



NORTH CAROLINA  
STATEWIDE TELEPSYCHIATRY PROGRAM

# Quarterly Progress Update



**Sy Atezaz Saeed, MD, MS, FACPpsych,**

*Professor and Chair*

Department of Psychiatry and Behavioral Medicine

Brody School of Medicine - East Carolina University

*Executive Director*

North Carolina Statewide Telepsychiatry Program (NC-STeP)





NORTH CAROLINA  
STATEWIDE TELEPSYCHIATRY PROGRAM

**NC-STeP Advisory Council Meeting**

Friday, June 25, 2021

10:00 am – 11:30 am

Virtual Meeting via Zoom Video Conferencing

**Agenda**

10:00- 10:05 a.m.	Welcome
10:05- 10:10 a.m.	Review and Approval of March 12, 2021 Minutes
10:10- 11:00 a.m.	NC-STeP FY21-Q3 (Jan-Mar) Performance Data
11:00- 11:15 a.m.	Update on Community-Based Pilots
11:15- 11:20 a.m.	Old Business
11:20- 11:25 a.m.	New Business
11:25- 11:30 a.m.	Announcements
11:30 a.m.	Adjourn



Join Zoom Meeting

<https://zoom.us/j/94425768672?pwd=d0JJYk5tTjh5blZqOTdzL2Y2ZDRwdz09>

# NC-STeP Quality Management and Outcomes Monitoring Processes: January – March 2021

- 41 hospitals in the network, 40 hospitals were live
- 30 hospitals reporting Telepsychiatry patients in their ED
  - not all live hospitals had telepsychiatry patients
- Total number of assessments for this quarter = 1,296
- Total number of encounters for this quarter = 1,105
- Patient assessments billed for Model 1 hospitals = 879

# NC-STeP Quality Management and Outcomes Monitoring Processes: January – March 2021

- The Median Length of Stay was 27.2 hours
- The Average Length of Stay was 53.5 hours
  - 52.5 hours for those discharged to home
  - 57.5 hours for those transferred to another facility
- Average Consult Elapsed Time (in Queue to Exam Complete) for Model 1 hospitals was 4 hours and 4 minutes.

# NC-STeP Quality Management and Outcomes Monitoring Processes: January – March 2021

- 775 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
  - 317 (41%) of those patients did not have an IVC in place when discharged.
- Of the ED patients who received telepsychiatry services:
  - 46% were discharged to home
  - 47% were discharged to another facility

# NC-STeP Quality Management and Outcomes Monitoring Processes: January – March 2021

- 16 Community based sites were live as of 3/31/21 with 16 sites reporting Telepsychiatry patients.
- There were 1092 total behavioral health visits.
  - 77 visits with a Psychiatrist.
  - 1,015 visits with a behavioral health manager.
  - 11 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
Total Patient Encounters	35,386	1,179	1,074	1,105	
Model 1 Hospital Patient Encounters	21,512	620	544	688	
Model 2 Hospital Patient Encounters	13,847	559	530	417	
Total Number of Assessments (Billed Assessments for Model 1 Hospitals + Number of Patient Encounters for Model 2 Hospitals)	46,904	1,334	1,201	1,296	



# NC-STeP Benchmarks



	Goals	Values Reached		
	Cumulative Target to be reached by (06/30/2021)	Value Reached as of most recent previous quarter (12/31/2020)	Value Reached as of this reporting quarter (03/31/2021)	Year-to-Date Total with % of the Yearly Target (03/31/2021)
Number of IVCs	1,700	702	775	2,284 134% of Yearly Target
Number of IVCs Overturned	505	271	317	909 180% of Yearly Target
Total Number of Assessments (Billed assessments for Model 1 hospitals + Number of patient encounters for Model 2 hospitals.)	4,251	1,201	1,296	3,831 90% of Yearly Target



# NC-STeP Status as of March 31, 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 03/31/2021
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	317 in this quarter  Cumulative total since program inception 7,012
3. The number of participating consultant providers	48	48	42



# NC-STeP Status as of March 31, 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 03/31/2021
4. The number of telepsychiatry assessments conducted.	5,105	4,251	1,296 in this quarter  Cumulative total since program inception 46,904
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	778 in this quarter  Cumulative total since program inception 20,541



# NC-STeP Status as of March 31, 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 03/31/2021
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 = 27.7
8. The rate of "satisfied" or "strongly satisfied" among emergency department staff participating in NC-STeP.	80%	80%	88%



# NC-STeP Status as of March 31, 2021

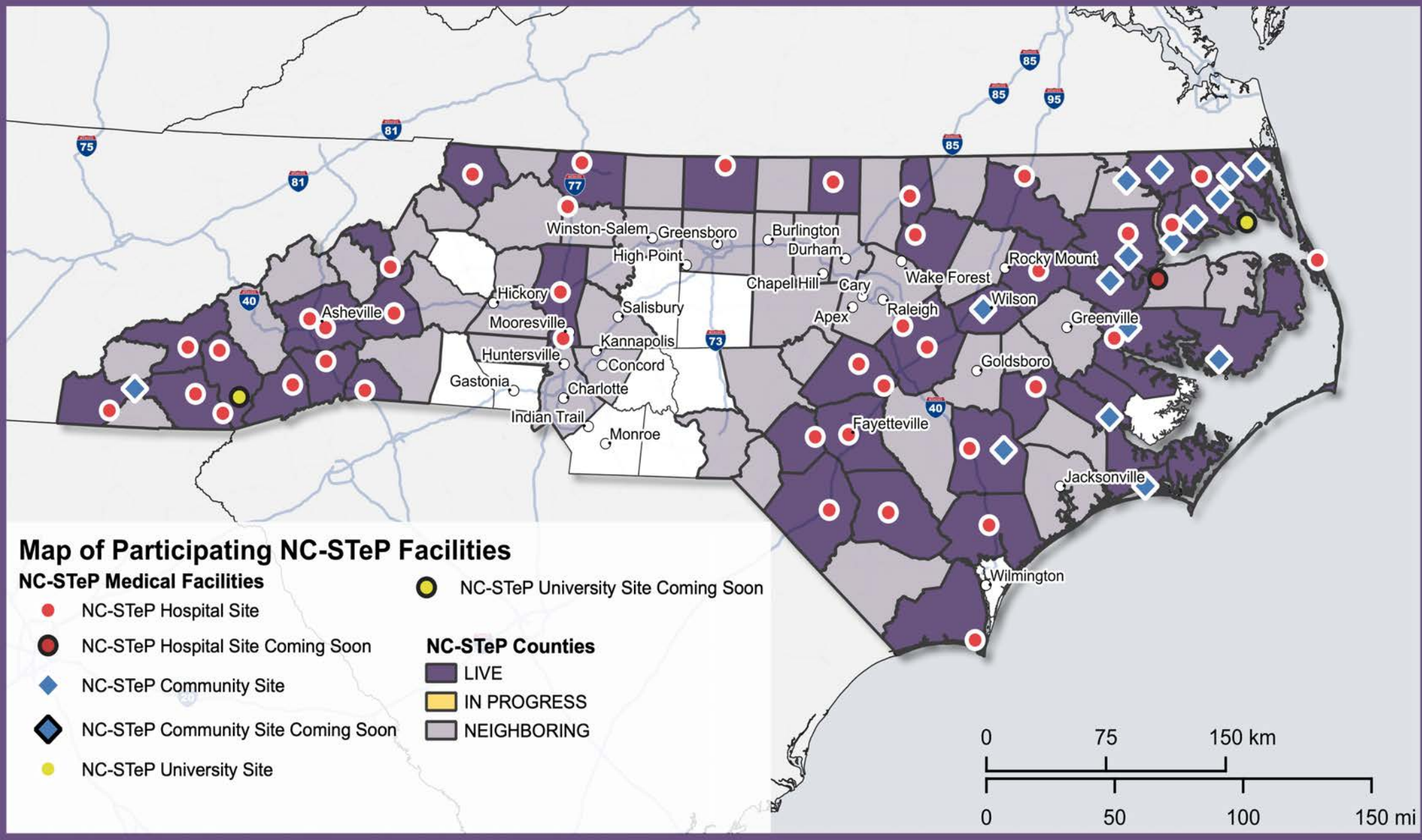
EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020	TARGET TO BE REACHED BY 06/30/2021	VALUES/MEASURES REACHED AS OF 03/31/2021
9. The rate of "satisfied" or "strongly satisfied" among hospital CEOs/COOs participating in NC-STeP.	100%	100%	100%
10. The rate of "satisfied" or "strongly satisfied" among consulting (hub) providers participating in NC-STeP.	100%	100%	86%



# NC-STeP Status as of March 31, 2021

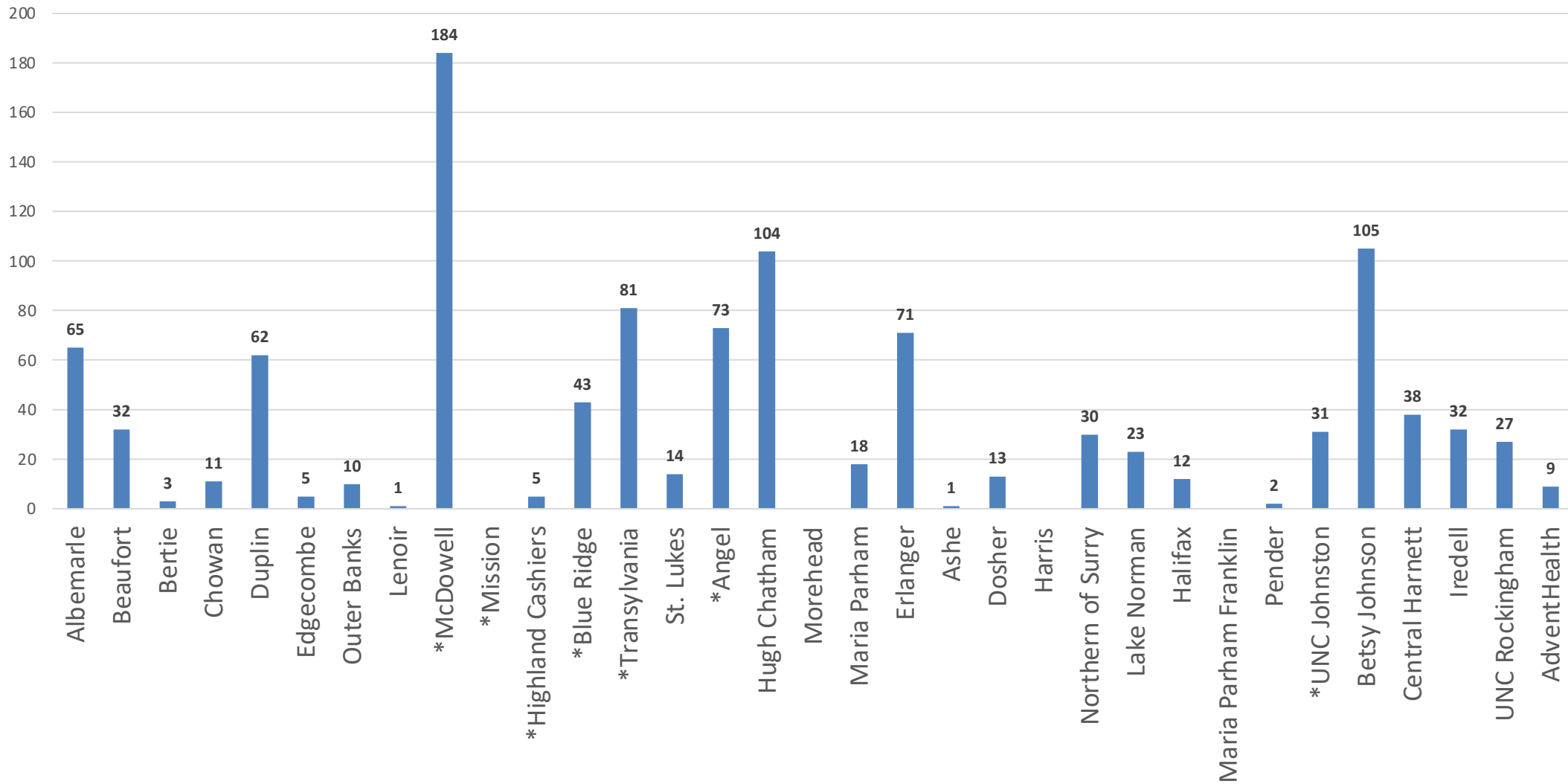
EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2020	TARGET TO BE REACHED BY 06/30/2021	VALUES/MEASURES REACHED AS OF 03/31/2021
11. The rate of "satisfied" or "strongly satisfied" among emergency department physicians participating in the statewide telepsychiatry program.	85%	85%	100%
12. Cumulative return on investment to state psychiatric facilities through overturned involuntary commitments (inpatient admission prevented)	\$3,839,400	\$3,213,403	\$1,711,800 Cumulative average since program inception \$37,864,800

# NC-STeP Status as of March 31, 2021



# Number of NC-STeP Patients by Hospital

January - March 2021

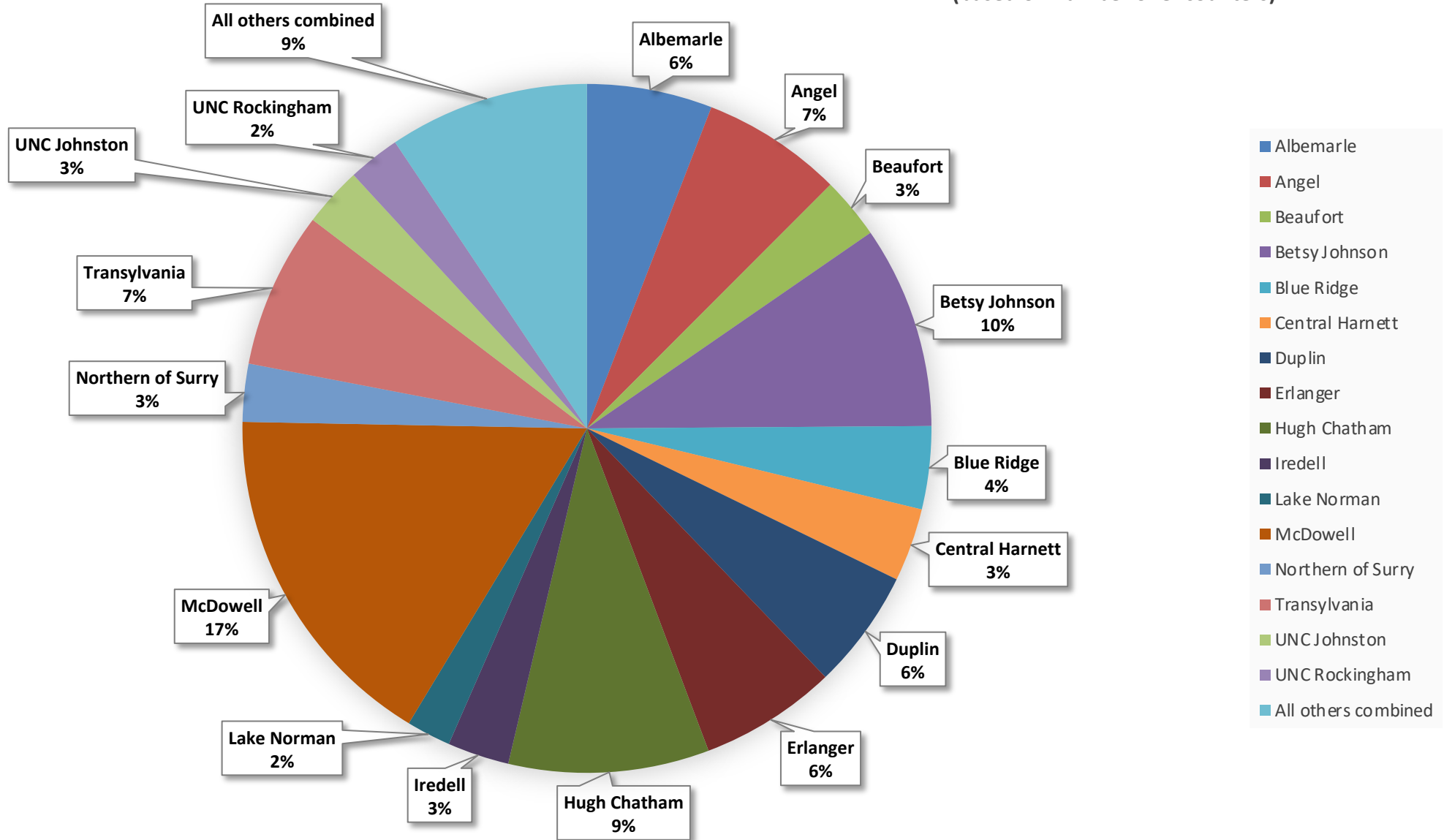


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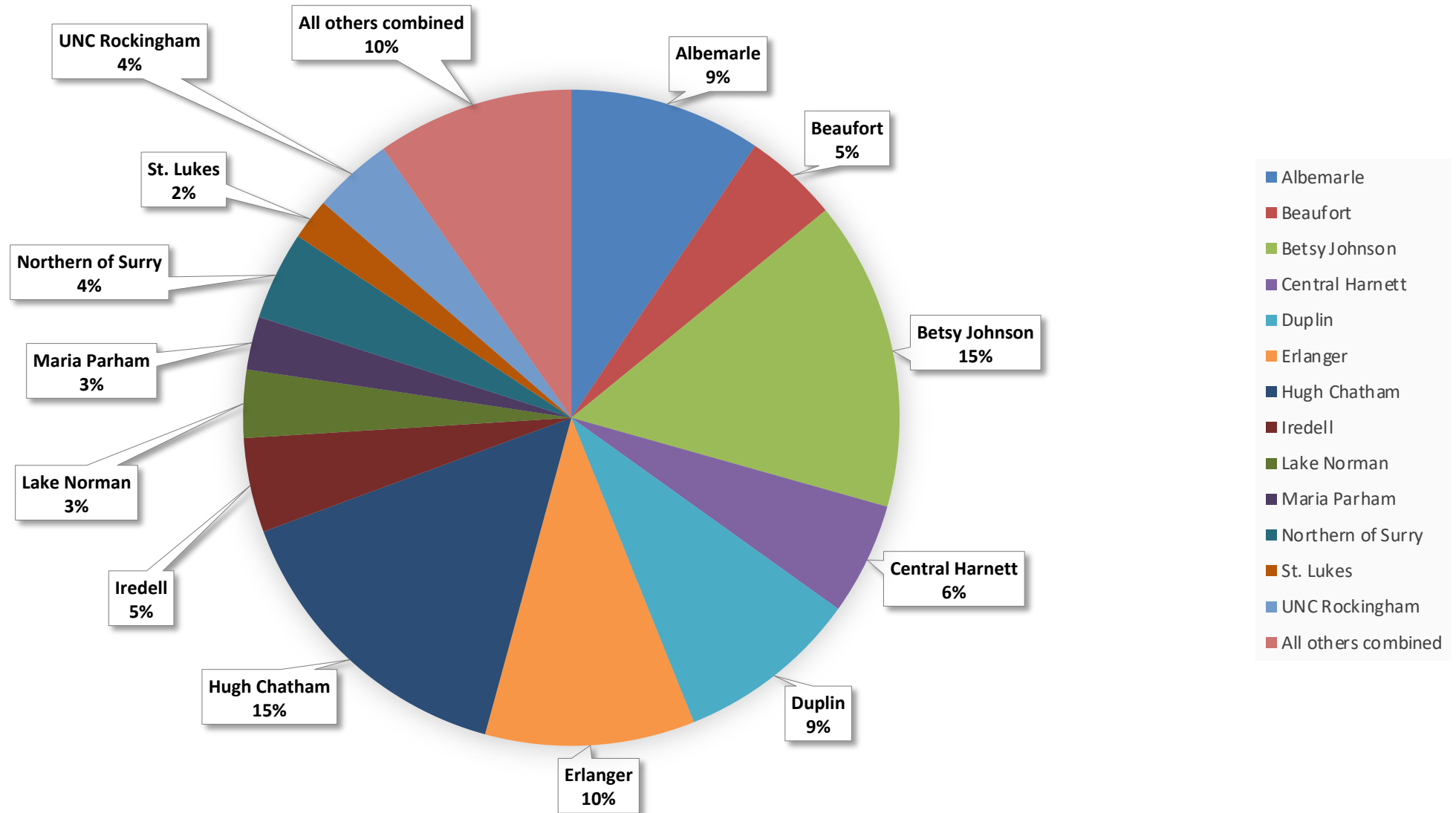


## Percent of use by hospital Jan-Mar 2021 (based on number of encounters)



# Percent of use for Model 1 hospitals Jan-Mar 2021

(based on number of encounters)

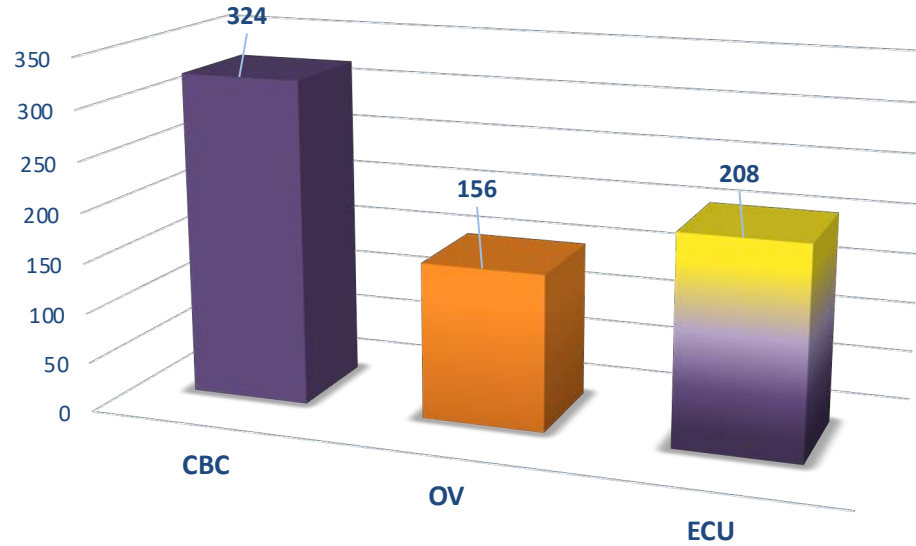


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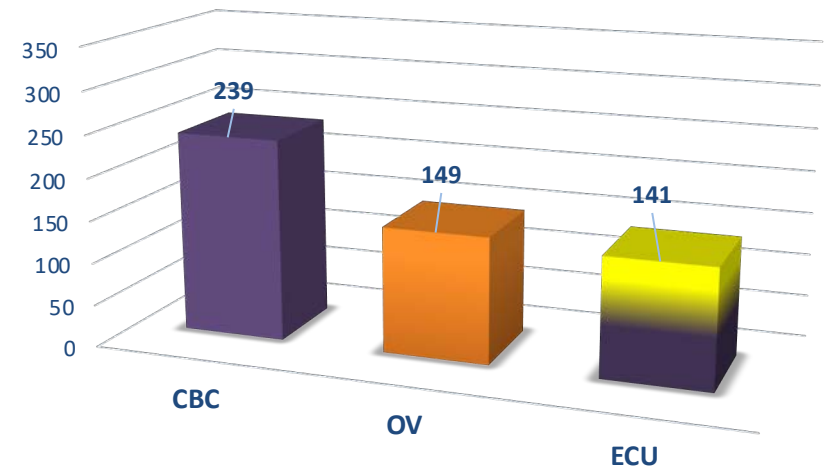


# Number of Patients by Provider (Model 1)

Jan-Mar 2021

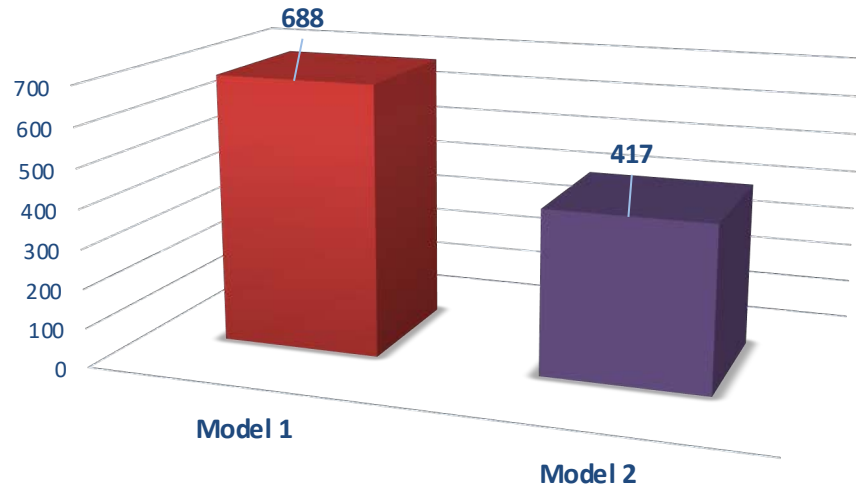


Oct-Dec 2020

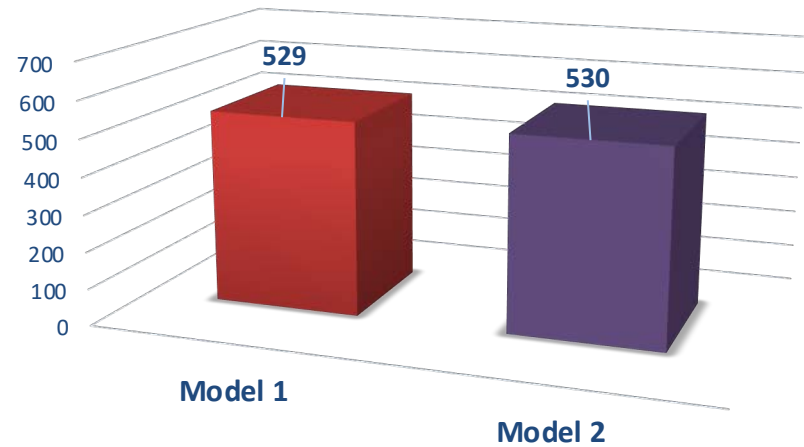


# Number of Patients by Model

Jan-Mar 2021

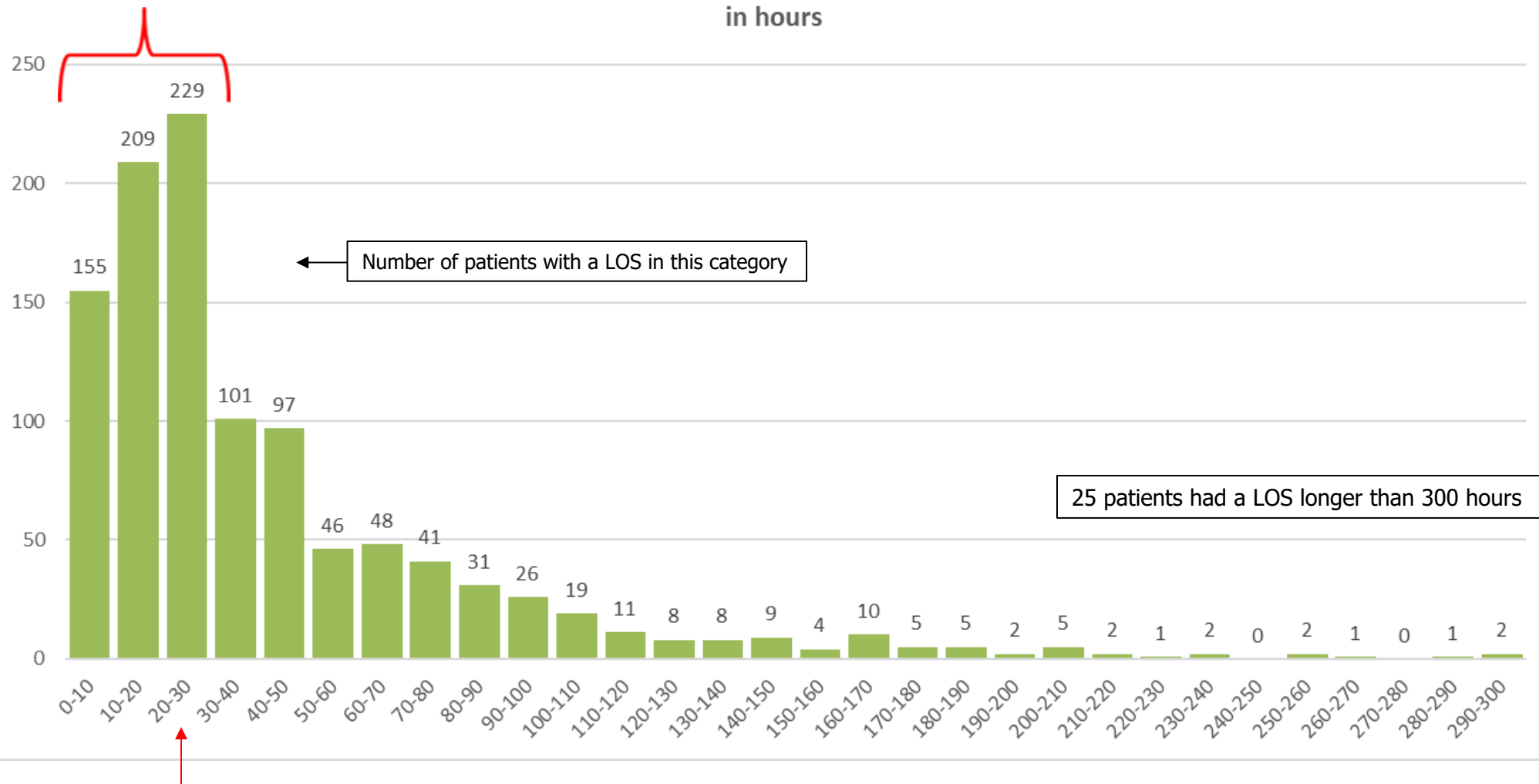


Oct-Dec 2020



# Number of NC-STeP Patients by LOS Category Jan - Mar 2021 in hours

54% percent of patients  
had a LOS of 30 hours or less



Median Length of Stay for Jan-Mar 2021 = 27.7 Hours

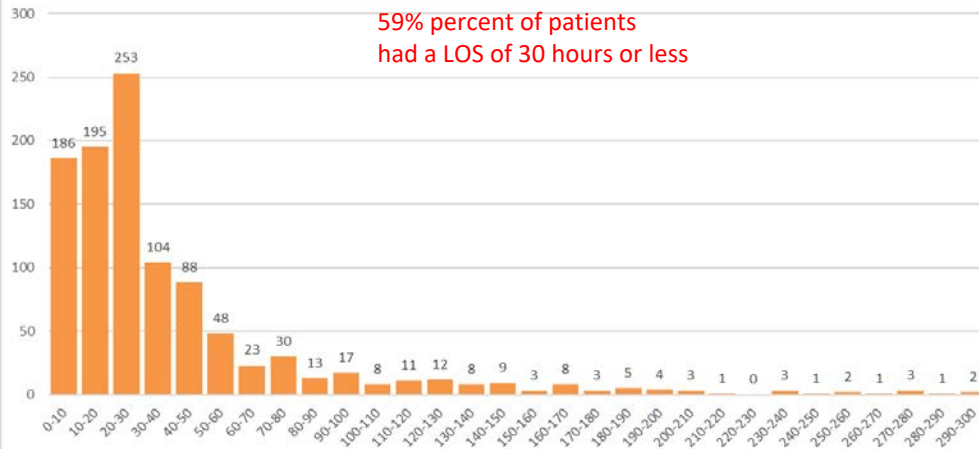


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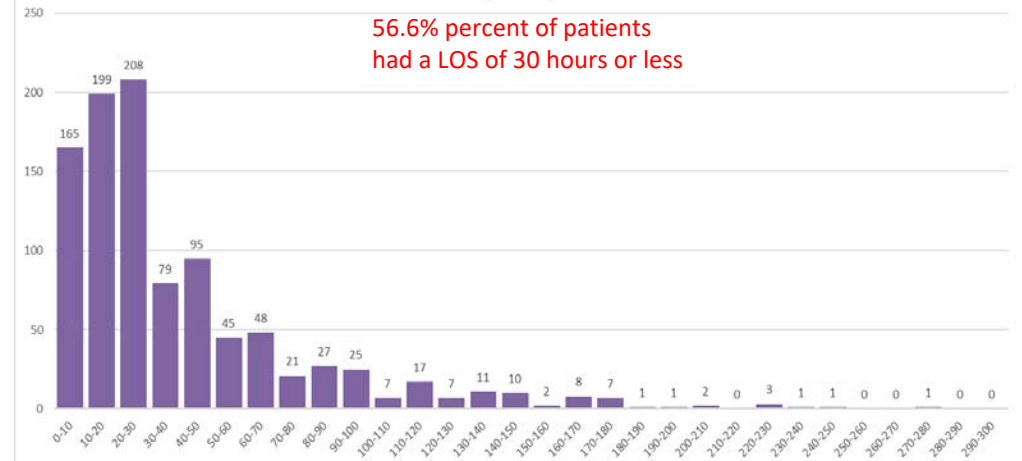
Number of NC-SteP Patients by LOS Category  
Oct - Dec 2020  
(in hours)

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



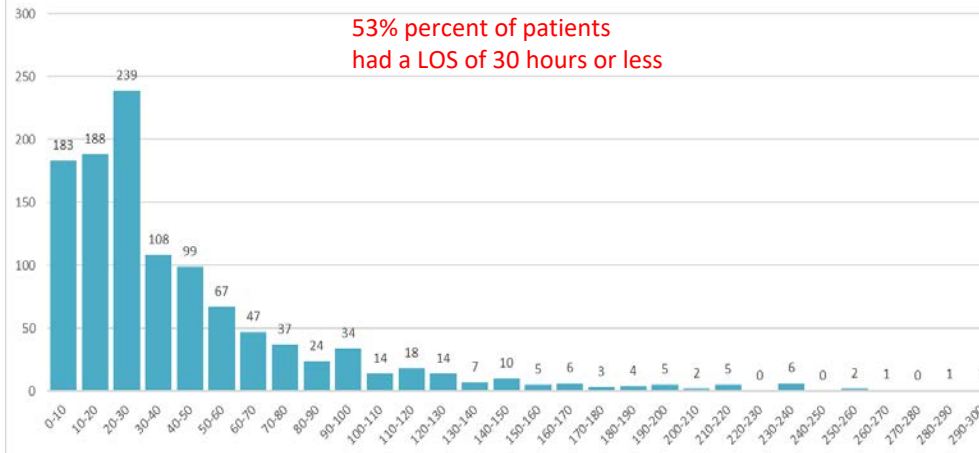
Number of NC-SteP Patients by LOS Category  
Jan-Mar 2020  
(in hours)

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



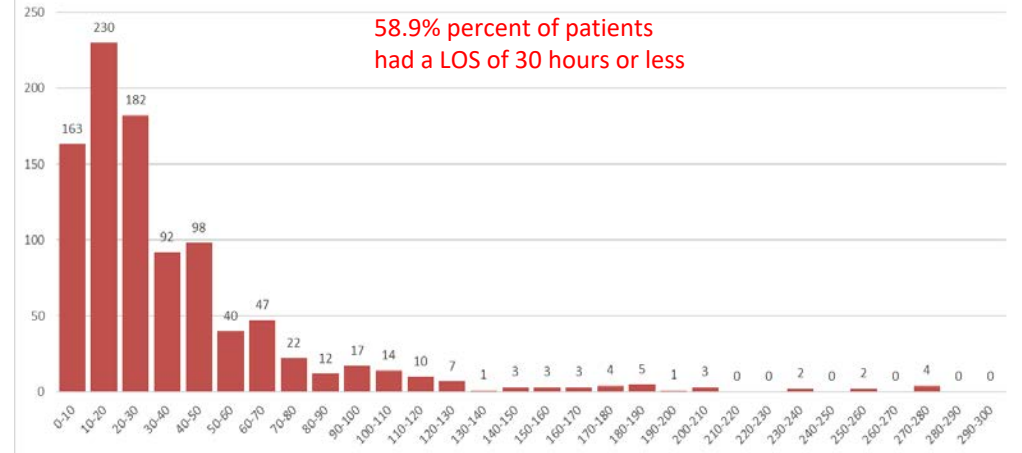
Number of NC-SteP Patients by LOS Category  
Jul - Sep 2020  
(in hours)

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)





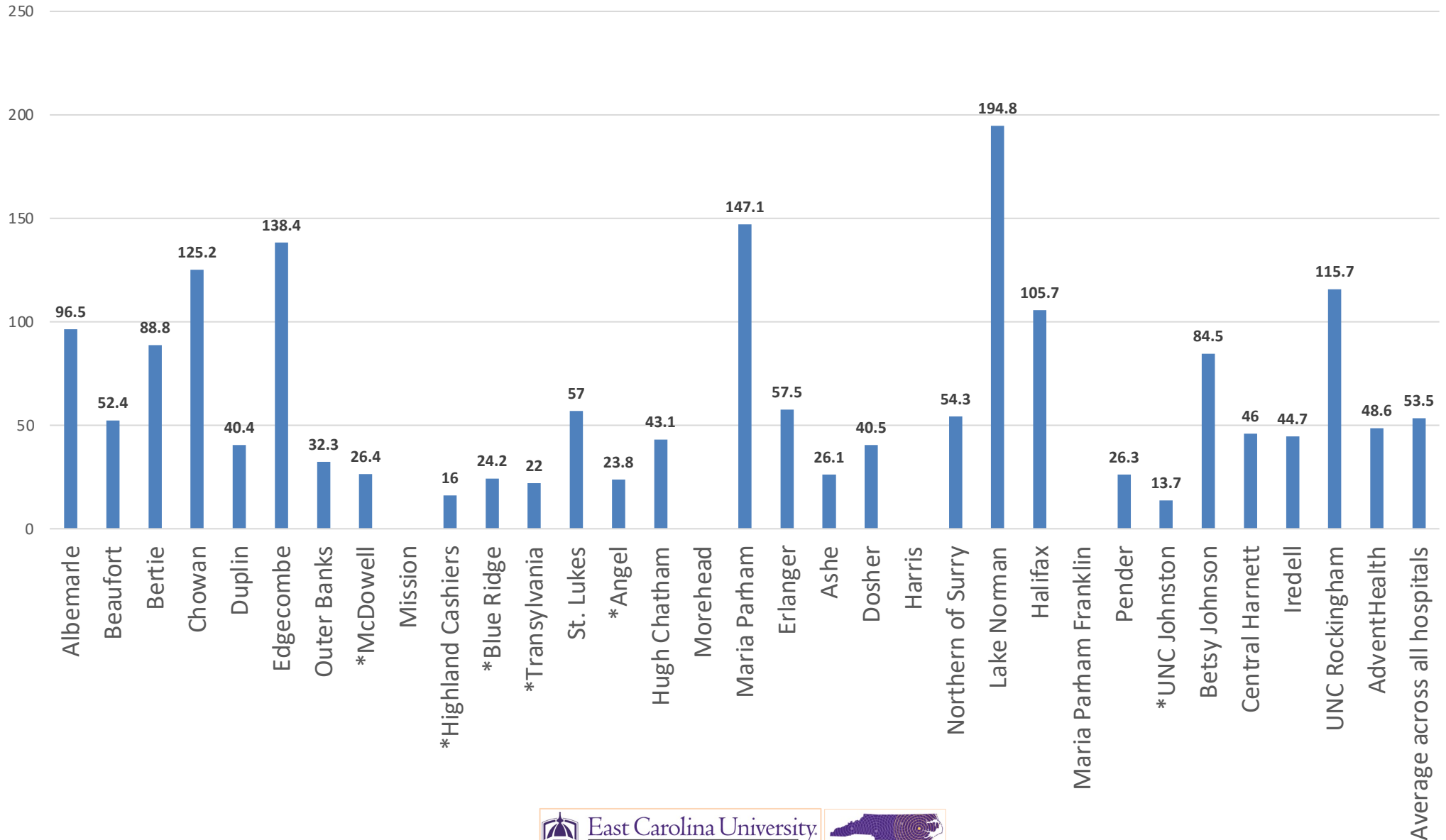
## Average Length of Stay by Quarter

(in hours)

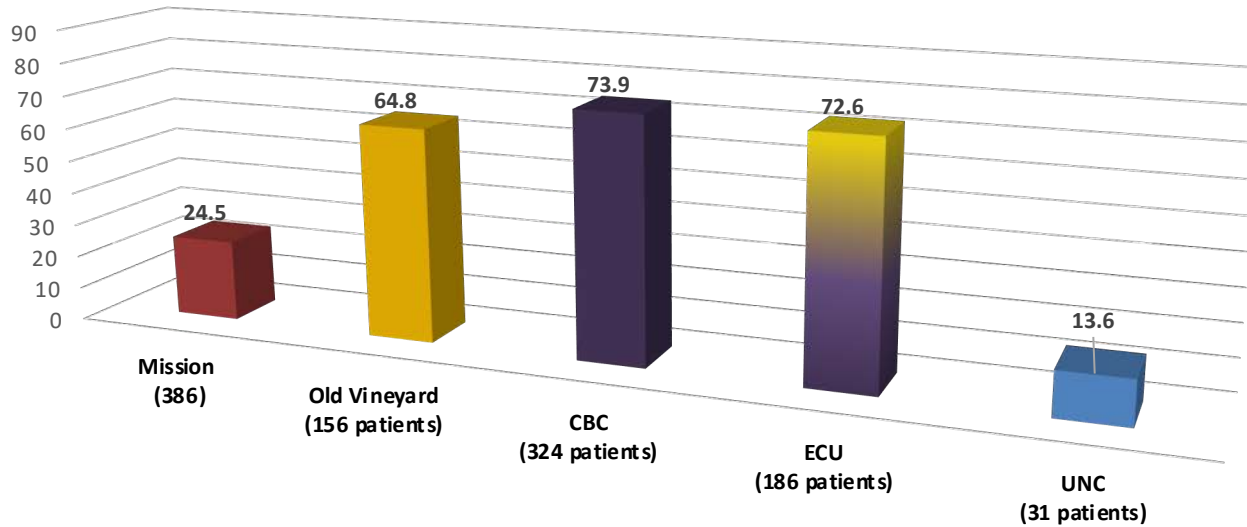


# Average Length of Stay for NC-STeP Patients by Hospital

January - March 2021  
(in hours)

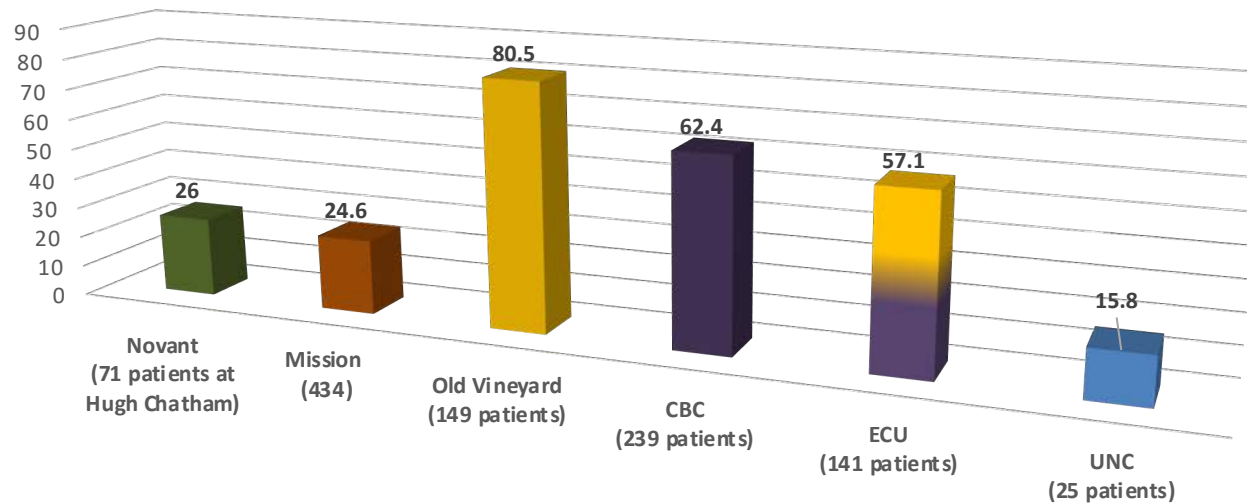


Jan-Mar 2021 (in hours)



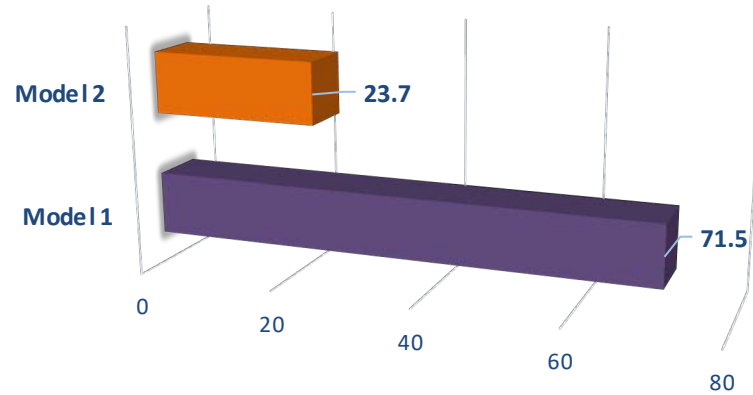
## Average Length of Stay by Provider

Oct-Dec 2020 (in hours)

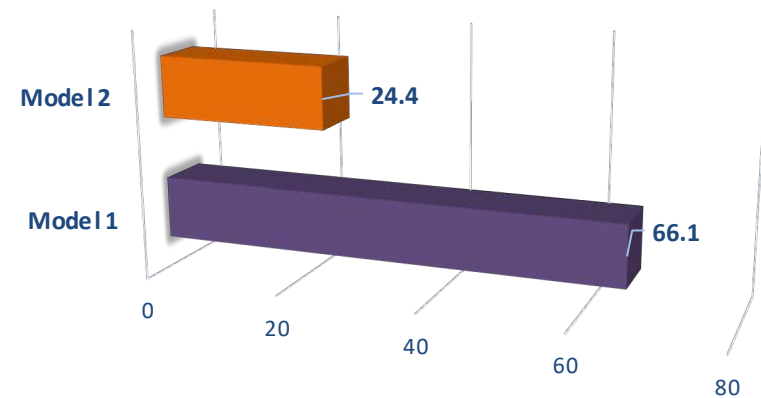


# Average LOS by Model

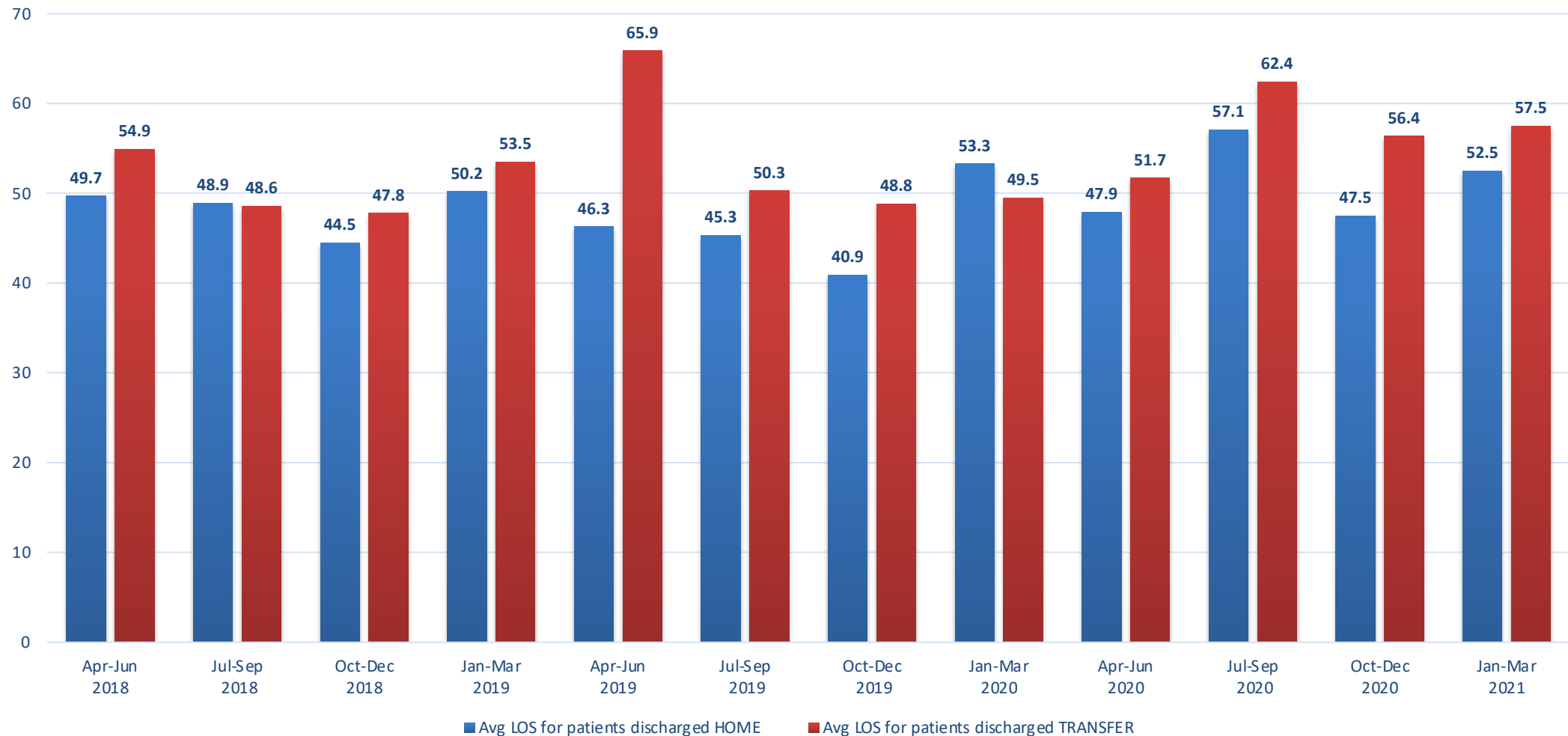
Jan-Mar 2021 (in hours)



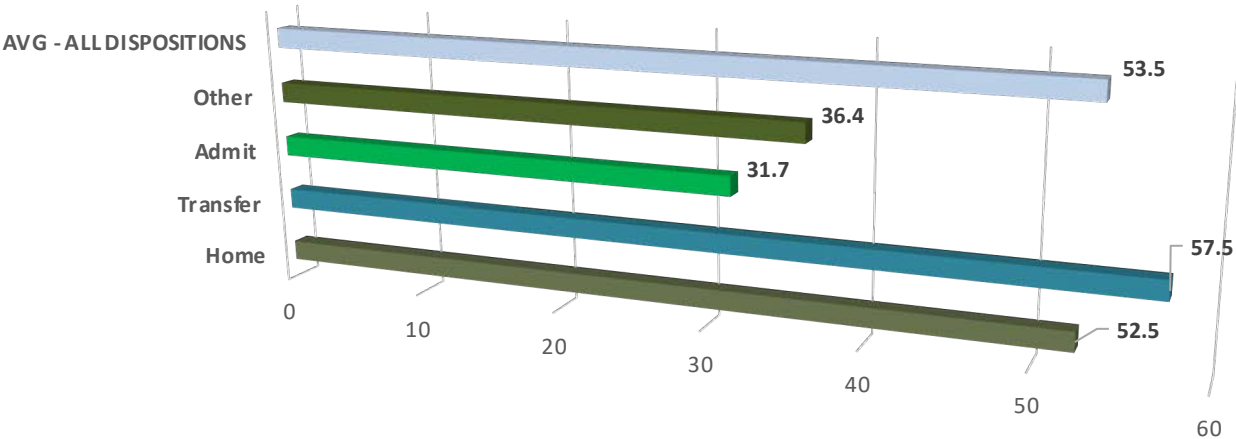
Oct-Dec 2020 (in hours)



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

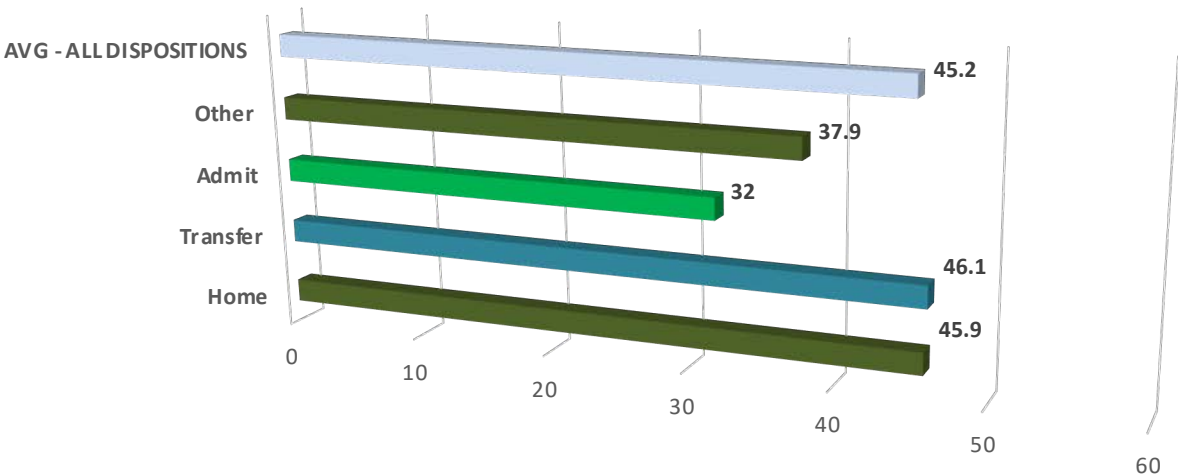


Jan-Mar 2021 (in hours)



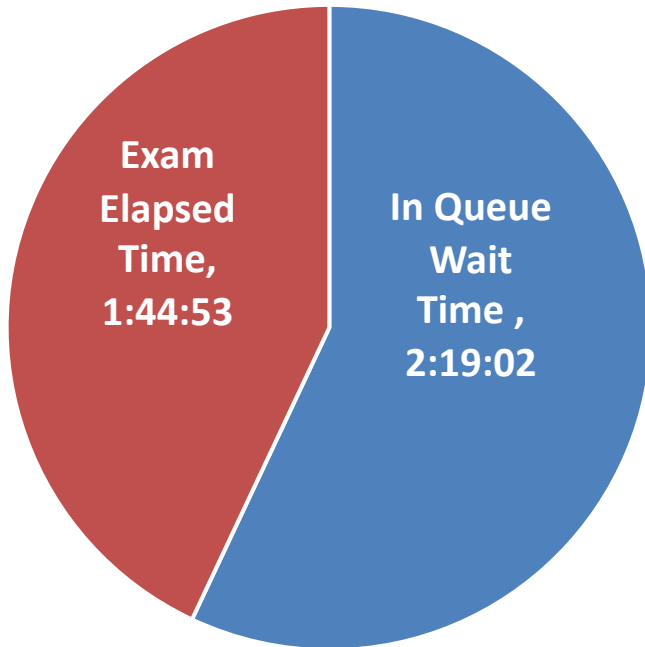
**Average LOS by  
Discharge Disposition**

Oct-Dec 2020 (in hours)

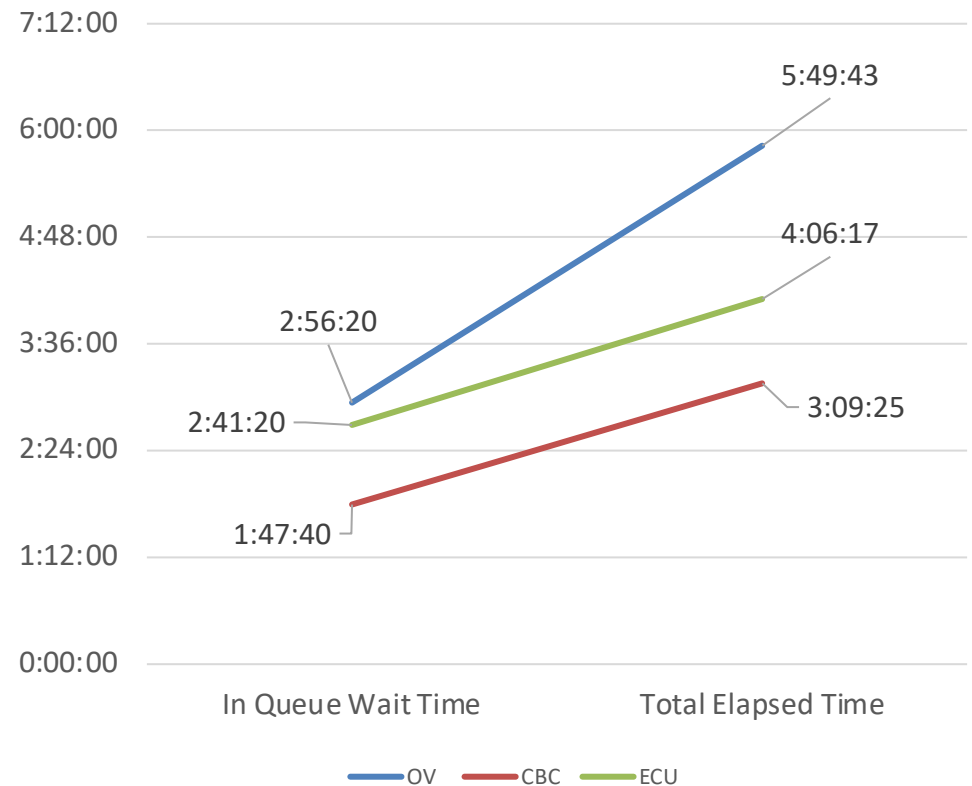


# Consult Elapsed Time: January – March 2021

CBC, OV & ECU  
Average Consult Elapsed Time  
In Queue to Exam Complete  
FY21-Q3 January - March  
(4 hrs. 4 min.)



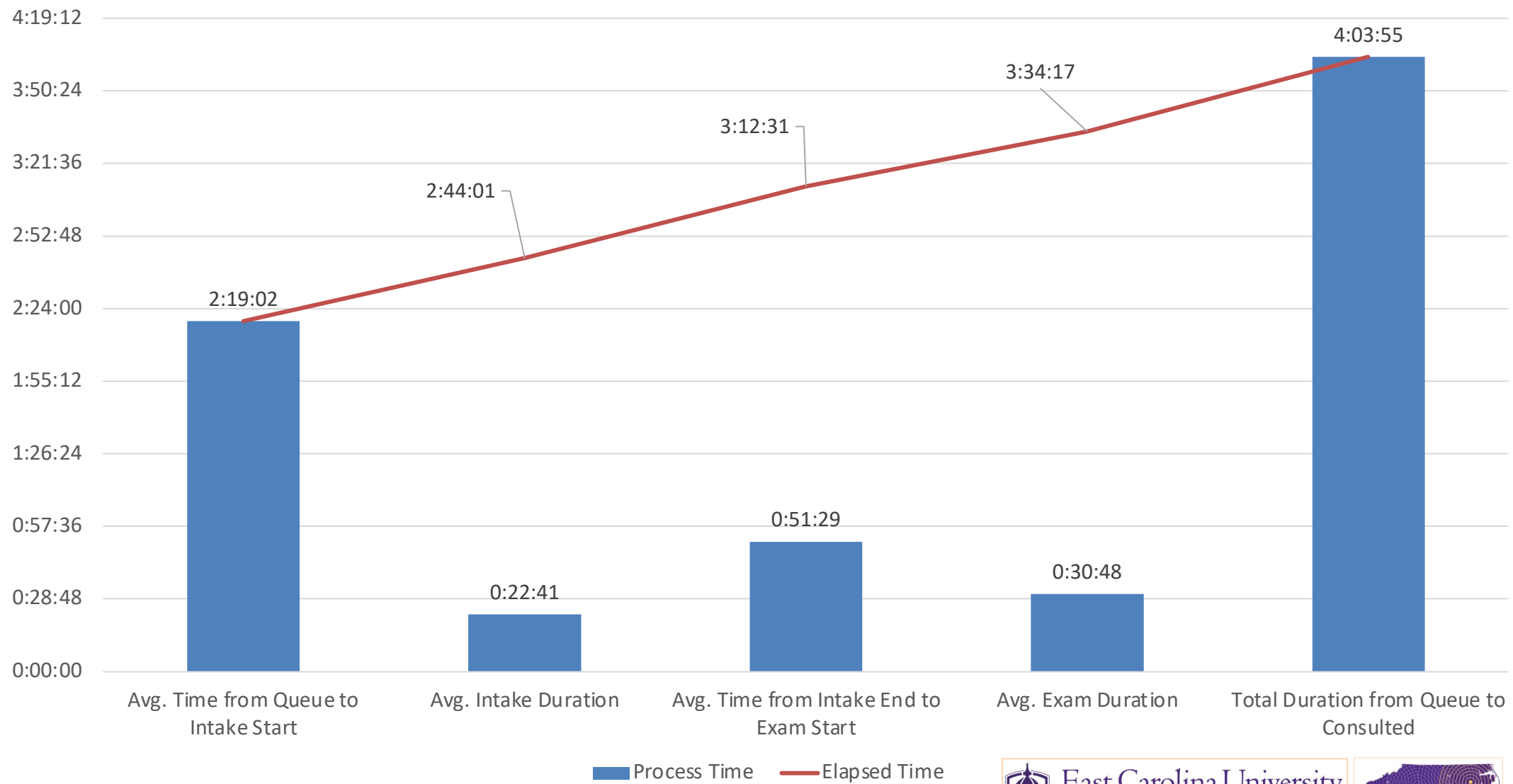
Comparison CBC, OV & ECU  
Average Consult Elapsed Time  
In Queue to Exam Complete  
FY21-Q3 January - March 2021  
(hh:mm:ss)





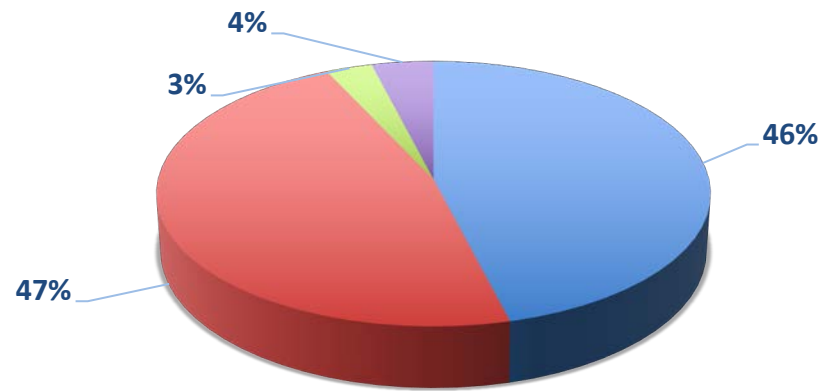
# Key Processes and Elapsed Times Averages

## CBC, OV, ECU: January – March 2021



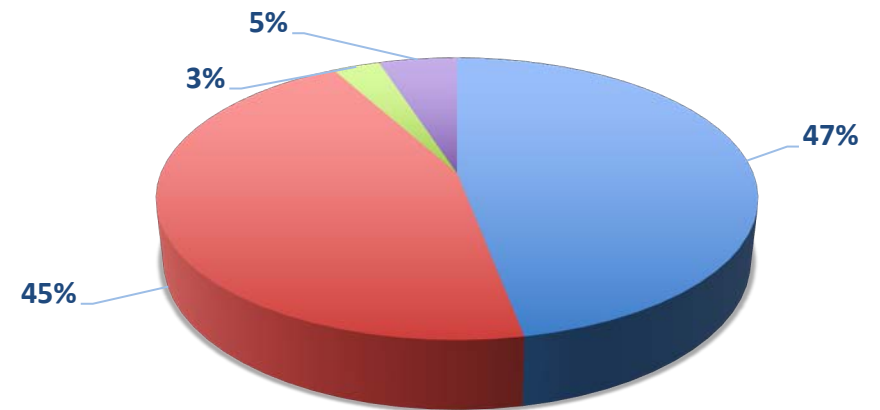
# Percent of Patients by Discharge Disposition

Jan-Mar 2021



■ Home ■ Transfer ■ Admit ■ Other

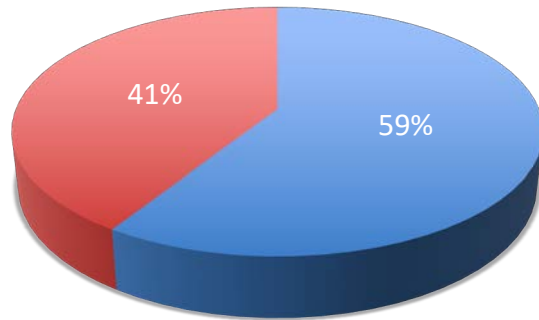
Oct-Dec 2020



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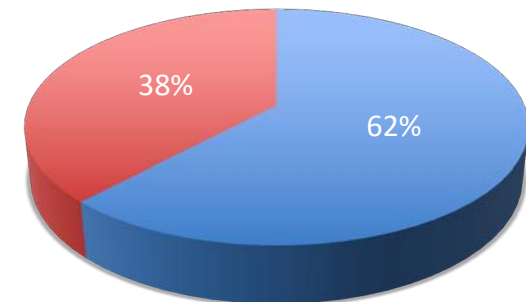
**Jan-Mar 2021**



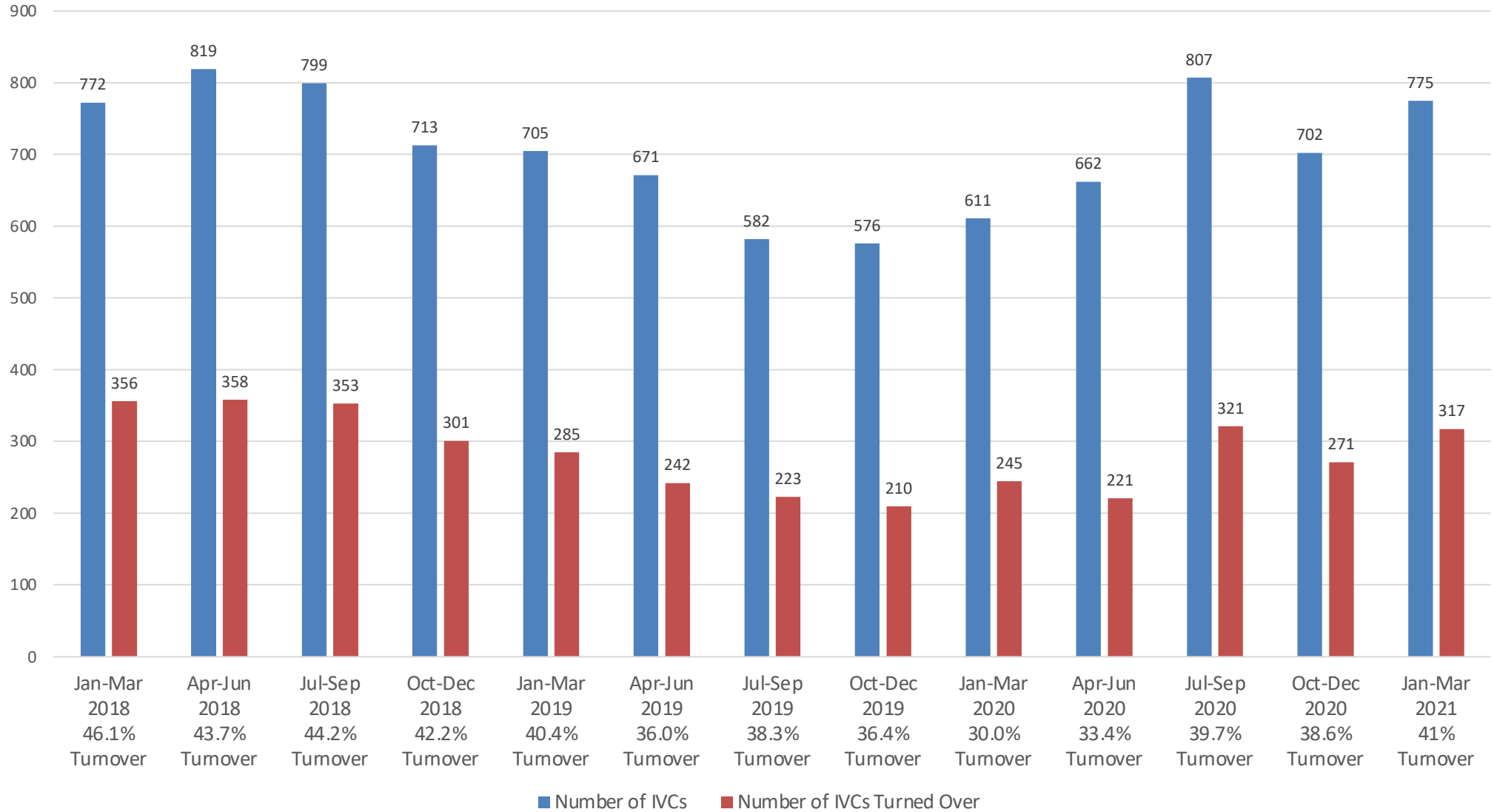
## IVCs – By Release Status

- IVCs - percent not released
- IVCs - percent released

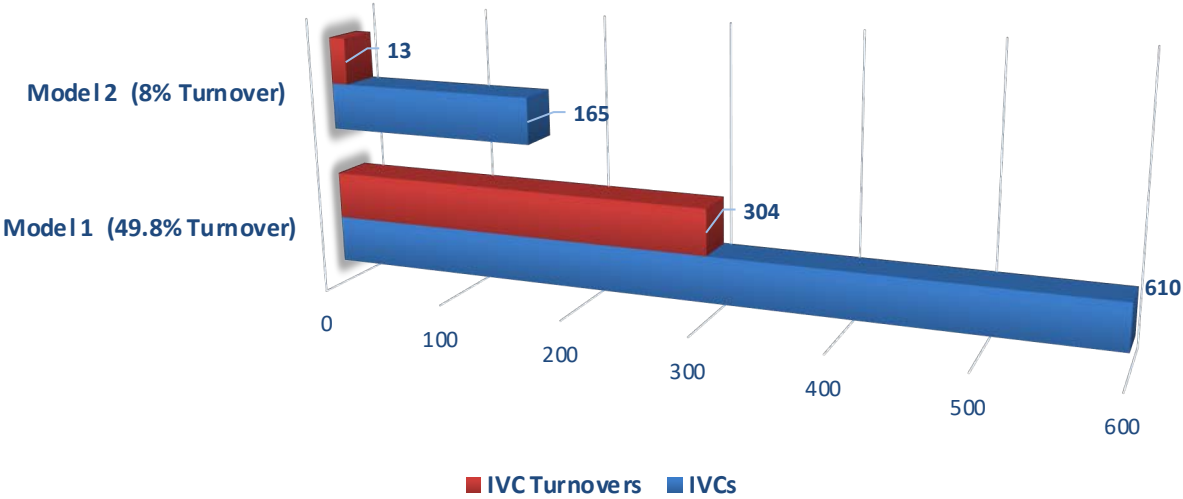
**Oct-Dec 2020**



# Number of IVCs and IVCs Turned Over by Quarter

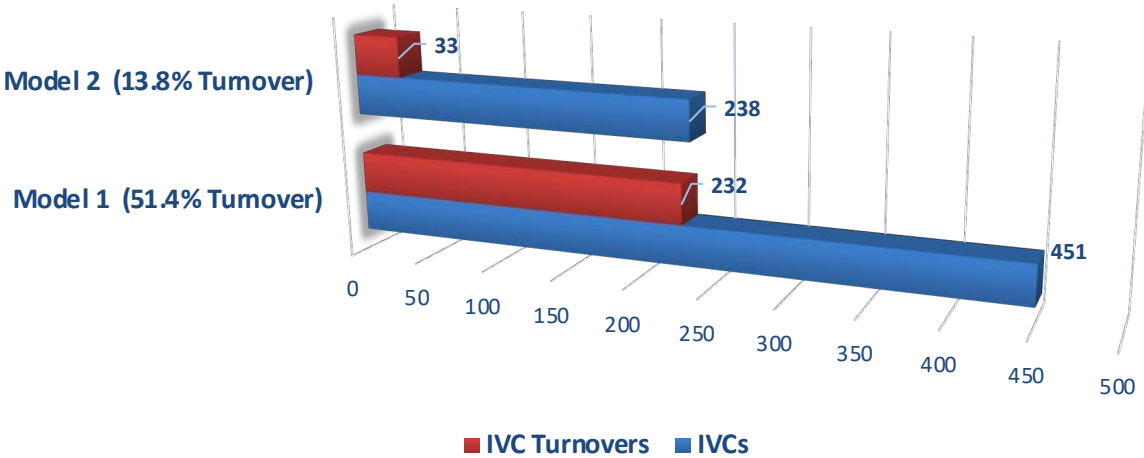


Jan-Mar 2021

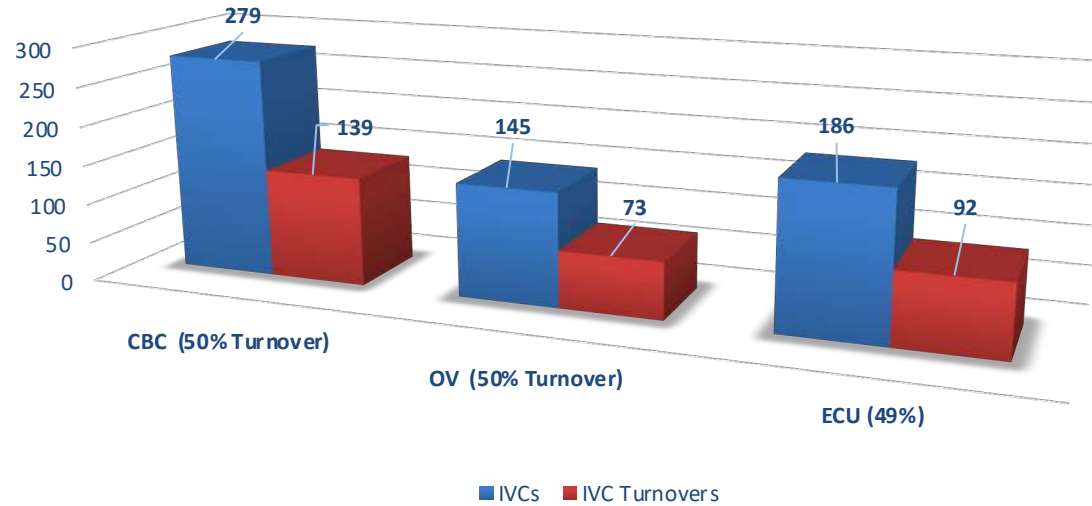


Number of IVCs and IVC Turnovers by Model

Oct-Dec 2020

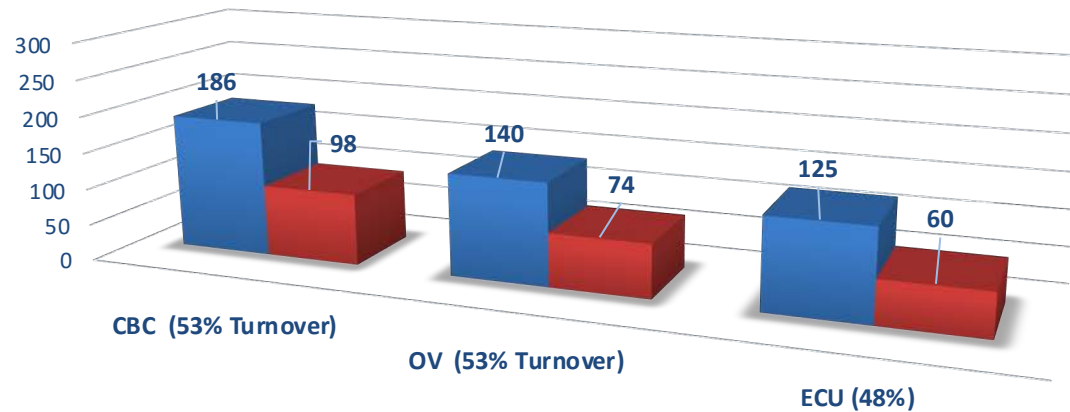


Jan-Mar 2021



## Number of IVCs and IVC Turnovers by Provider

Oct-Dec 2020



# Satisfaction Surveys

- Satisfaction surveys are done twice a year
- Most recent surveys conducted in March 2021 with 9 groups
- Invitations to participate were sent via electronic mail
- For groups that use the portal (Model 1 ED staff, psychiatrists, and intake specialists) there was a link to the survey on the portal log-in page
- Surveys were completed online via Qualtrics software





# Satisfaction Surveys Methodology

Satisfaction surveys were conducted in March 2021 with 9 groups

1. Model 1 Emergency Department Physicians
2. Model 1 Emergency Department Staff
3. Model 1 Provider Psychiatrists
4. Model 1 Psychiatric Intake Specialists
5. Model 1 Hospital CEOs
6. Model 2 Emergency Department Physicians
7. Model 2 Emergency Department Staff
8. Model 2 Provider Psychiatrists
9. Model 2 Hospital CEOs

Each group was given a different survey (with different questions) based on their role in the program.

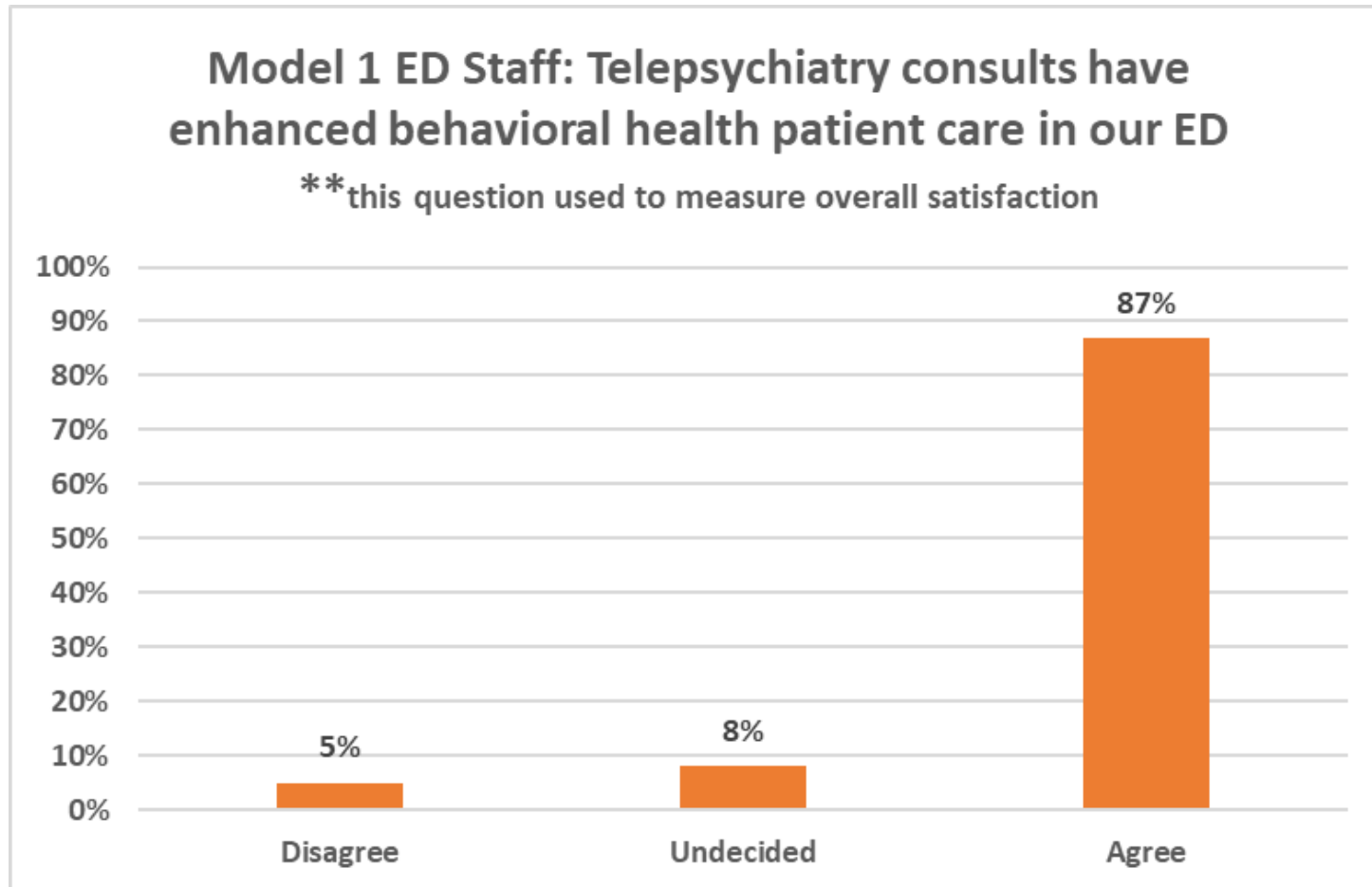
# Satisfaction Surveys Methodology

**The following number of individuals from each group responded (N= 57)**

- Model 1 Emergency Department Physicians (2 responded)
- Model 1 Emergency Department Staff (38 responded)
- Model 1 Provider Psychiatrists (6 responded)
- Model 1 Psychiatric Intake Specialists (3 responded)
- Model 1 Hospital CEOs (4 responded)
- Model 2 Emergency Department Physicians (0 responded)
- Model 2 Emergency Department Staff (2 responded)
- Model 2 Provider Psychiatrists (1 – results not shown due to small number)
- Model 2 Hospital CEOs (1 responded – results not shown due to small number)

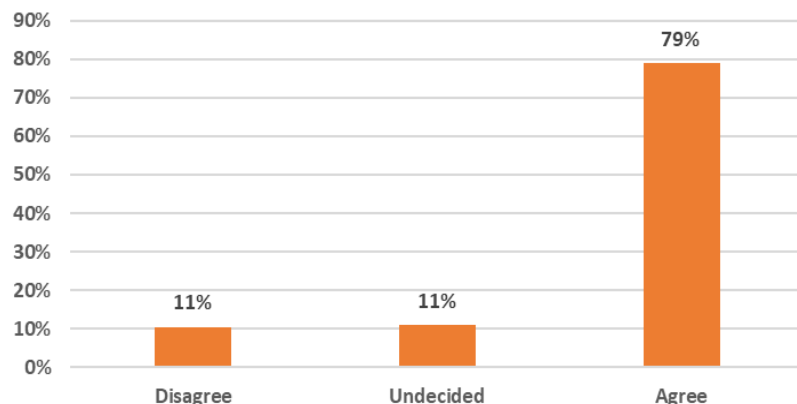
**For each group, one summary question is selected for an overall “satisfaction” rate.  
The overall satisfaction rate is 89%.**

# Model 1 Hospital ED Staff Results (n=38)

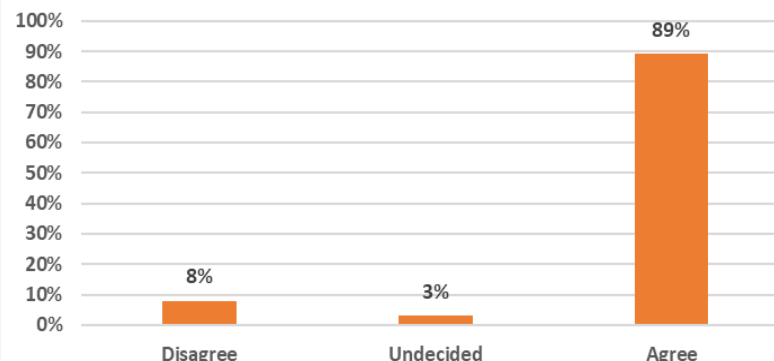


# Model 1 Hospital ED Staff Results (n=38)

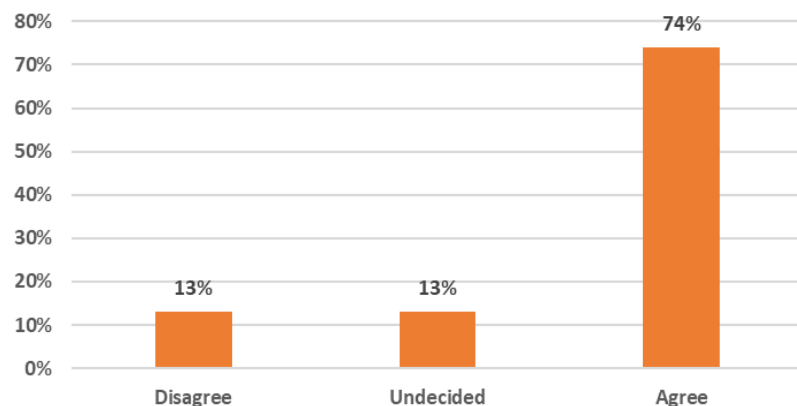
**Model 1 ED Staff: The telepsychiatry equipment is easy to use**



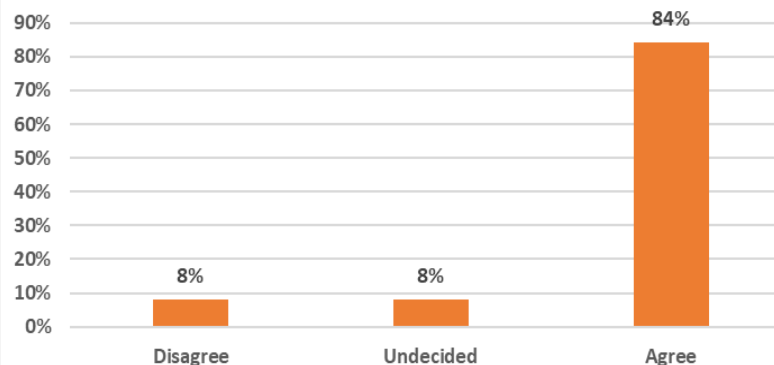
**Model 1 ED Staff: I received adequate training/instruction preparing me to use the telepsychiatry cart**



**Model 1 ED Staff: The telepsychiatry equipment is reliable and seldom goes down.**

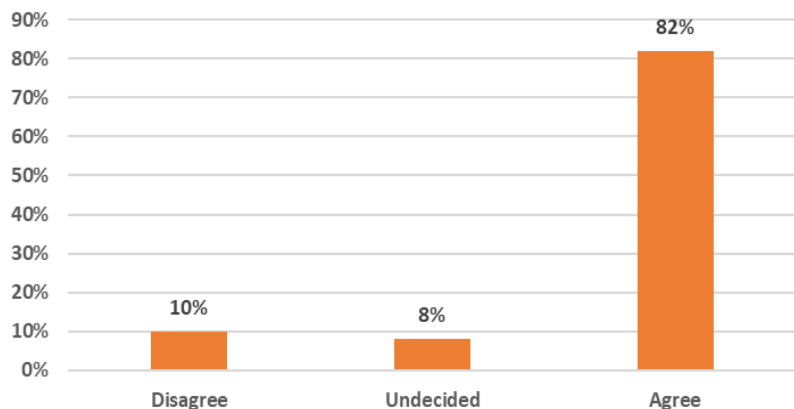


**Model 1 ED Staff: Patients appear comfortable using the telepsychiatry equipment to talk with the provider**

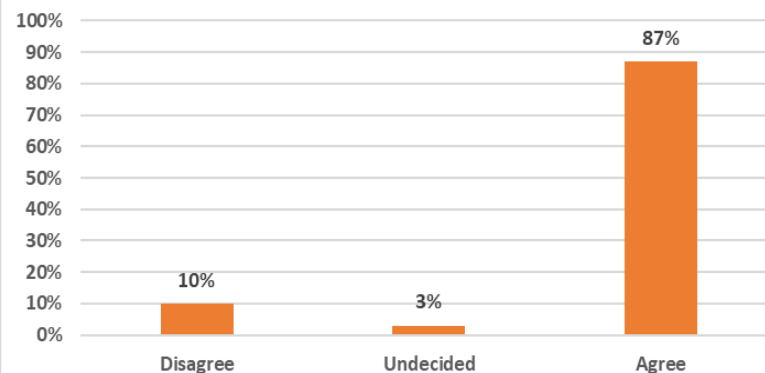


# Model 1 Hospital ED Staff Results (n=38)

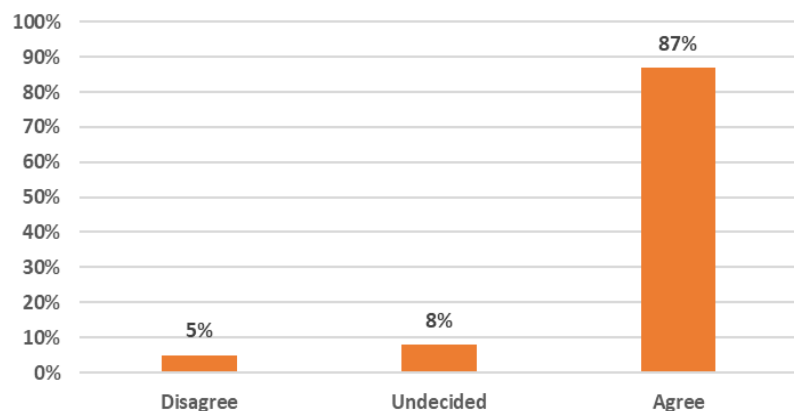
**Model 1 ED Staff: The NC-STeP portal is easy to use.**



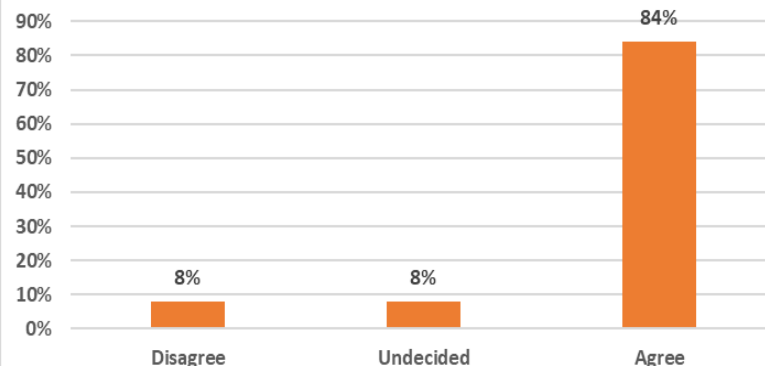
**Model 1 ED Staff: The training and resources provided adequately prepared me to use the NC-STeP portal.**



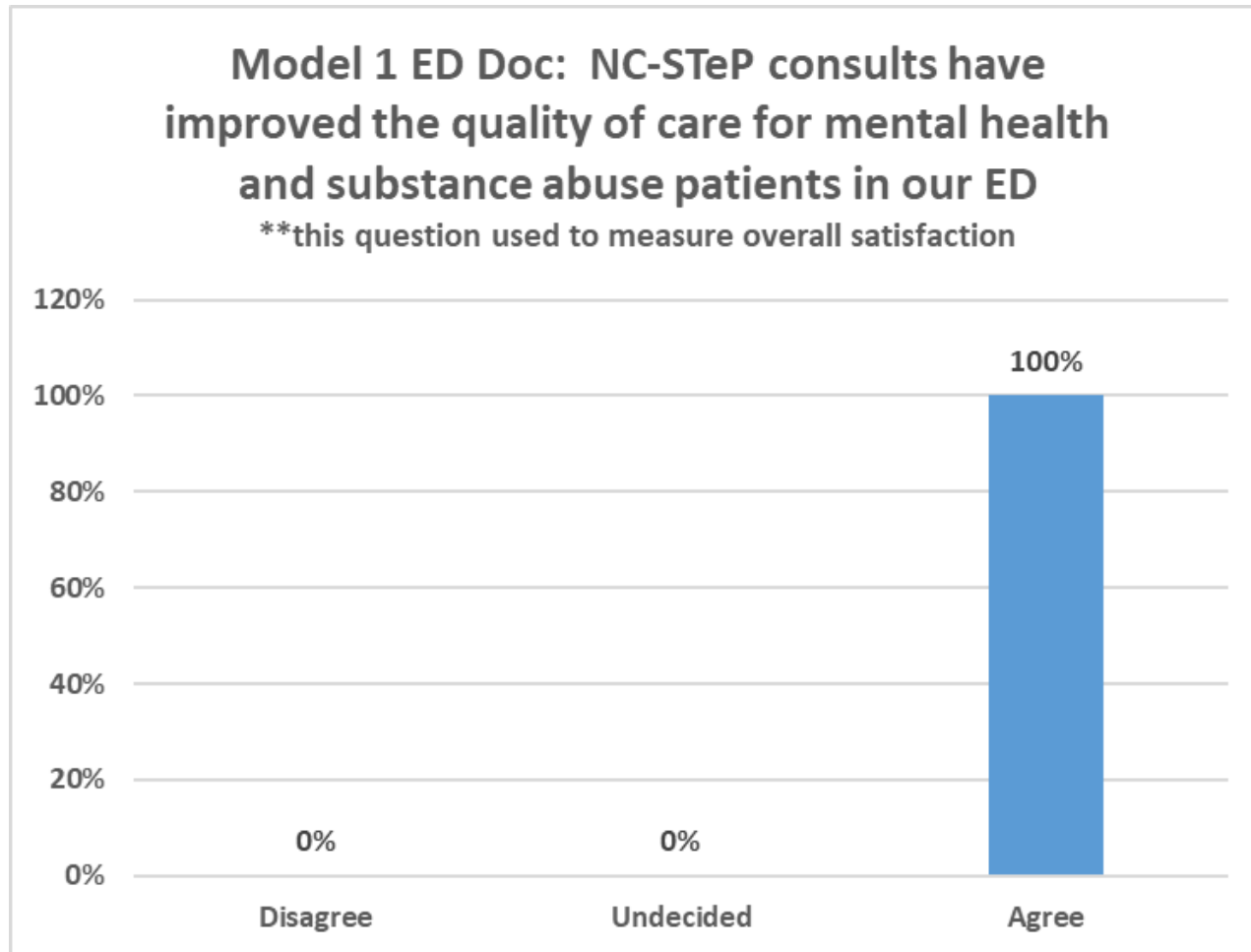
**Model 1 ED Staff: The NC-STeP portal is reliable and unscheduled downtime is rare.**



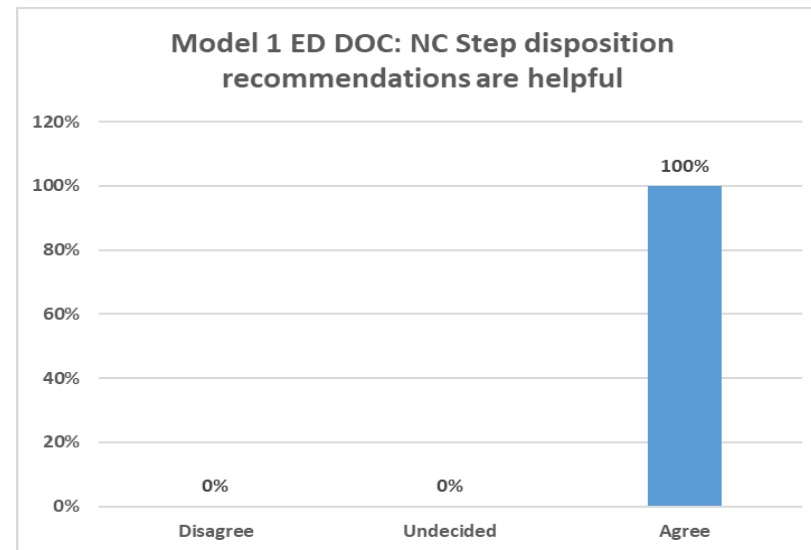
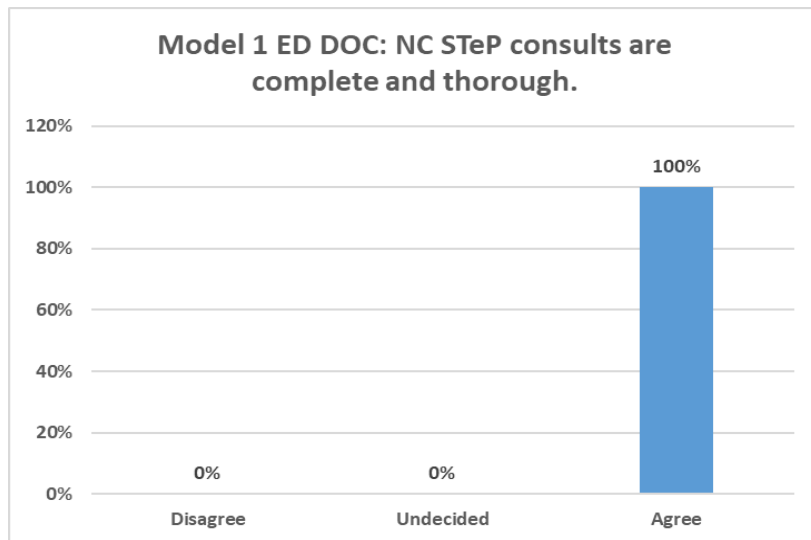
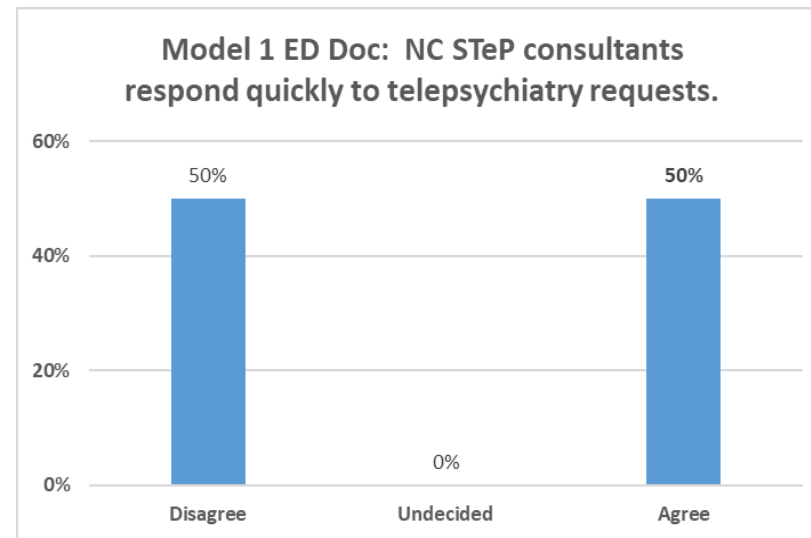
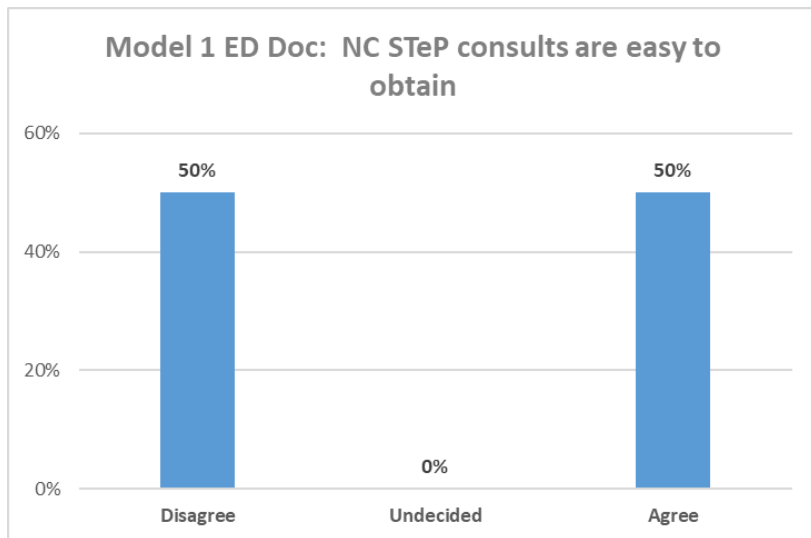
**Model 1 ED Staff: The level of technical expertise provided by NC-STeP support is adequate.**



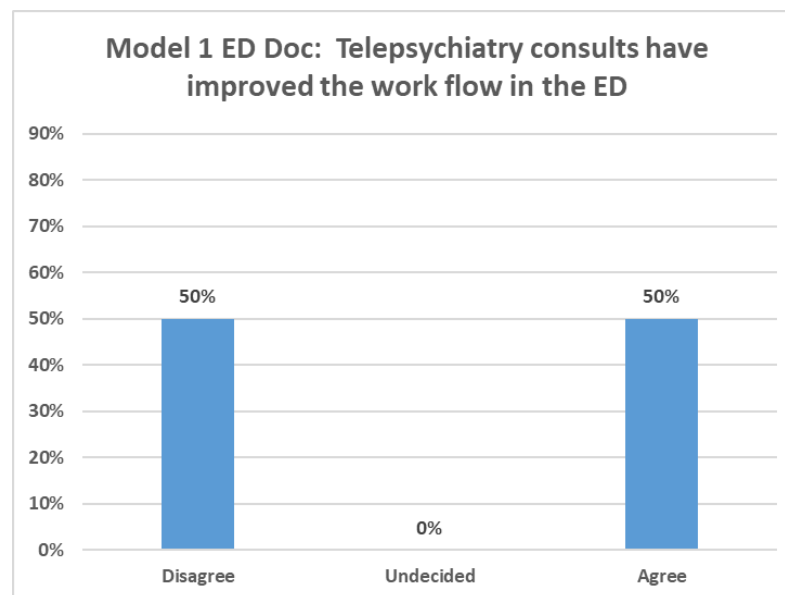
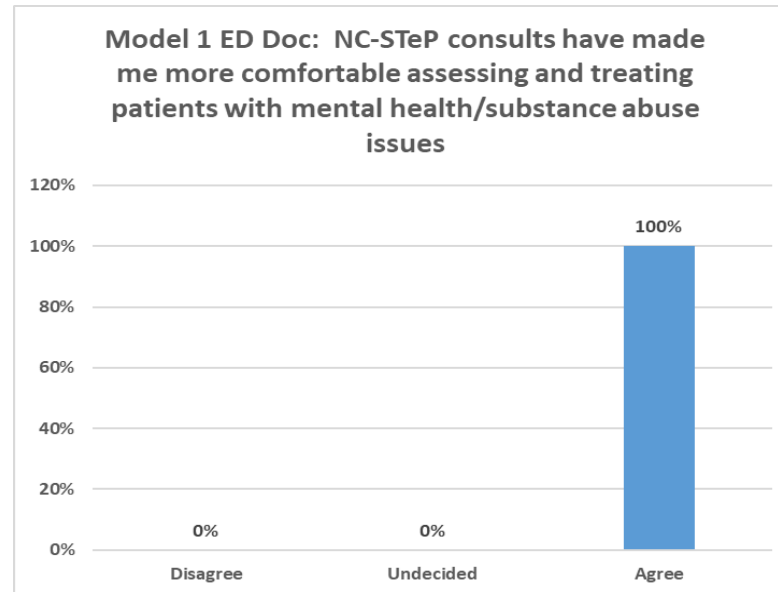
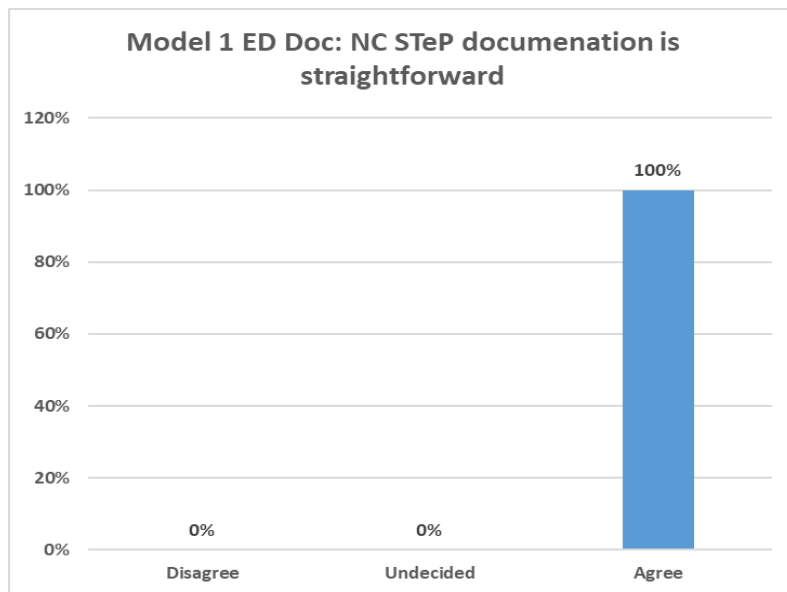
# Model 1 Hospital ED Physicians Results (n= 2)



# Model 1 Hospital ED Physicians Results (n= 2)

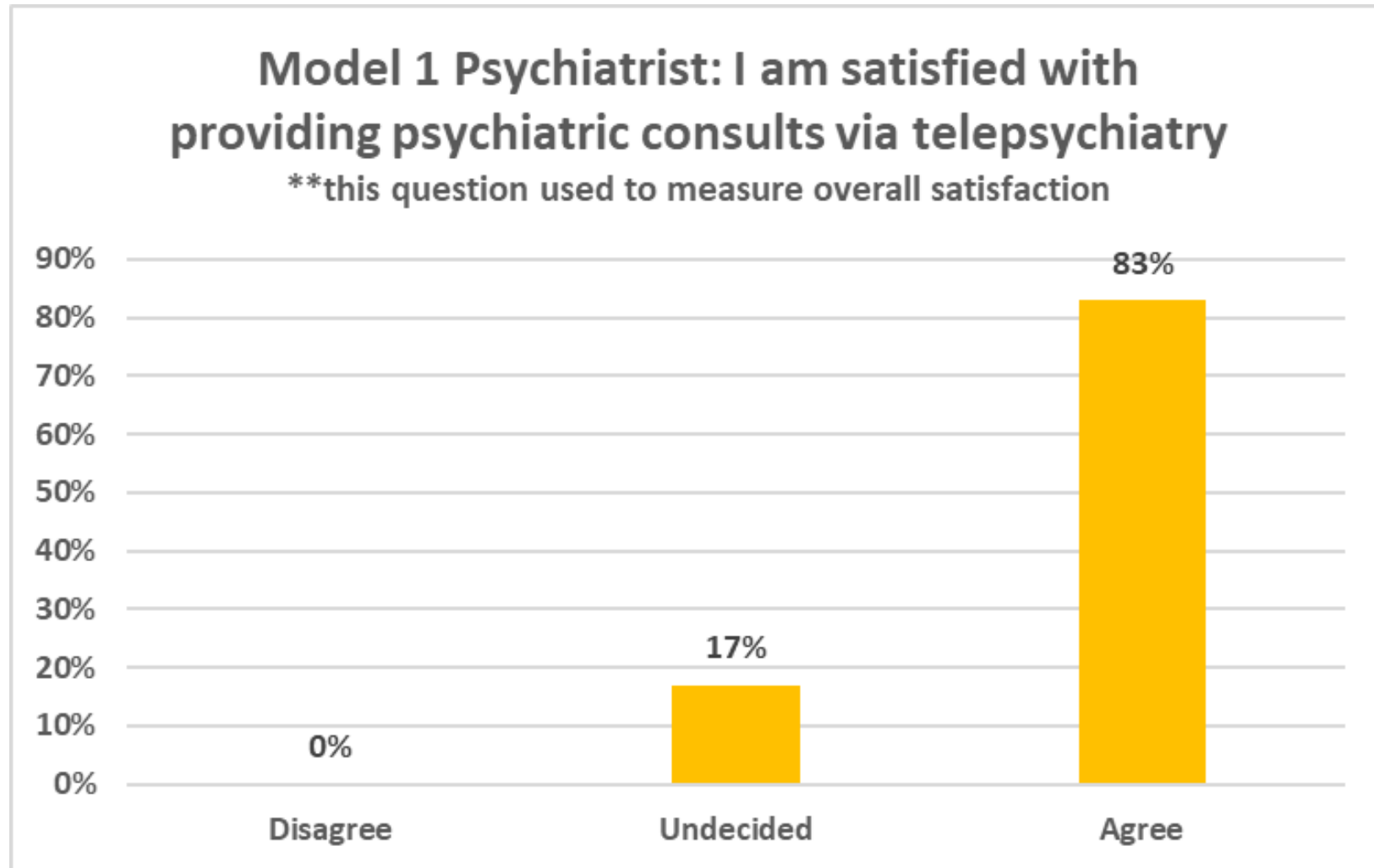


# Model 1 Hospital ED Physicians Results (n= 2)

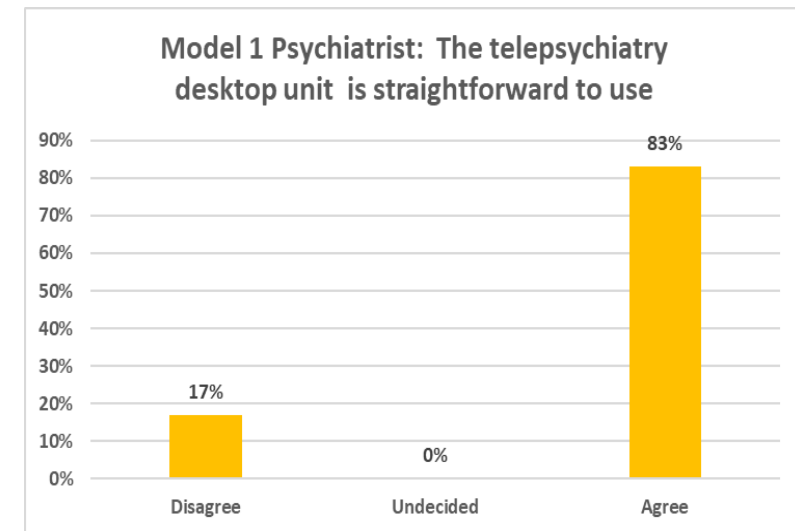
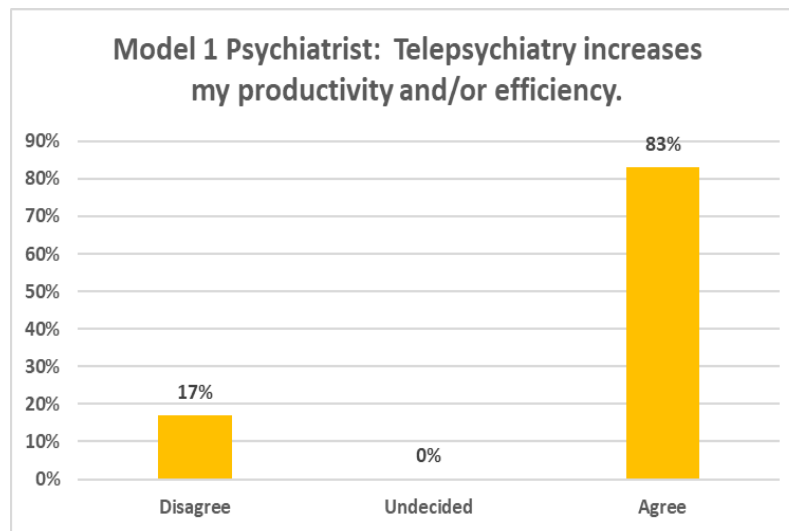
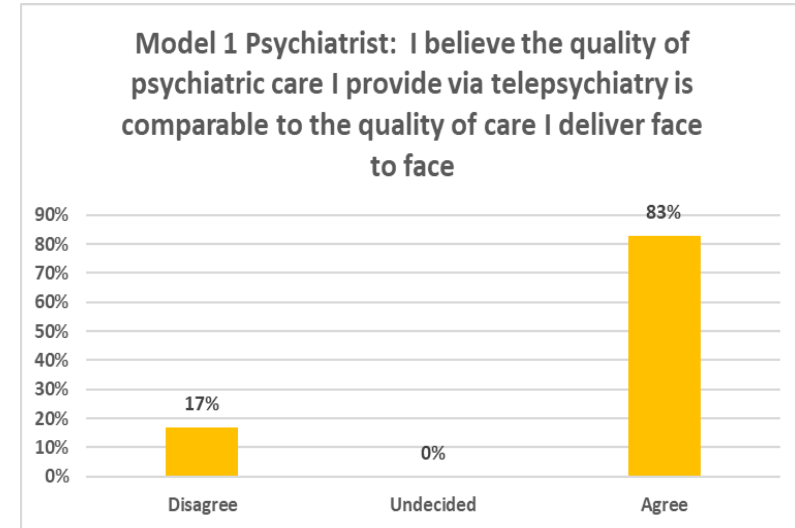
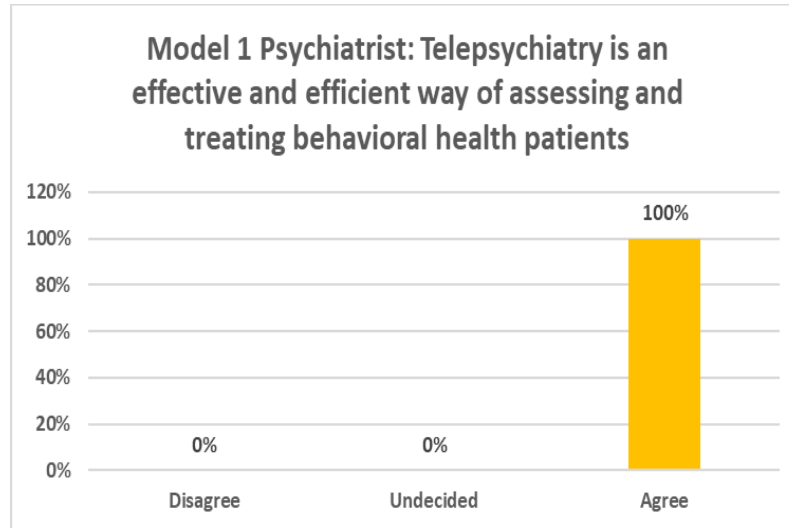




# Model 1 Provider Psychiatrist Results (n= 6)

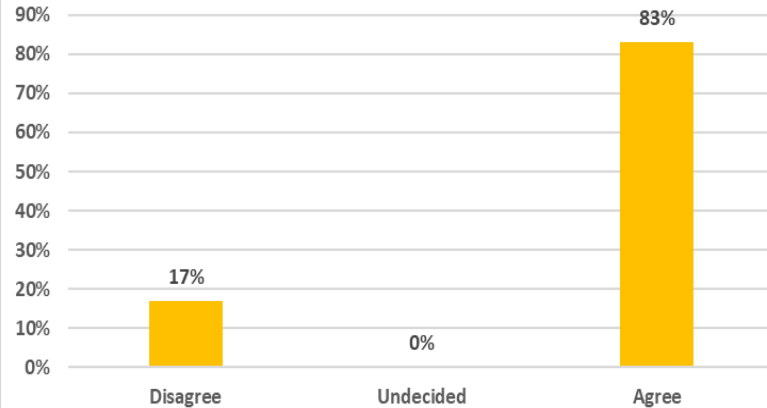


# Model 1 Provider Psychiatrist Results (n= 6)

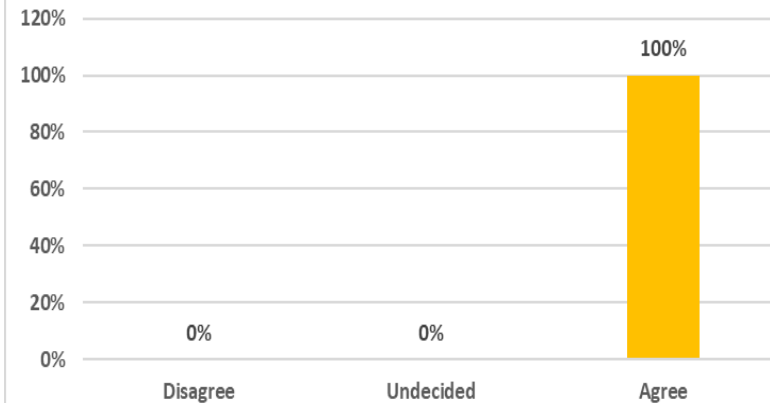


# Model 1 Provider Psychiatrist Results (n= 6)

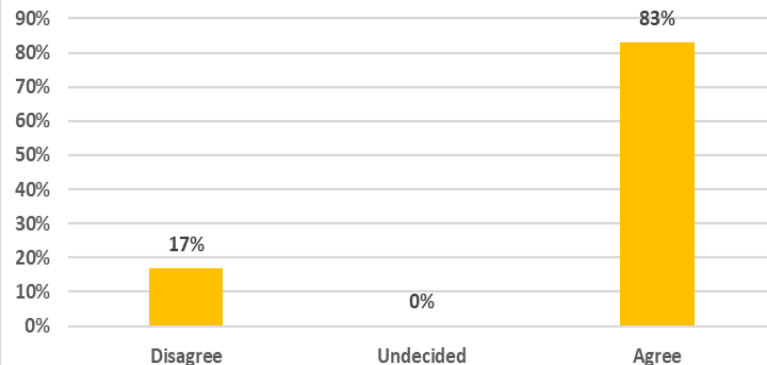
**Model 1 Psychiatrist: The telepsychiatry desktop unit is reliable and seldom down**



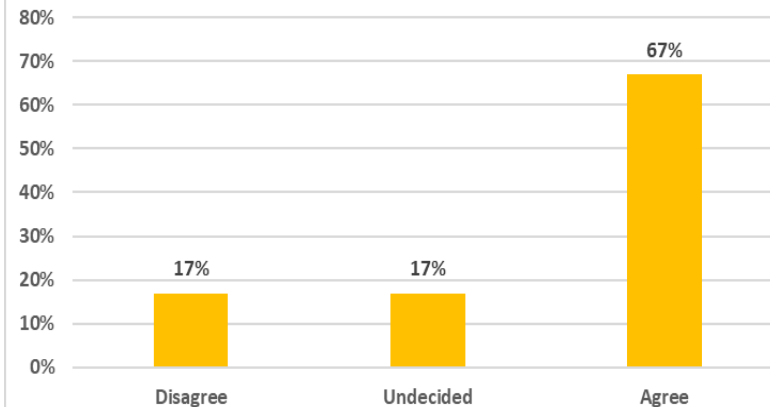
**Model 1 Psychiatrist: The NC-STeP portal is straightforward to use.**



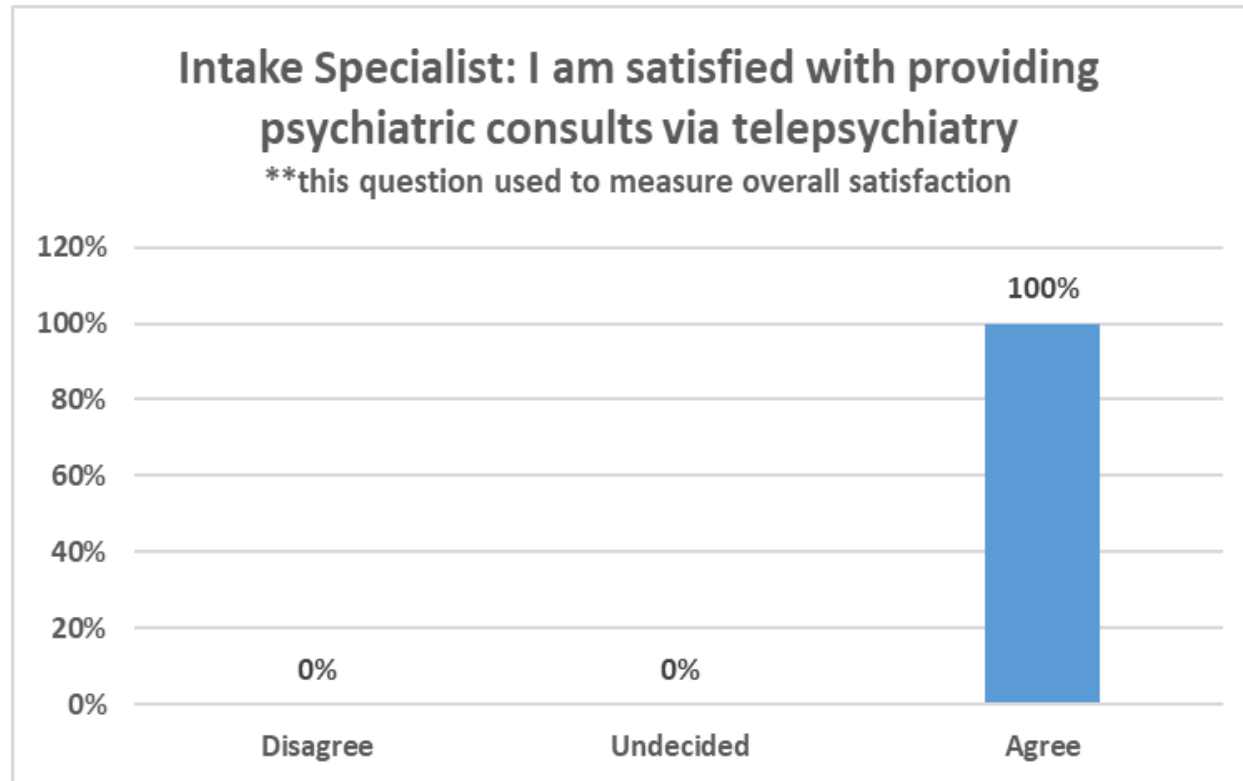
**Model 1 Psychiatrist: I received adequate training and resources preparing me to use the NC-STeP portal**



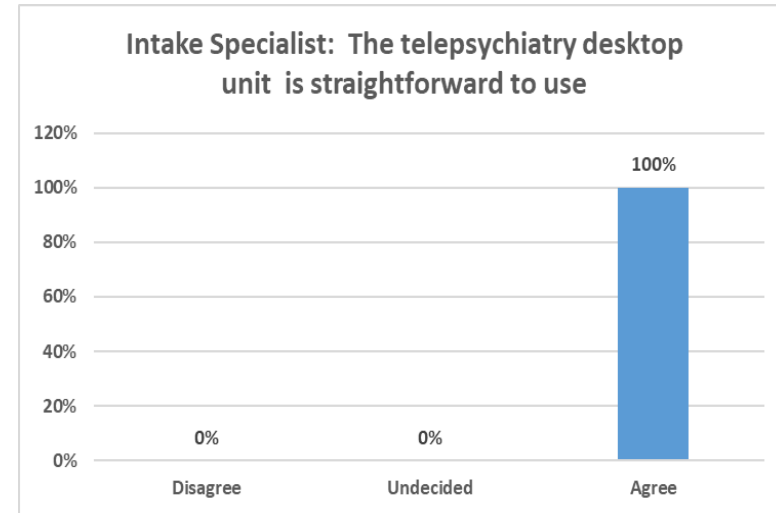
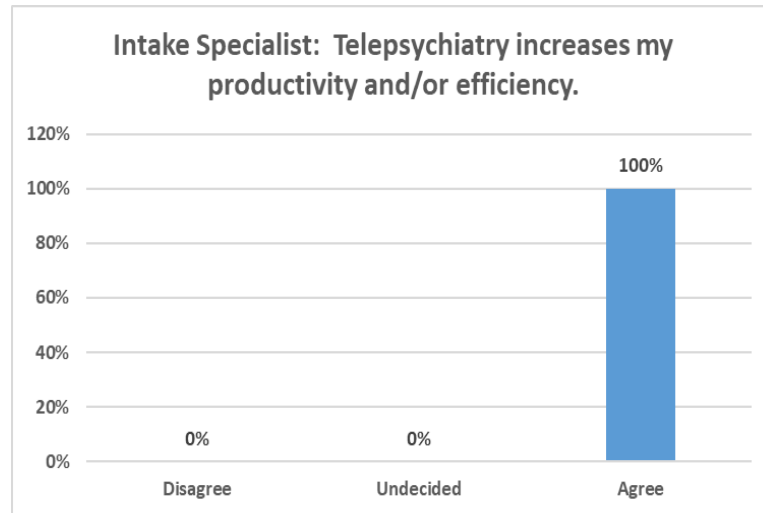
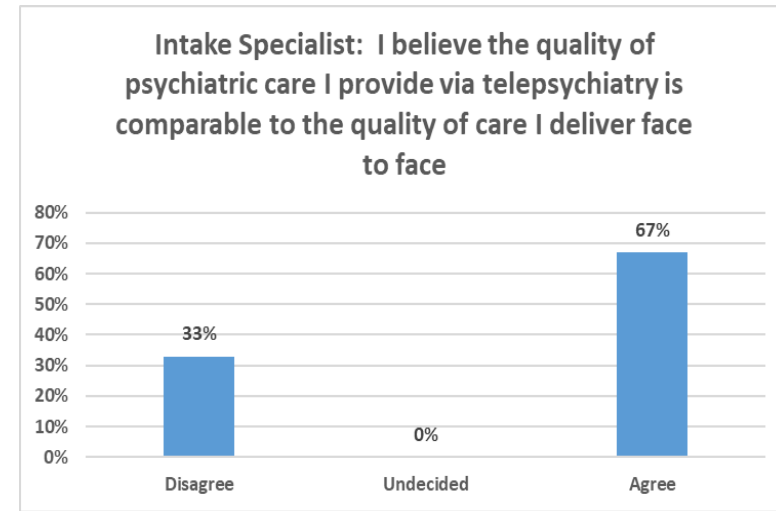
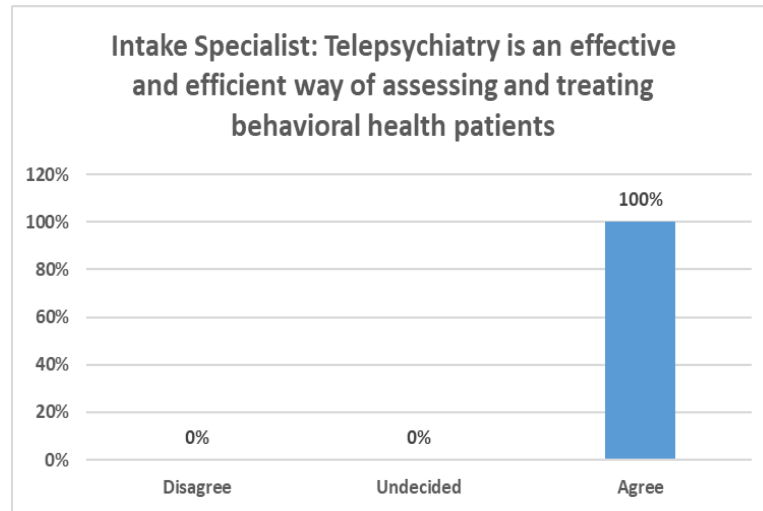
**Model 1 Psychiatrist: The NC-STeP portal works well without excessive delays or downtime**



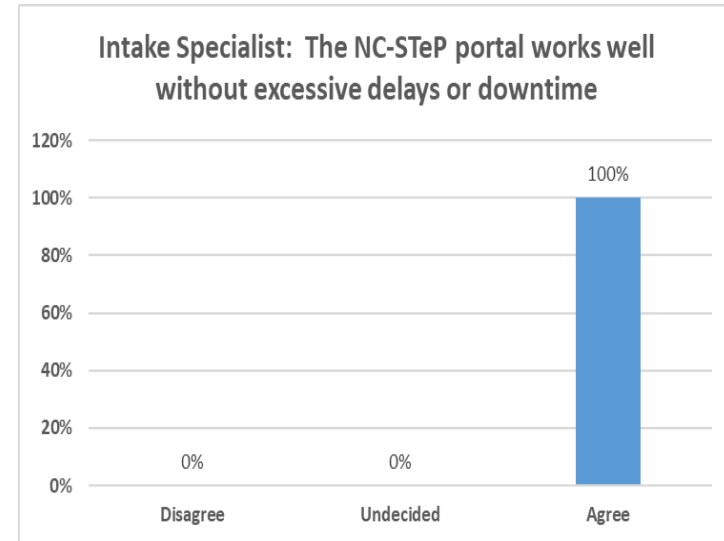
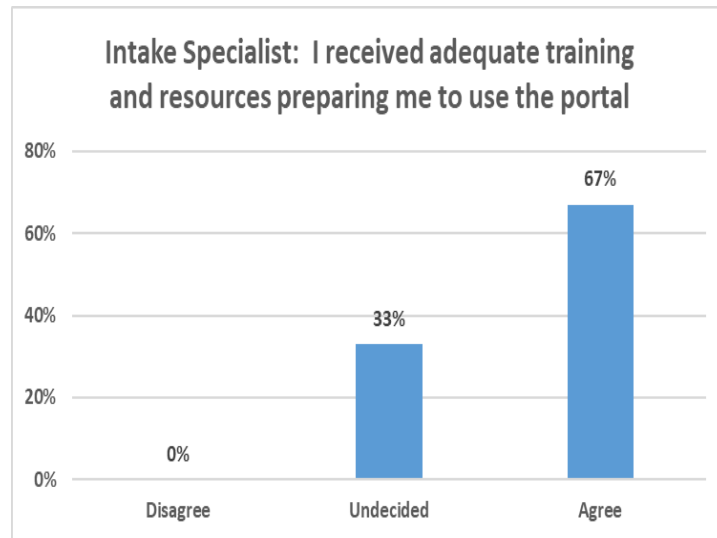
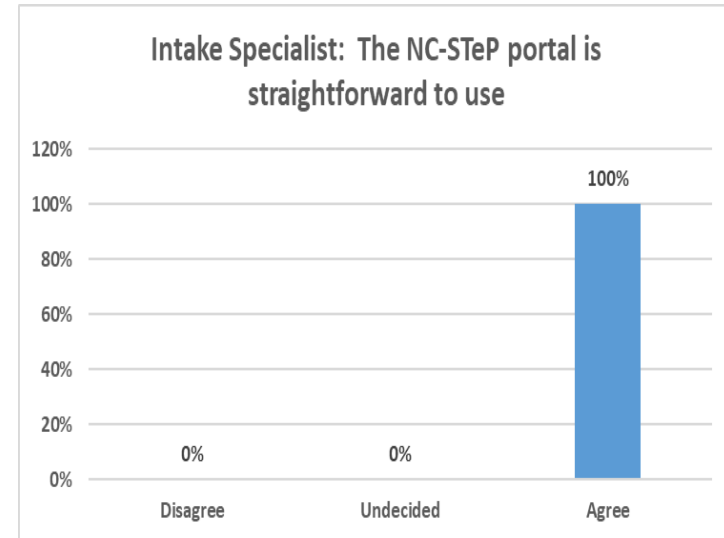
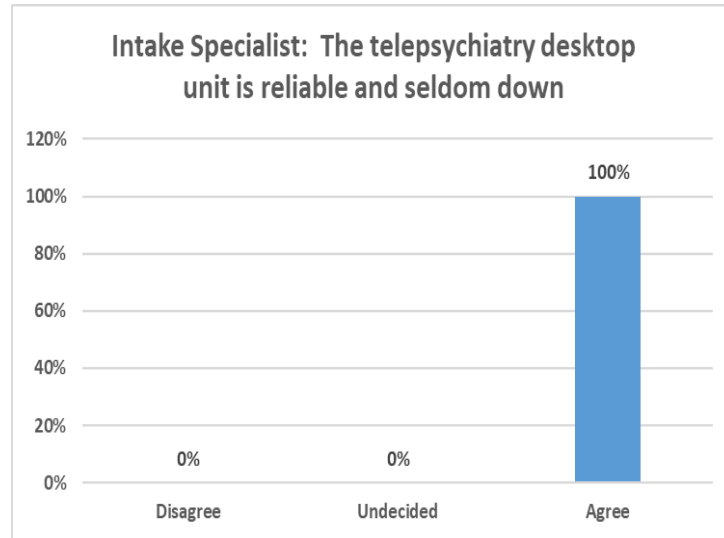
# Model 1 Psychiatric Intake Specialist Results (n=3)



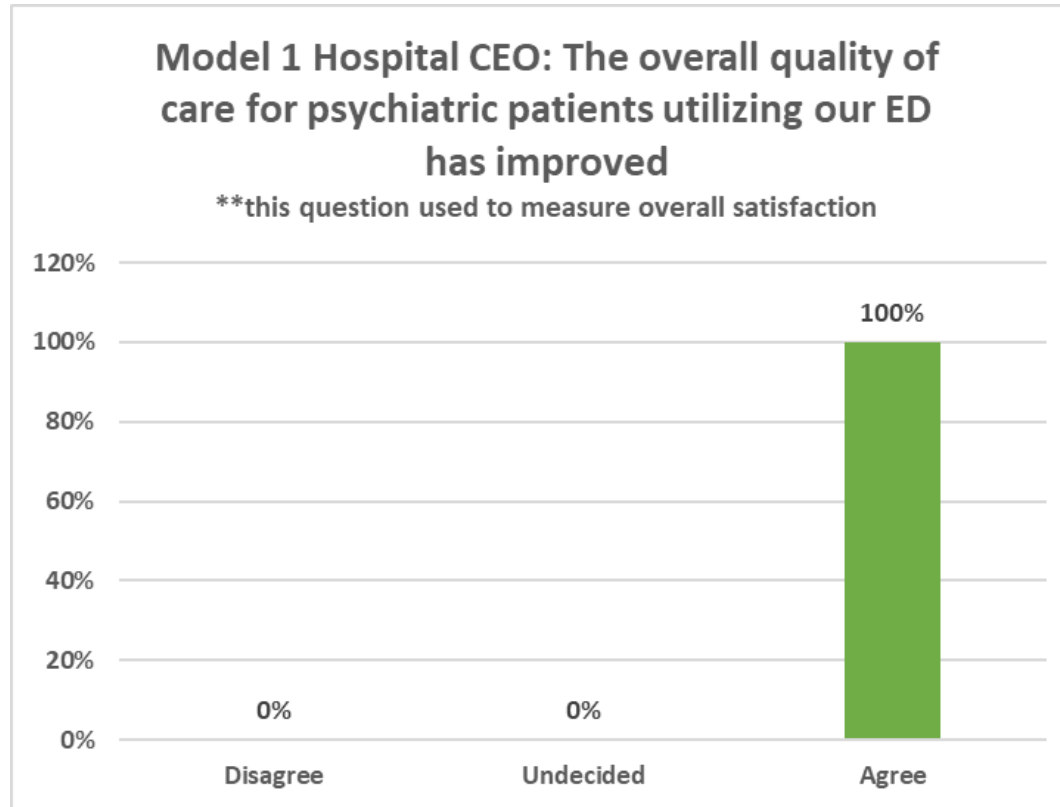
# Model 1 Psychiatric Intake Specialist Results (n=3)



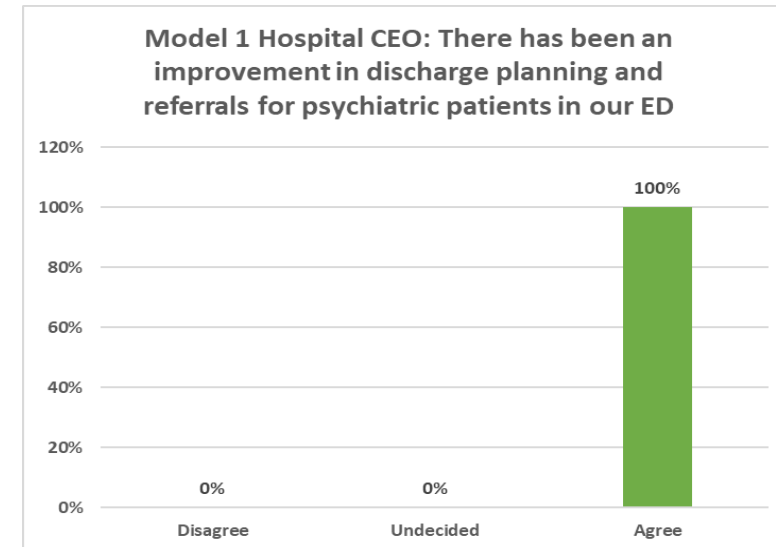
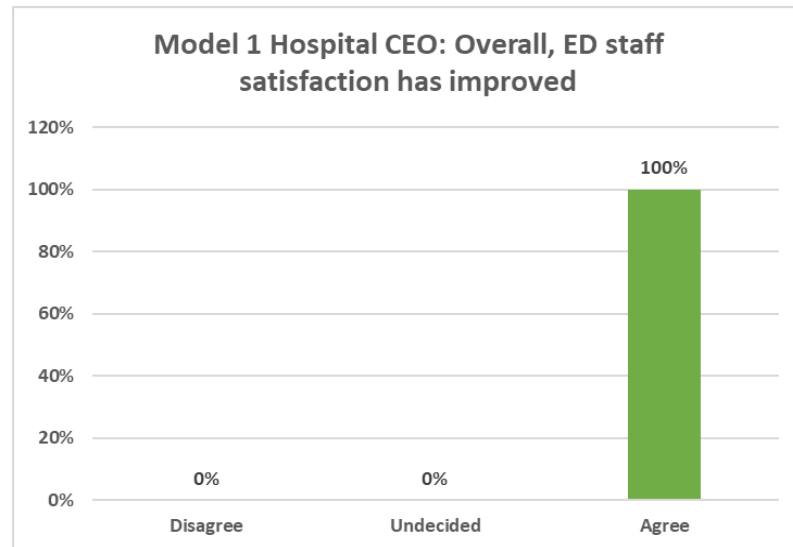
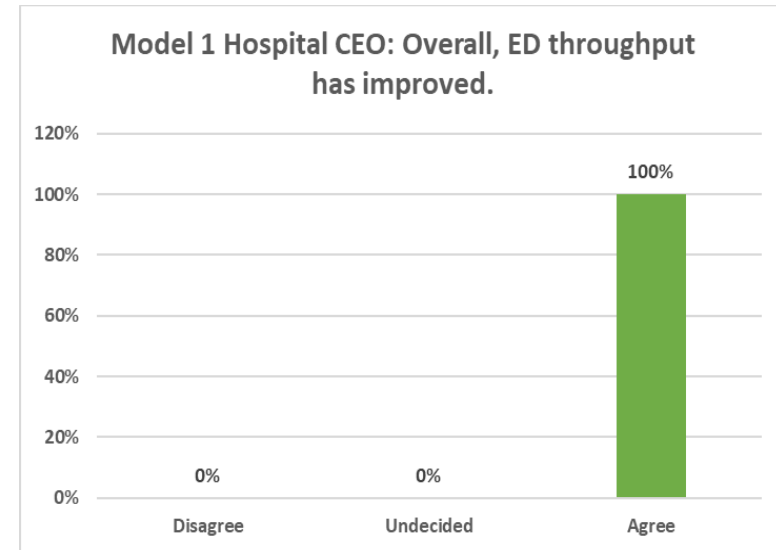
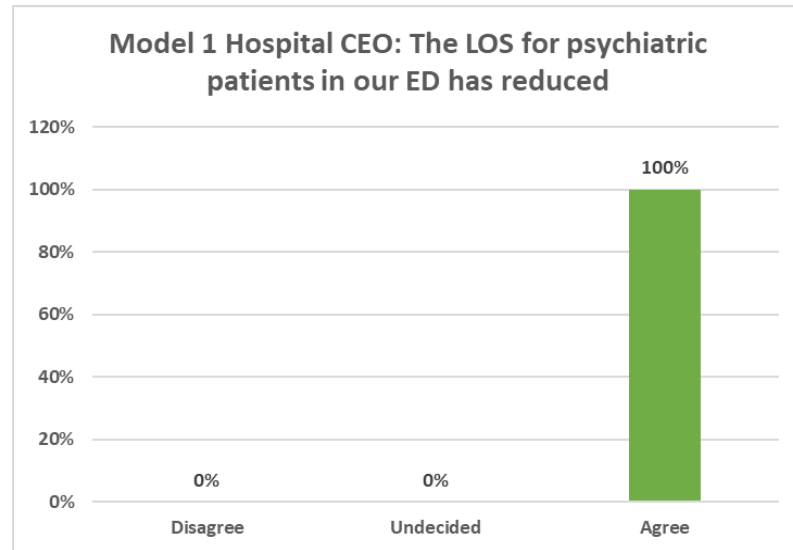
# Model 1 Psychiatric Intake Specialist Results (n=3)



# Model 1 CEO/CNO/CFO Results (n=4)

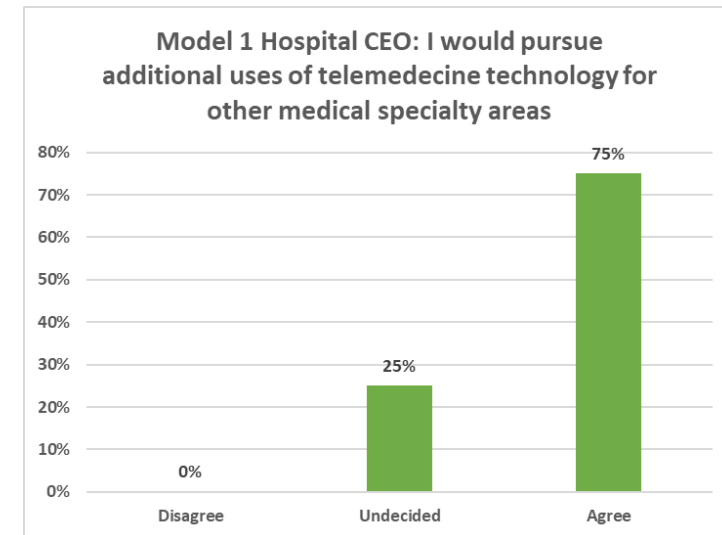
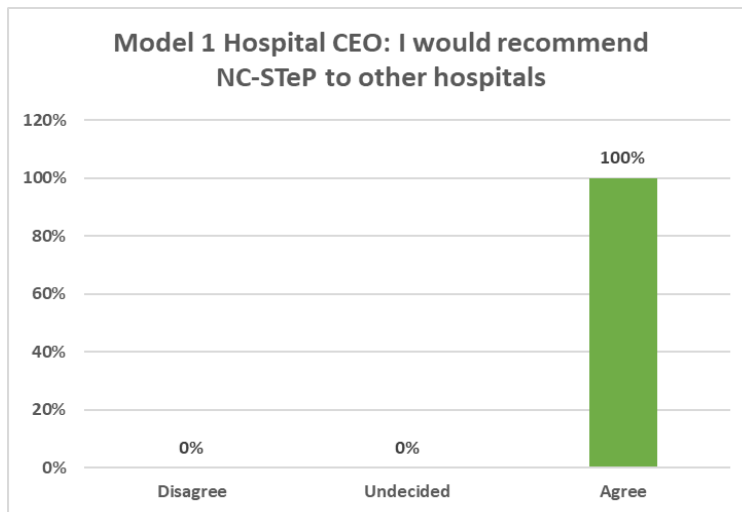
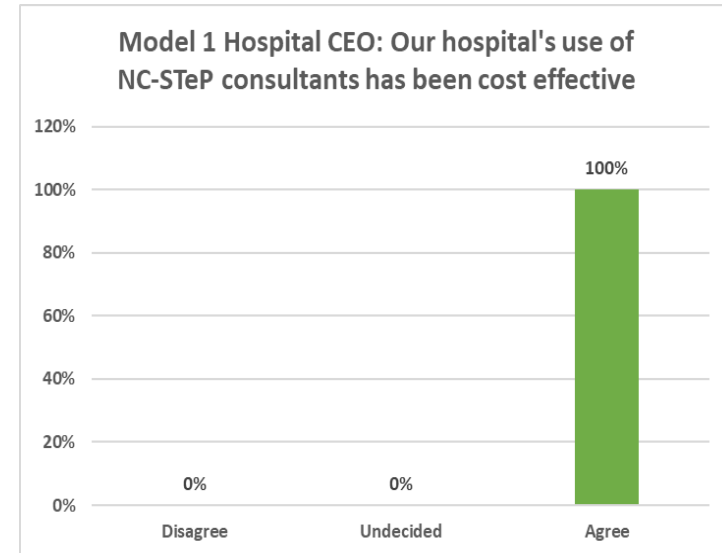
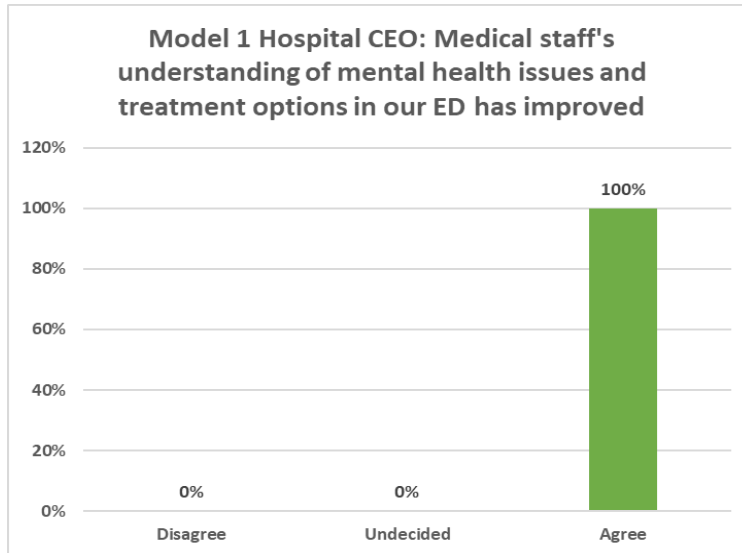


# Model 1 CEO/CNO/CFO Results (n=4)



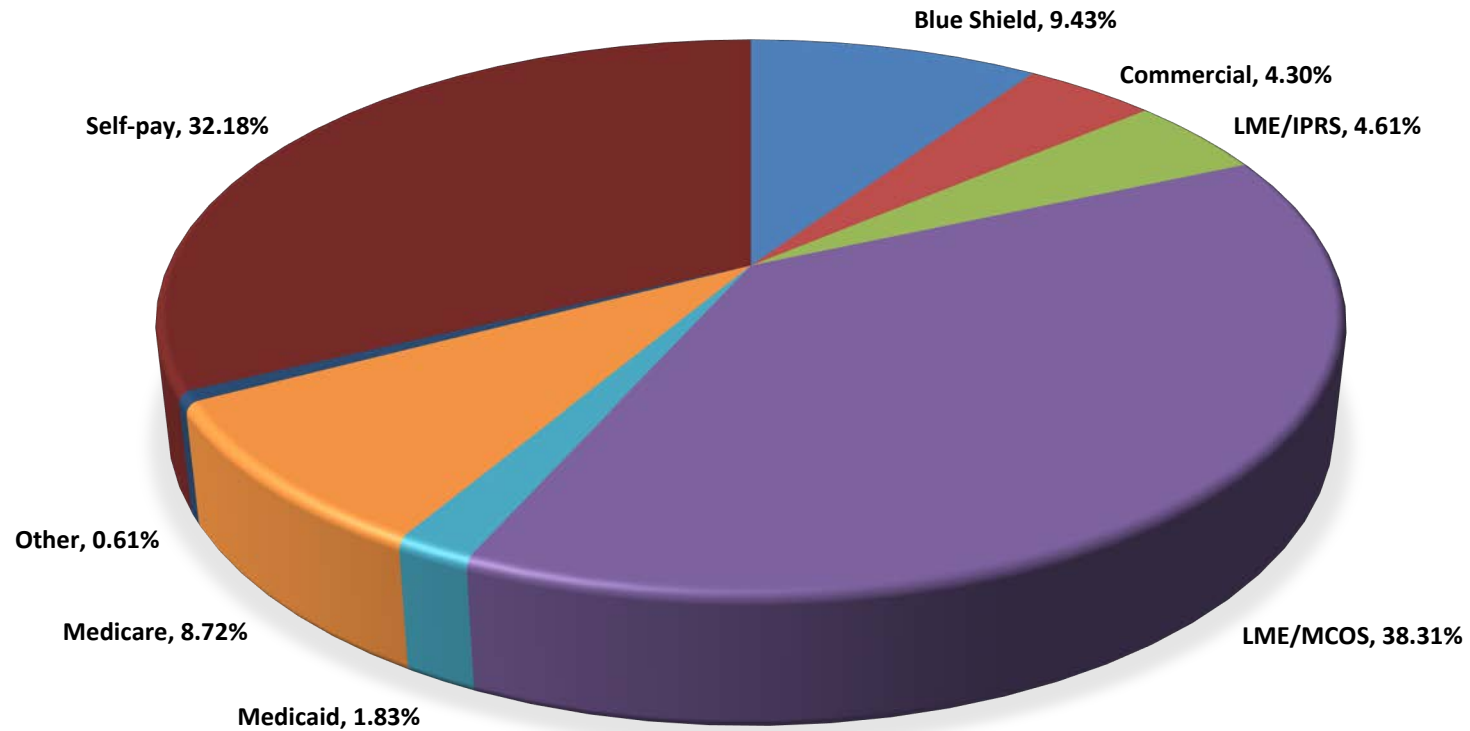


# Model 1 CEO/CNO/CFO Results (n=6)



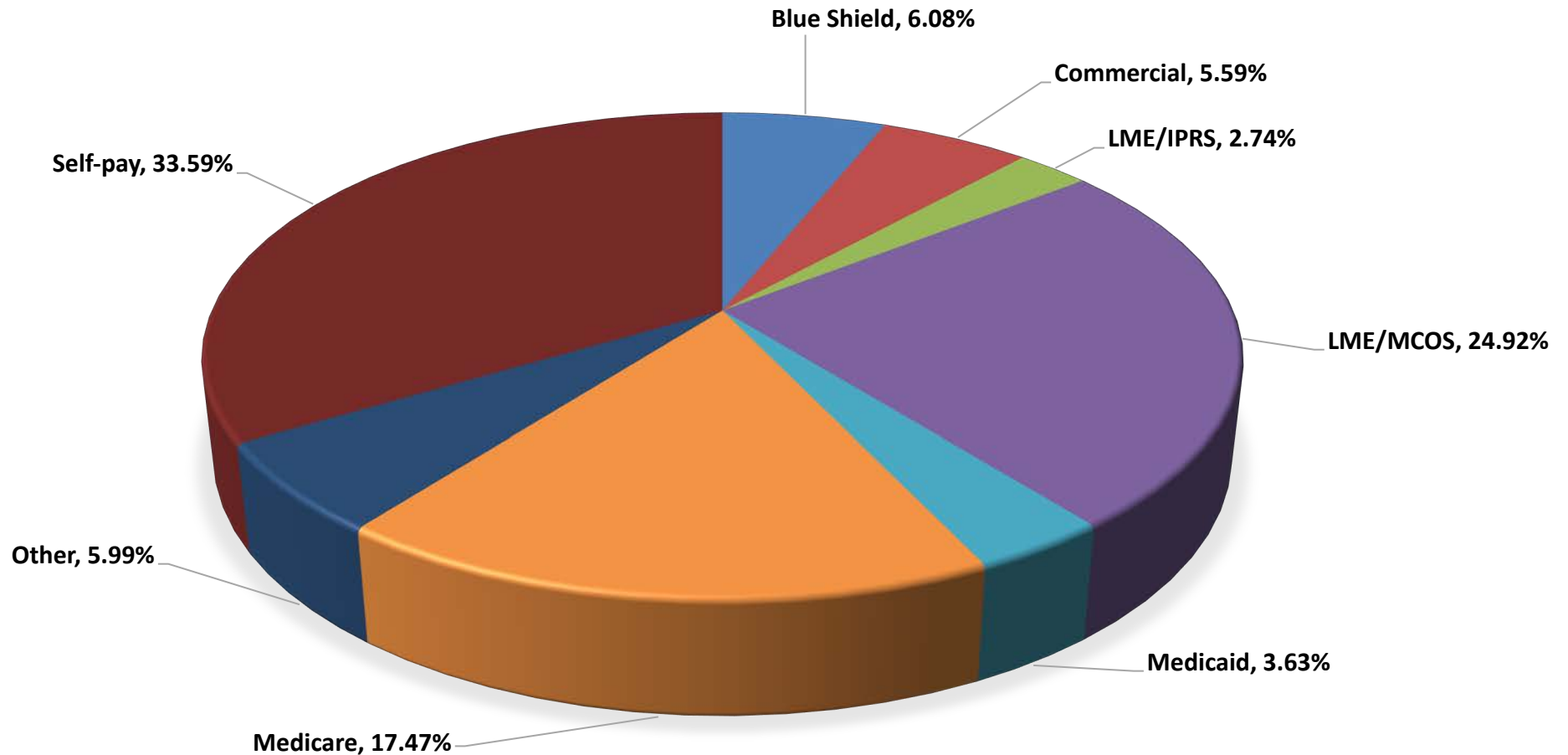
# NC-STeP Charge Mix

QTD 2021 - Quarter 3



# NC-STeP Charge Mix - Project to Date

Service Dates: October 1, 2013 - March 31, 2021



# Community-Based Sites as of March 31, 2021

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 3/31/2020	VALUES/MEASURES REACHED AS OF 03/31/2021
1. The number of full-time equivalent (FTE) providers supporting the program	0.70 FTEs	0.70 FTEs
2. The number of community-based sites contracted	8	16
3. Number of patient visits with medical (psychiatric) doctor	81	77 YTD= 210 PTD= 886
4. The number return visits	524	877 YTD= 2,376 PTD= 5,708
5. The number of patient visits with a mid-level provider	613	1,015 YTD= 2,712 PTD= 6,245
6. The number of new patient visits	169	214 YTD= 540 PTD= 1,489

# 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
With Medical Doctor	886	8	536	265	77
With Mid-Level Provider	6,245	7	2,006	3,217	1,015
<b>Total Patient Visits</b>	<b>7,228</b>	<b>15</b>	<b>2,633</b>	<b>3,477</b>	<b>1,103</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 11 MFM visits this quarter. As a result, the number of total patient visits was higher than the doctor visits and mid level visits summed. 4/22/21



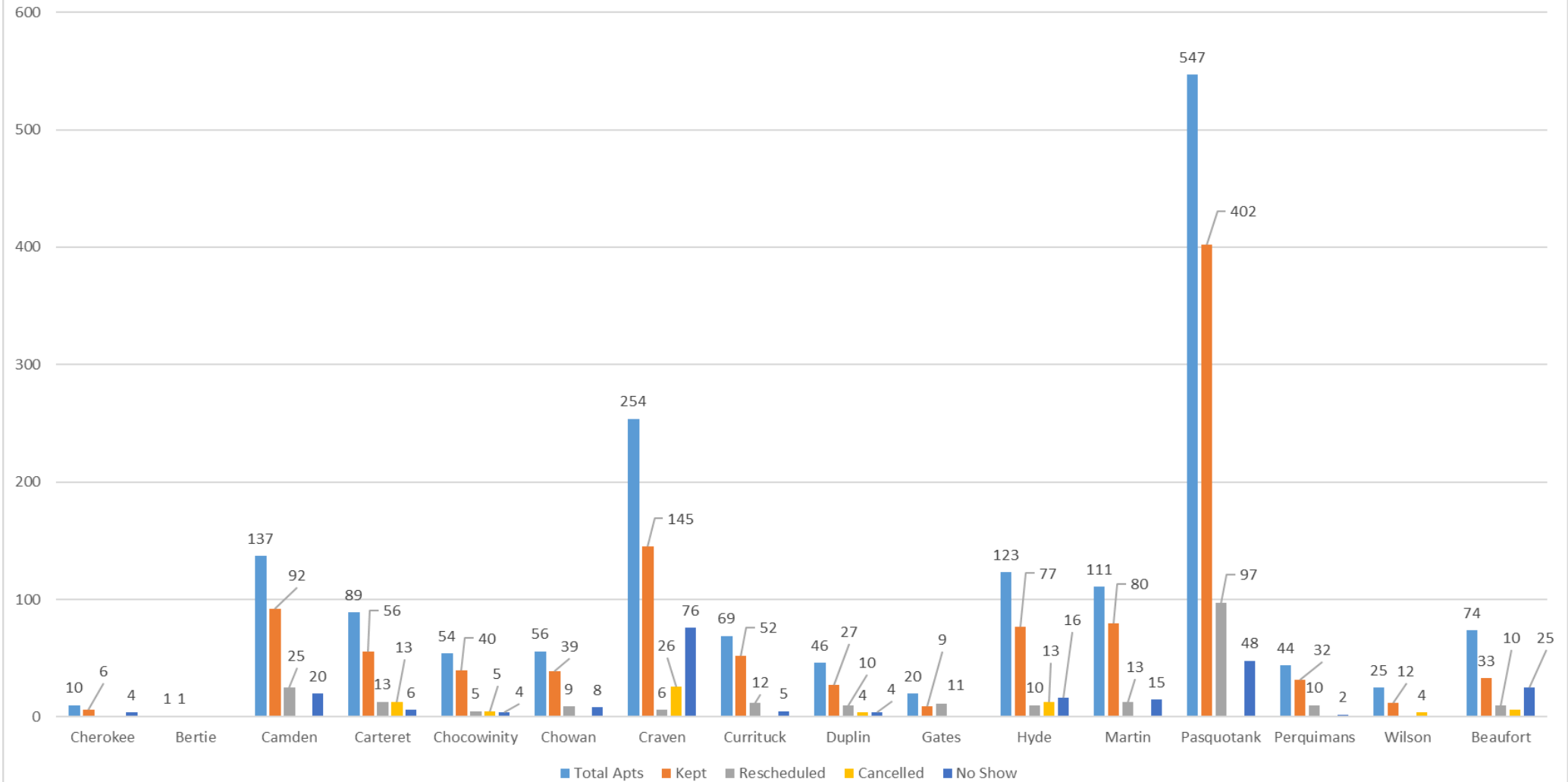
## NC-STeP Community Benchmarks

Patient Visits	Goals	Values Reached	
	Total for most recent full fiscal year (July 1, 2019 - June 30, 2020)	Value Reached as of most recent previous quarter (12/31/2020)	Value reached as of this reporting quarter (03/31/2021)
With Medical Doctor	438	70	77
With Mid-Level Provider	2,661	848	1015
New Patient Visits	629	169	214
Return Patient Visits	2,455	744	877

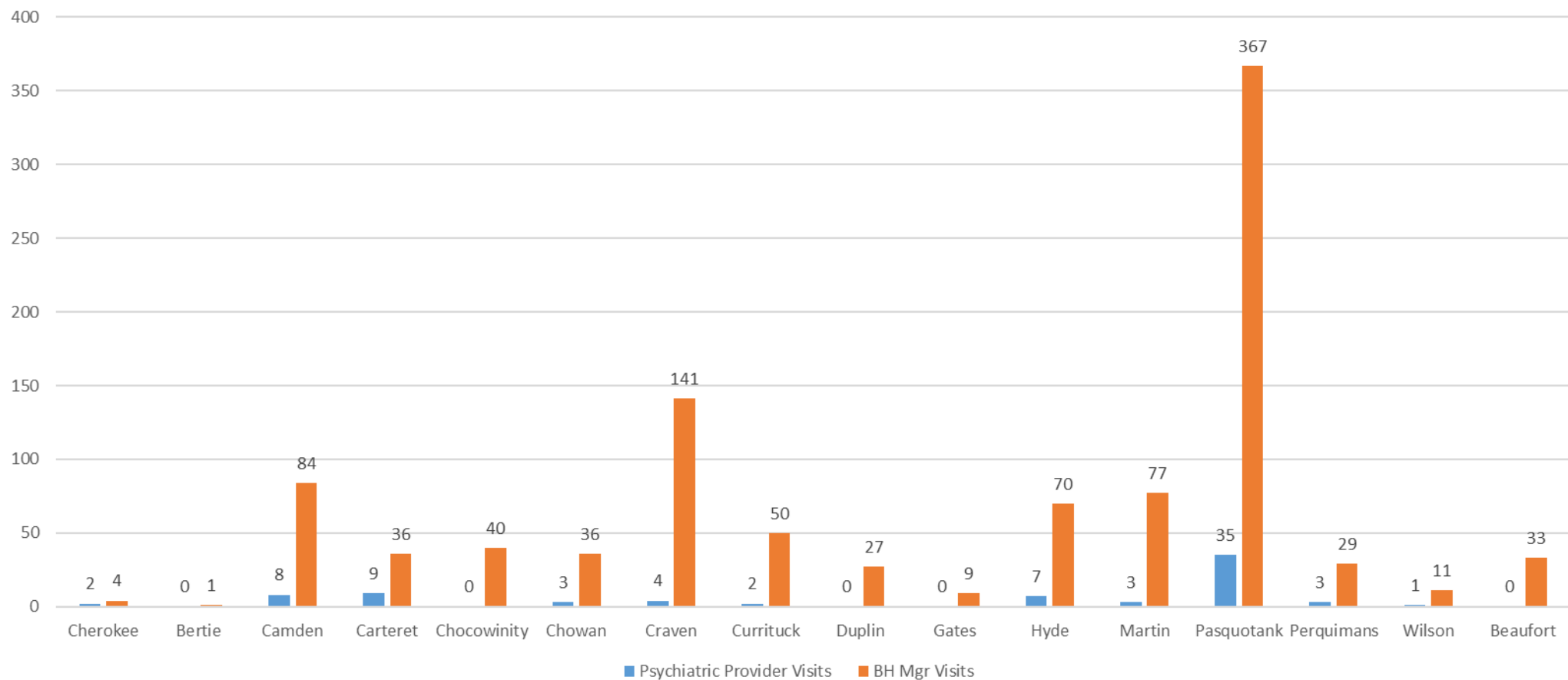
4/22/21

- DHHS no longer has targets, so I changed this column to show totals for the most recent 12-month fiscal year period.
- 1 visit did not specify if it was new or return.
- There were 11 MFM visits.

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

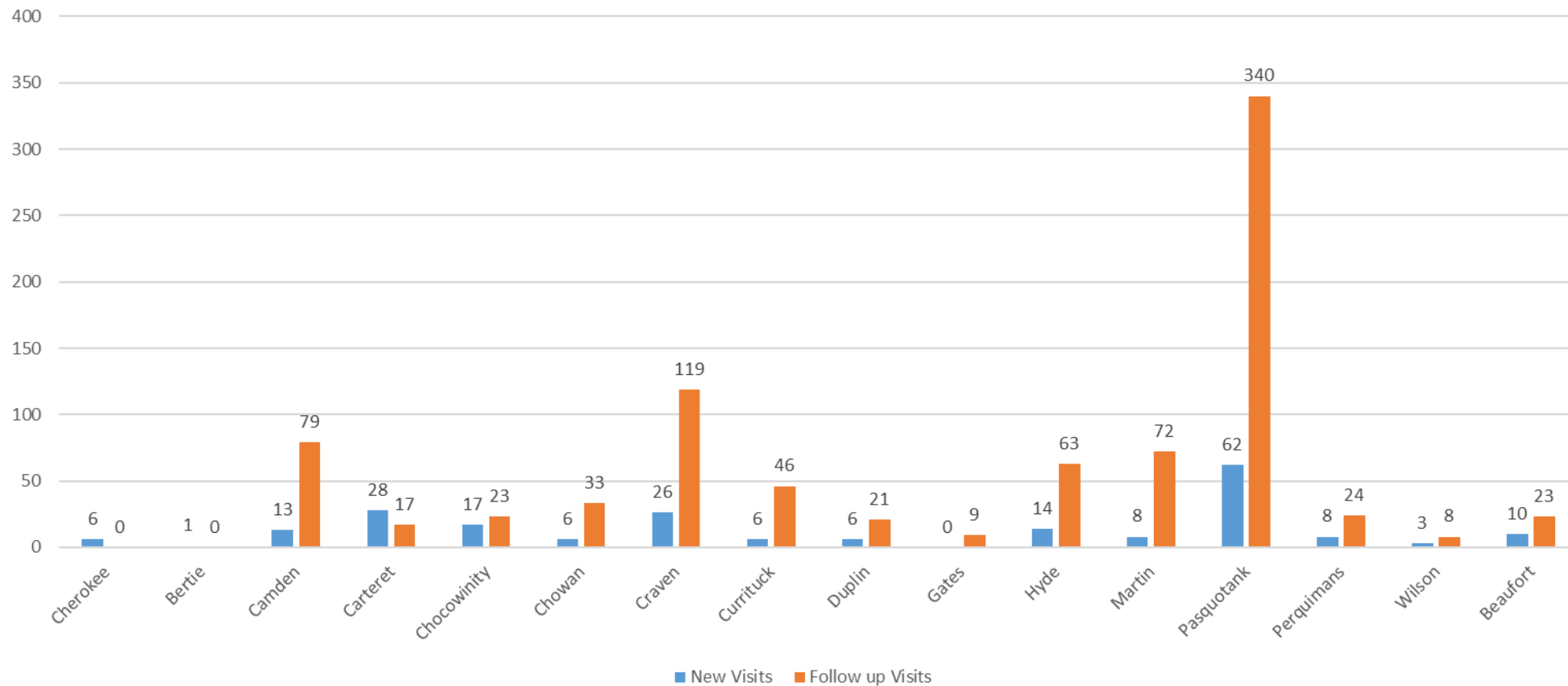


# NC-STeP Community Visits by Site by provider type January - March 2021





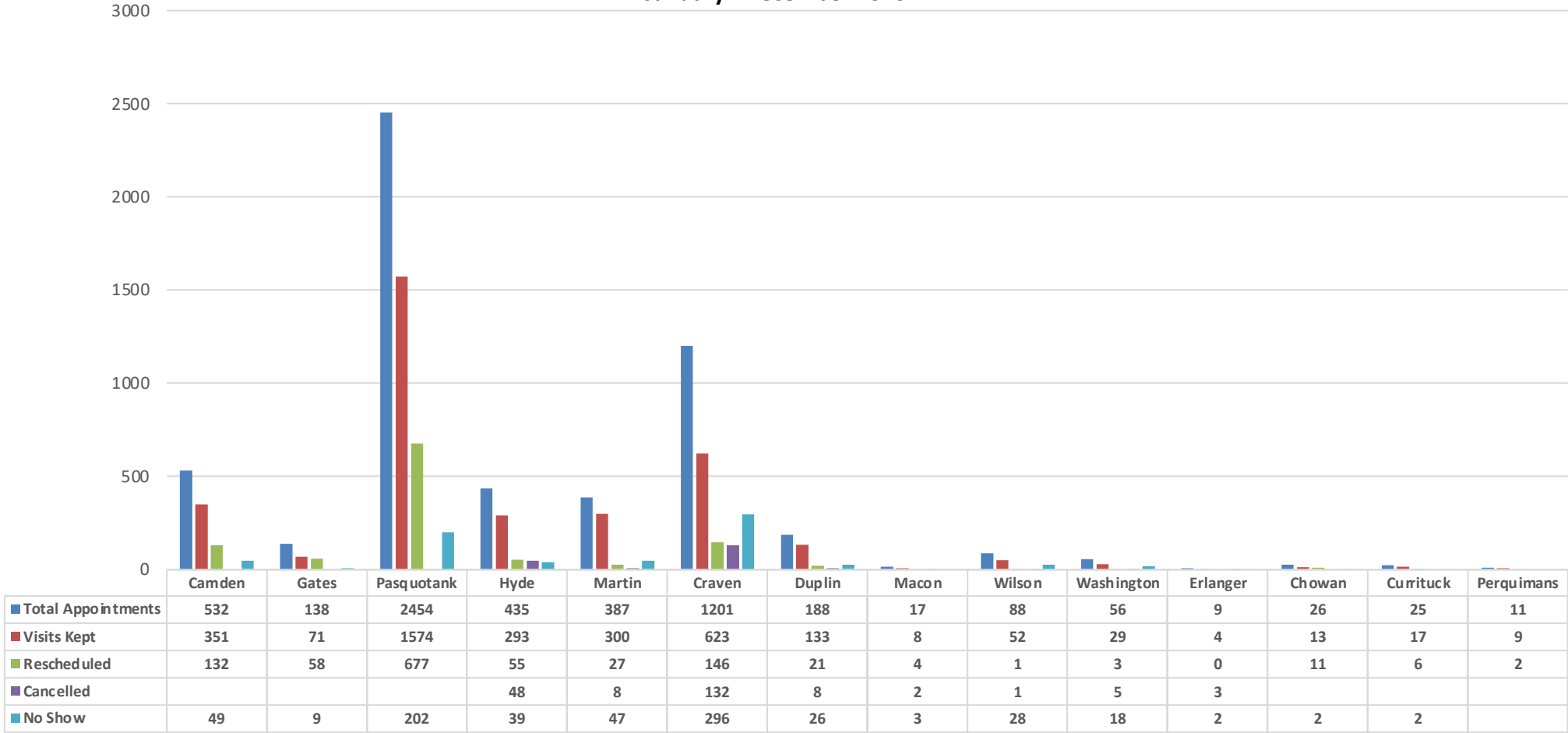
# NC-STeP Community Visits by Site New and Follow up January - March 2021



# NC-STeP Community Appointments by Site

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

### January - December 2020



■ Total Appointments
 ■ Visits Kept
 ■ Rescheduled
 ■ Cancelled
 ■ No Show



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# NC-STeP Status as of March 31, 2021

- 41 hospitals in the network. 40 live.
- 46,904 total psychiatry assessments since program inception
- 7,012 IVCs overturned
  - Cumulative return on investment = \$37,864,800  
(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 March 31, 2021

- 16 community-based sites.
- 7,228 total patient visits since program inception in October 2018.
  - 886 total patient visits with a psychiatrist
  - 6,245 total patient visits with a mid-level provider



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## Contact

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

*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)

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

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

Mail: 600 Moyer Boulevard, Suite 4E-100,  
Greenville, NC 27834









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STATEWIDE TELEPSYCHIATRY PROGRAM







### **NC-STEP Advisory Council Meeting**

Friday, June 25, 2021

10:00 am – 11:30 am

Virtual Meeting via Zoom Video Conferencing

#### **Agenda**

10:00- 10:05 a.m.	Welcome
10:05- 10:10 a.m.	Review and Approval of March 12, 2021 Minutes
10:10- 11:00 a.m.	NC-STEP FY21-Q3 (Jan-Mar) Performance Data
11:00- 11:15 a.m.	Update on Community-Based Pilots
11:15- 11:20 a.m.	Old Business
11:20- 11:25 a.m.	New Business
11:25- 11:30 a.m.	Announcements
11:30 a.m.	Adjourn



Join Zoom Meeting

<https://zoom.us/j/94425768672?pwd=d0JJYk5tTjh5blZqOTdzL2Y2ZDRwdz09>