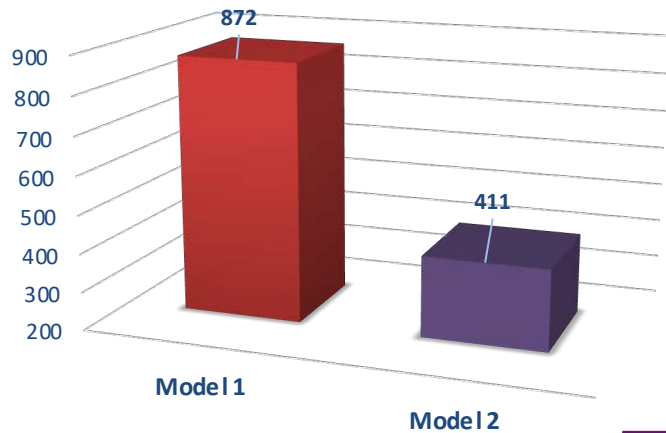
## Oct-Dec 2022



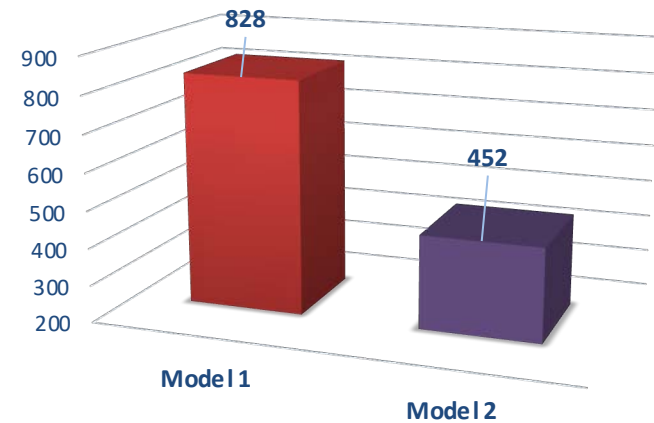
## Jan-Mar 2022



## Jul-Sep 2022

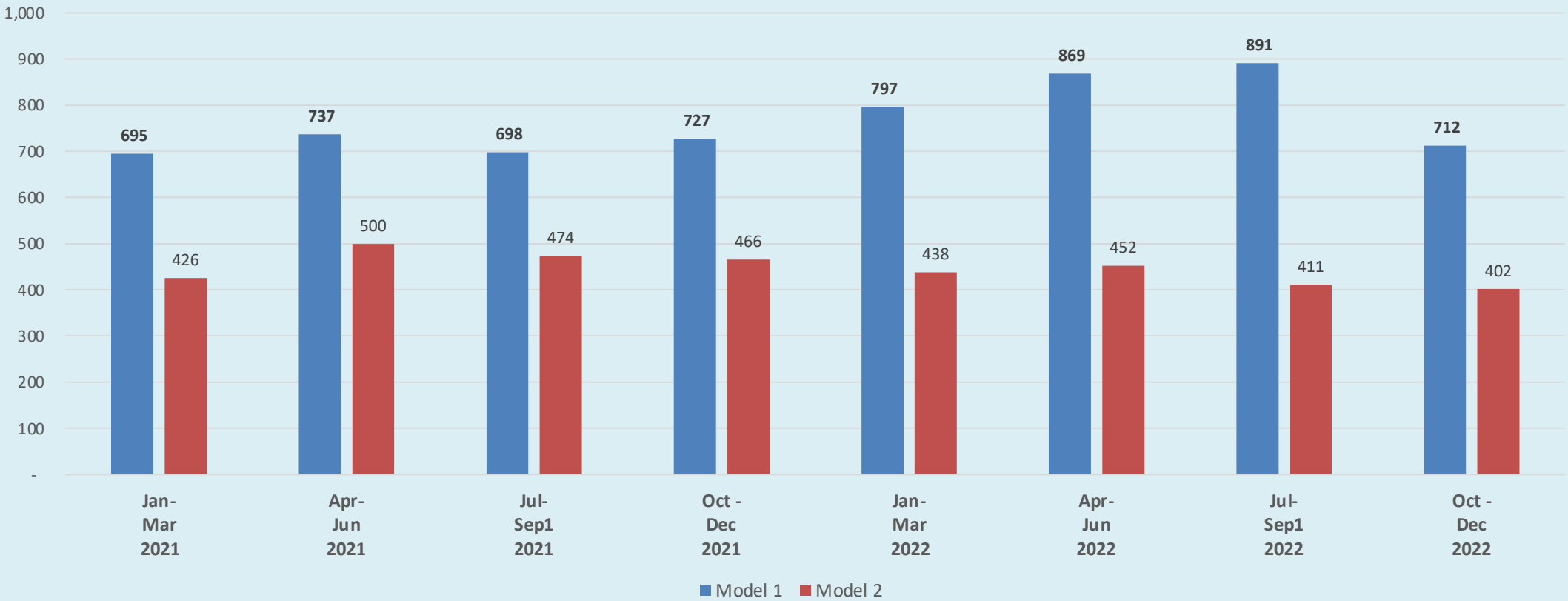


## Apr-Jun 2022



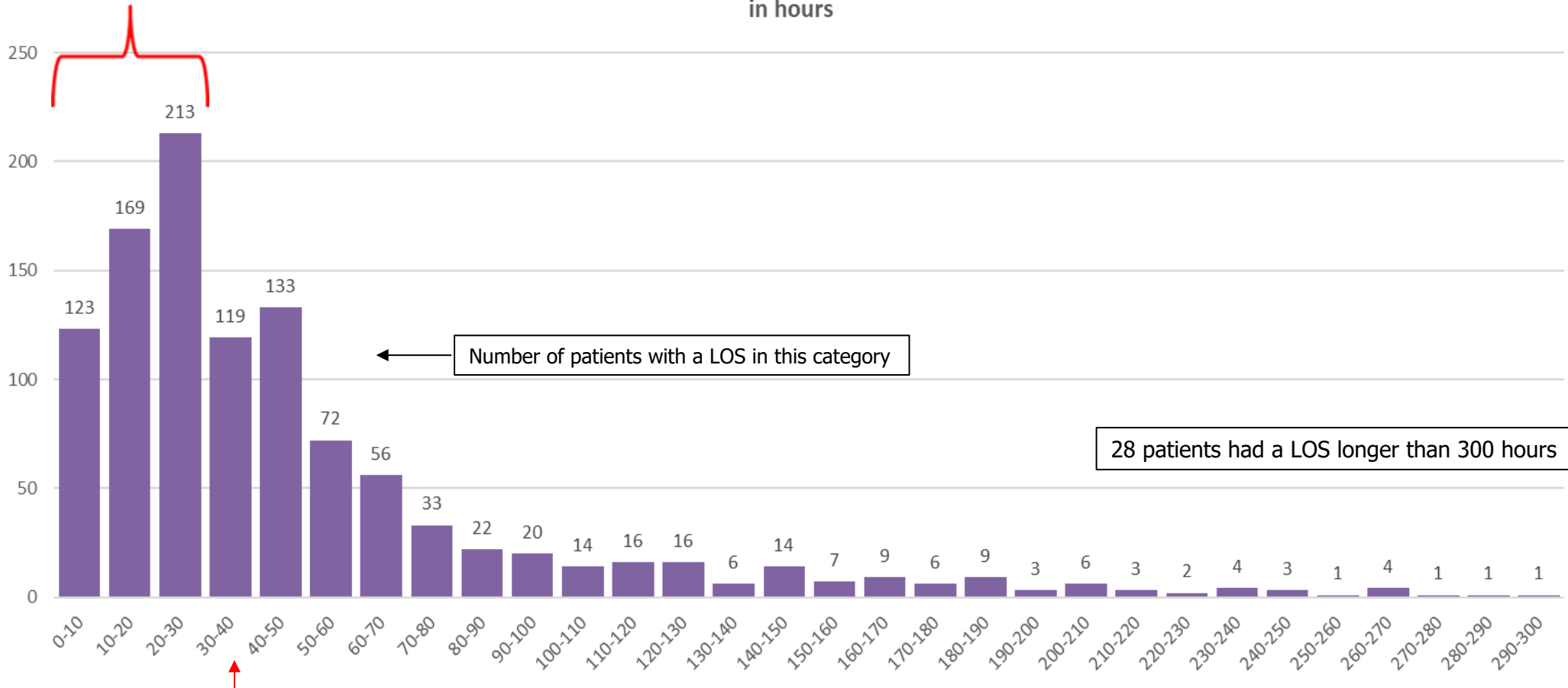
# Number of NC-STeP Patients by Model by Quarter

## January 2021 - December 2022



45.3% percent of patients had a LOS of 30 hours or less

### Number of NC-STeP Patients by LOS Category Oct - Dec 2022 in hours

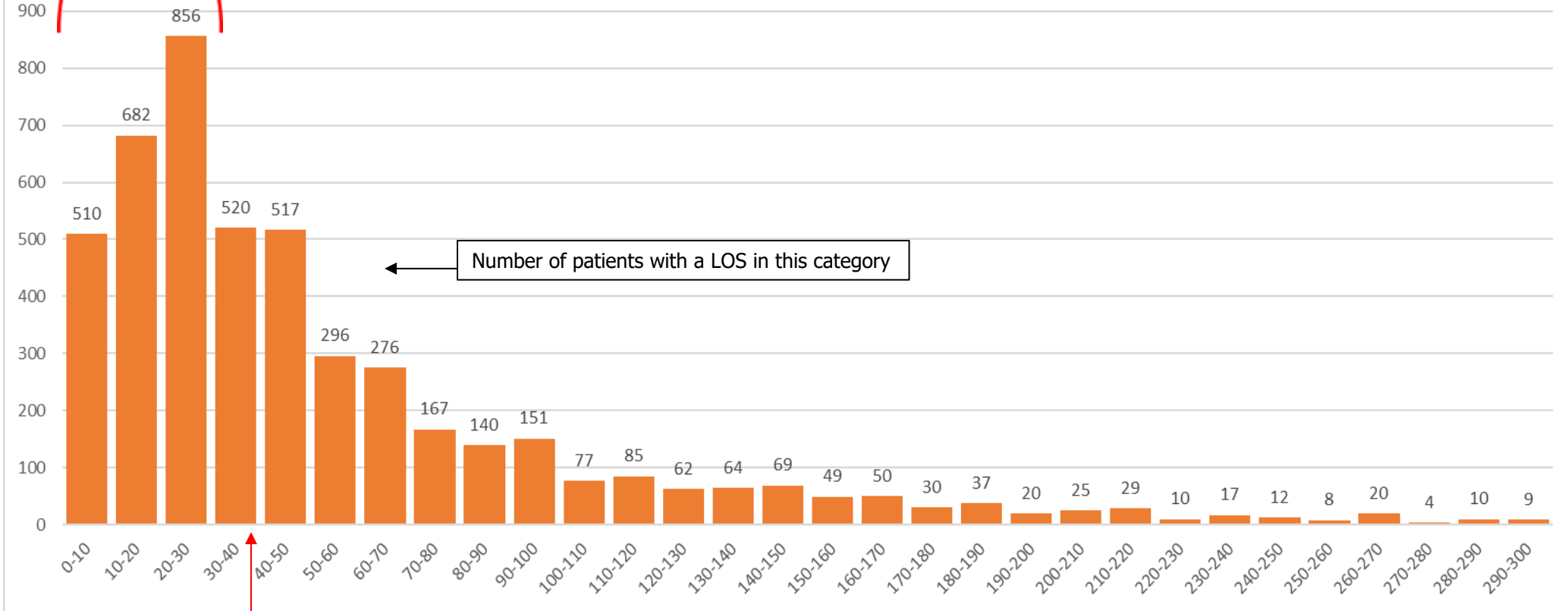


Median Length of Stay for Oct-Dec 2022 = 34.1 hours



41% percent of patients had a LOS of 30 hours or less

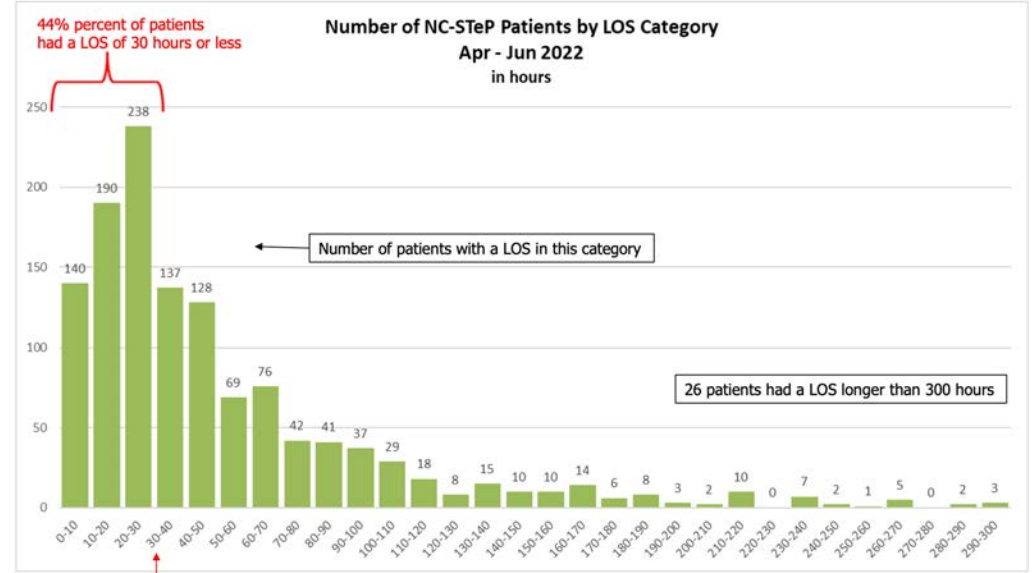
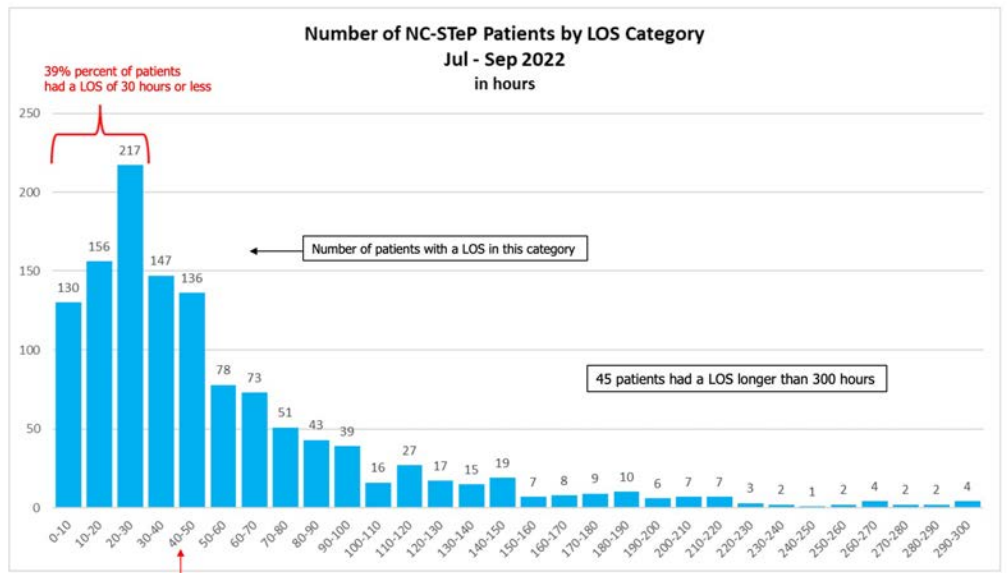
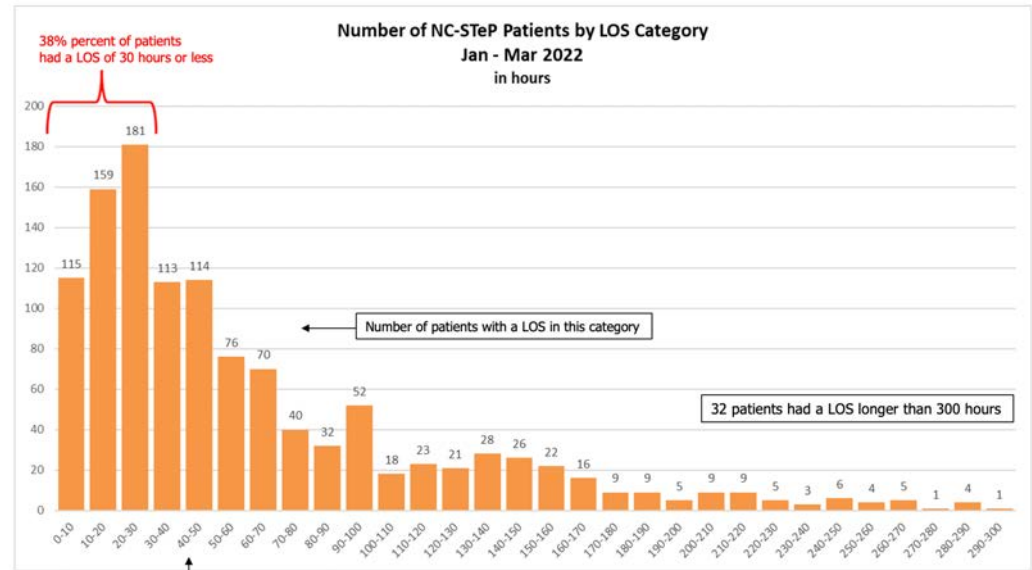
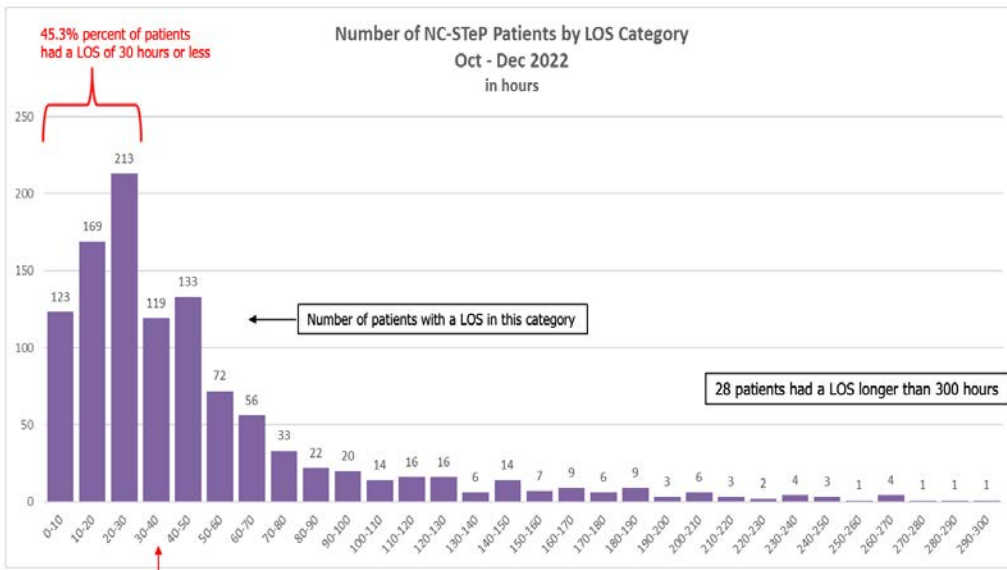
### Number of NC-SteP Patients by LOS Category Jan - Dec 2022 in hours



Median Length of Stay for Jan-Dec 2022 = 38.4 Hours

170 patients (3.4%) had a LOS longer than 300 hours over the 12 months





Median Length of Stay for Oct-Dec 2022 = 34.1 hours

Median Length of Stay for Jan-Mar 2022 = 42.7 hours

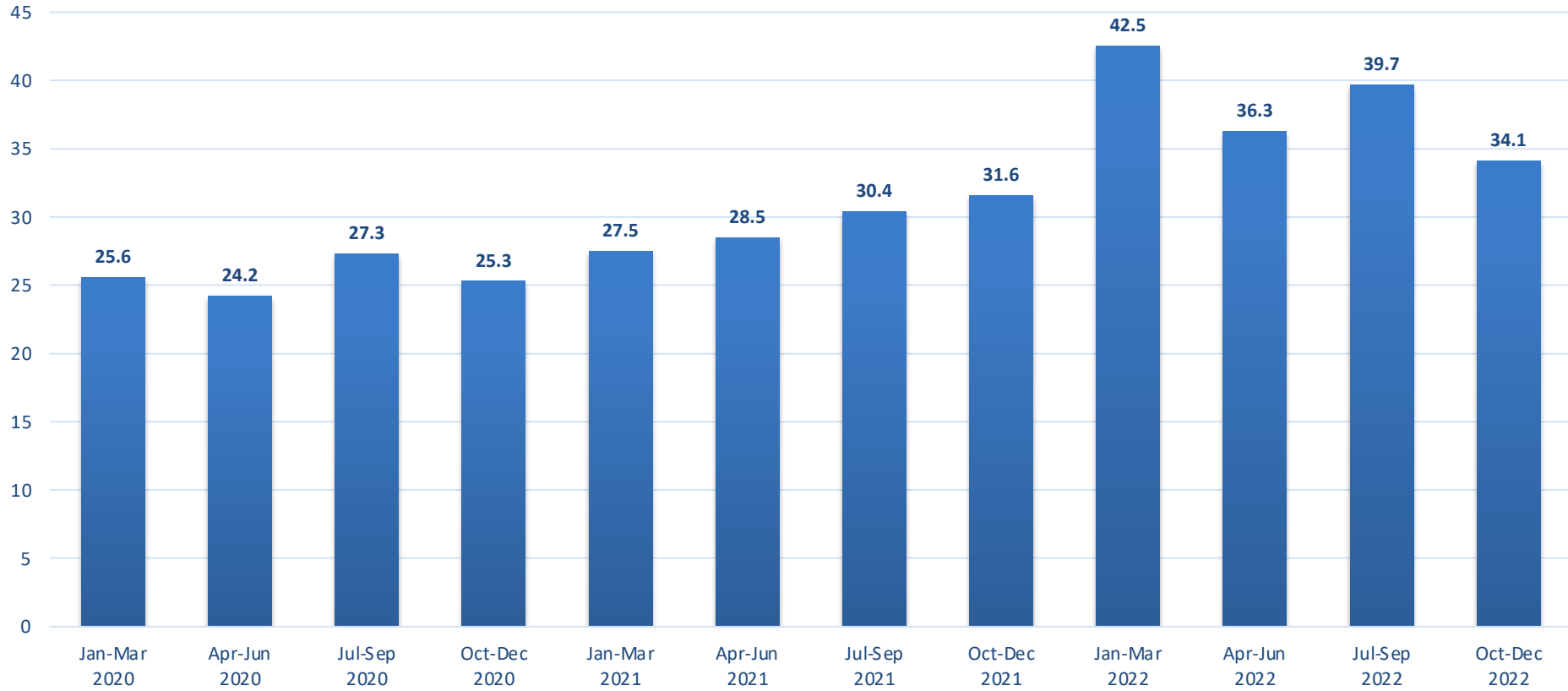
Median Length of Stay for Jul-Sep 2022 = 39.5 hours

Median Length of Stay for Apr-Jun 2022 = 35.2 hours

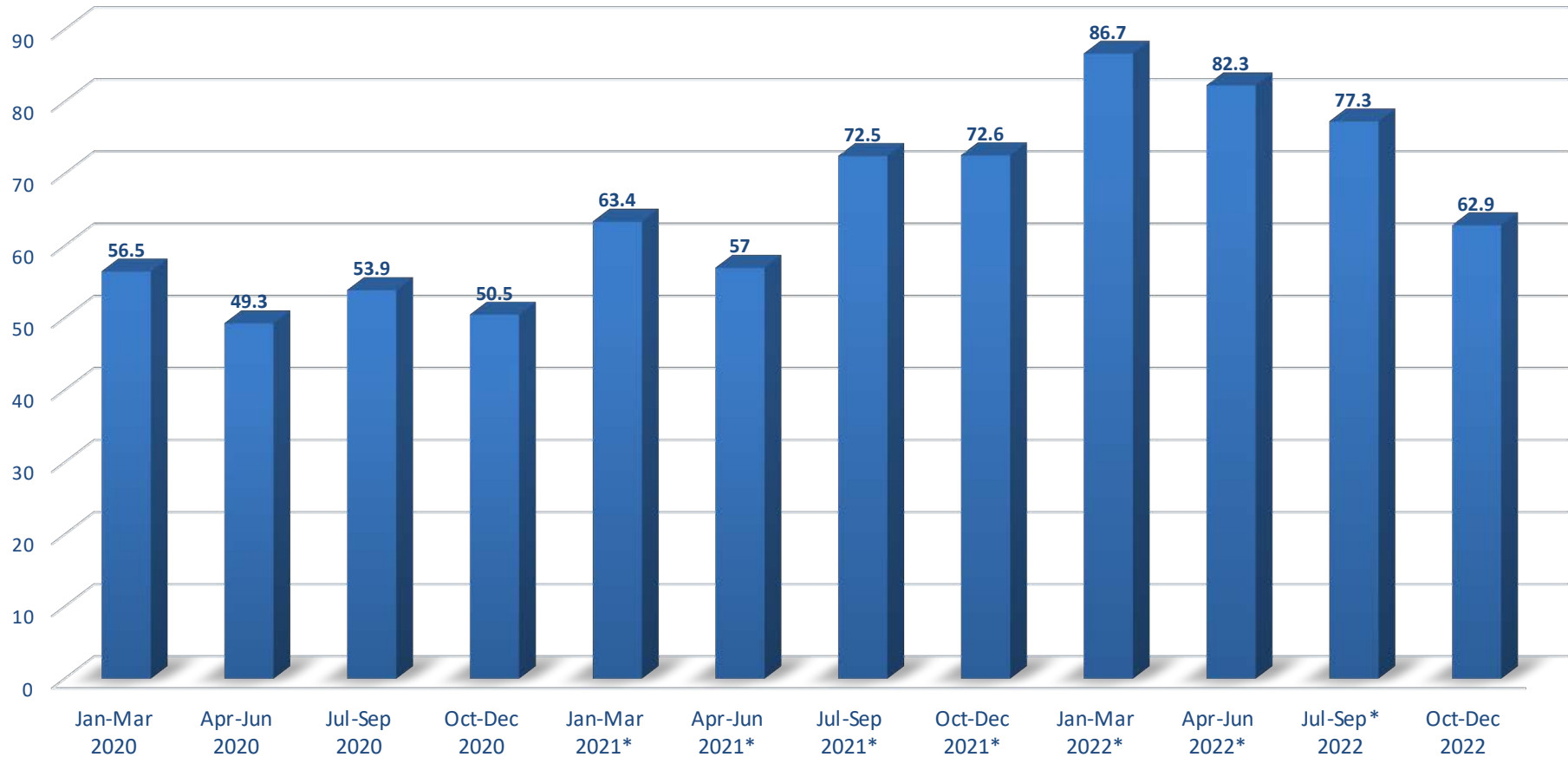


# Median Length of Stay by Quarter

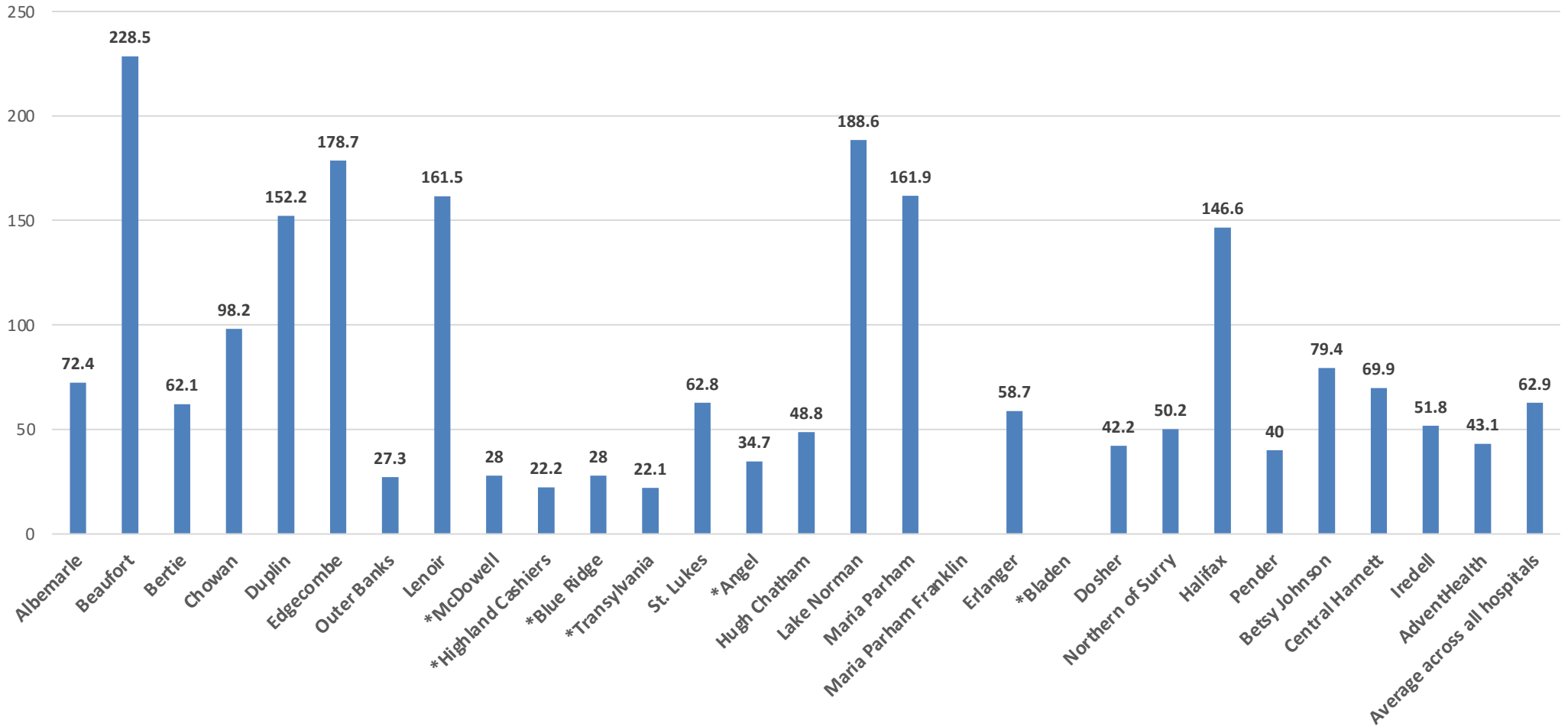
(in hours)



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

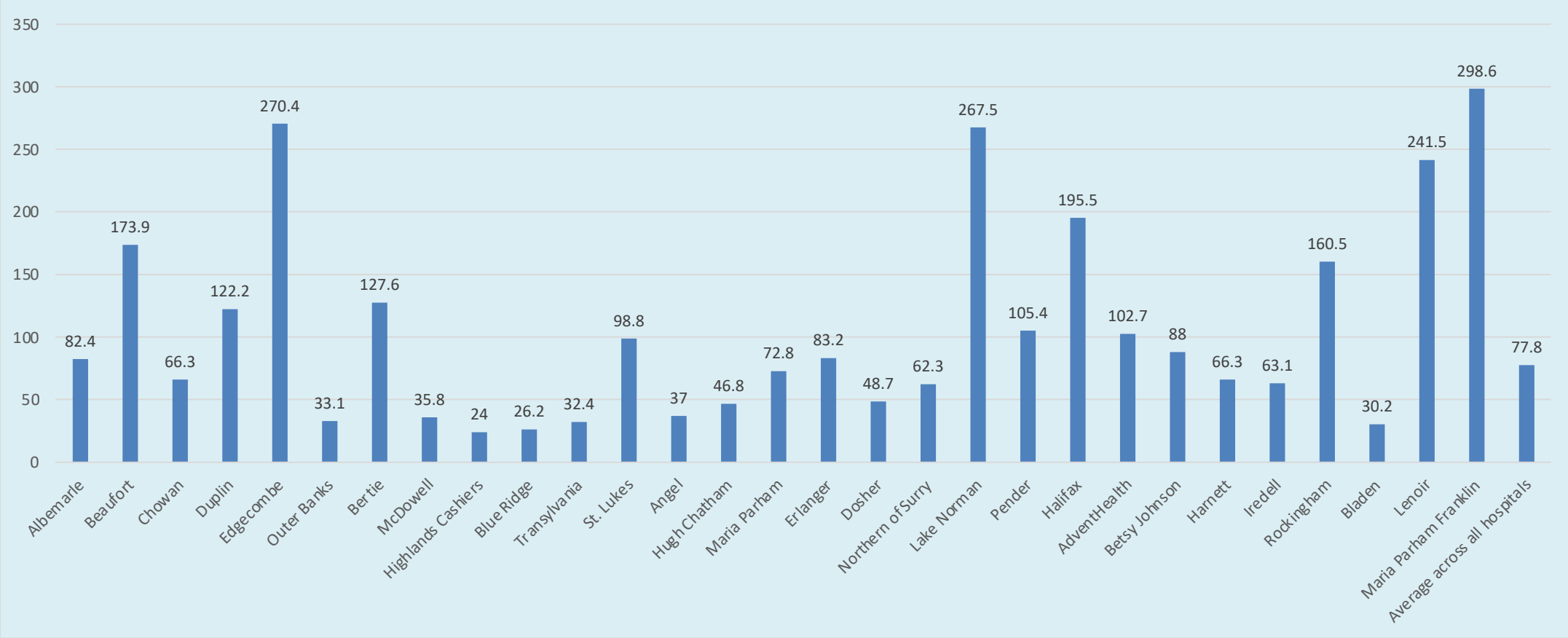


**Average Length of Stay for NC-STeP Patients by Hospital**  
**October - December 2022**  
 (in hours)



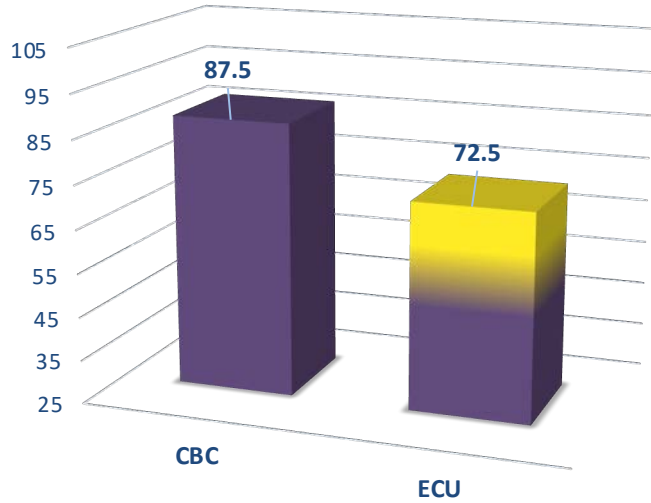


## Average Length of Stay for NC-STeP Patient by Hospital January - December 2022 (in hours)

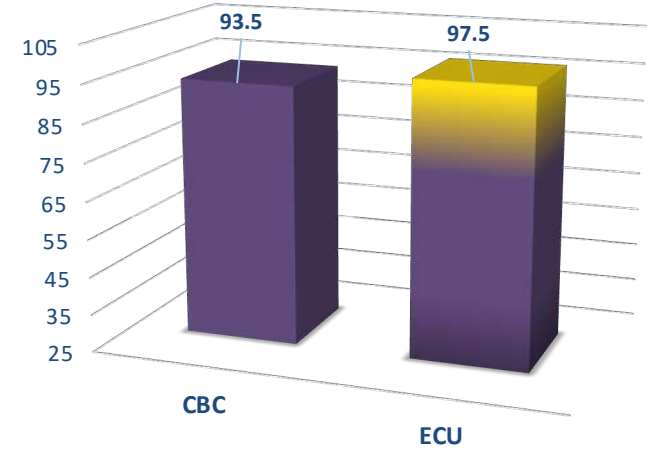


# Average LOS by Provider (in hours)

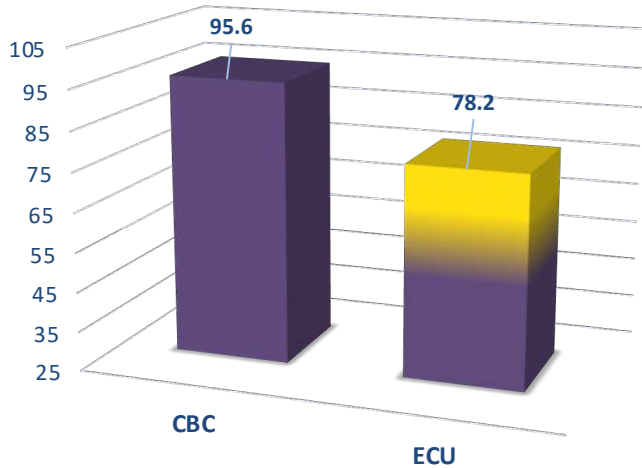
## Oct-Dec 2022



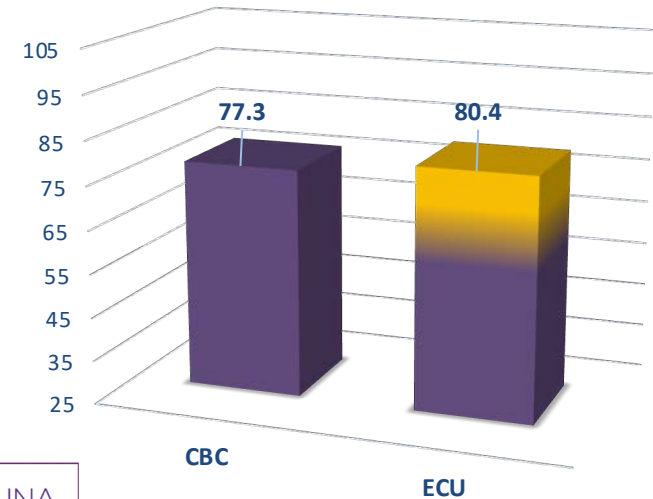
## Jan-Mar 2022



## Jul-Sep 2022

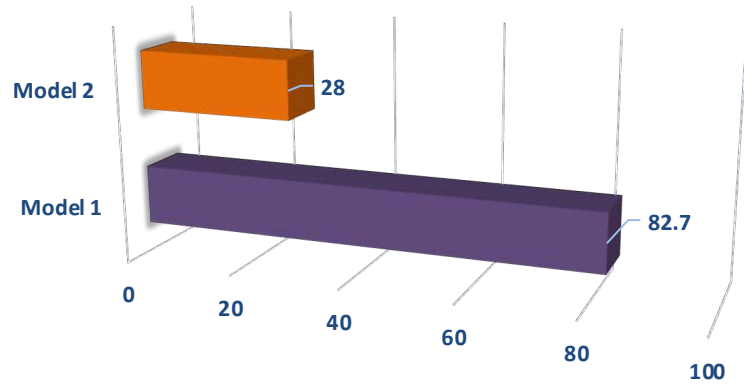


## Apr-Jun 2022

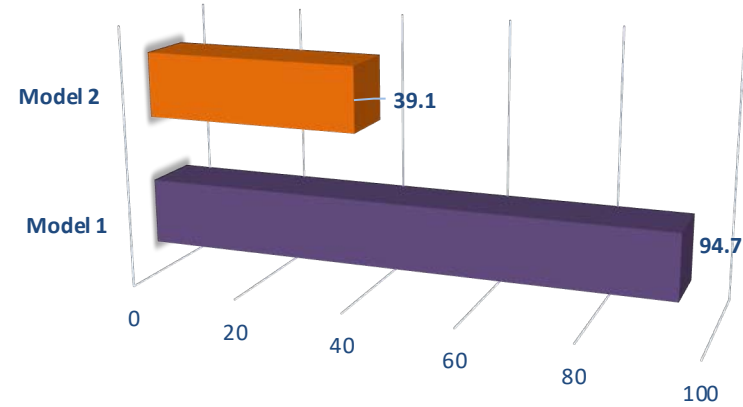


# Average LOS by Model

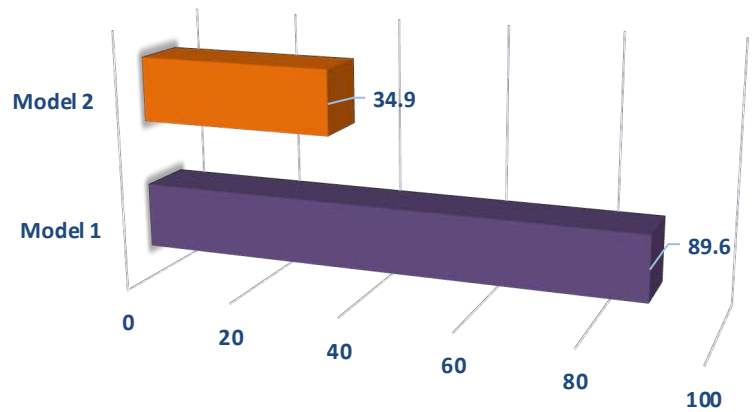
Oct-Dec 2022 (in hours)



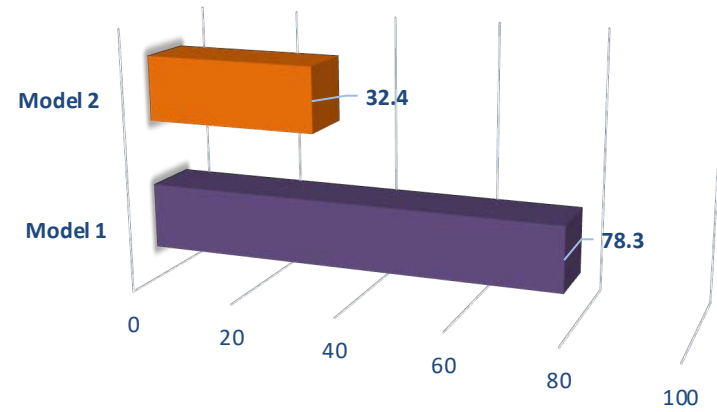
Jan-Mar 2022 (in hours)



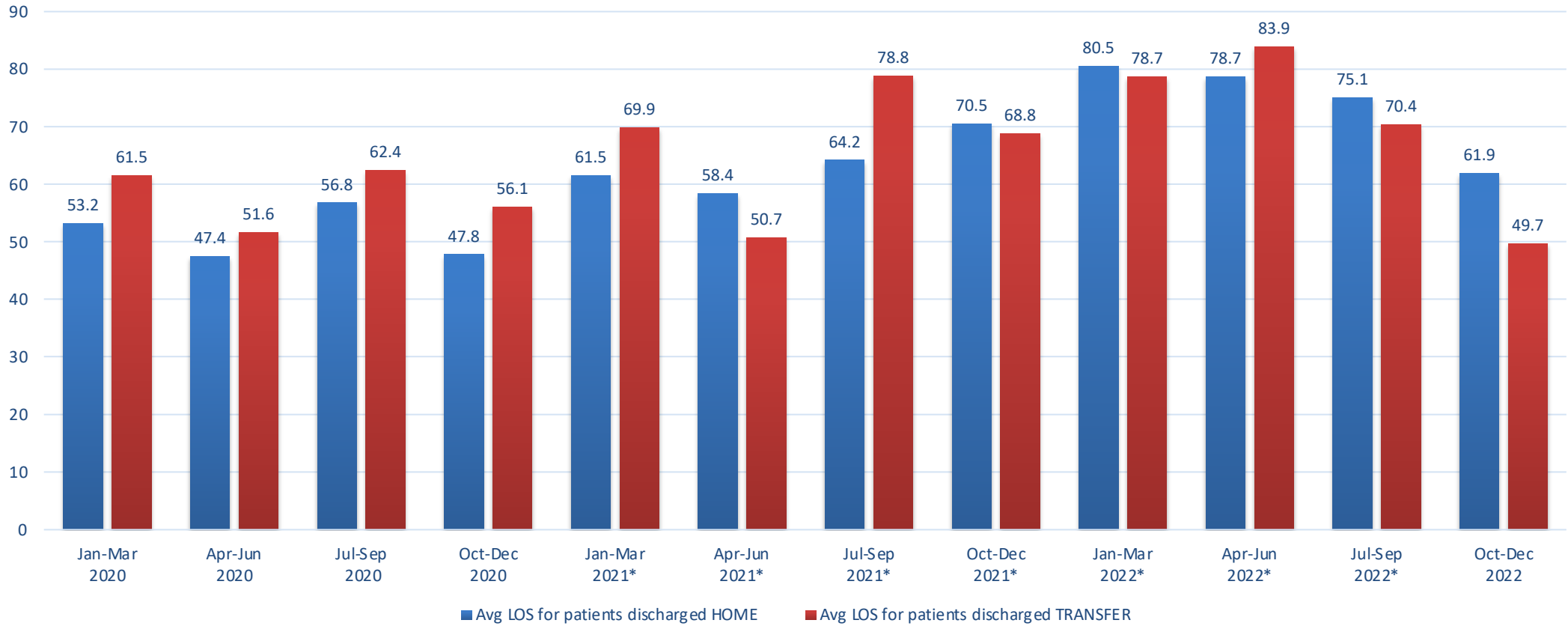
Jul-Sep 2022 (in hours)



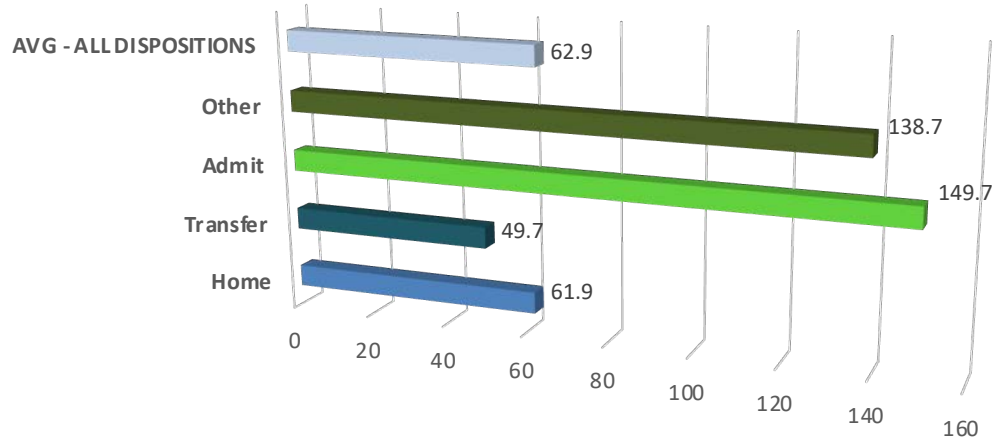
Apr-Jun 2022 (in hours)



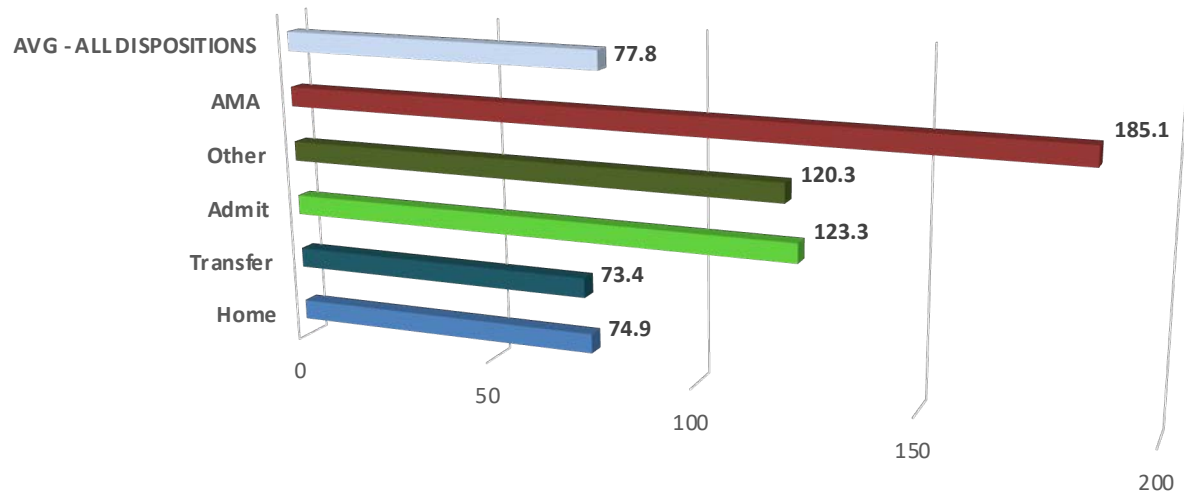
## Average Length of Stay by Quarter for Patients Discharged to Home or Transfer (in hours)



Oct-Dec 2022 (in hours)



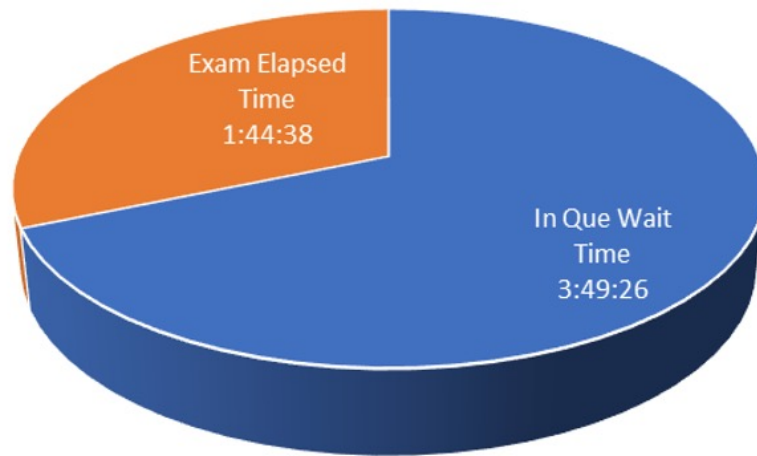
Jan-Dec 2022 (in hours)



## Average LOS by Discharge Disposition

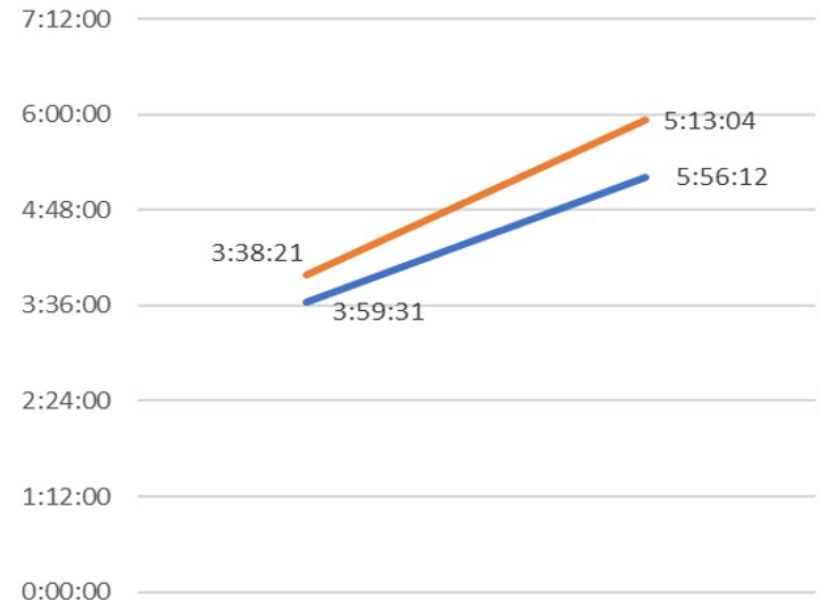
# Consult Elapsed Time: October – December 2022

CBC & ECU  
Average Consult Exam Elapsed Time  
In Que to Exam Complete  
FY23-Q2 Oct - Dec 2022



■ In Que Wait Time ■ Exam Elapsed Time

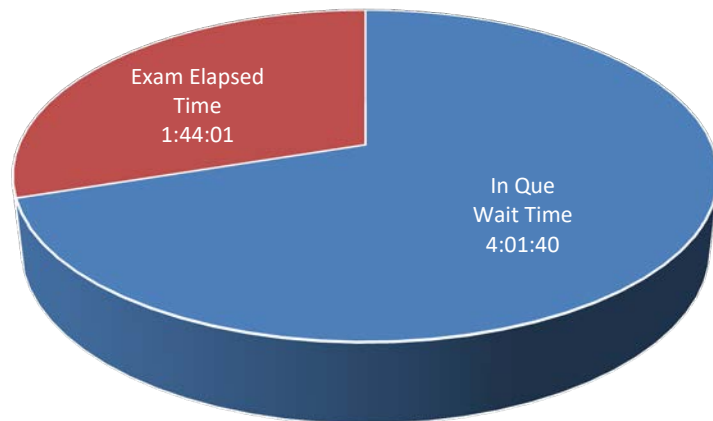
Comparison CBC & ECU  
Average Consult Elapsed Time  
In Que to Exam Complete  
FY23-Q2 October - December 2022



— CBC — ECU

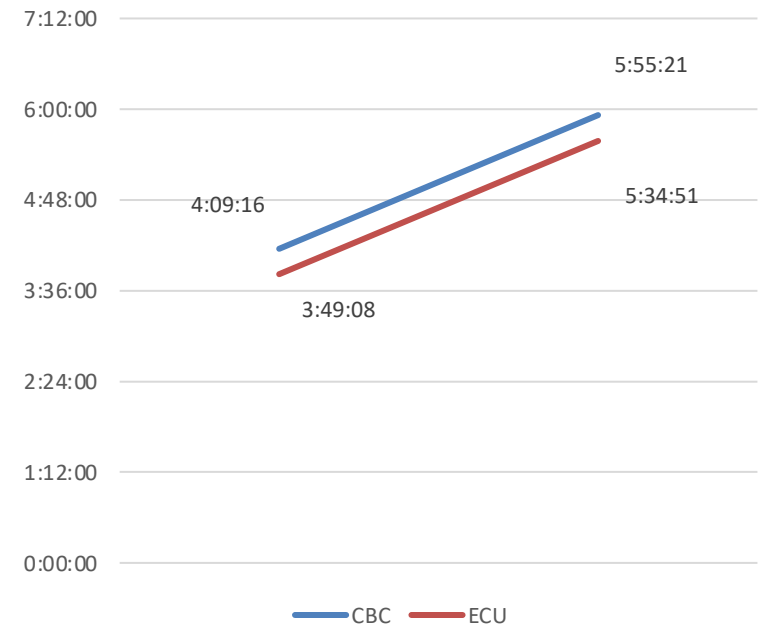
# Consult Elapsed Time: January – December 2022

**CBC & ECU**  
**Average Consult Elapsed Time**  
**In Que to Exam Complete**  
**January - December 2022**

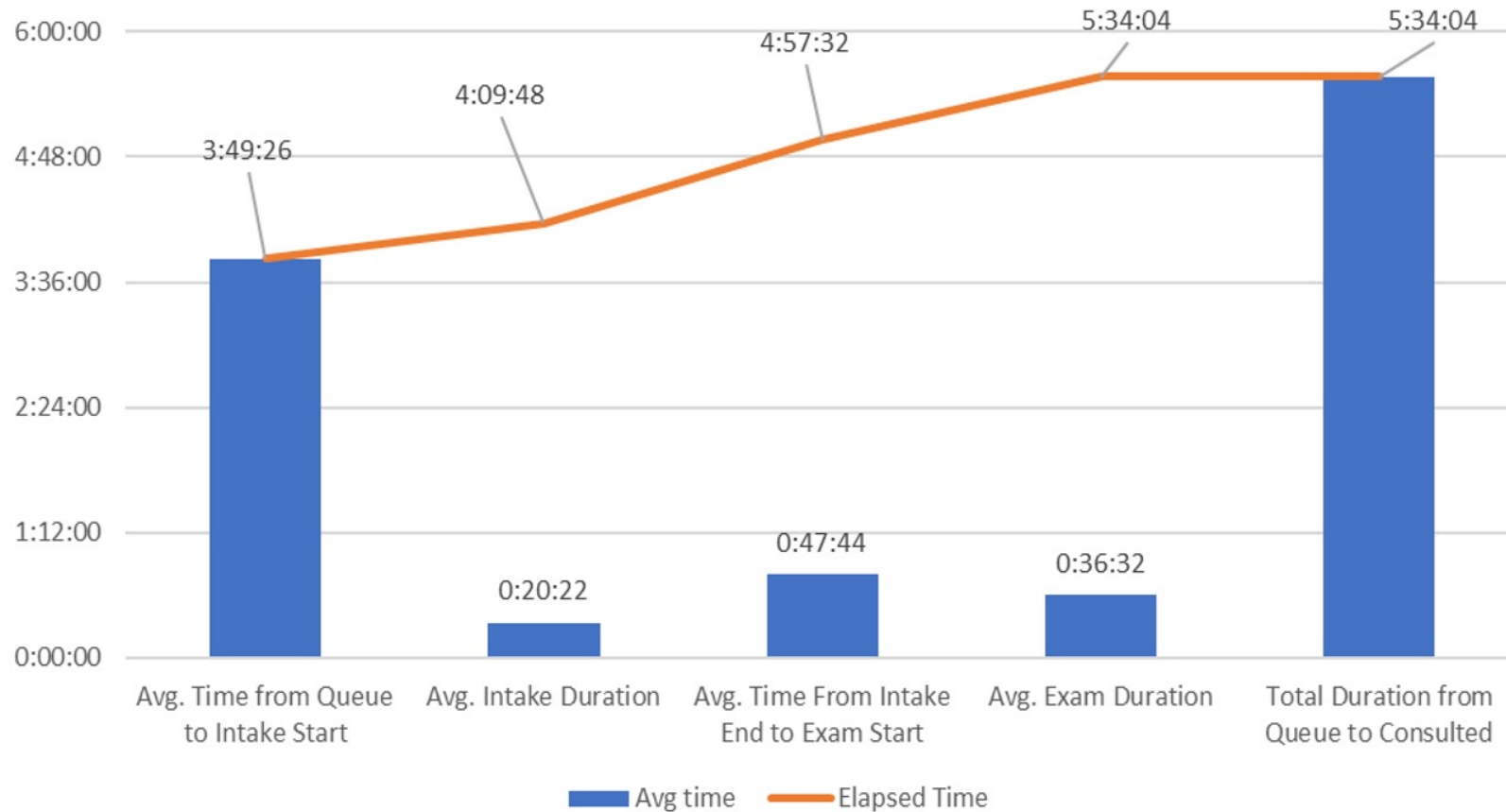


■ In Que Wait Time ■ Exam Elapsed Time

**Comparison CBC & ECU**  
**Average Consult Elapsed Time**  
**In Que to Exam Complete**  
**January - December 2022**



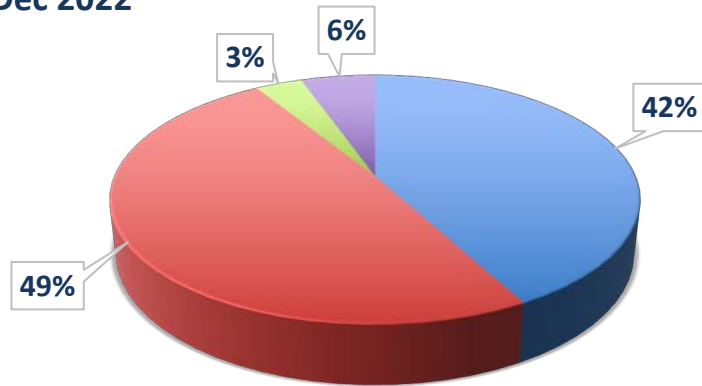
# Key Processes and Elapsed Times Averages CBC and ECU: October – December 2022



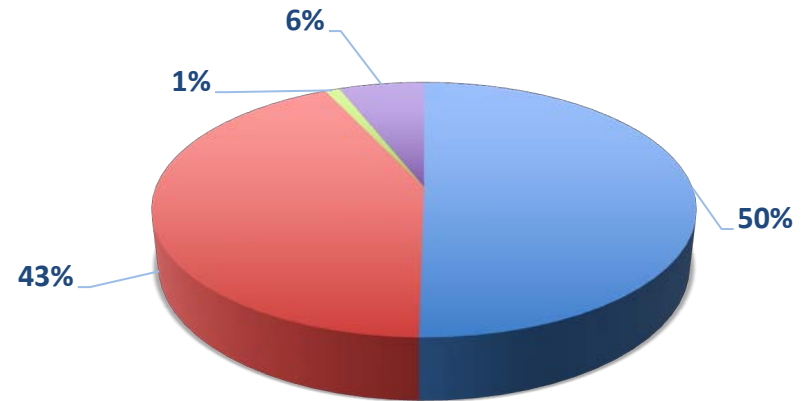


# Percent of Patients by Discharge Disposition

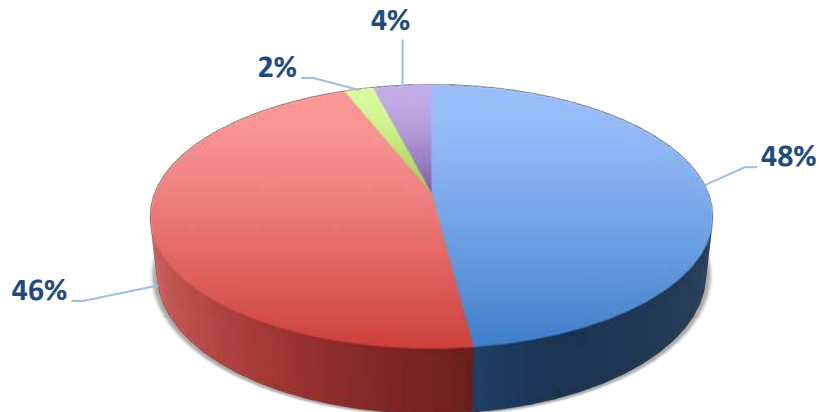
Oct-Dec 2022



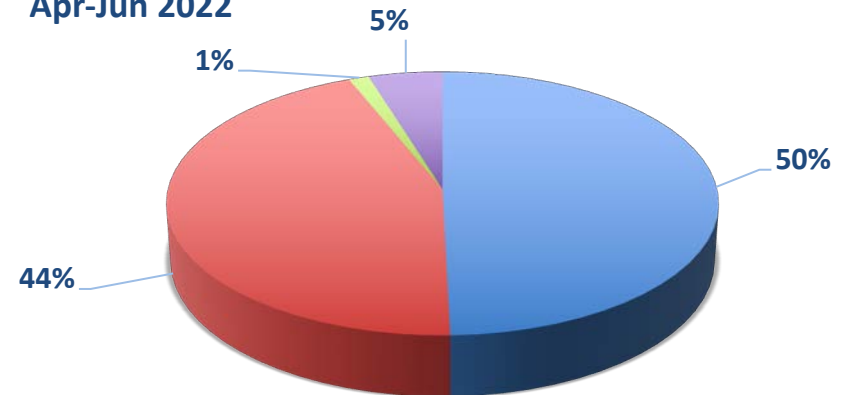
Jan-Mar 2022



Jul-Sep 2022



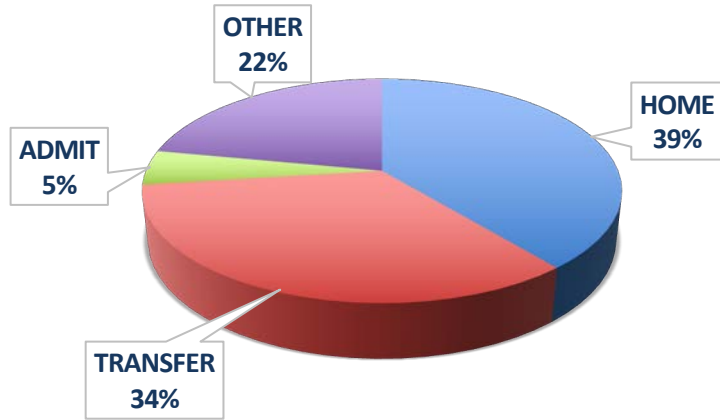
Apr-Jun 2022



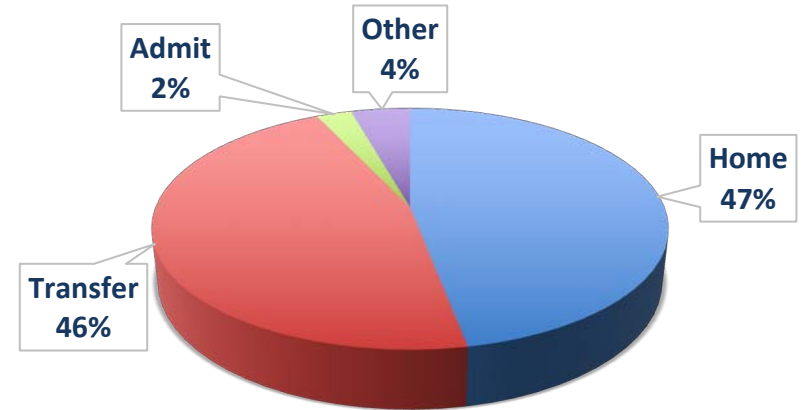
■ Home ■ Transfer ■ Admit ■ Other

# Percent of Patients by Discharge Disposition

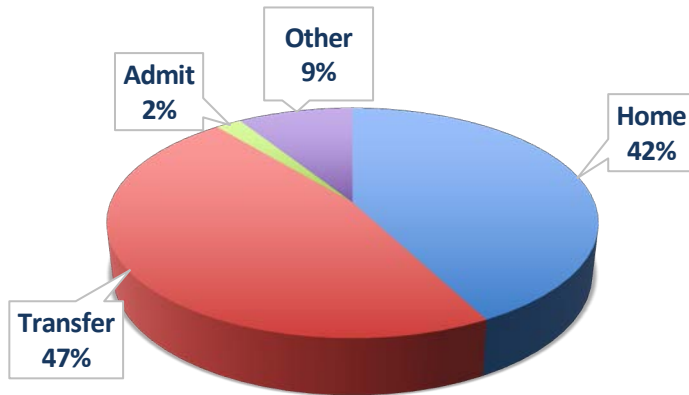
## January - December 2019



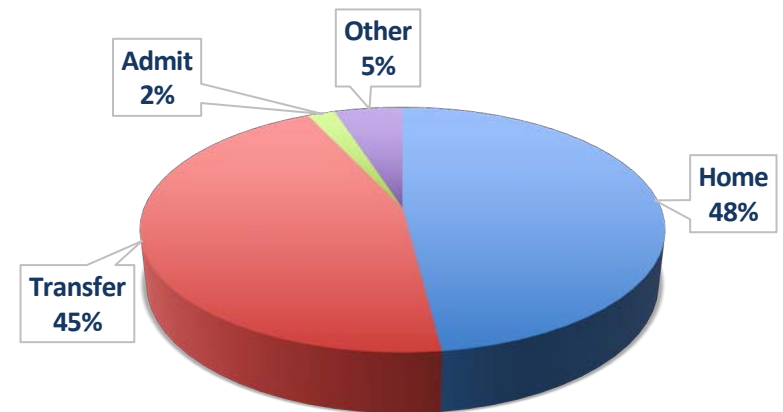
## January - December 2021



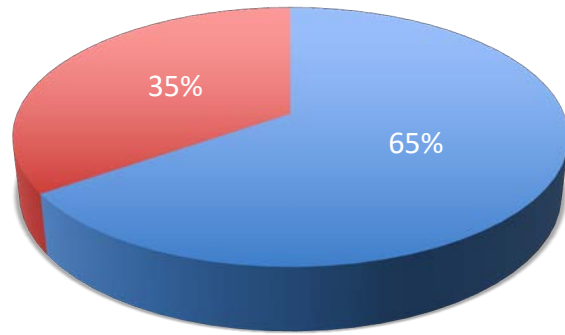
## January - December 2020



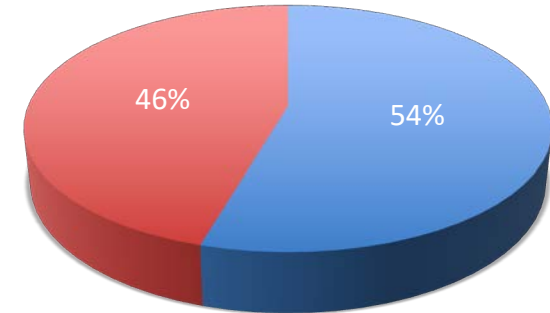
## January - December 2022



**Oct-Dec 2022**



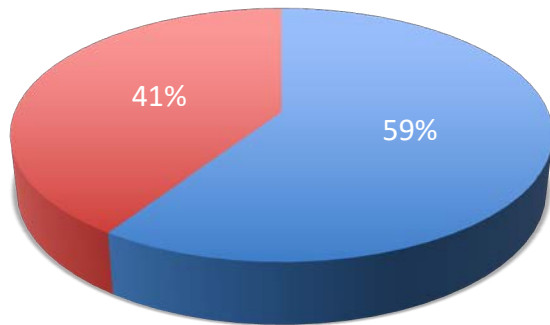
**Jan-Mar 2022**



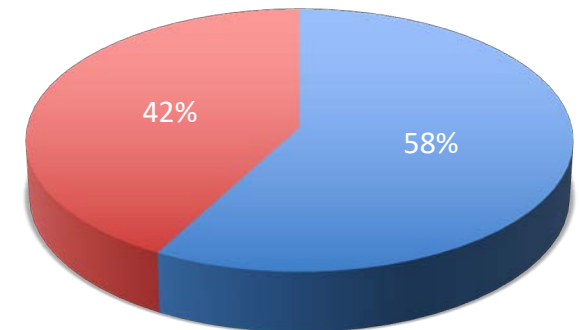
**IVCs –  
By Release Status**

- IVCs - percent not released
- IVCs - percent released

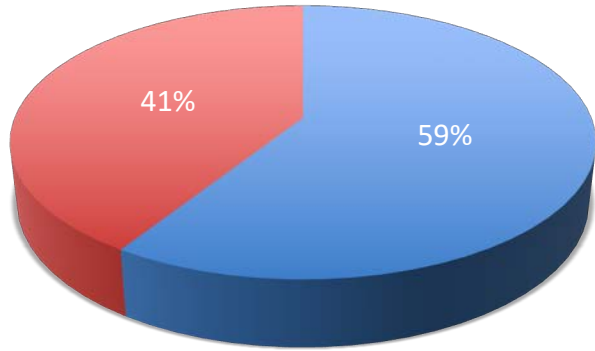
**Jul-Sep 2022**



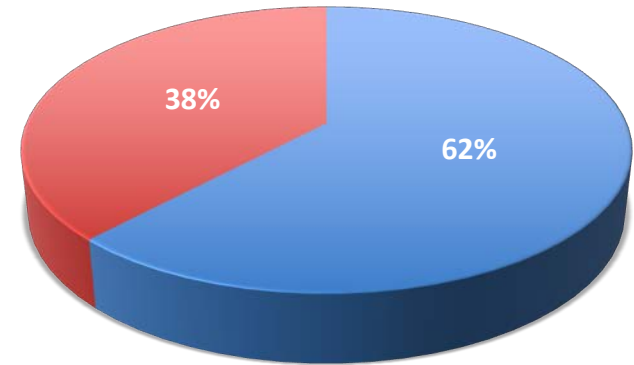
**Apr-Jun 2022**



January – December 2022



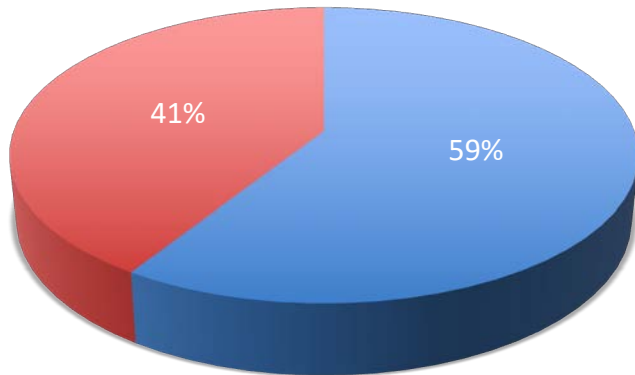
January – December 2019



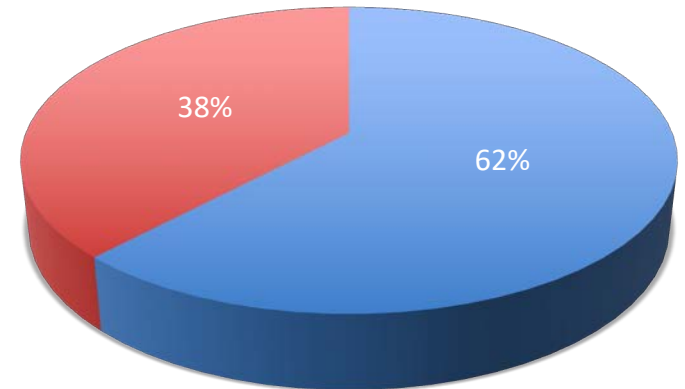
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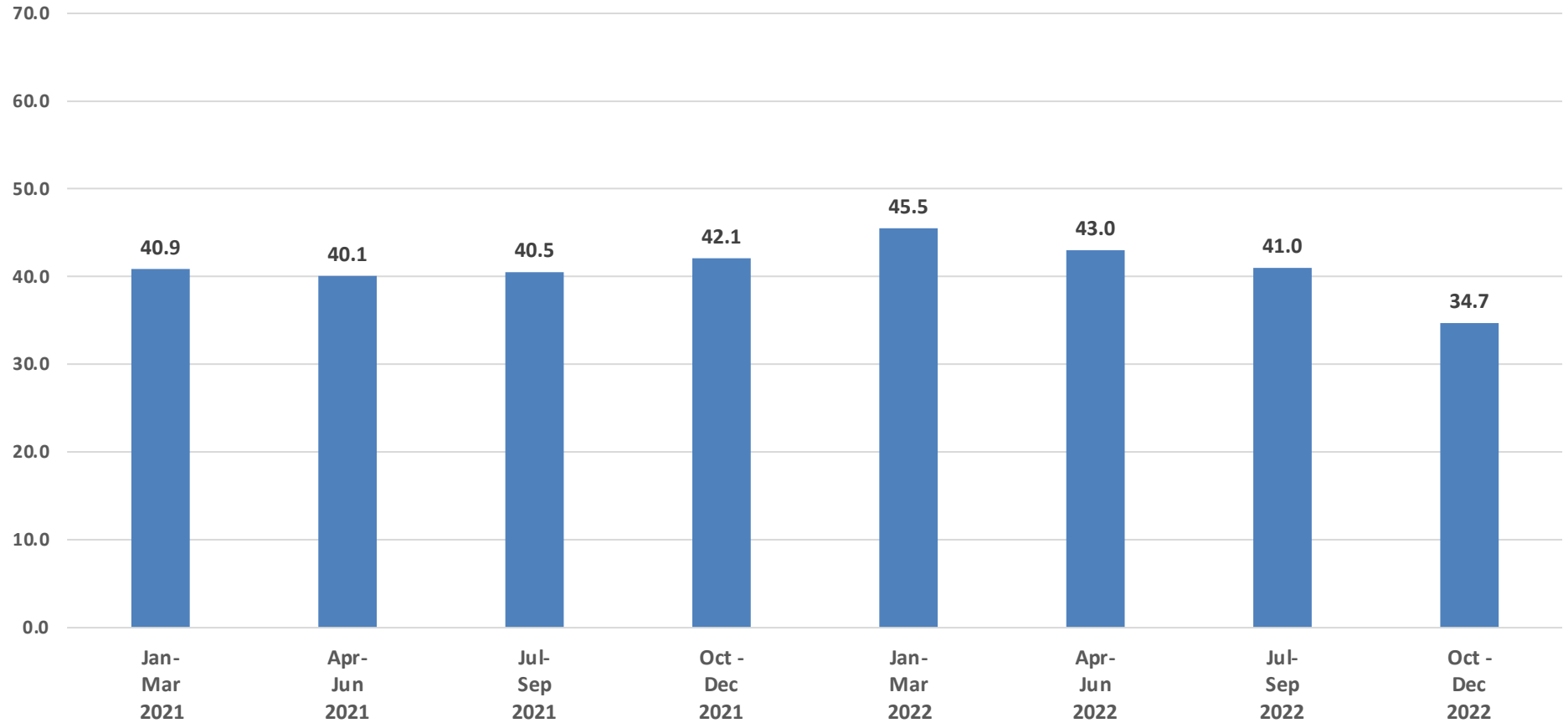
January – December 2021



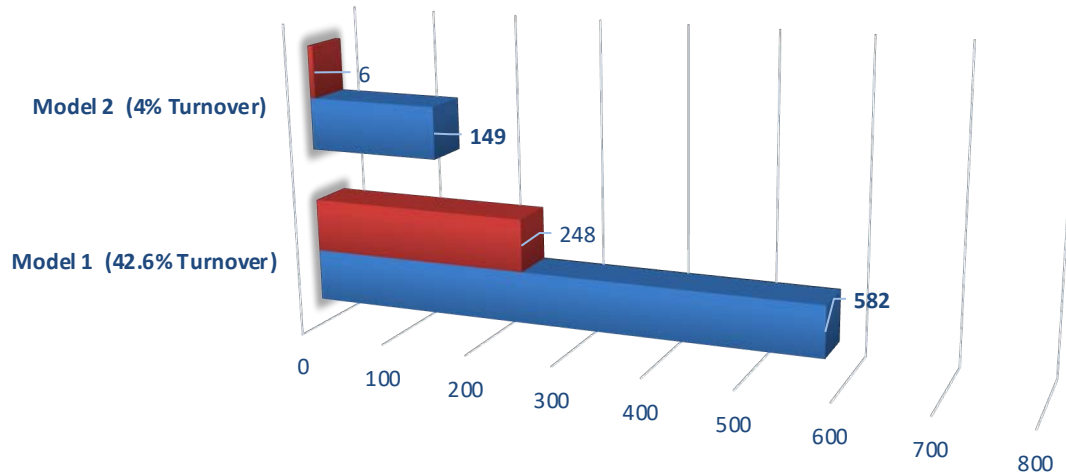
January – December 2020



## Percent of IVCs Turned Over by Quarter January 2021 - December 2022

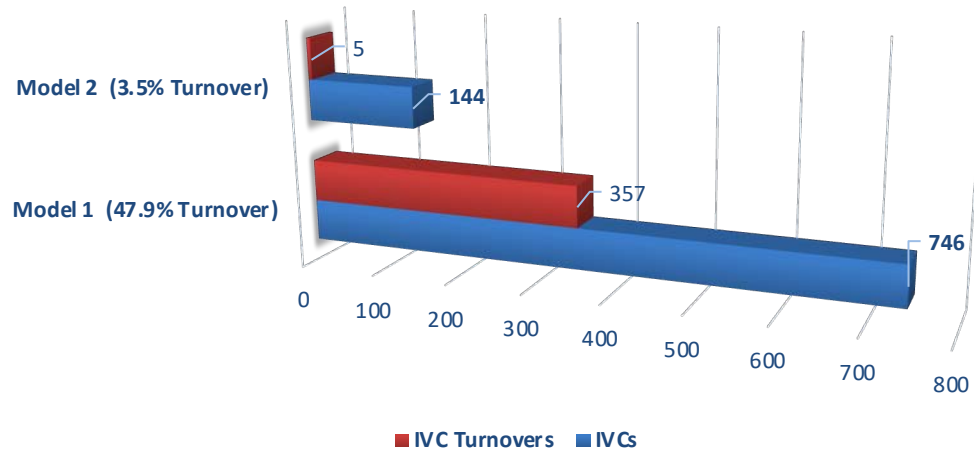


## Oct-Dec 2022

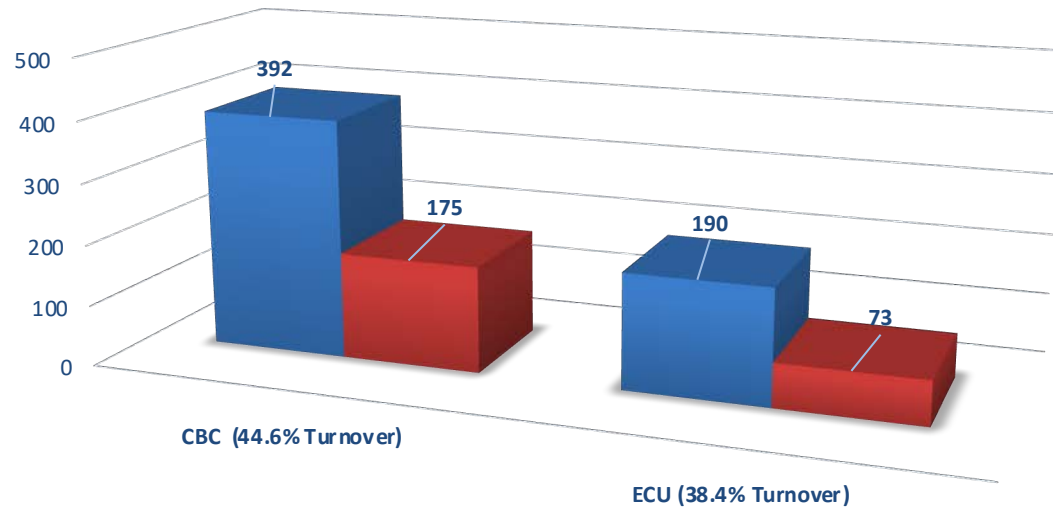


## Number of IVCs and IVC Turnovers by Model

## Jul-Sep 2022

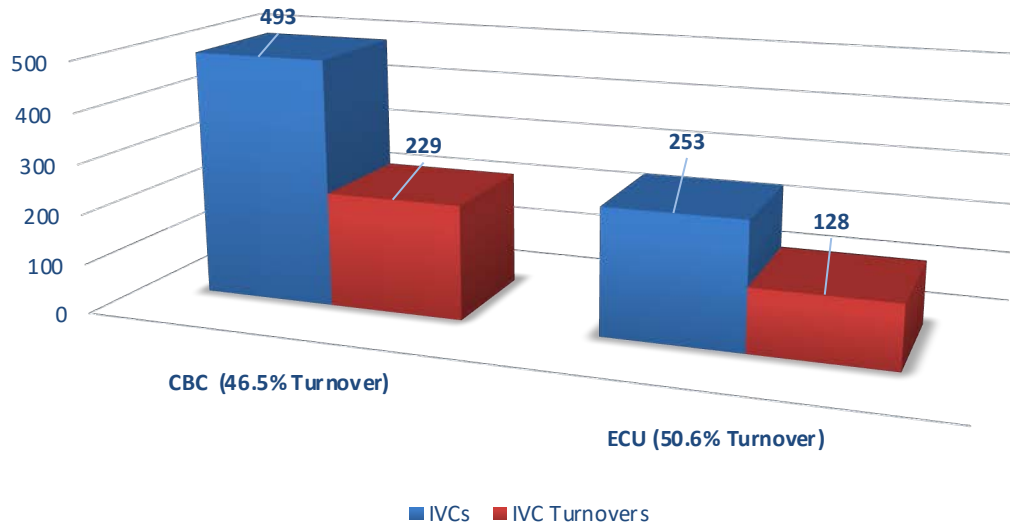


## Oct-Dec 2022



## Number of IVCs and IVC Turnovers by Provider

## Jul-Sep 2022



# Satisfaction Surveys

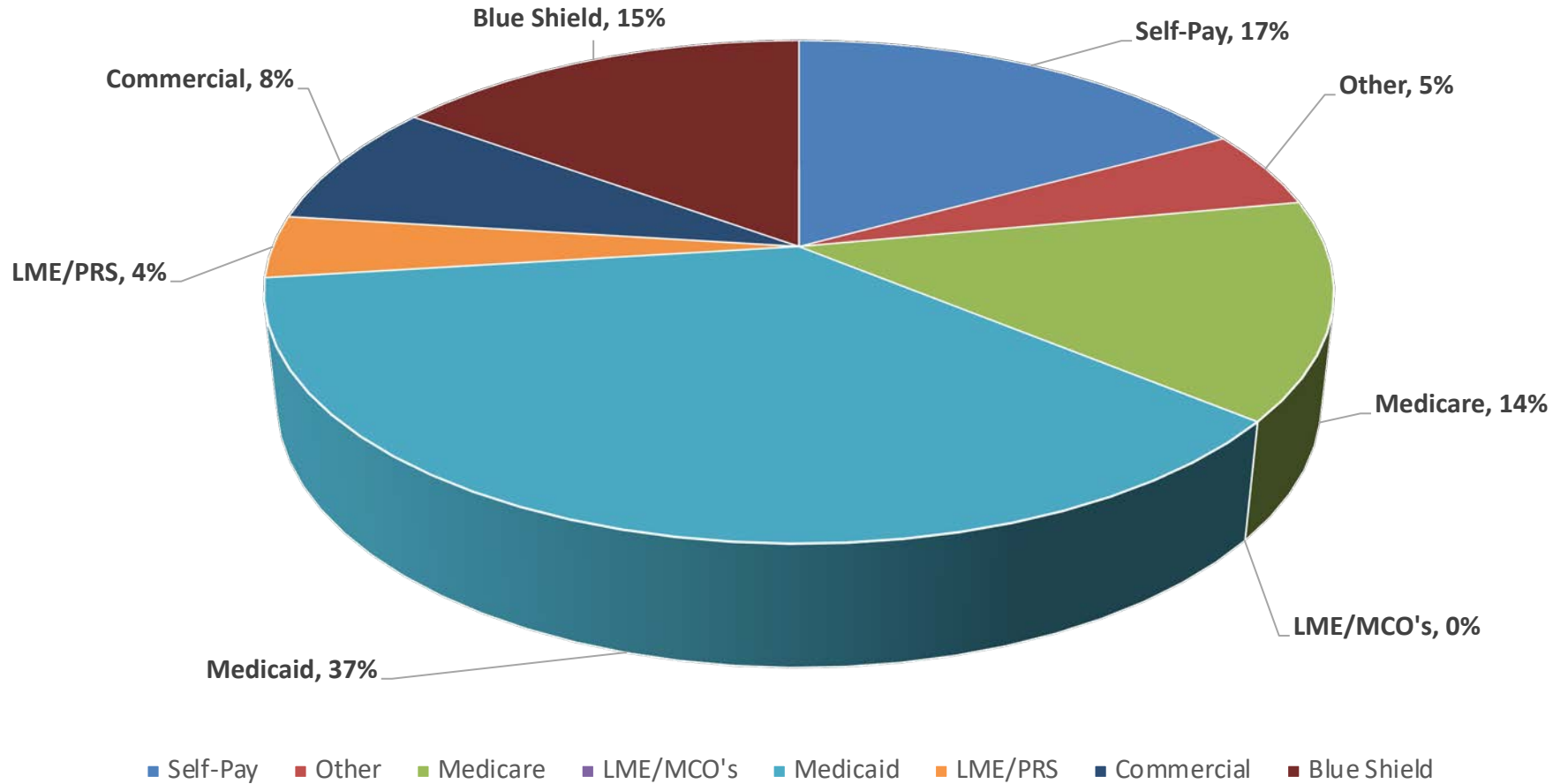
- Satisfaction surveys are done twice a year.
- Satisfaction surveys were not done during this last quarter.
- Most recent surveys were conducted in August of 2022
  - 52 individuals responded to the survey (N = 52).
  - **The overall satisfaction rate was 81%.**





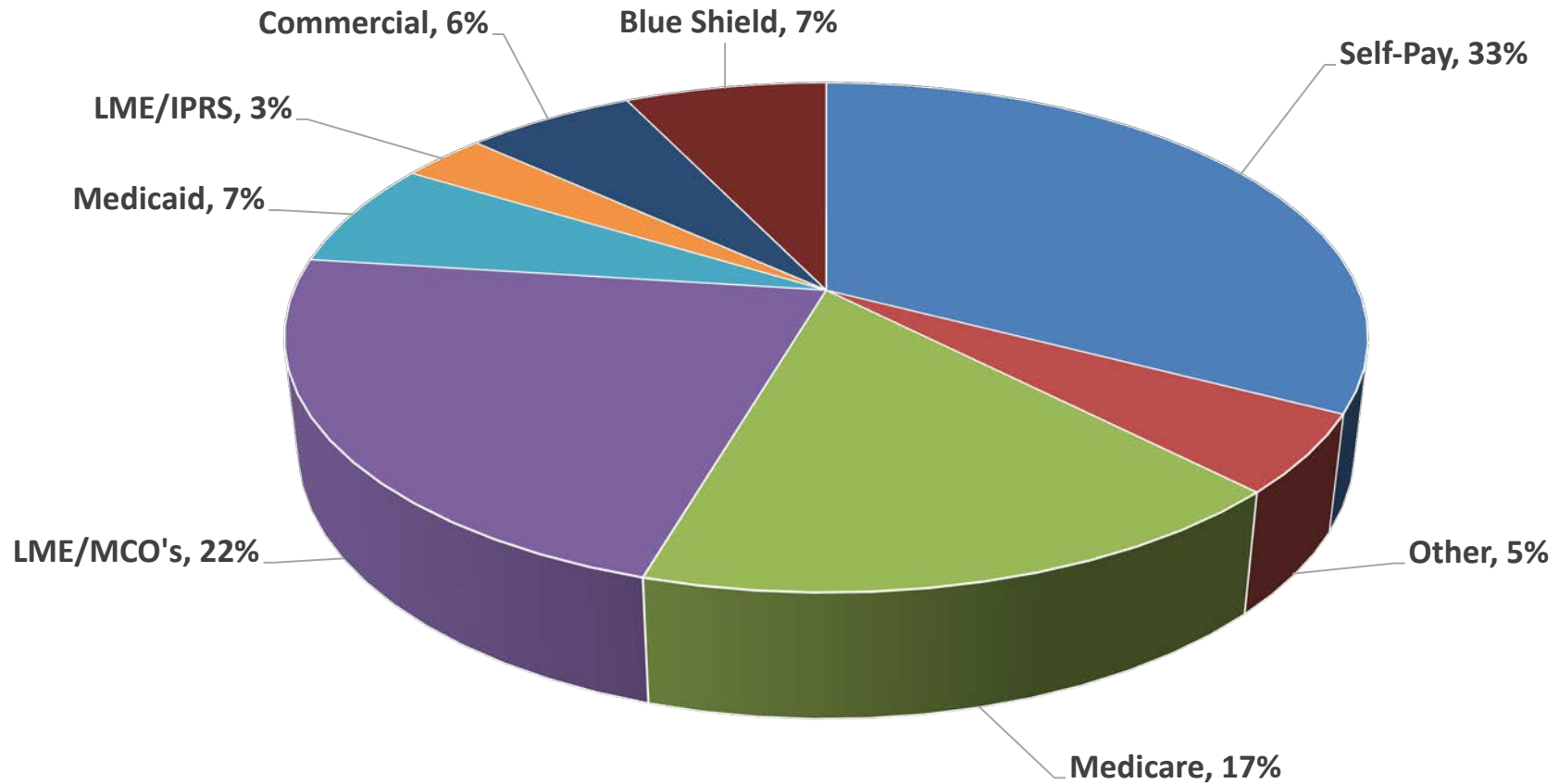
# NC-STeP Charge Mix

QTD FY2023 - Quarter 2



# NC-STeP Charge Mix - Project to Date

Service Dates: October 1, 2013 – December 31, 2022



# Community-Based Sites as of December 31, 2022

EVALUATION CRITERIA	VALUES/MEASURES REACHED AS OF 12/31/2022
1. The number of full-time equivalent (FTE) providers supporting the program	<b>1.5 FTEs</b>
2. The number of community-based sites contracted	<b>22</b>
3. Number of patient visits with medical (psychiatric) doctor	<b>215</b> <b>PTD= 1,692</b>
4. The number return visits	<b>1,204</b> <b>PTD= 12,281</b>
5. The number of patient visits with a mid-level provider	<b>1,436</b> <b>PTD= 14,022</b>
6. The number of new patient visits	<b>462</b> <b>PTD= 3,498</b>

# 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 Calendar Year 2021	During Quarter Jan- Mar 2022	During Quarter Apr- Jun 2022	During Quarter Jul- Sep 2022	During Quarter Oct- Dec 2022
With Medical Doctor	<b>1,692</b>	8	536	265	316	103	98	151	215
With Mid-Level Provider	<b>14,022</b>	7	2,006	3,217	4,122	1,036	986	1,212	1,436
<b>Total Patient Visits</b>	<b>15,818</b>	15	2,633	3,477	4,440	1,139*	1,085	1,363	1,666**

\* 1 visit did not specify provider type

\*\* 15 visits did not specify provider type

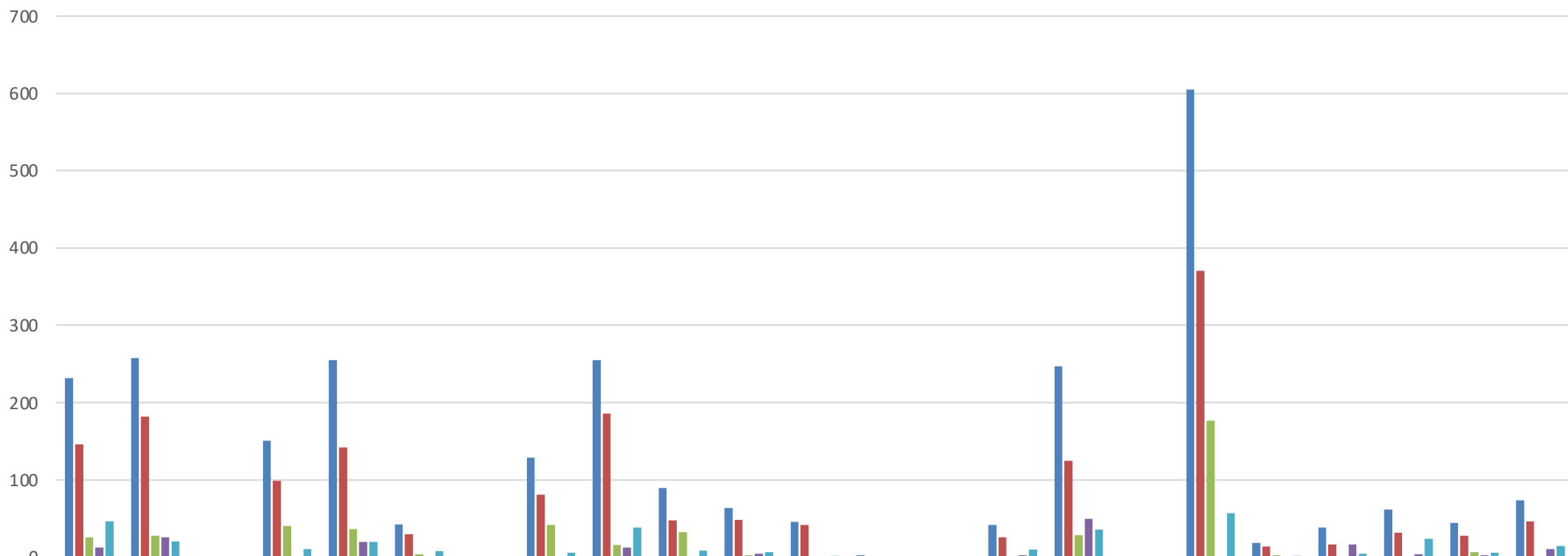
Since project inception there are 109 visits that listed no provider and 5 visits that listed both a mid-level and a doctor.



# NC-Step Appointment by Site

## Appointments, Visits Kept, Rescheduled, Cancelled, No Show

### October - December 2022



	Beaufort	Benson	Bertie	Camden	Carteret	Cherokee	Chocowinity	Chowan	Craven	Currituck	Duplin	Erlanger-Clay	Gates	Hertford	Hyde	Kinston	MTW	Pasquotank	Perquimans	Vidant Edenton	Vidant Kenansville	Roanoke Rapids	Outer Banks
Total Apts	232	258		151	255	43		129	255	90	64	46	3		42	247		605	19	39	62	45	74
Apts Kept	146	182		99	142	30		81	186	48	49	42	1		26	125		371	14	17	32	28	47
Apts Rescheduled	26	28		41	37	4		42	16	33	3	1	1			29		177	3		1	7	
Apts Cancelled	13	26			20	1			13		5	1			3	50				17	4	3	11
Apts No Show	47	21		11	20	8		6	39	9	7	2	1		10	36		57	2	5	24	6	15

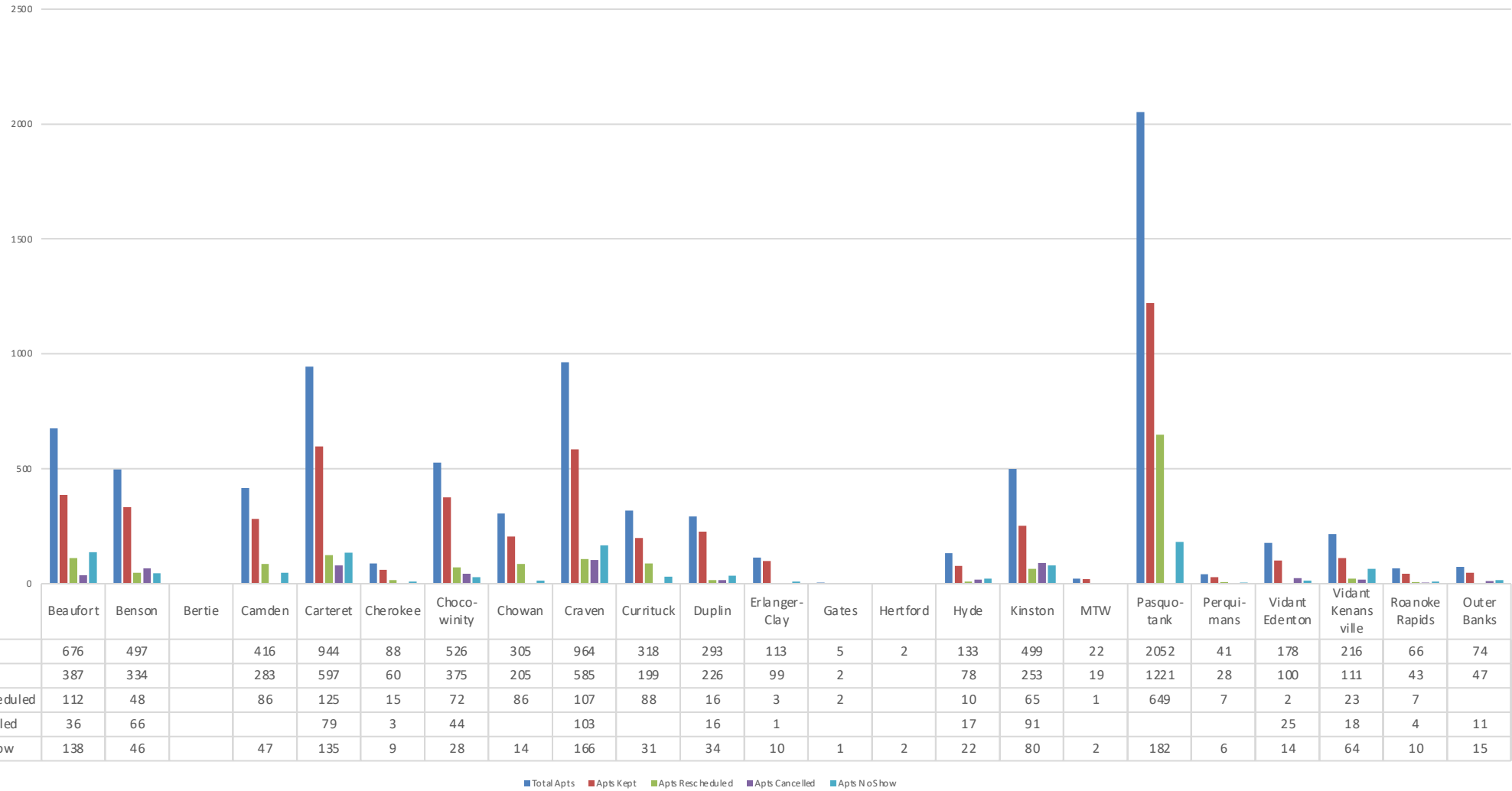
■ Total Apts   
 ■ Apts Kept   
 ■ Apts Rescheduled   
 ■ Apts Cancelled   
 ■ Apts No Show



# NC-Step Appointment by Site

## Appointments, Visits Kept, Rescheduled, Cancelled, No Show

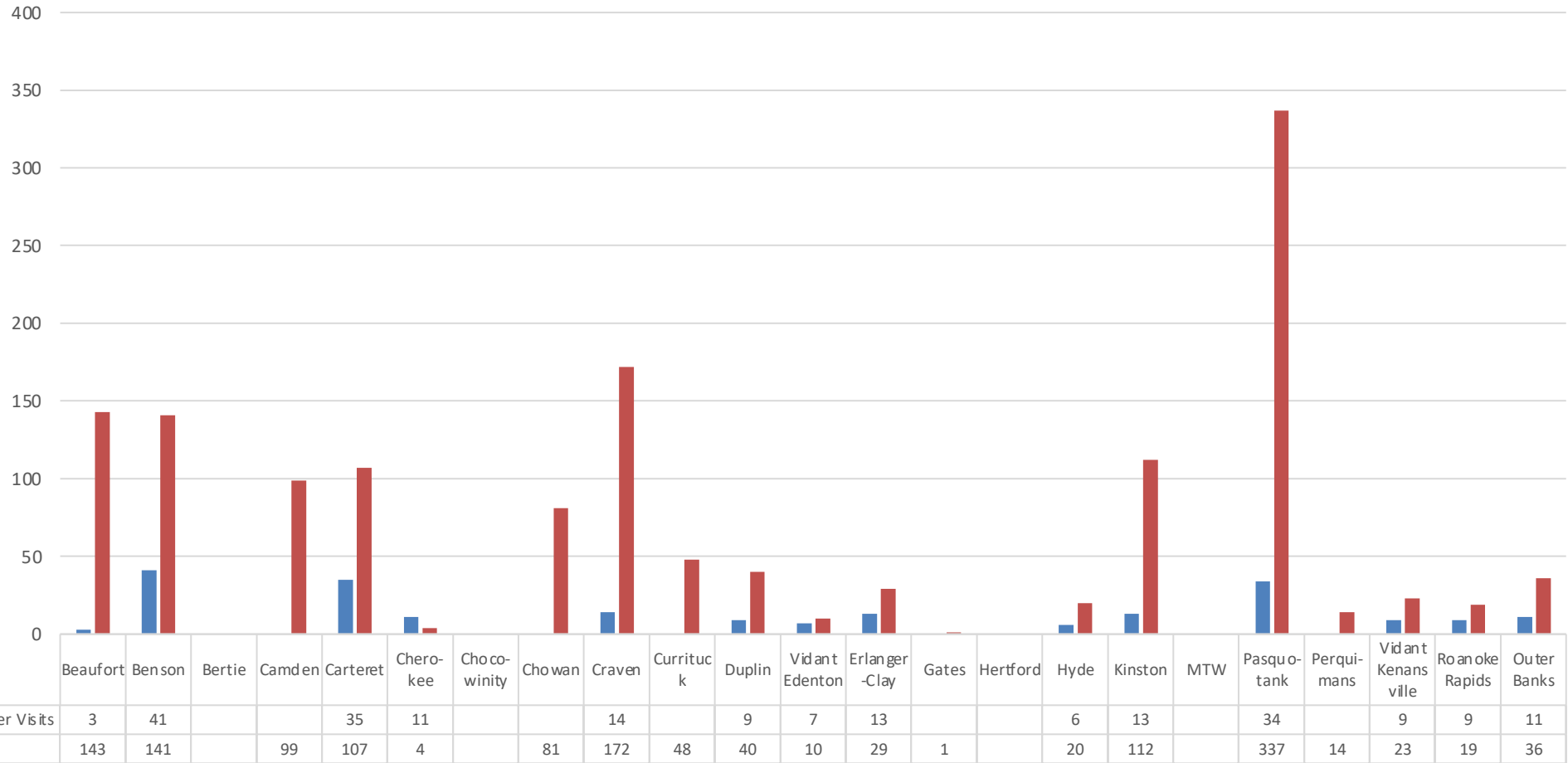
### January - December 2022



■ Total Apts   
 ■ Apts Kept   
 ■ Apts Rescheduled   
 ■ Apts Cancelled   
 ■ Apts No Show



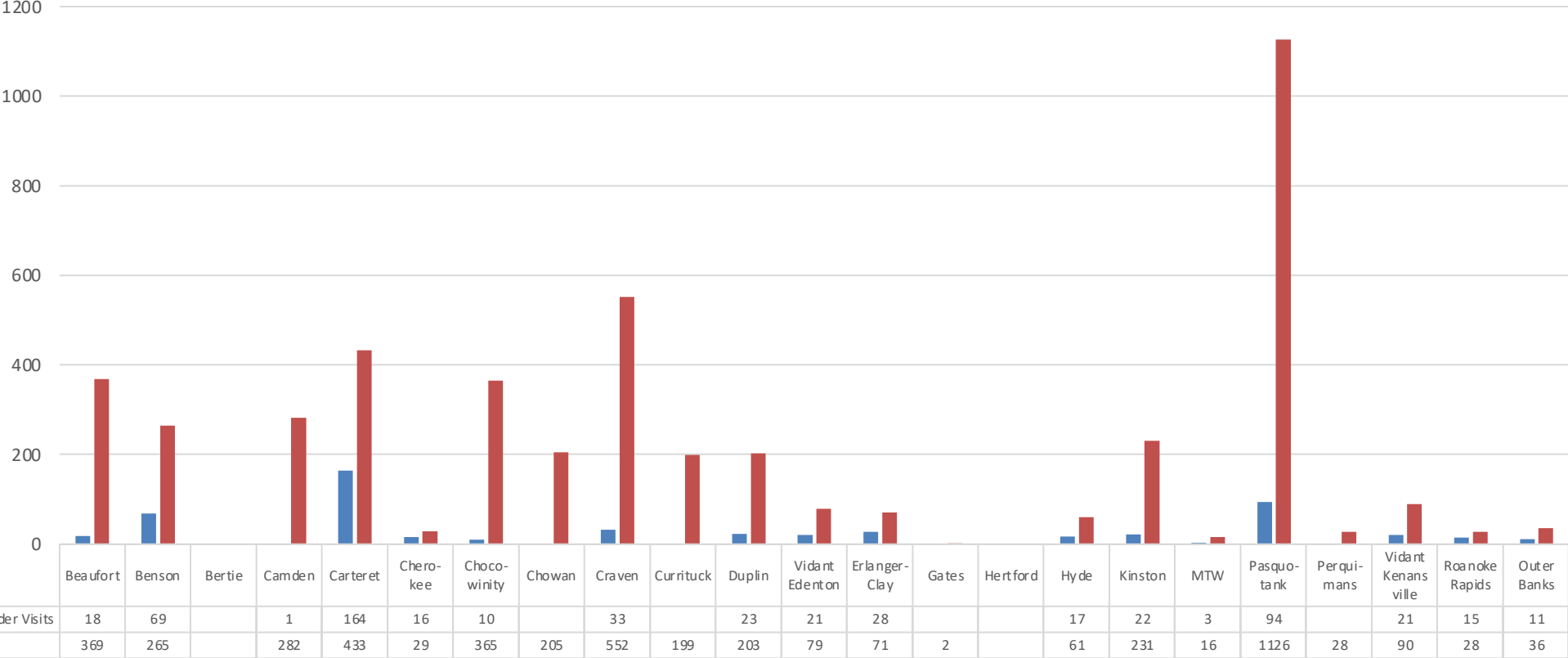
## NC-Step Community Visits by Site by Provider Type October - December 2022



■ Psychiatric Provider Visits   ■ BH Mgr Visits



# NC-Step Community Visits by Site by Provider Type January - December 2022



■ Psychiatric Provider Visits   ■ BH Mgr Visits

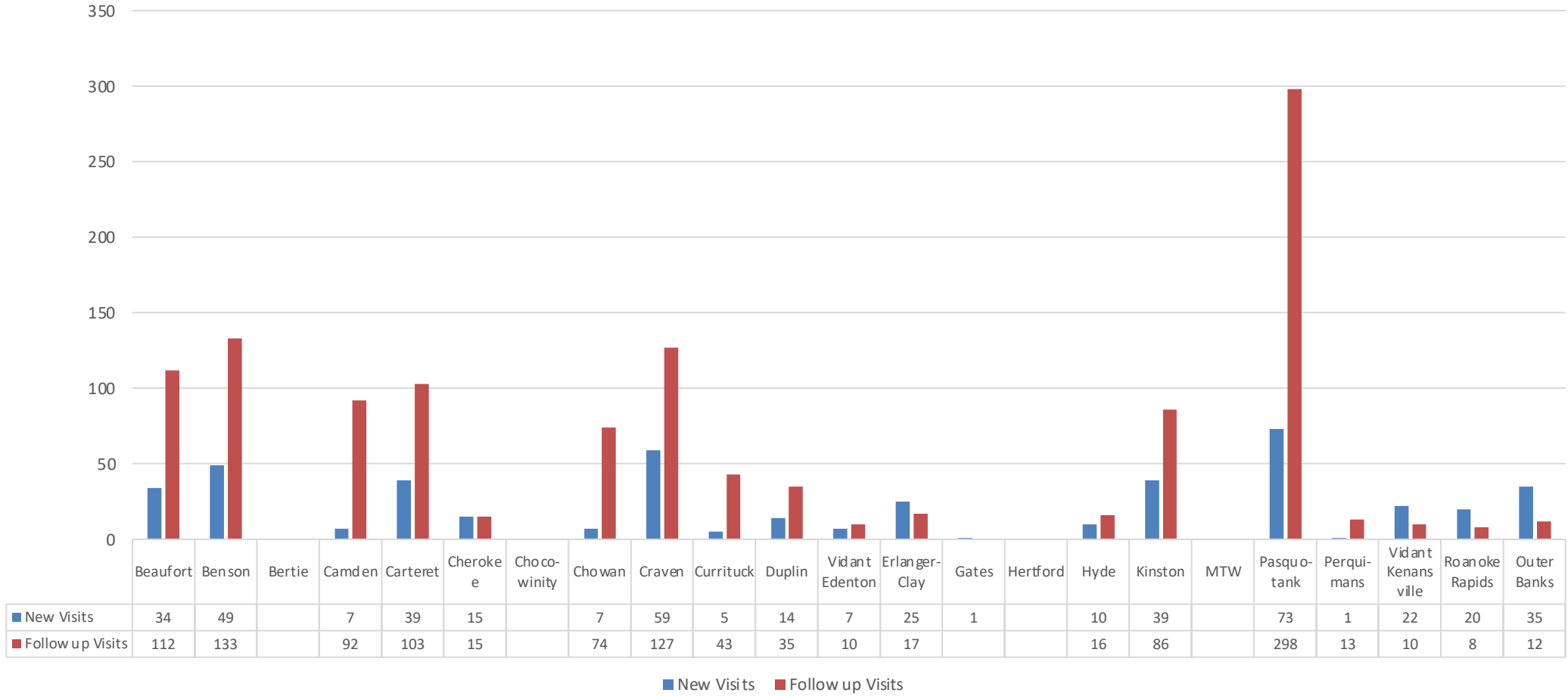




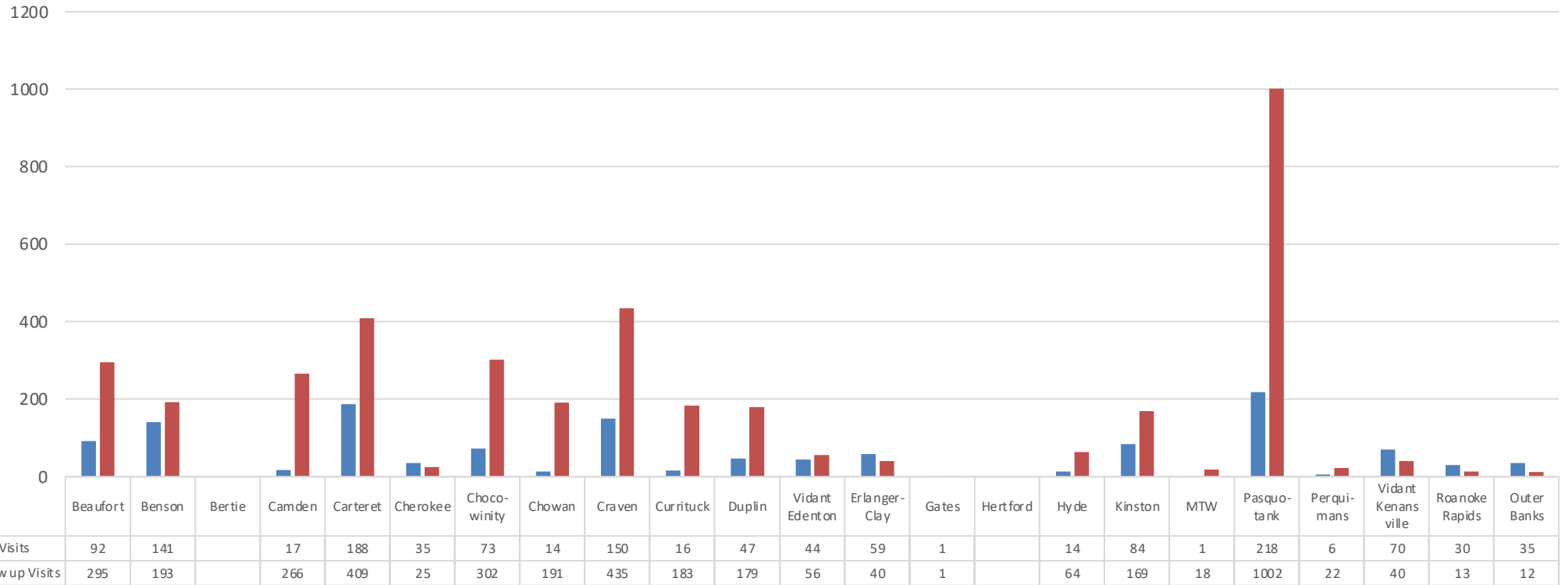
# NC-SteP Community Visits by Site

## New and Follow-Up

### October - December 2022



## NC-SteP Community Visits by Site New and Follow-Up January - December 2022



■ New Visits   ■ Follow up Visits



# NC-STeP Status as of December 31, 2022

- 38 hospitals in the network. 37 live.
- 57,052 total psychiatry assessments since program inception
- 9,419 IVCs overturned
  - Cumulative return on investment = \$50,862,000  
(savings from preventing unnecessary hospitalizations)
- Four Clinical Provider Hubs with 59 consultant providers
- Over 32% of the patients served had no insurance coverage

# NC-STeP Status as of December 31, 2022

- 22 community-based sites.
- 15,714 total patient visits since program inception in October 2018.
  - 1,692 total patient visits with a psychiatrist
  - 14,022 total patient visits with a mid-level provider

## Contact

Sy Atezaz Saeed, MD, MS, FACP<sub>psych</sub>

*Professor and Chair Emeritus*

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

*Executive Director*

North Carolina Statewide Telepsychiatry Program (NC-STeP)

Phone: 252.744.2660 | e-mail: [saeeds@ecu.edu](mailto:saeeds@ecu.edu)

Website: <http://www.ecu.edu/psychiatry>

Mail: 600 Moye Boulevard, Suite 4E-65,  
Greenville, NC 27834





**NORTH CAROLINA**  
STATEWIDE TELEPSYCHIATRY PROGRAM

**NC-STeP Advisory Council Meeting**  
Wednesday, March 1, 2023  
10:30 am – 12:00 pm  
Virtual Meeting via Zoom Video Conference

**Agenda**

- |                   |  |
|-------------------|--|
| 10:30- 10:40 a.m. | Welcome and Introductions  |
| 10:40- 10:45 a.m. | Review and Approval of December 14, 2022 Minutes   |
| 10:45- 11:45 a.m. | NC-STeP FY23-Q2 (Oct-Dec) Performance Data   |
| 11:45- 11:50 a.m. | Old Business   |
| 11:50- 11:55 a.m. | New Business   |
| 11:55- 12:00 p.m. | Announcements <ul style="list-style-type: none"><li>• NC-STeP Pediatric Program launch</li><li>• Vermont/ NC-STeP Collaboration</li><li>• NC-STeP Presentations at the Annual Meetings of ATA and APA</li><li>• MOThERS Project update and presentation at the NC Rural Summit</li></ul> |
| 12:00 p.m.        | Adjourn  |



Join Zoom Meeting

<https://us06web.zoom.us/j/86993351235?pwd=NXk0a0hSTGV3QTFmUFVJeVZybnN5Zz09>

Meeting ID: 869 9335 1235

Passcode: 198610



## **Caring for the Mental Health and Wellbeing of Children: Using Telepsychiatry to Enhance Access to Care and Promote Well-Being**

A new grant-funded service soon will be offered by the North Carolina Statewide Telepsychiatry Program (NC-Step)\* to provide mental health services for children and adolescents in six selected pediatric/primary care practices in Tier 1 or Tier 2 counties in North Carolina. And we are seeking practice partners.



*East Carolina University Chancellor Philip Rogers joins Gov. Roy Cooper, and additional state and campus leaders, to announce a \$3.2 million United Health Foundation grant. (ECU photos by Cliff Hollis)*

## GRANT EXPANDS NC-STeP

**ECU will provide mental health services for youth with \$3.2 million United Health Foundation grant**



## VT/NC Collaboration

Vermont is emulating the NC Statewide Telepsychiatry Program (NC-STeP) to increase timely psychiatric care via telehealth in the emergency department setting in rural areas of our state.

VPQHC is excited to be mentored by Dr. Sy Saeed and the NC-STeP team as we design and implement a new statewide system to address currently unmet mental health needs.

We are grateful to the NC-STeP team for their invaluable technical assistance and support as we begin scaling up the telepsychiatry network operations through our first two demonstration projects.

We look forward to our continued collaboration and future success.



Catherine Fulton, MS, CPHQ  
Executive Director, VPQHC



<https://ncstep.ecu.edu/>




**RESEARCH TRACK SPEAKER**

**ATA2023 Annual Conference & Expo**  
 March 4-6, 2023 | San Antonio, TX

*From **Now What?** to **How To!**  
 The Vision and Realities of Telehealth Adoption*

**Sy Saeed**  
 East Carolina University

Register now at  
[GoTelehealth.org](https://www.gotelehealth.org)



**Healthcare Beyond Your ZIP code:  
 Increasing Access to Telehealth  
 Solutions in Rural Areas**

Afternoon Breakout Session  
 Room 305 A&B



**Dr. John Graham**  
 President  
 North Carolina  
 Telehealth  
 Network  
 Association



**Dr. Sy Saeed**  
 Professor and  
 Chair Emeritus;  
 Director Center  
 for Telepsychiatry  
 ECU Brody  
 School of  
 Medicine, Center  
 for Telepsychiatry  
 and e-Behavioral  
 Health



**Dr. Lisa Shock**  
 Chief Population  
 Health Officer  
 NC United  
 Healthcare

# NC-STeP Upcoming 2023 Presentations

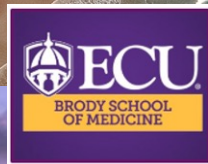


AMERICAN  
 PSYCHIATRIC  
 ASSOCIATION



**ANNUAL MEETING**  
 May 20-24, 2023 • San Francisco





NORTH CAROLINA  
STATEWIDE TELEPSYCHIATRY PROGRAM

