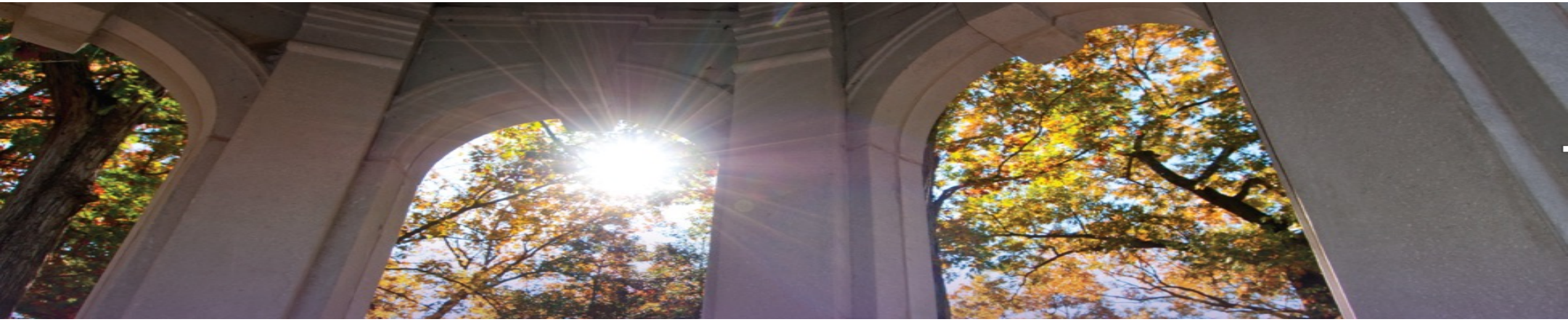
NC-STeP

NORTH CAROLINA
STATEWIDE TELEPSYCHIATRY PROGRAM

Quarterly Progress Update



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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)

ECU
BRODY SCHOOL OF MEDICINE

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

zoom

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

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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

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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%

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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

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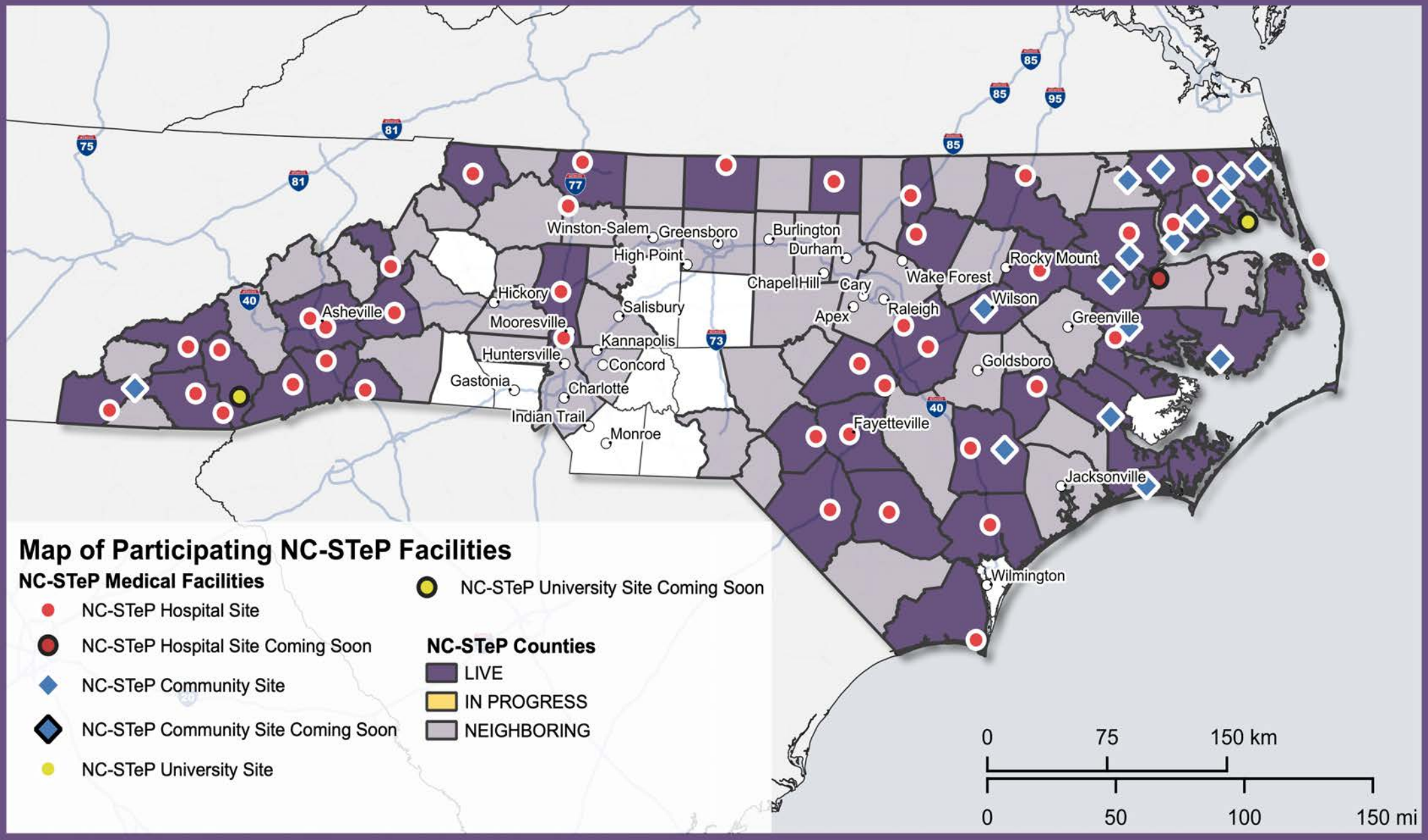
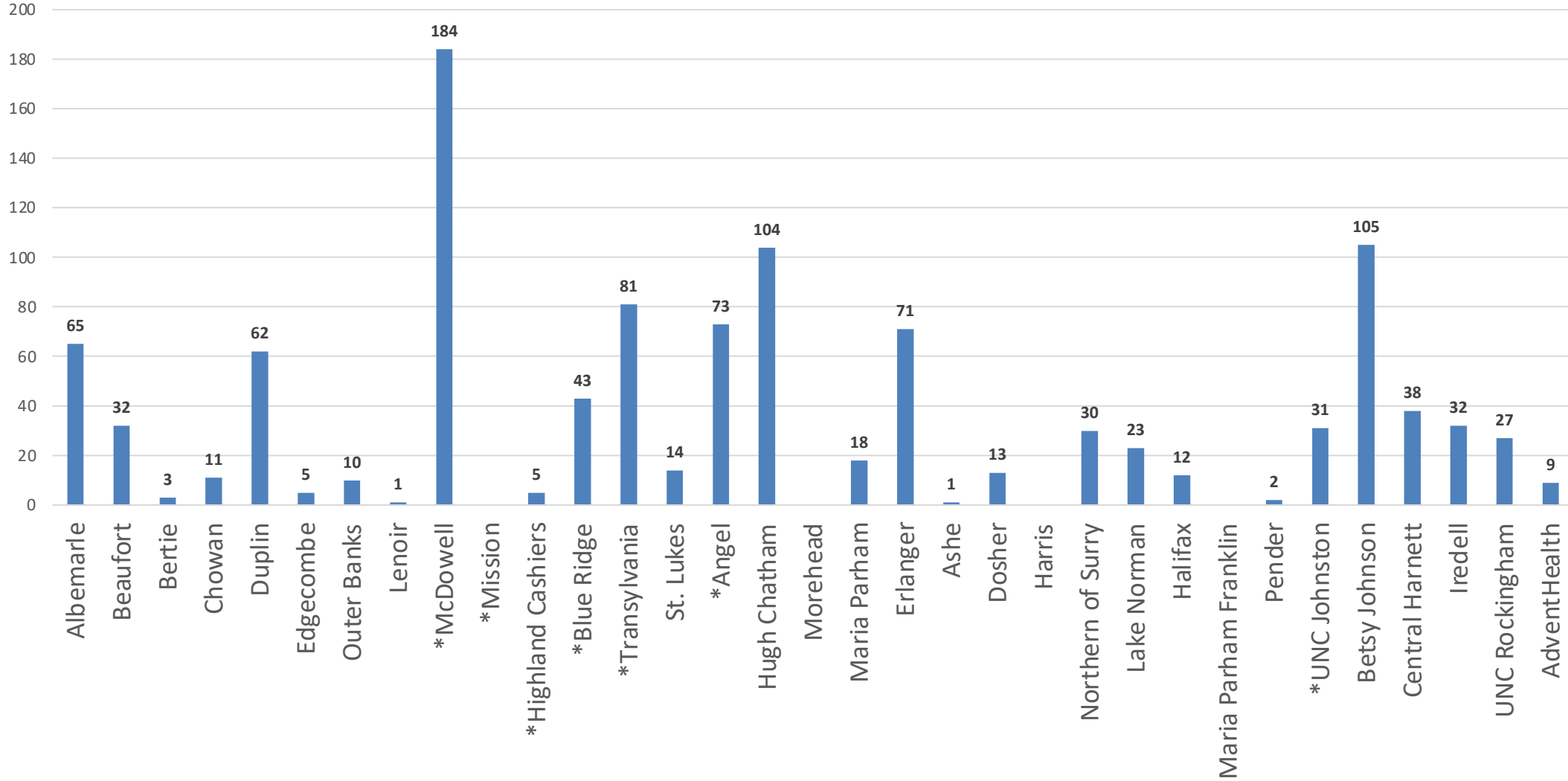
NC-STeP Status as of March 31, 2021



Number of NC-STeP Patients by Hospital

January - March 2021



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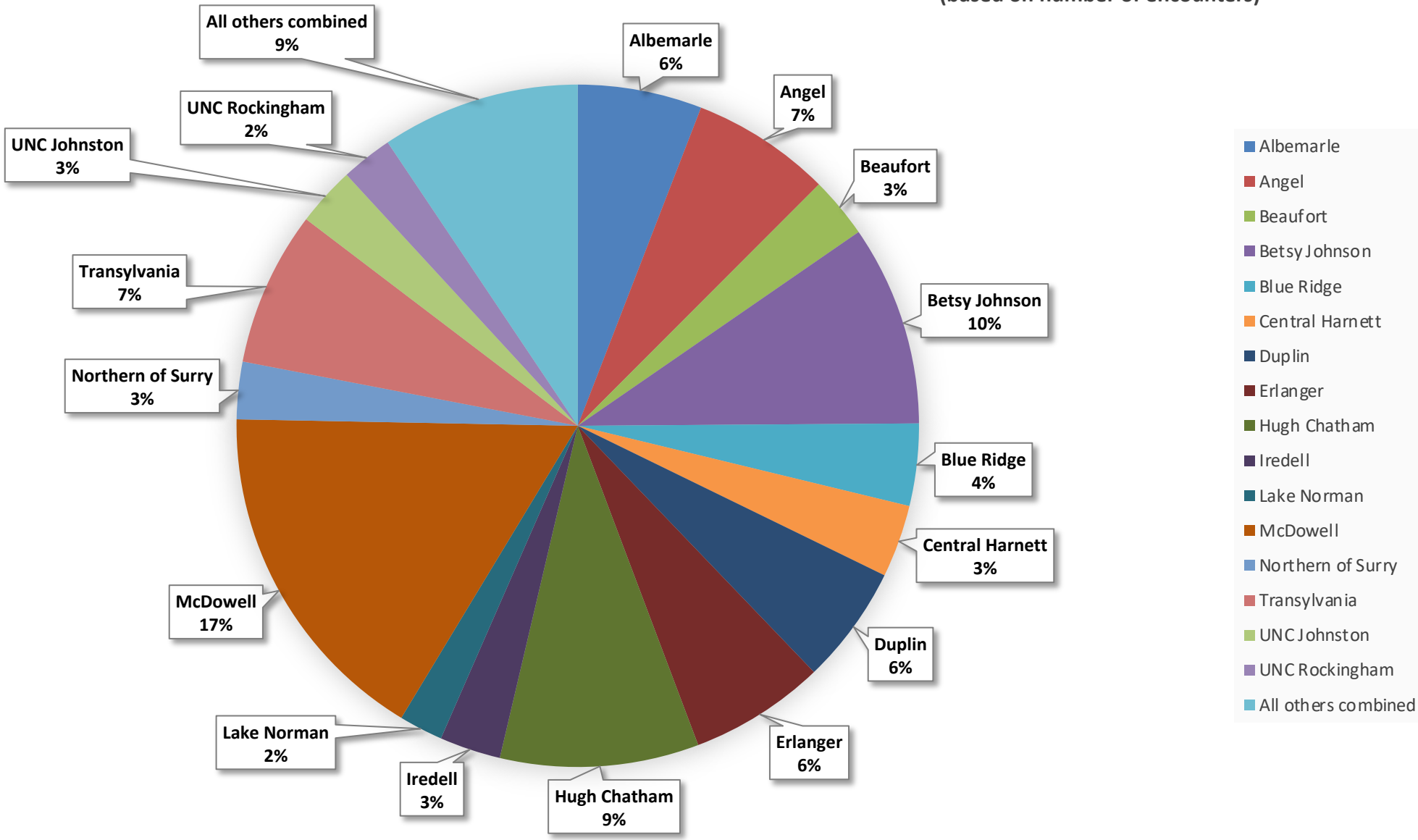
Percent of use by hospital Jan-Mar 2021

(based on number of encounters)



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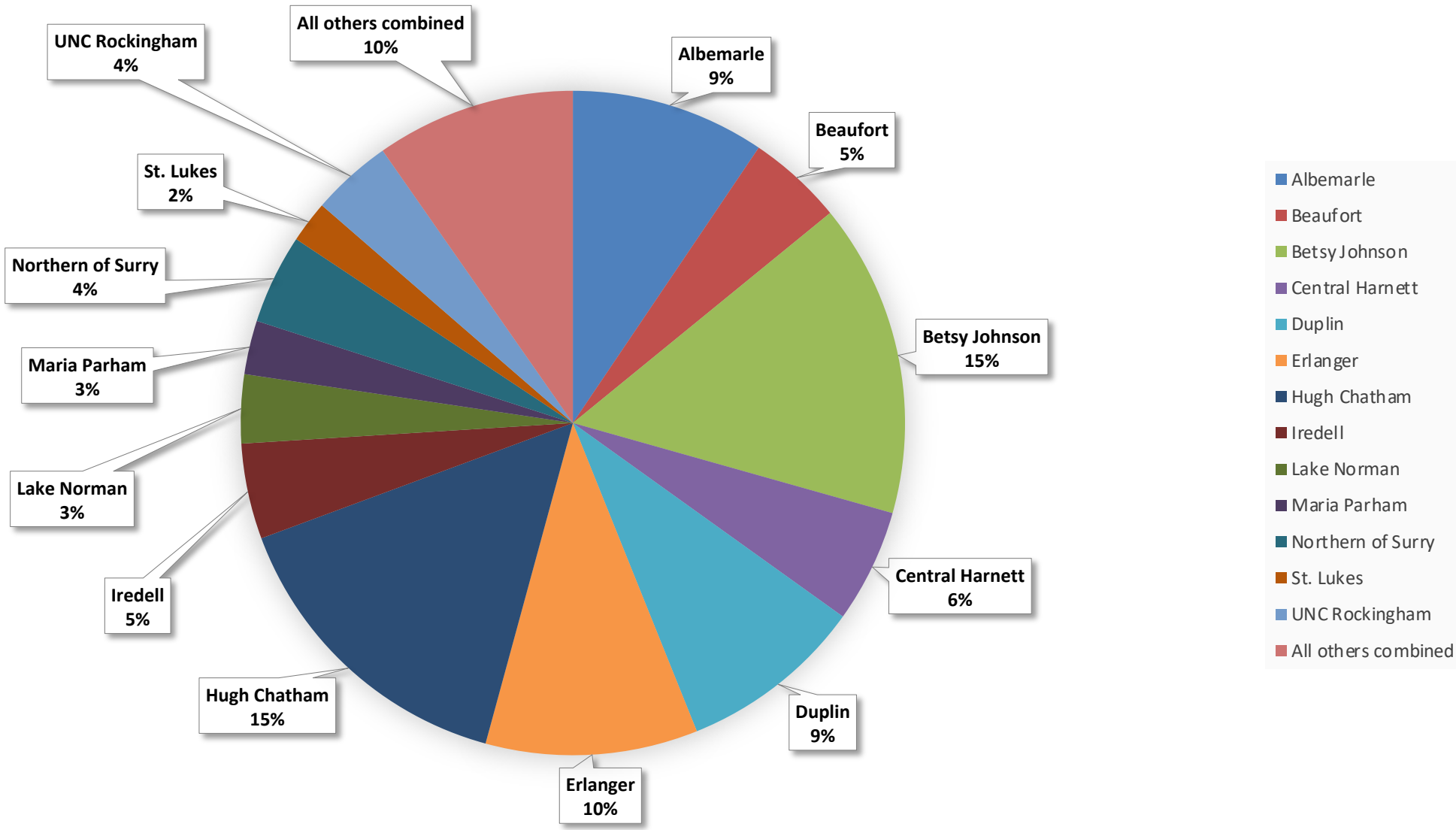
Percent of use for Model 1 hospitals Jan-Mar 2021

(based on number of encounters)



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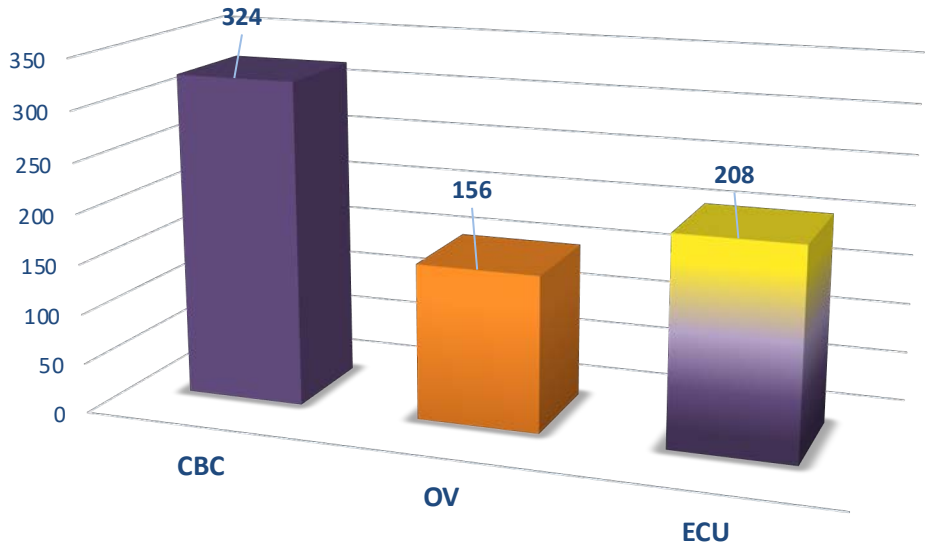
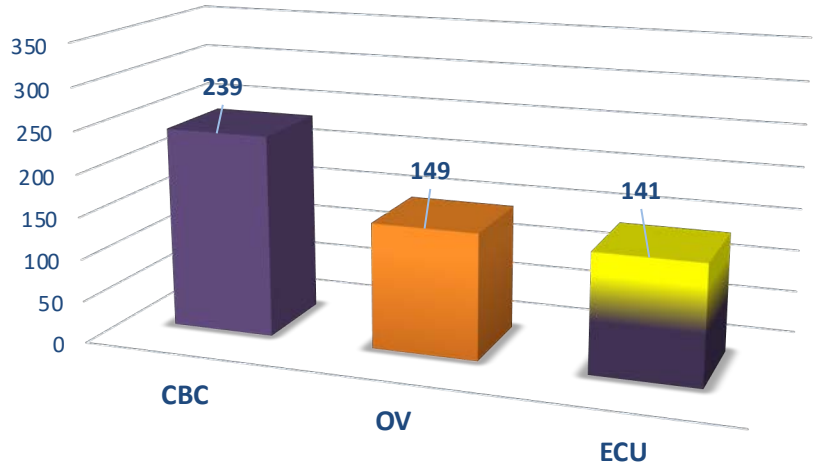
Number of Patients by Provider (Model 1)

Jan-Mar 2021



Oct-Dec 2020



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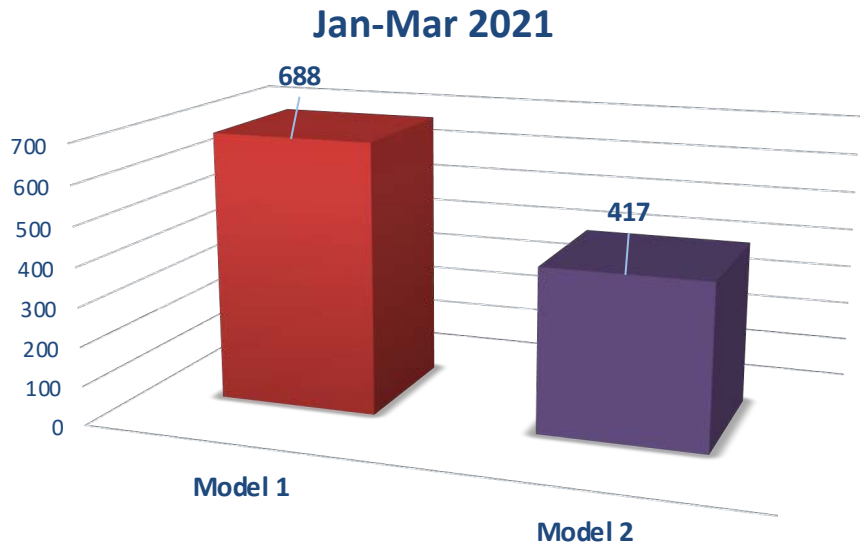
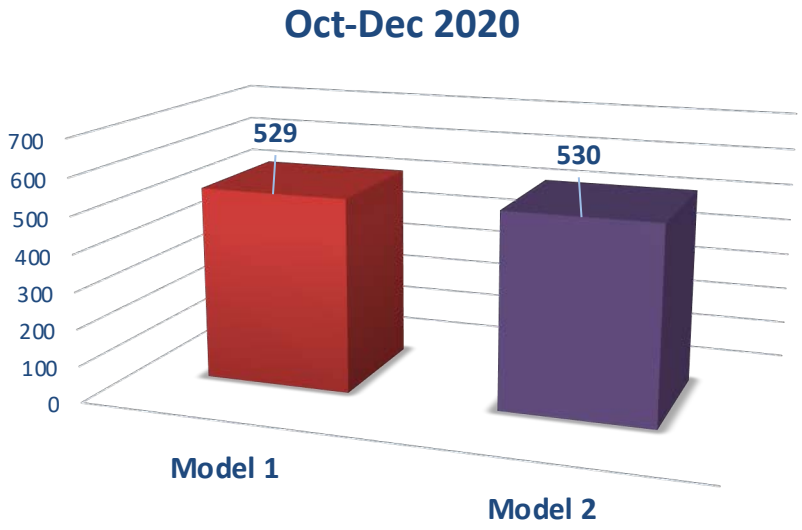
Number of Patients by Model





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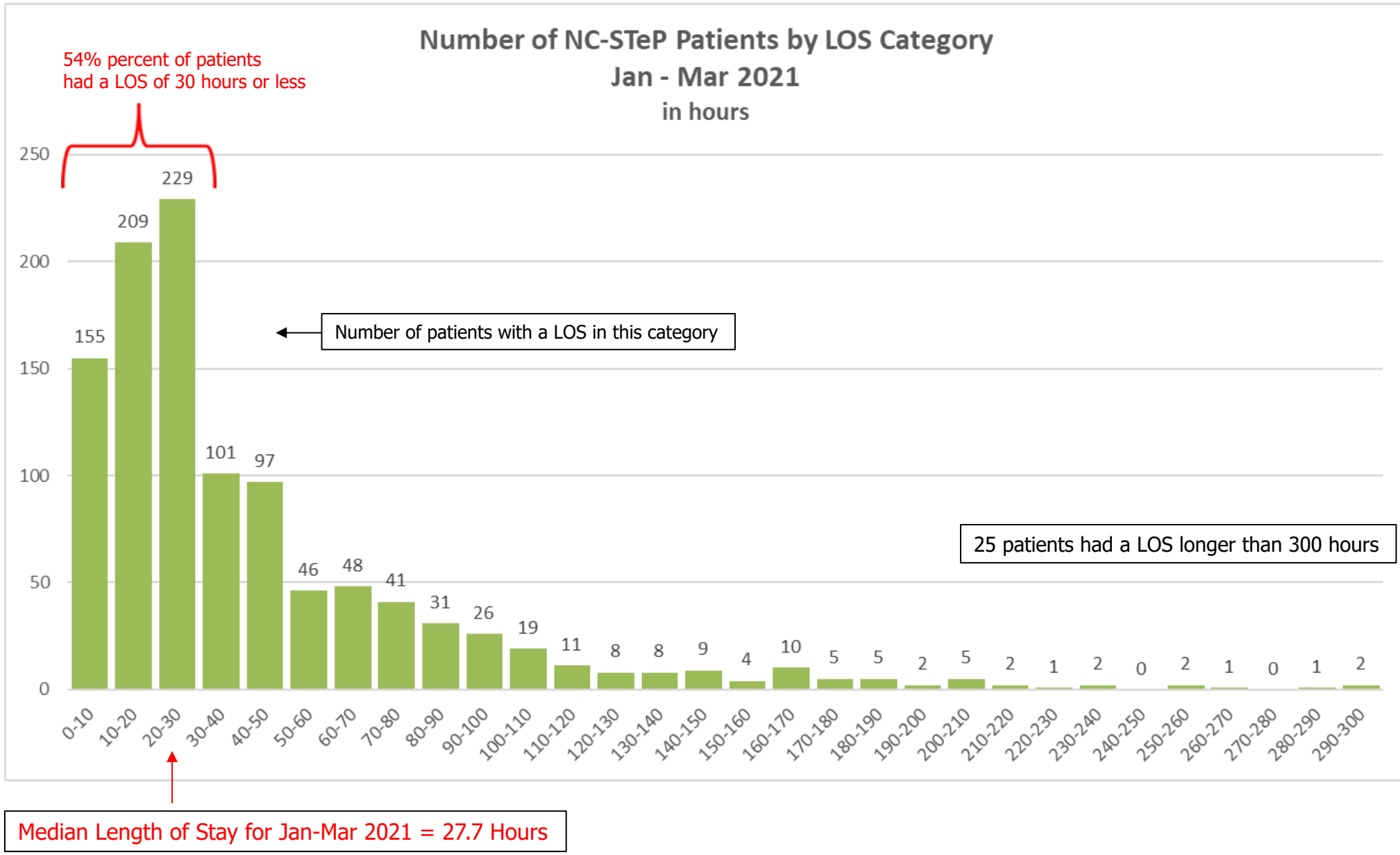

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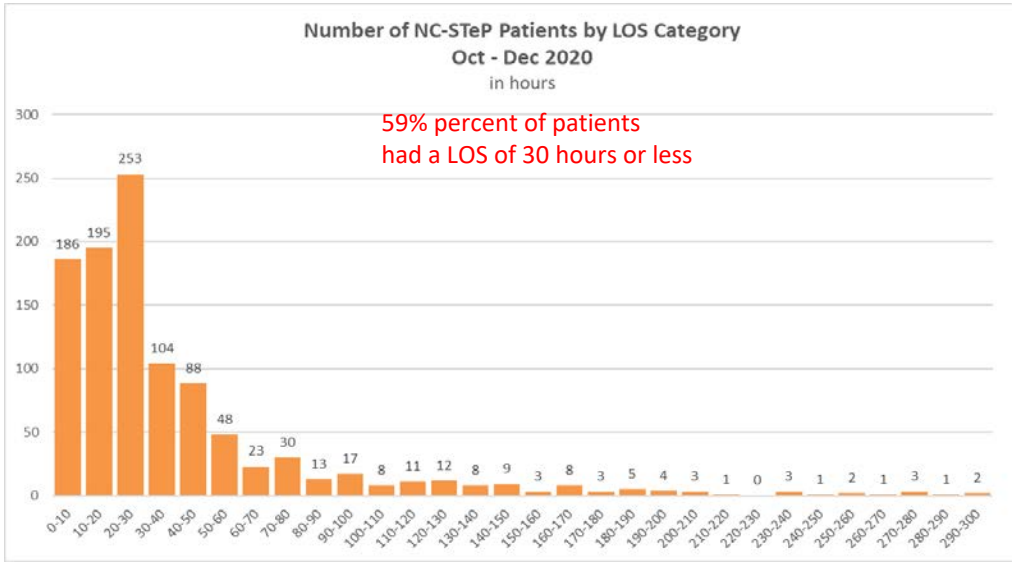

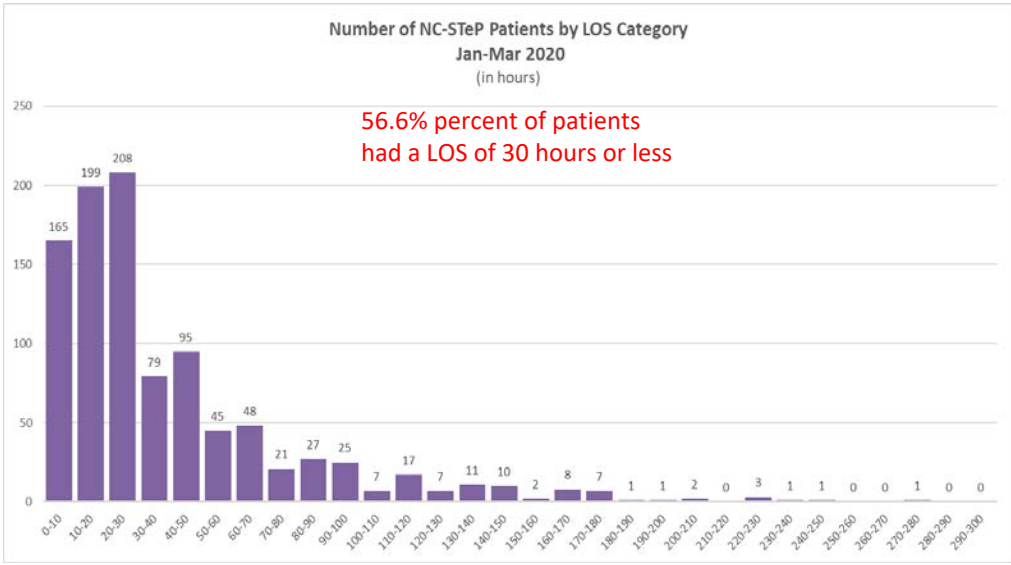

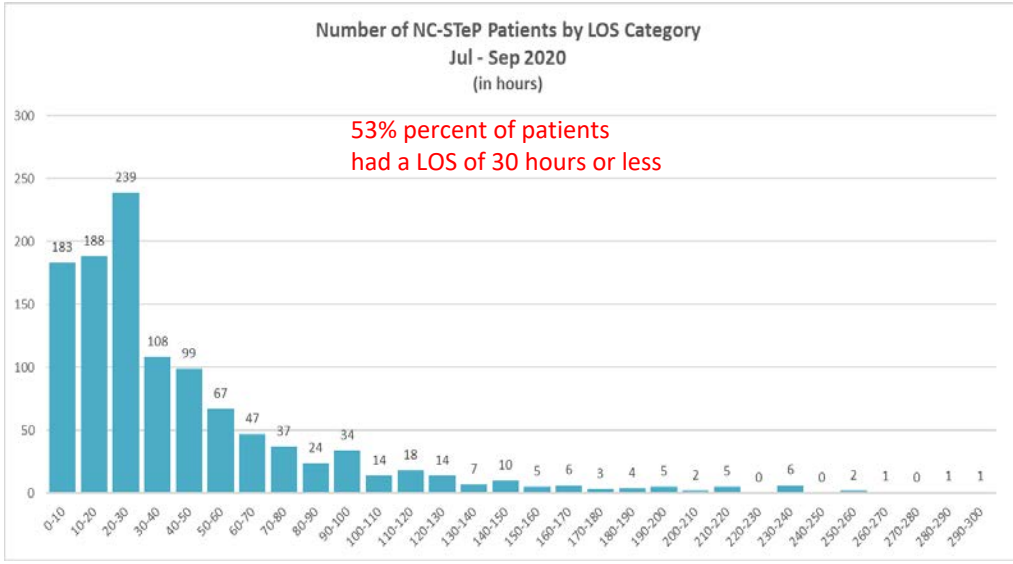

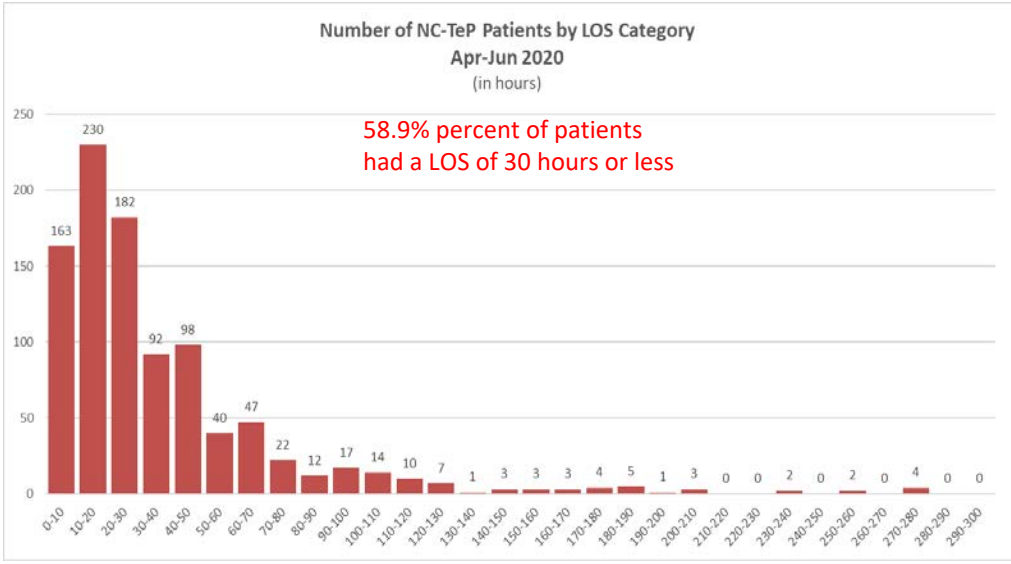

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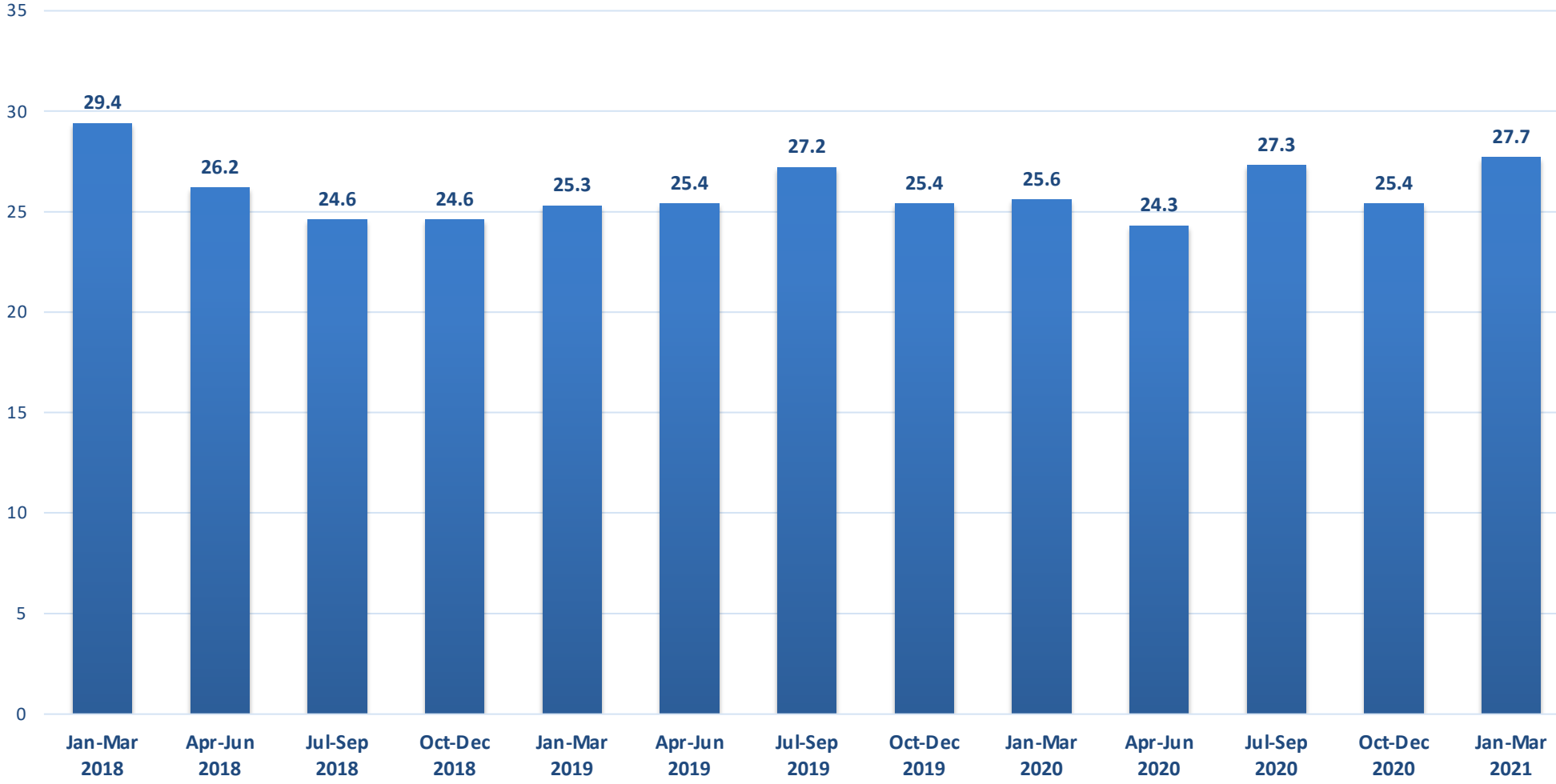
Median Length of Stay by Quarter

(in hours)



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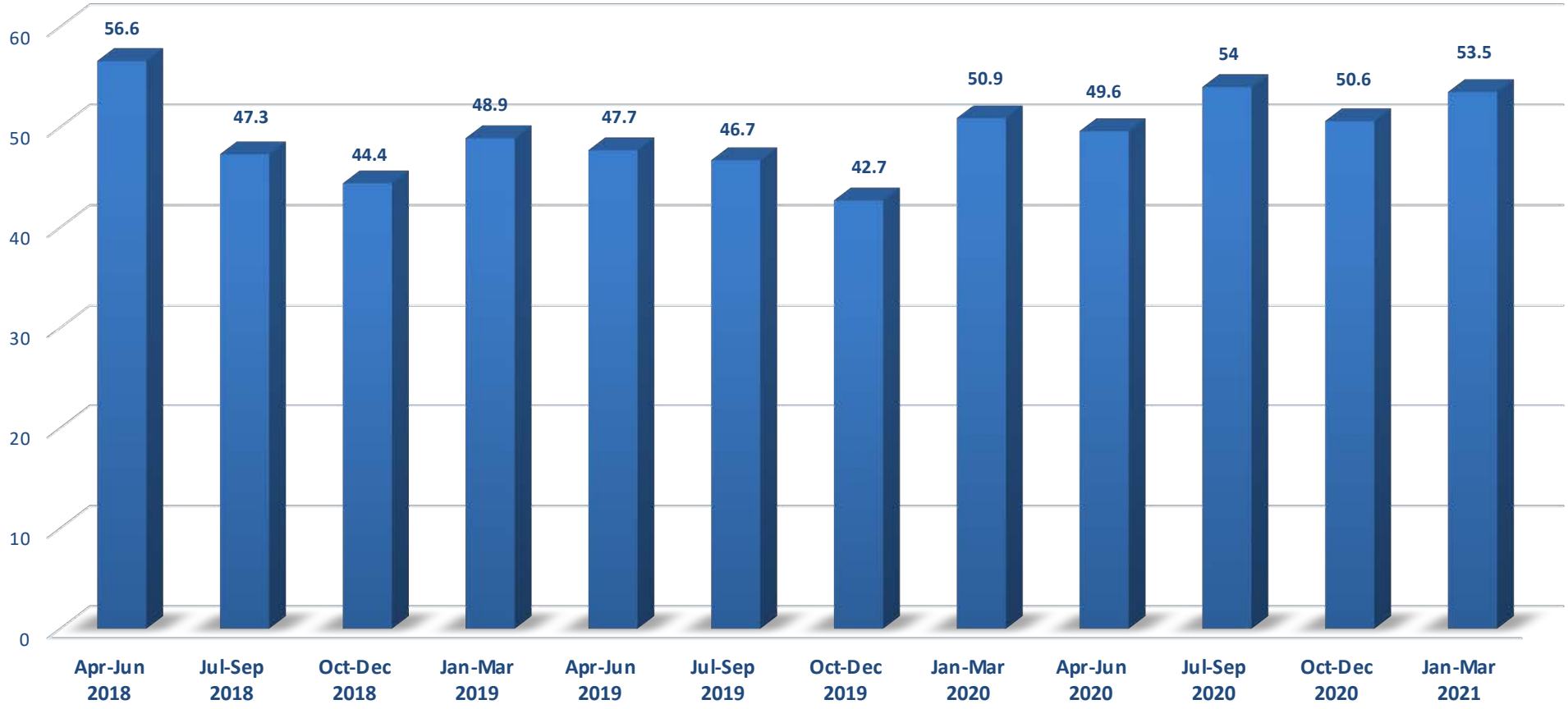
Average Length of Stay by Quarter

(in hours)



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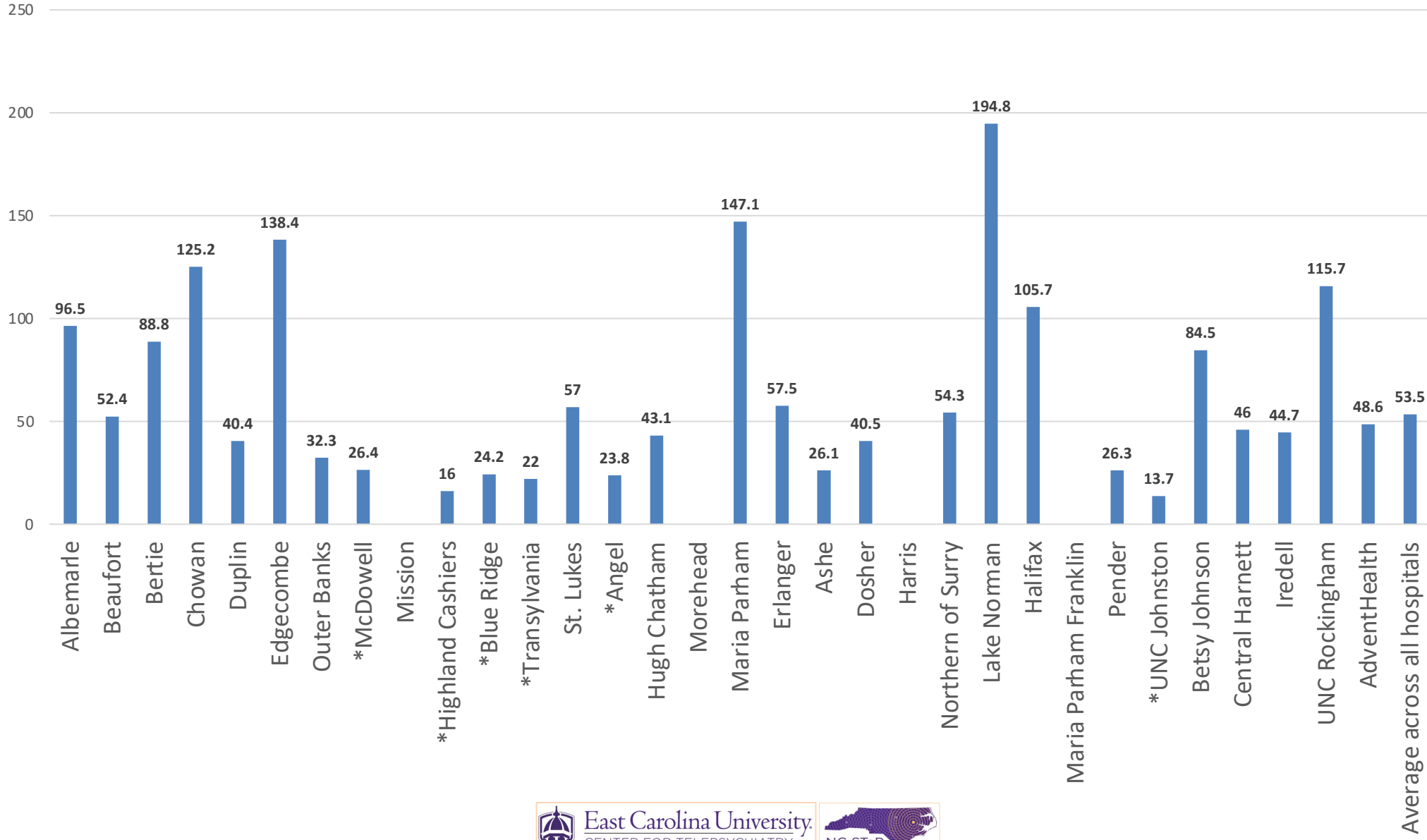
Average Length of Stay for NC-STeP Patients by Hospital

January - March 2021

(in hours)



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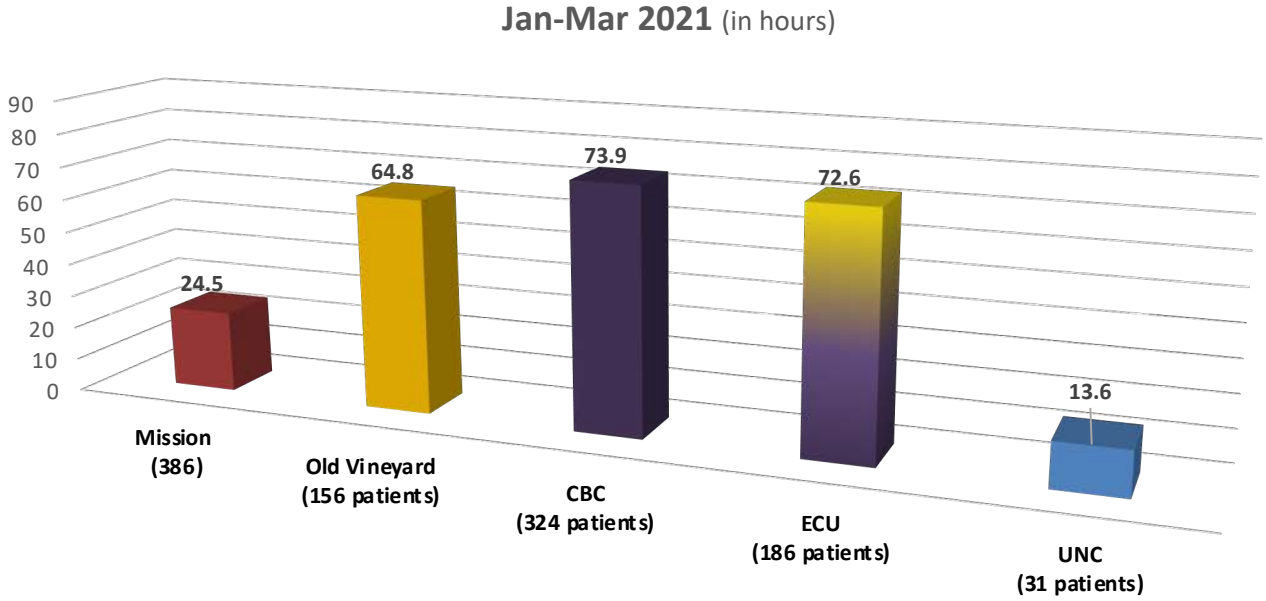
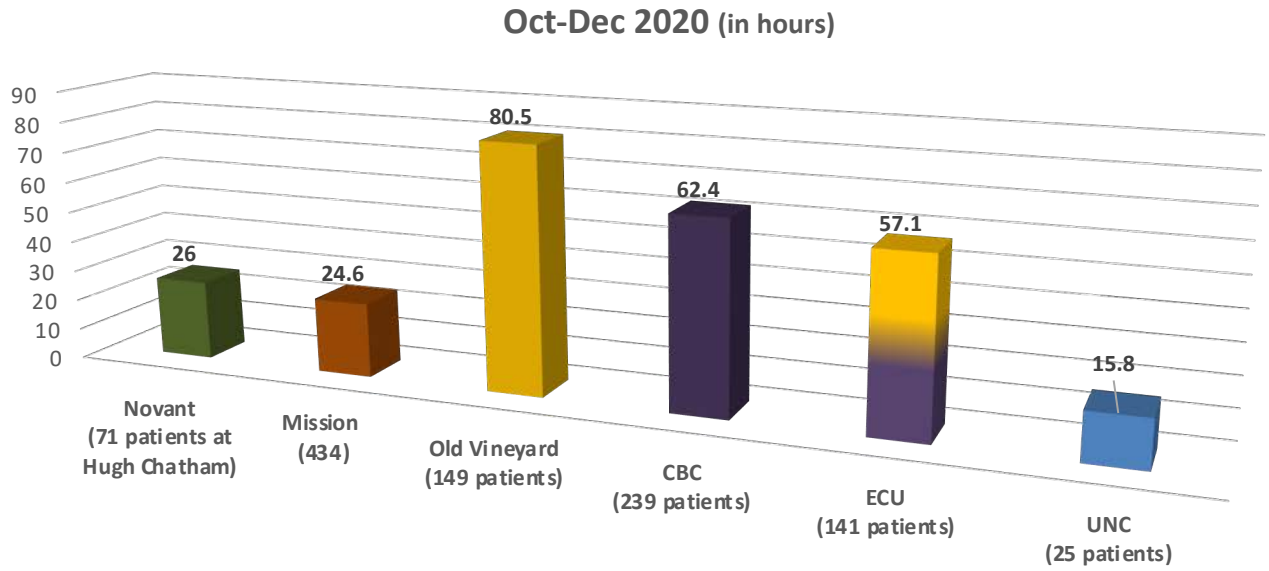
Average Length of Stay by Provider





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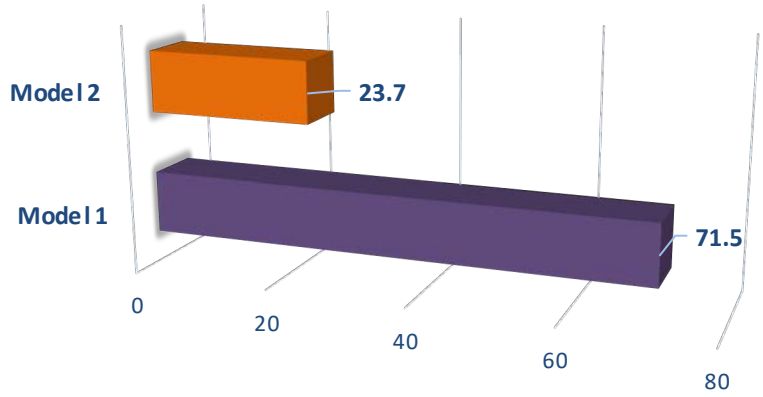
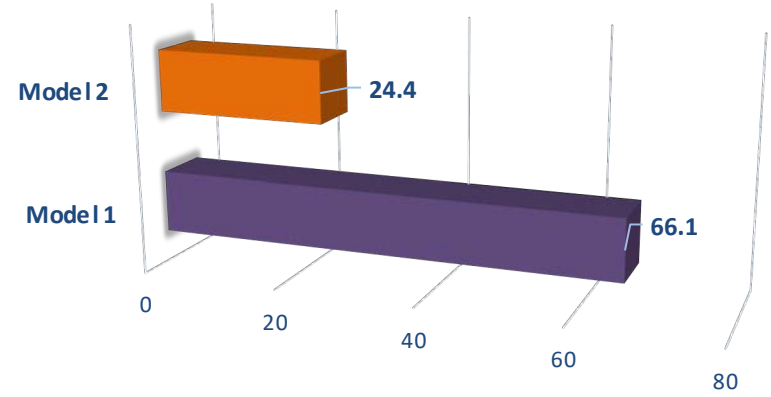
Average LOS by Model

Jan-Mar 2021 (in hours)



Oct-Dec 2020 (in hours)



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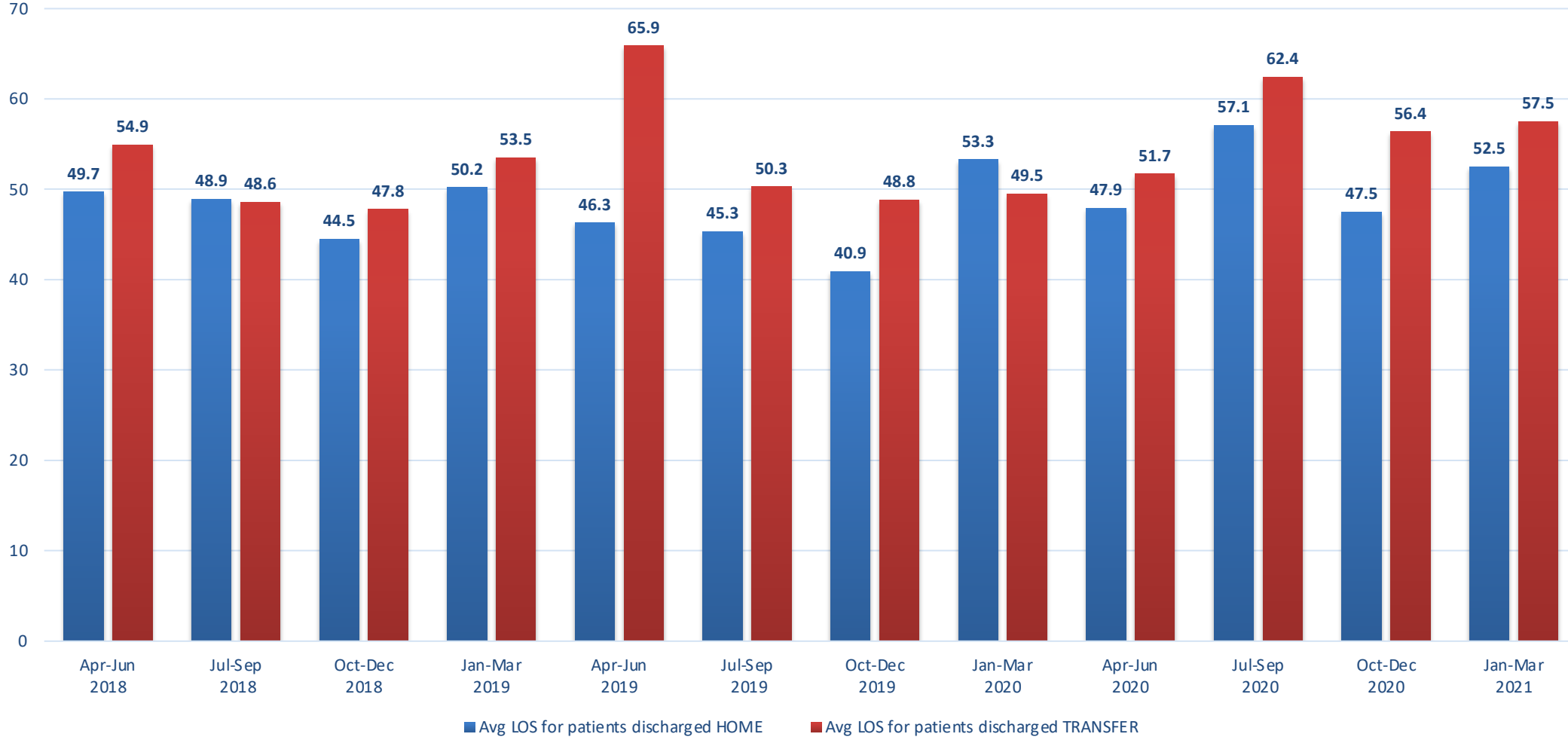
Average Length of Stay by Quarter for Patients Discharged to Home or Transfer
(in hours)



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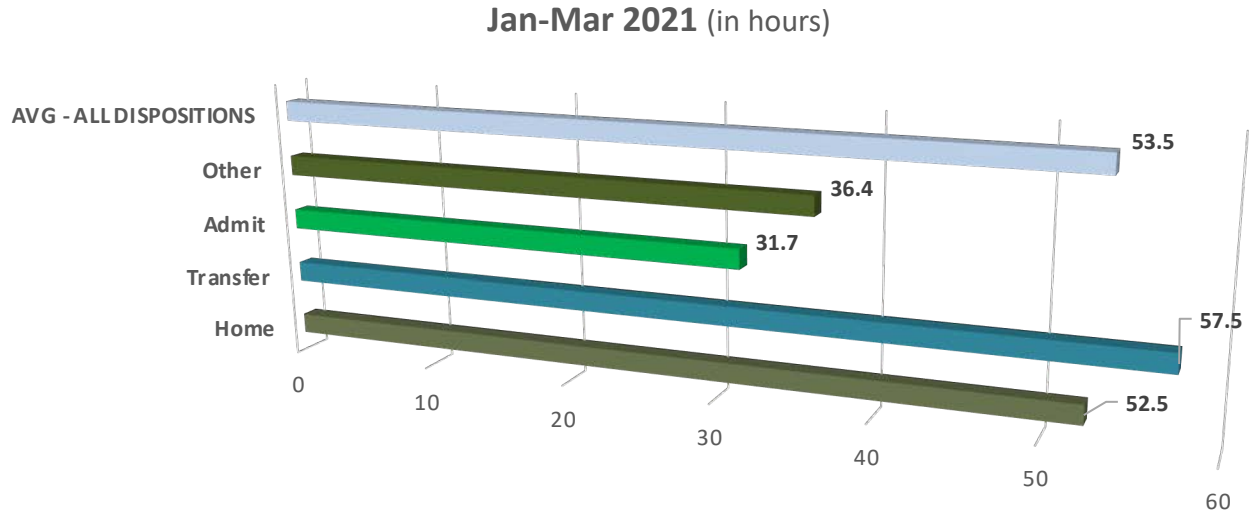
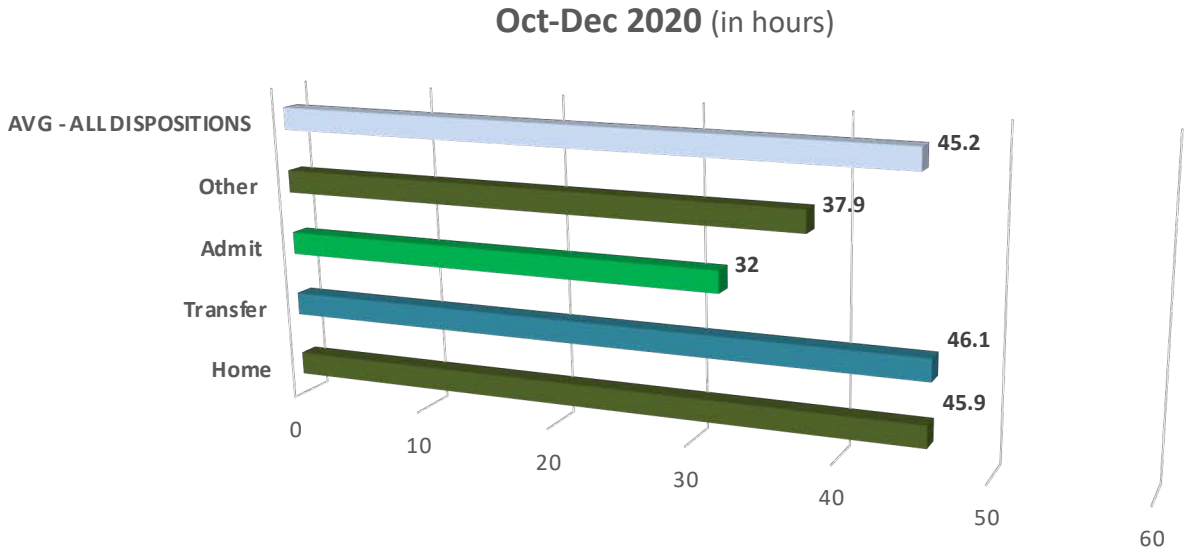
Average LOS by Discharge Disposition





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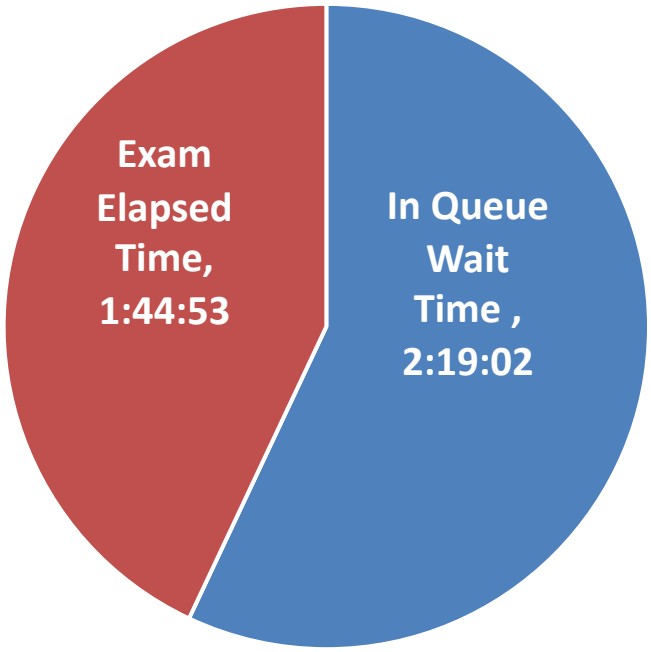
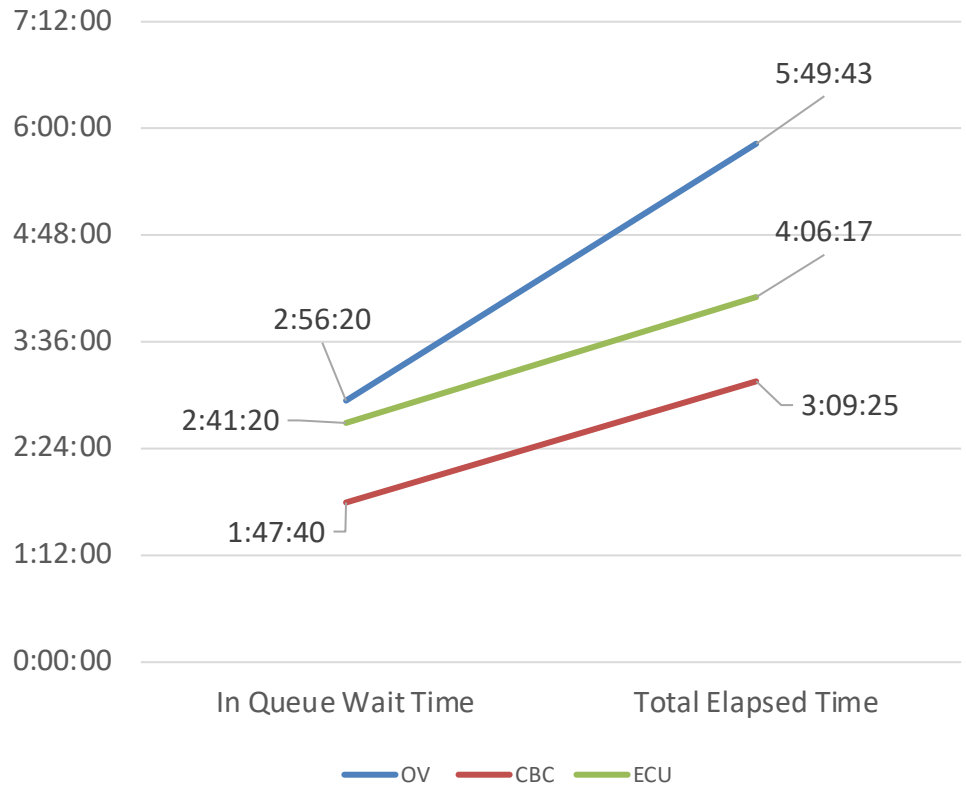
Consult Elapsed Time: January – March 2021

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)



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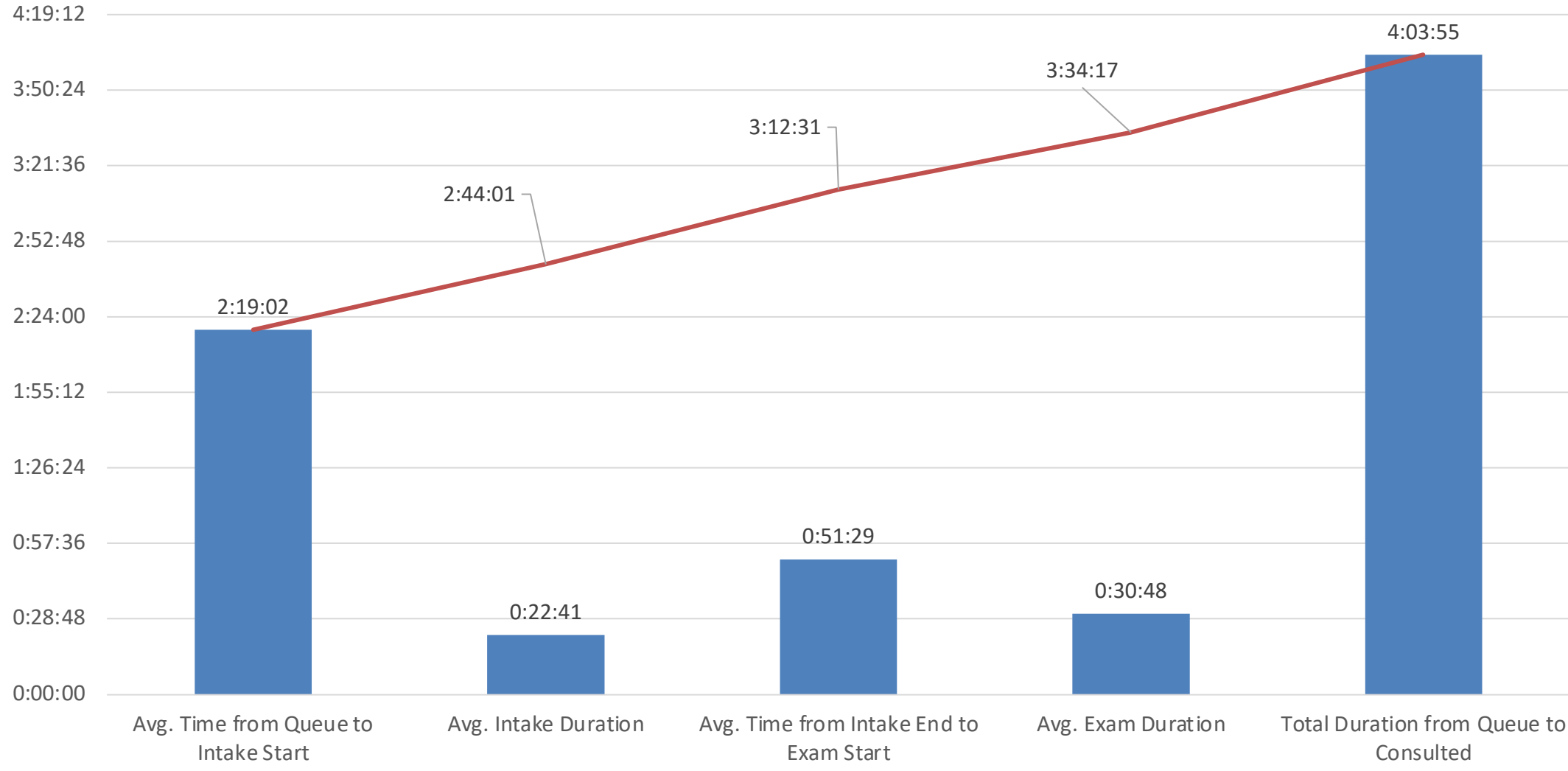
Key Processes and Elapsed Times Averages
CBC, OV, ECU: January – March 2021



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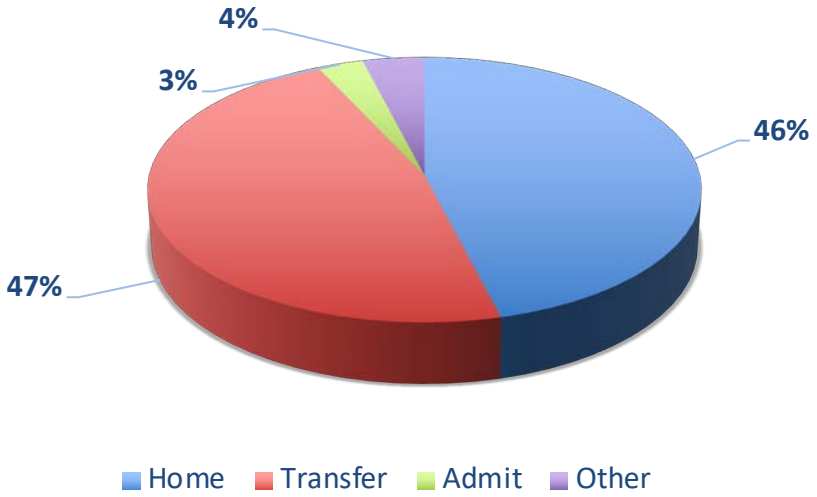
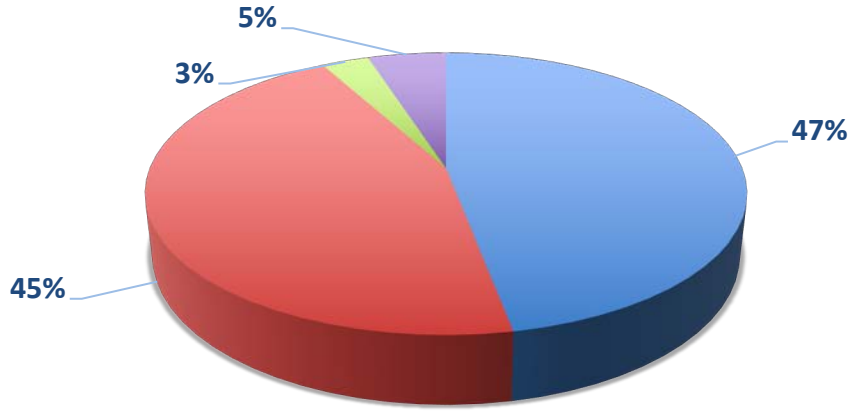
Percent of Patients by Discharge Disposition

Jan-Mar 2021



Oct-Dec 2020



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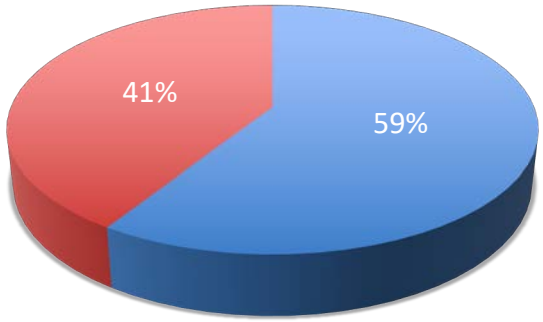
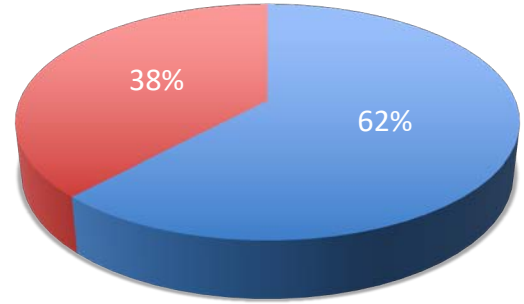
IVCs –
By Release Status

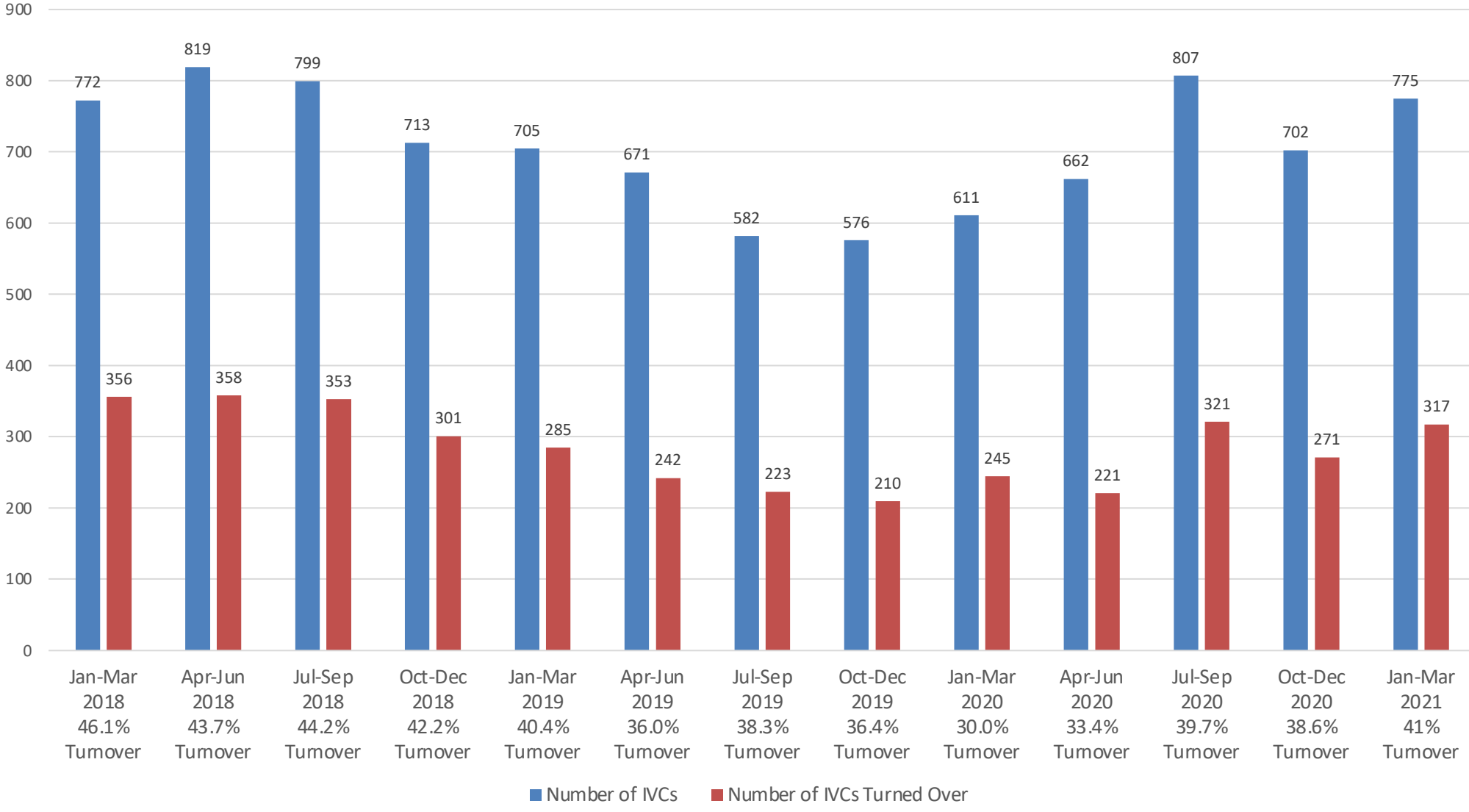
Jan-Mar 2021



Oct-Dec 2020



Number of IVCs and IVCs Turned Over by Quarter



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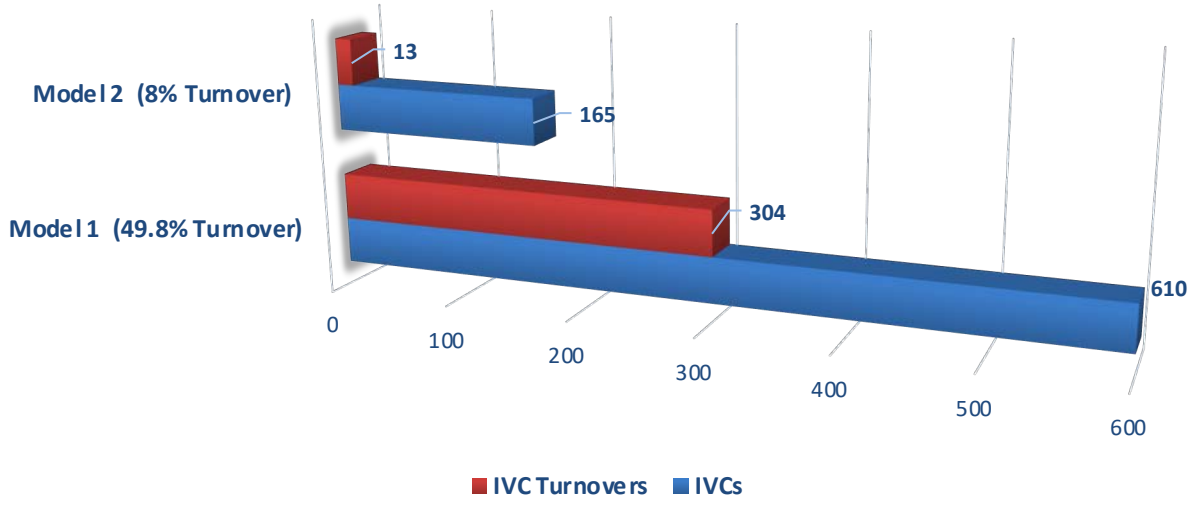
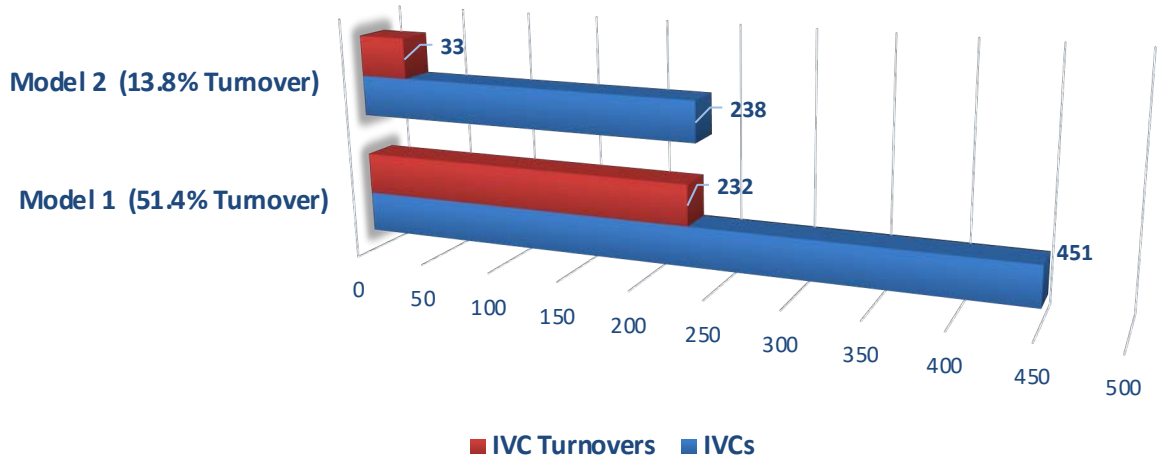
Jan-Mar 2021



Number of IVCs and IVC Turnovers by Model

Oct-Dec 2020



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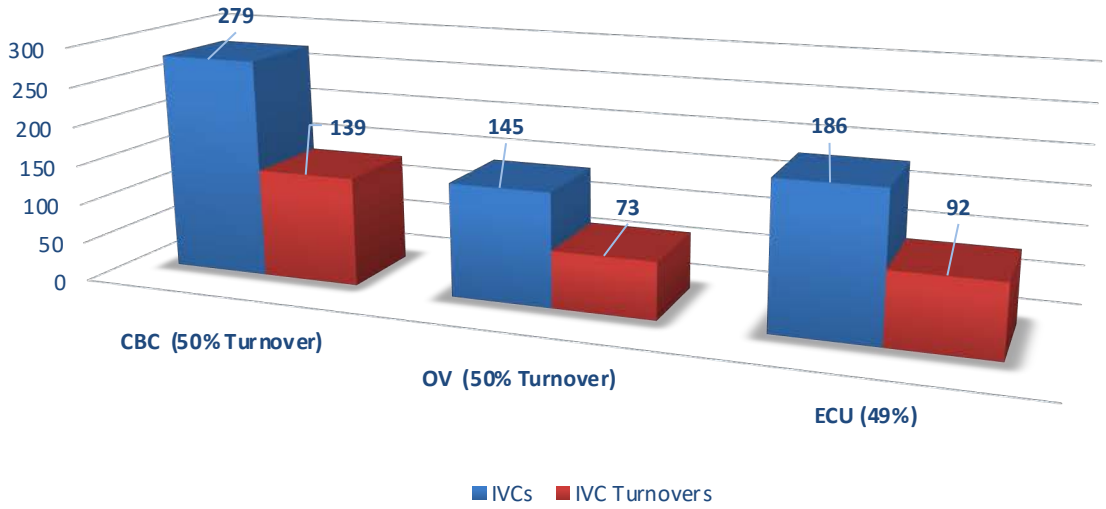
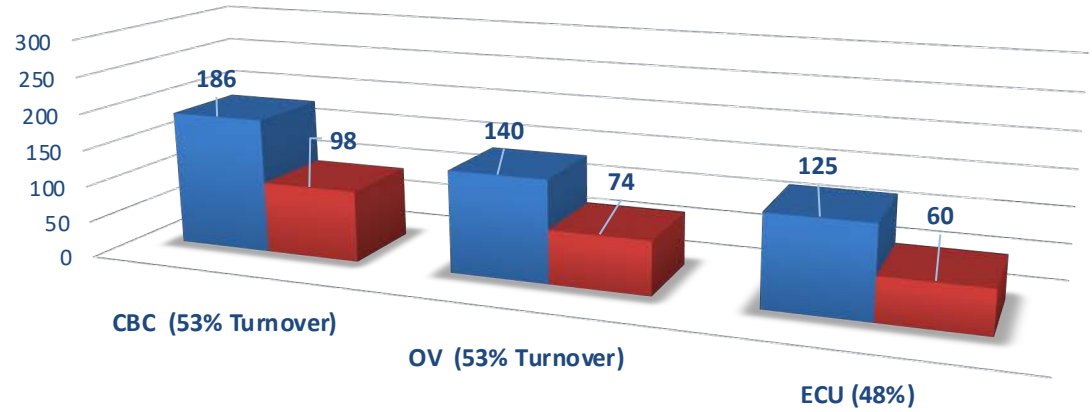
Number of IVCs and IVC Turnovers by Provider

Jan-Mar 2021



Oct-Dec 2020



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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

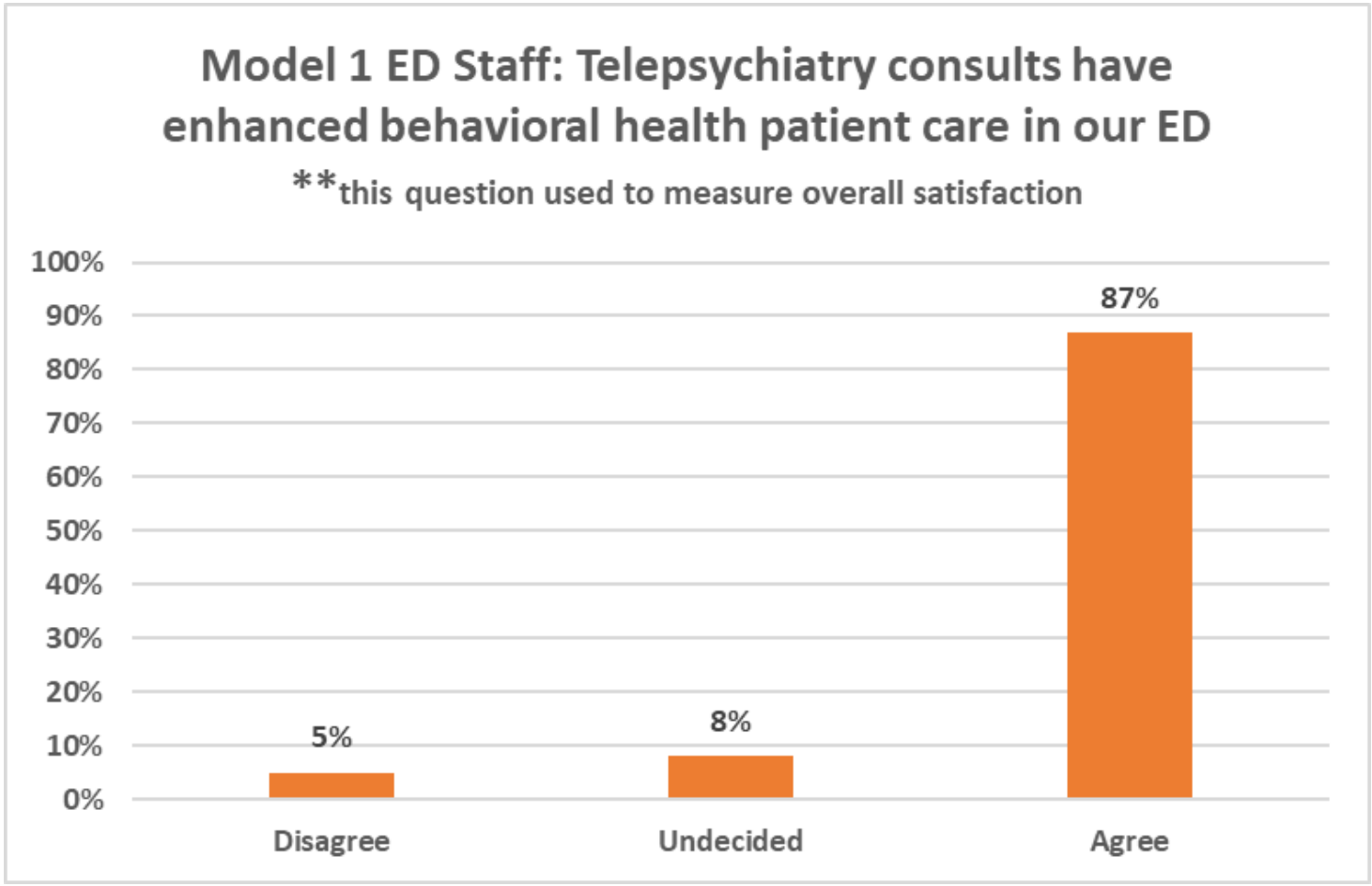
The following number of individuals from each group responded (N= 57)

- 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)



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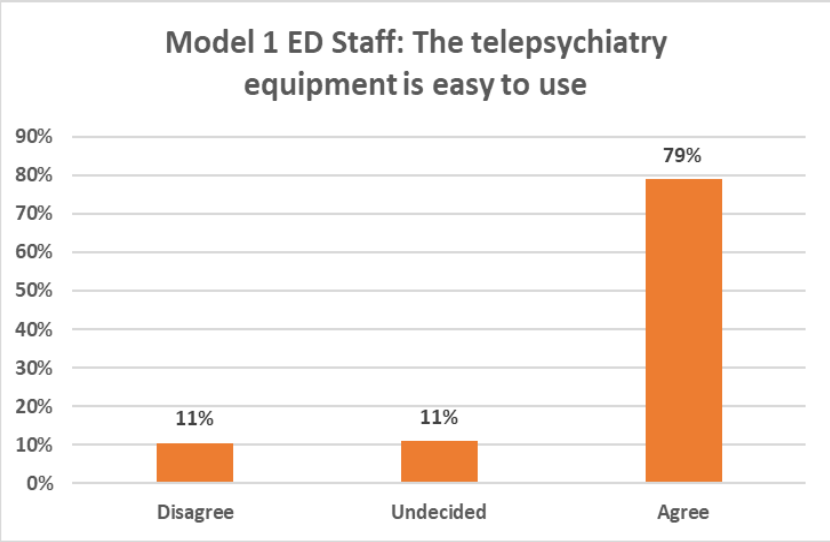
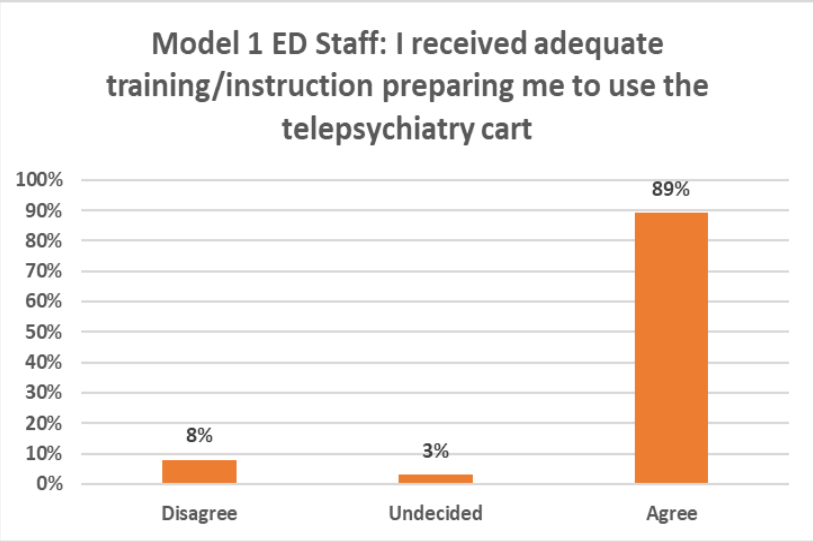
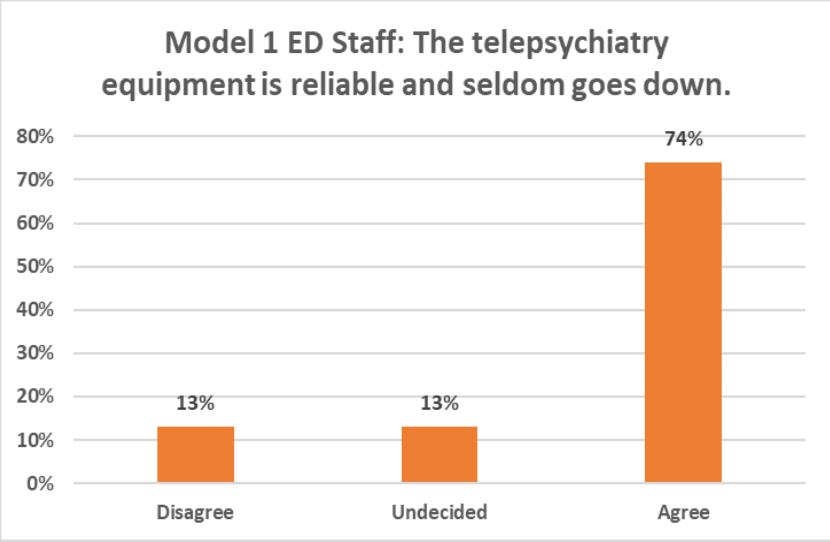
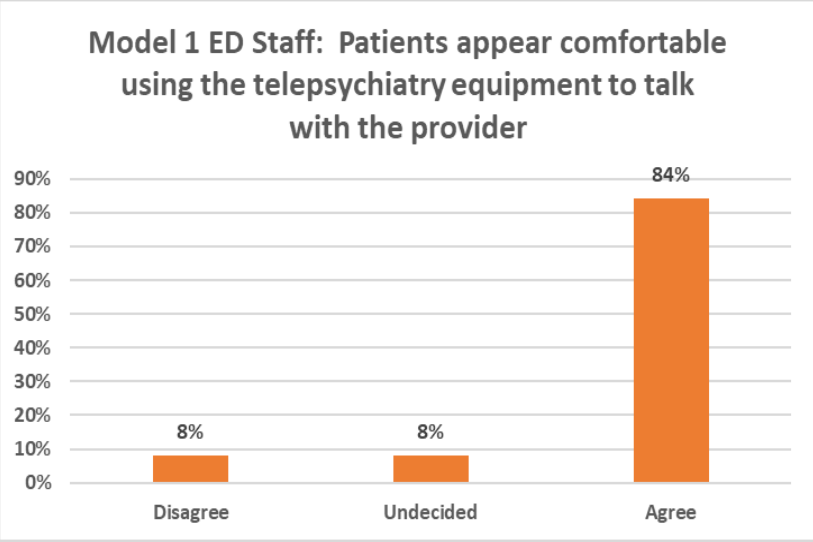
Model 1 Hospital ED Staff Results (n=38)









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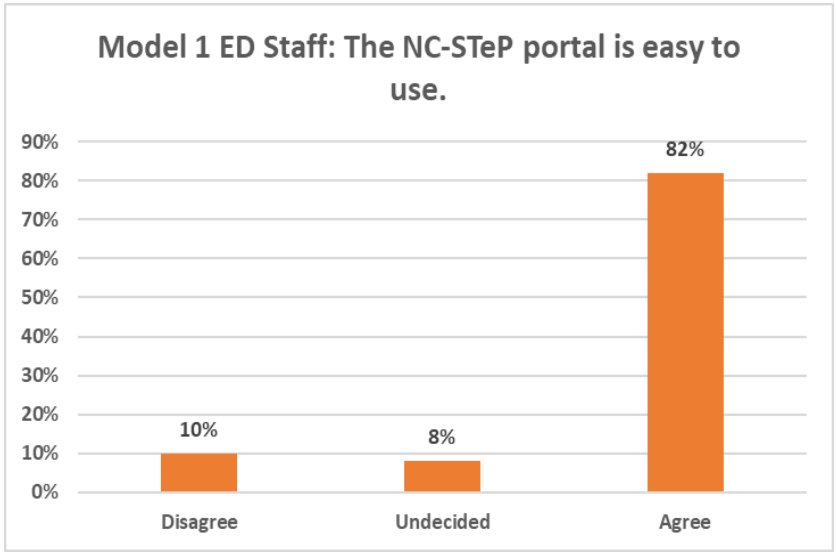
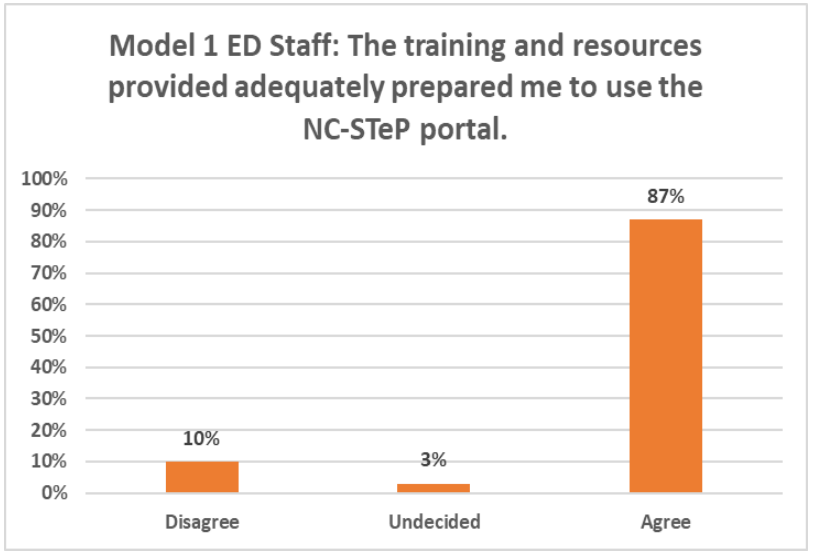
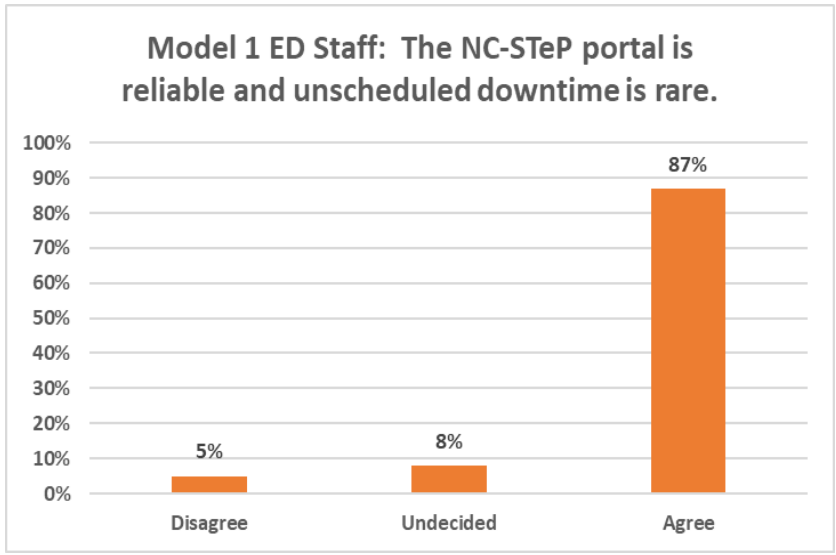
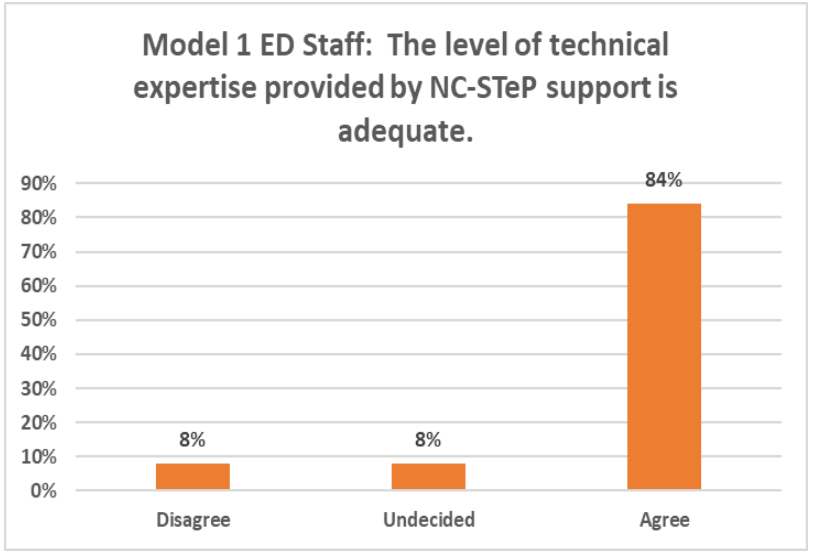
Model 1 Hospital ED Staff Results (n=38)









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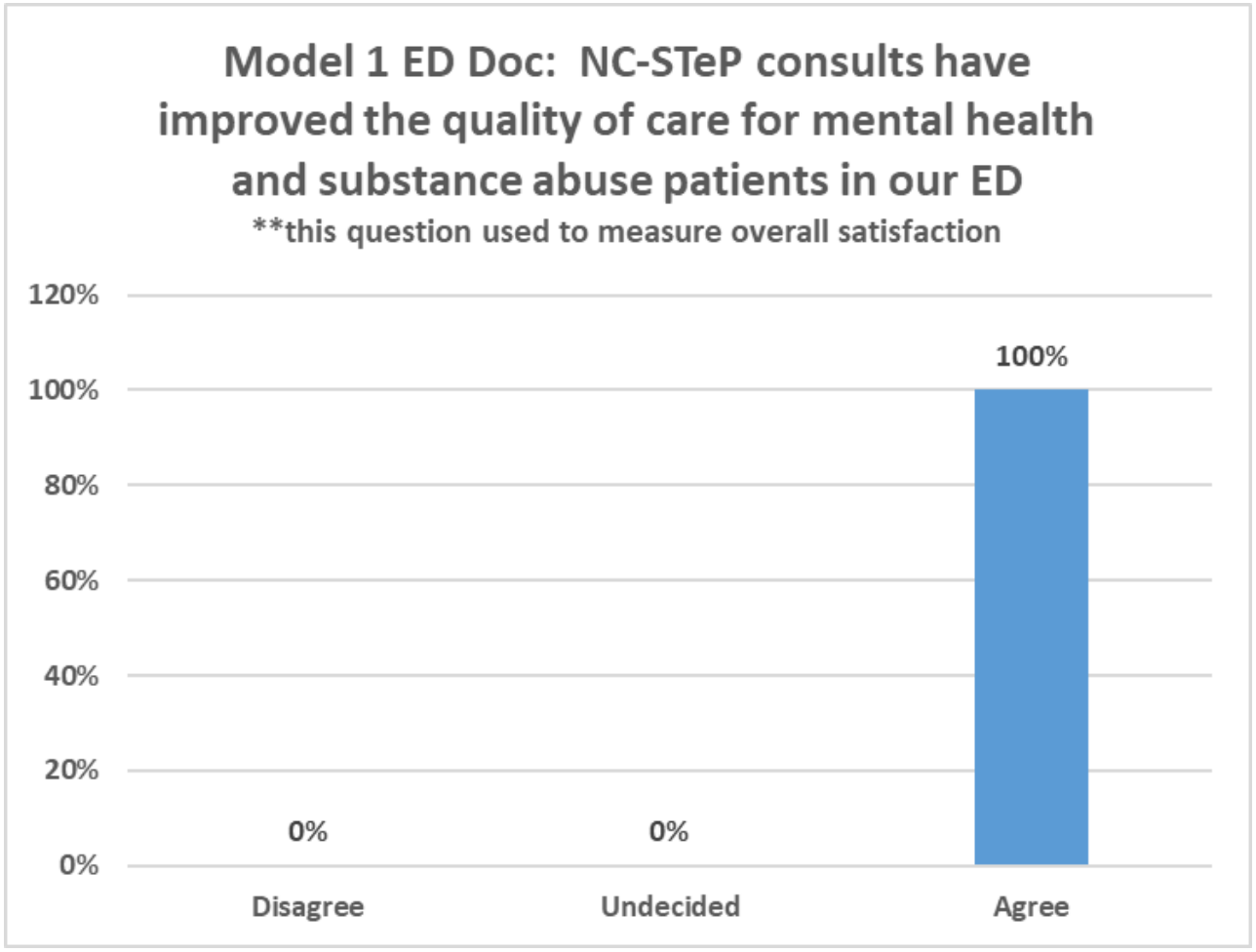
Model 1 Hospital ED Physicians Results (n= 2)



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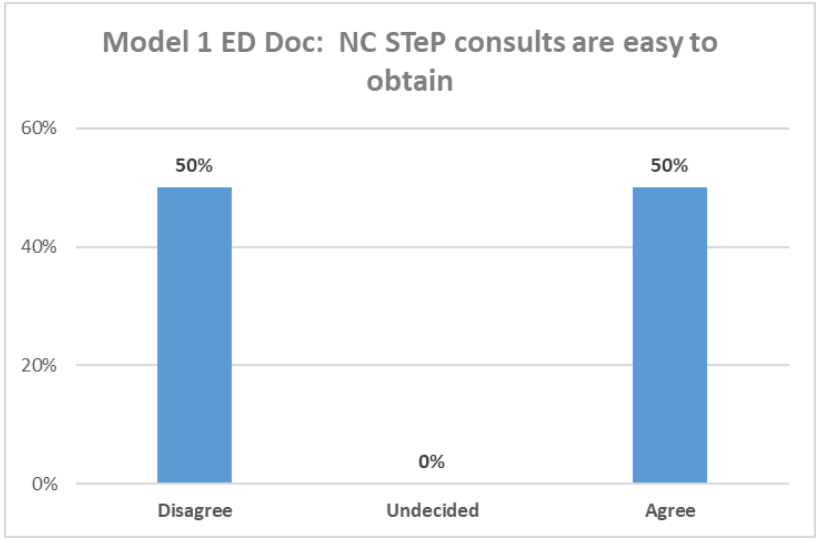
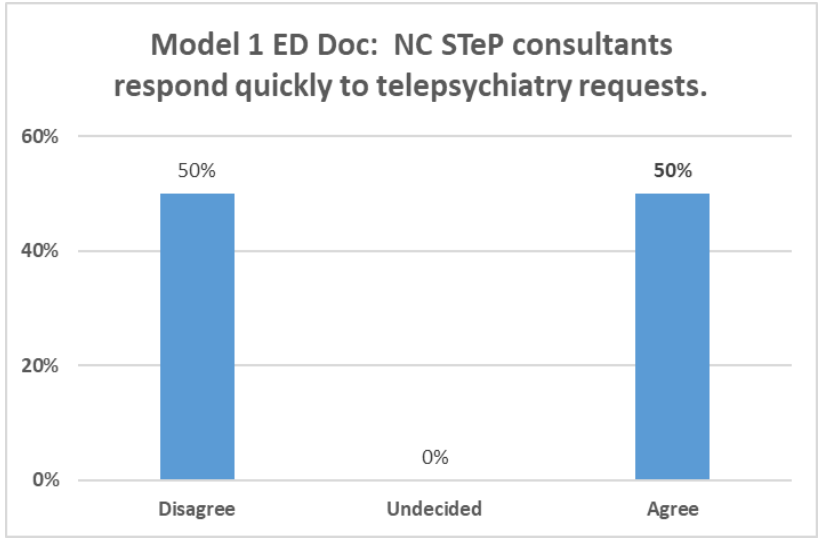
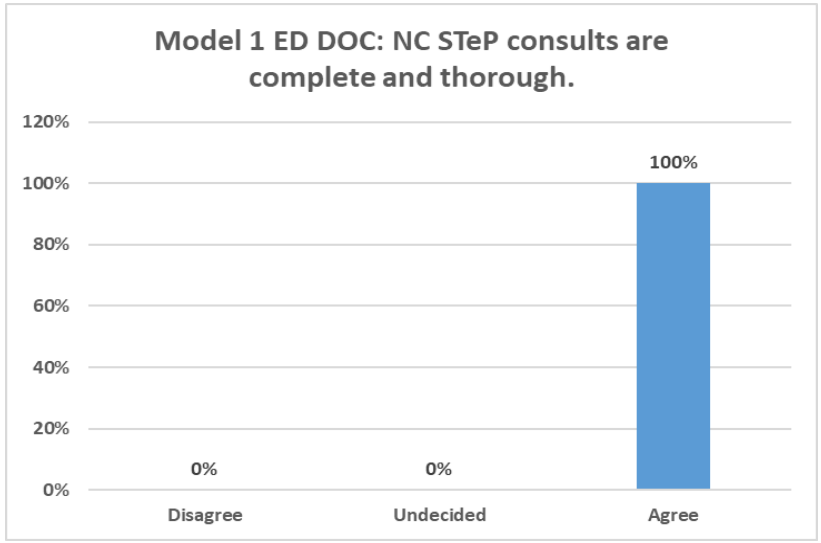
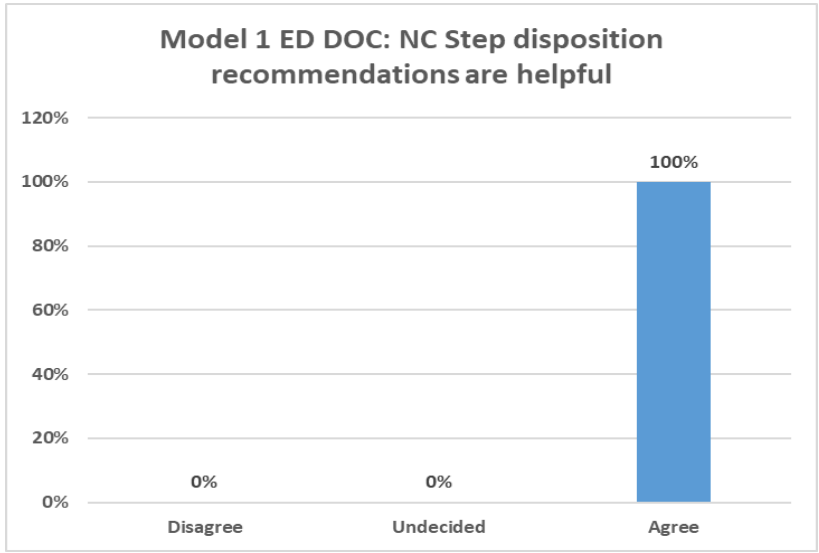
Model 1 Hospital ED Physicians Results (n= 2)









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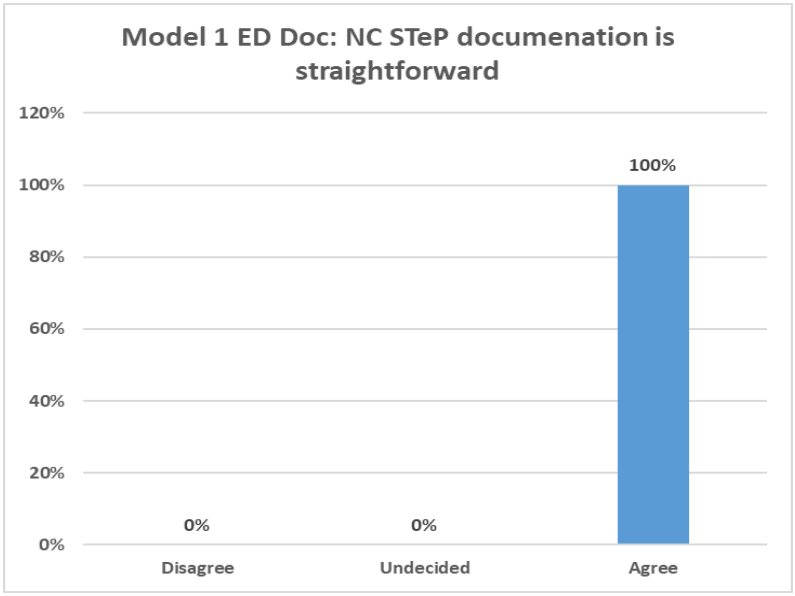
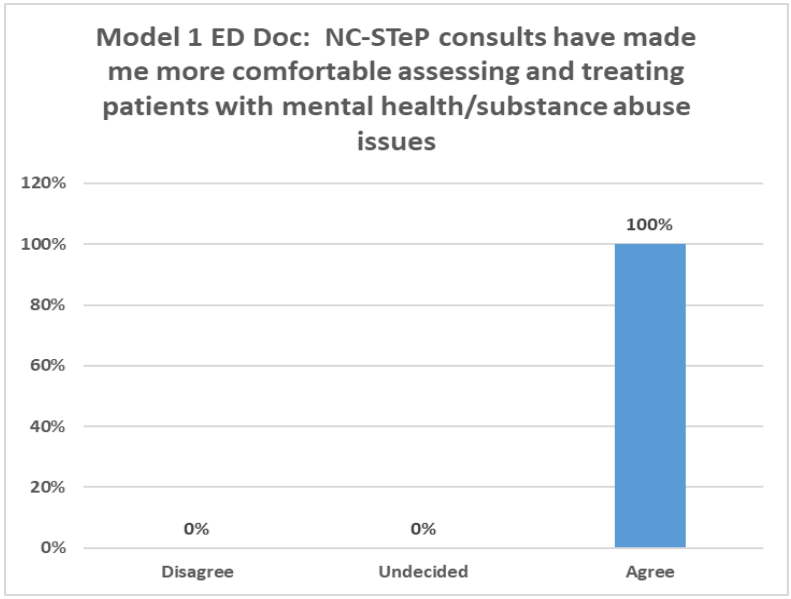
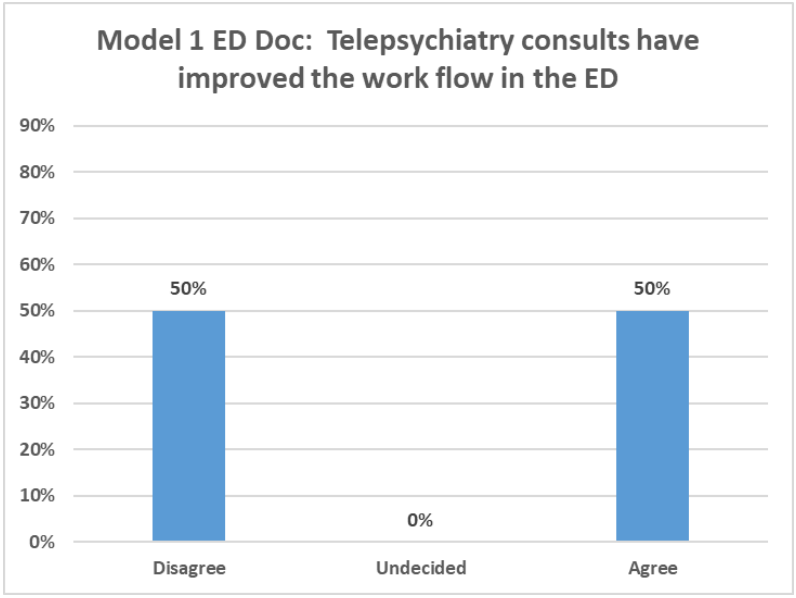
Model 1 Hospital ED Physicians Results (n= 2)







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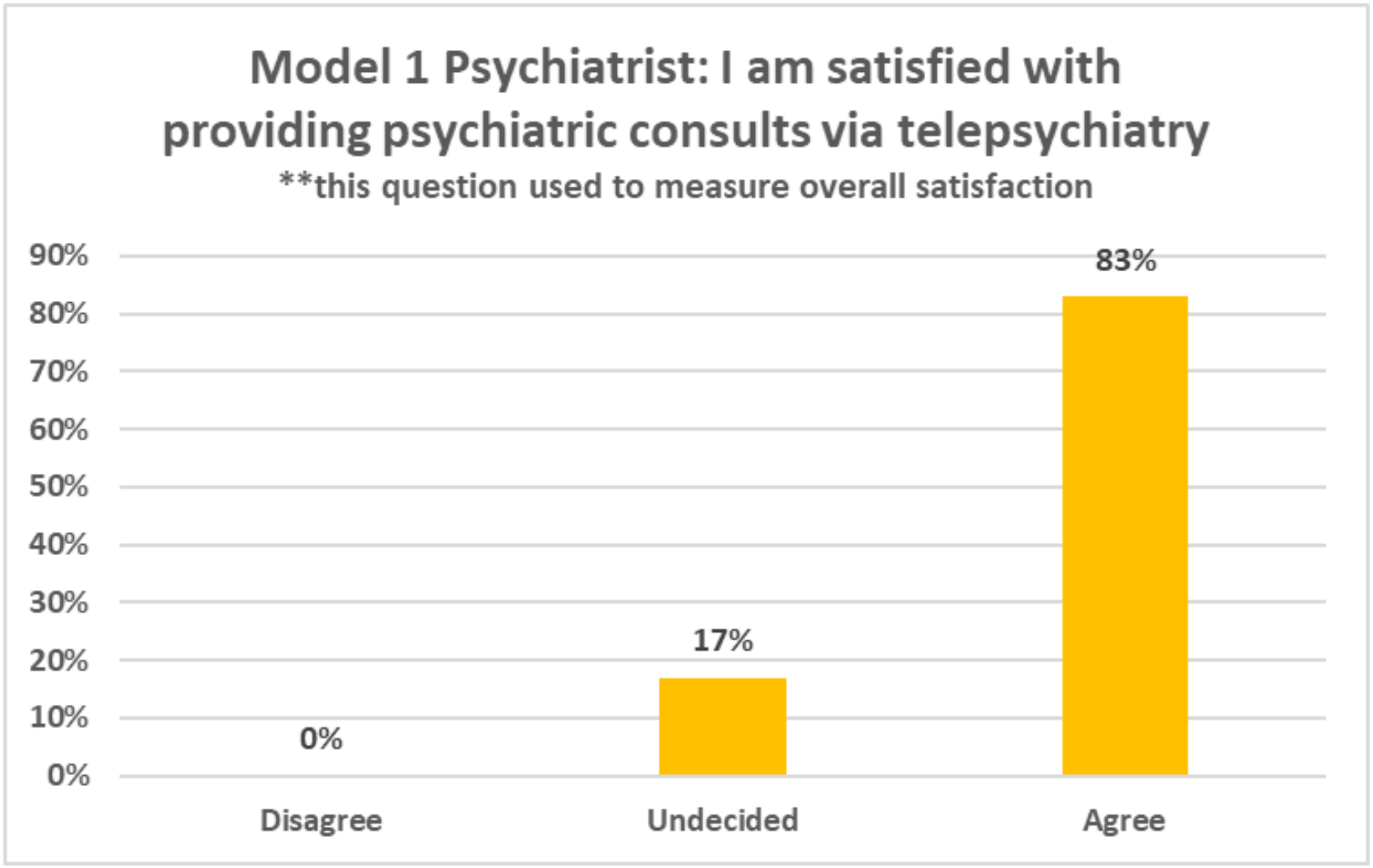
Model 1 Provider Psychiatrist Results (n= 6)



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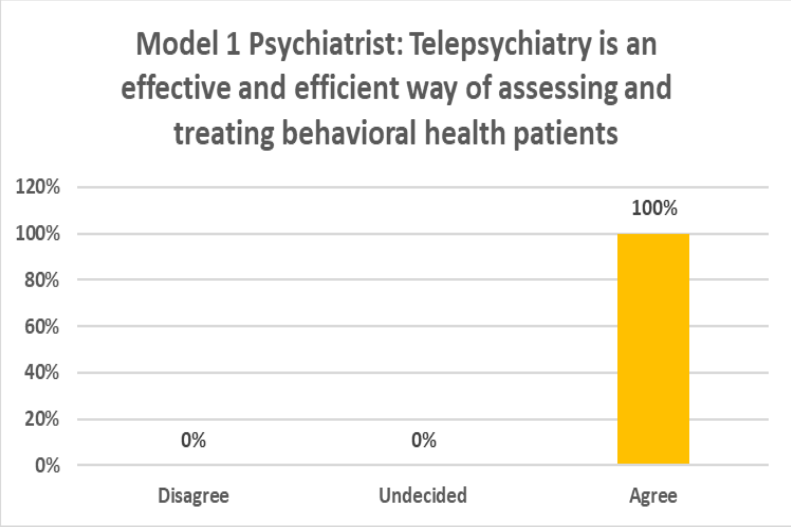
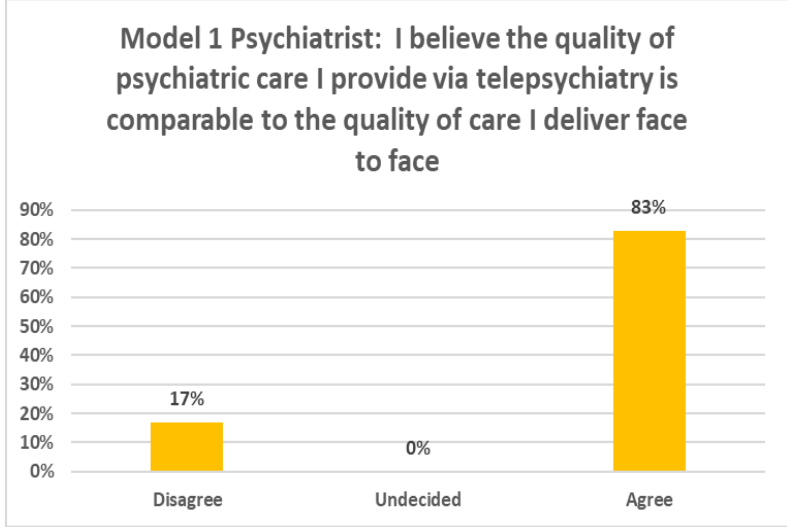
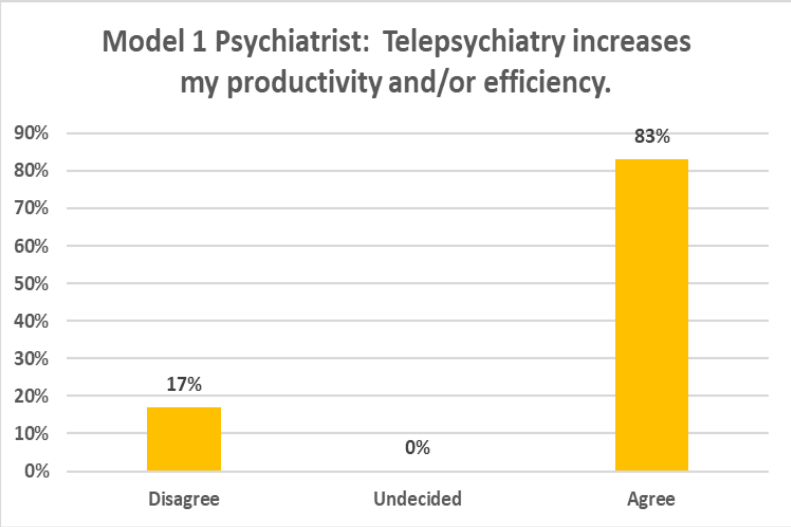
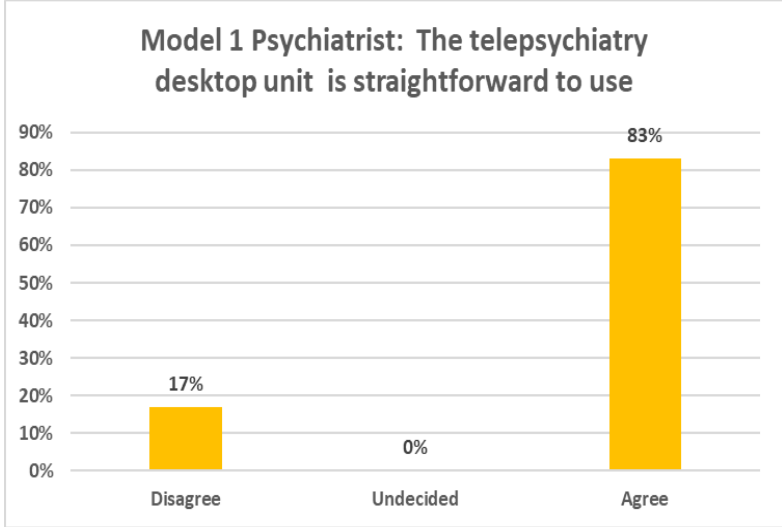
Model 1 Provider Psychiatrist Results (n= 6)









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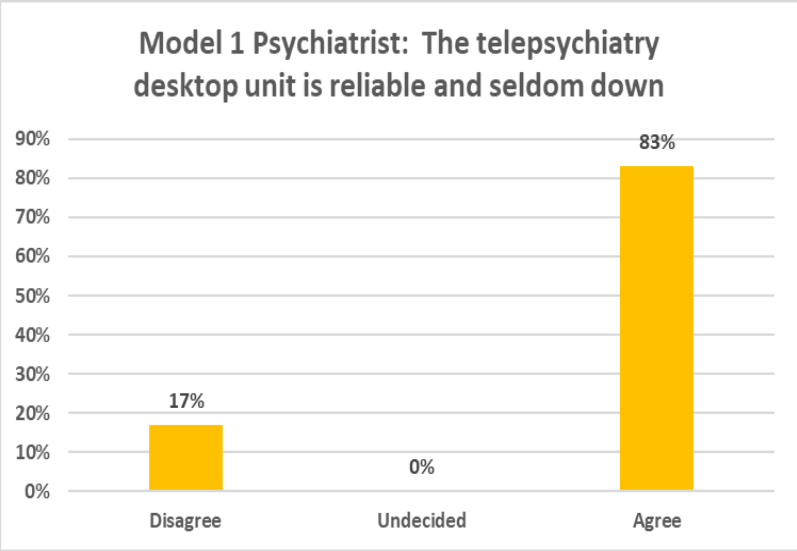
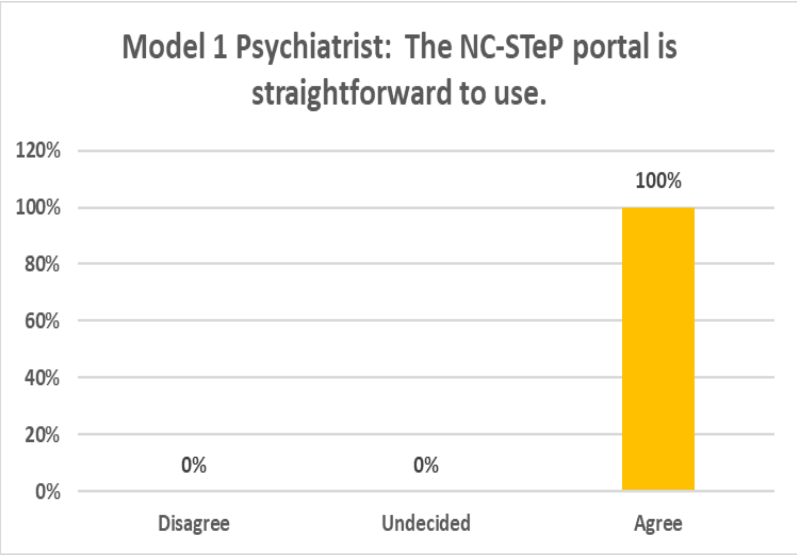
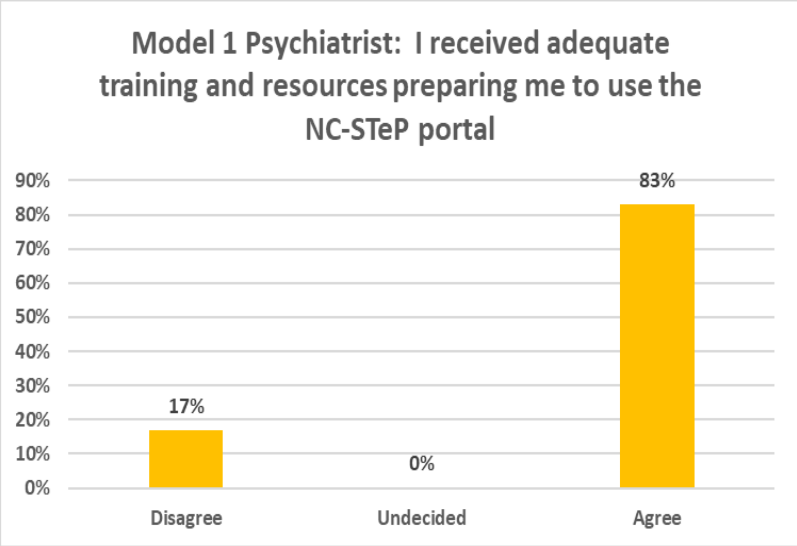
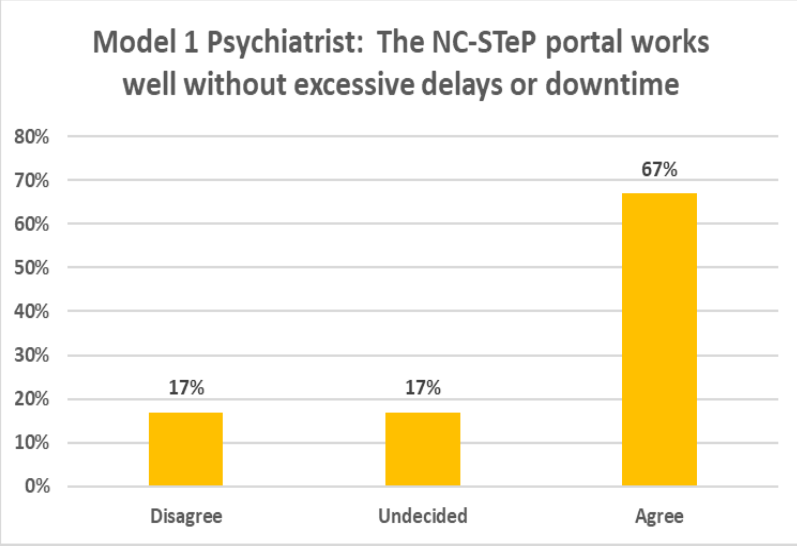
Model 1 Provider Psychiatrist Results (n= 6)









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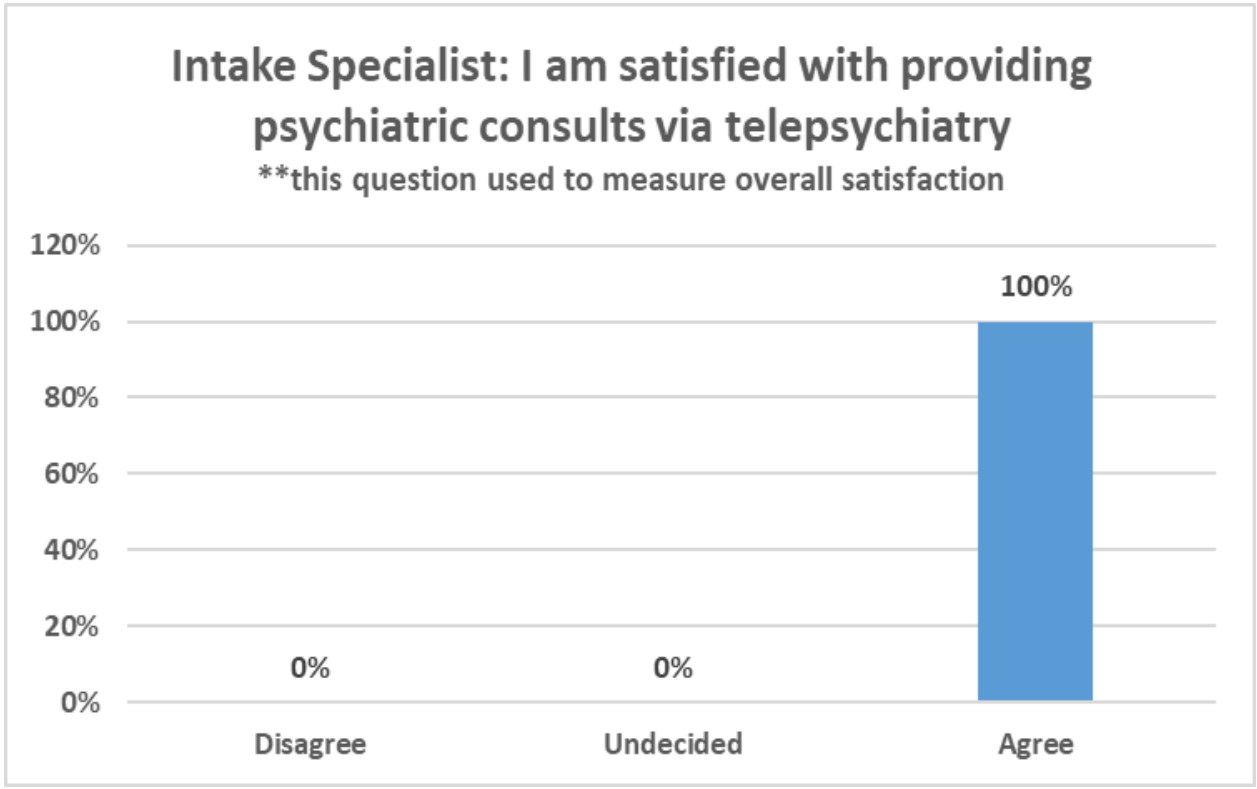
Model 1 Psychiatric Intake Specialist Results (n=3)



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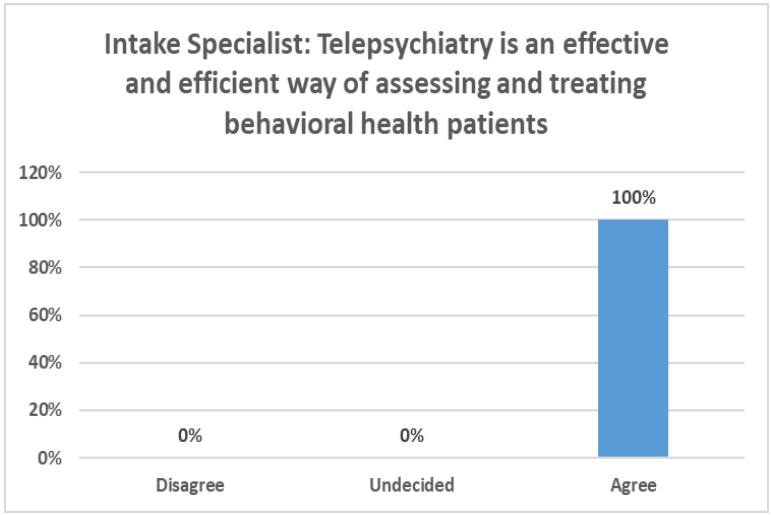
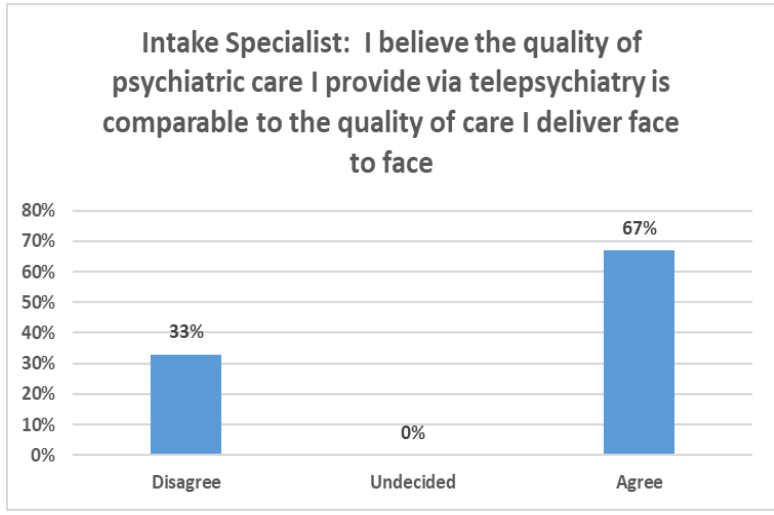
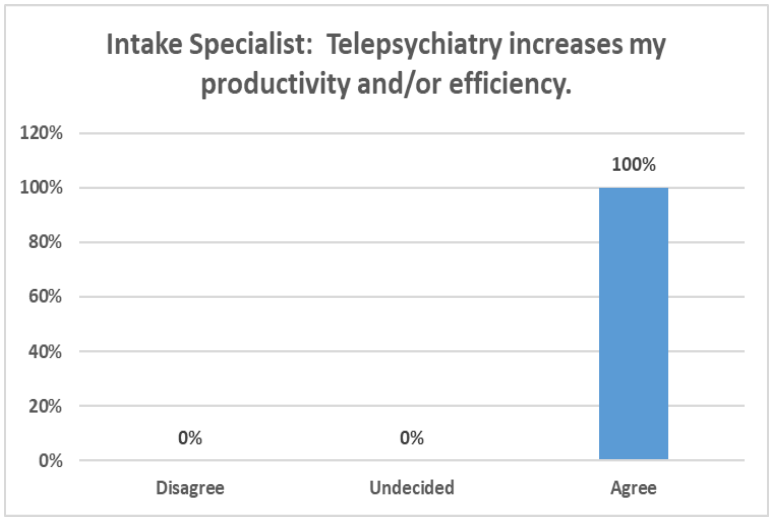
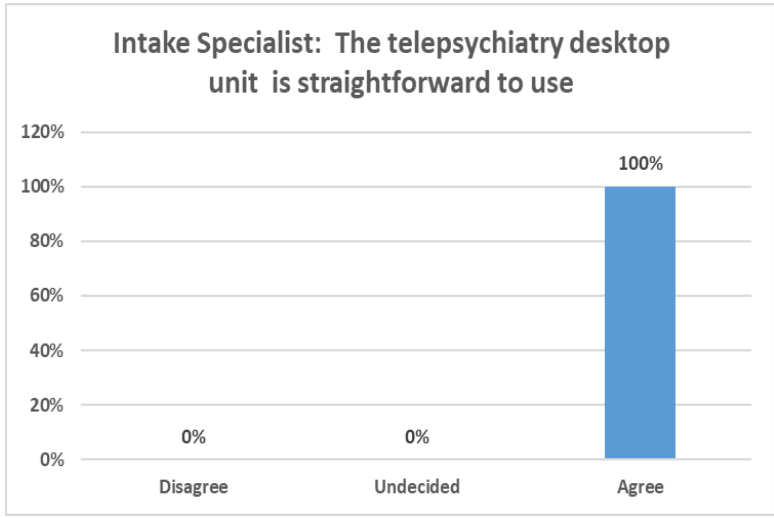
Model 1 Psychiatric Intake Specialist Results (n=3)









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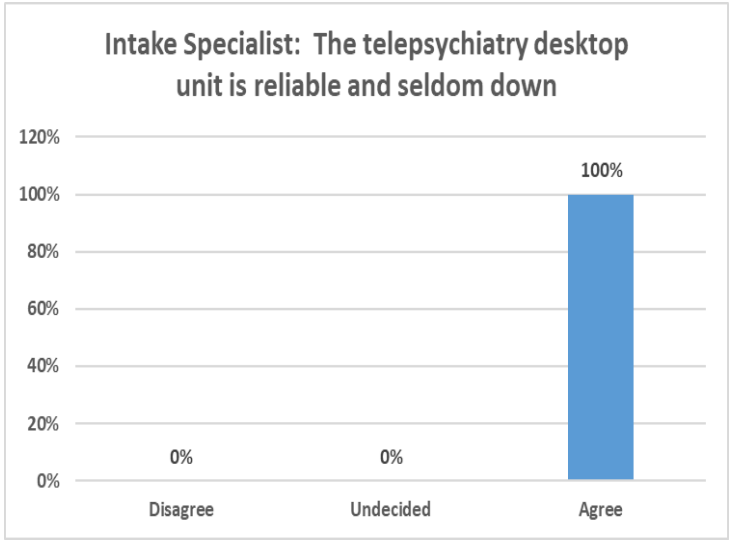
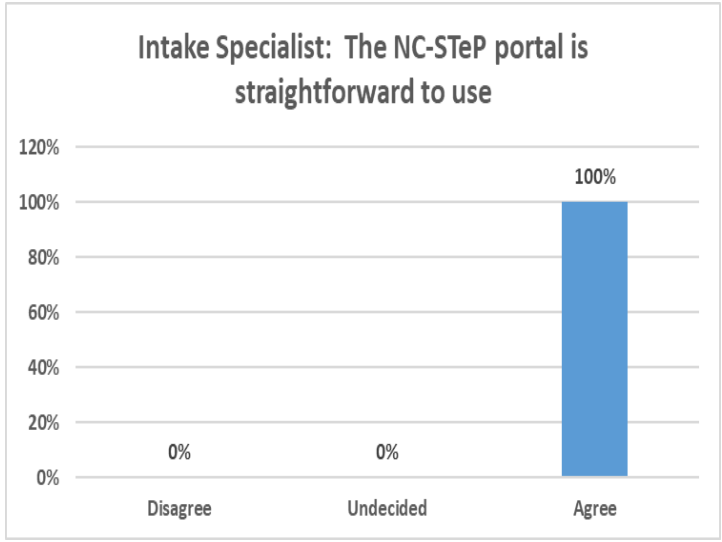
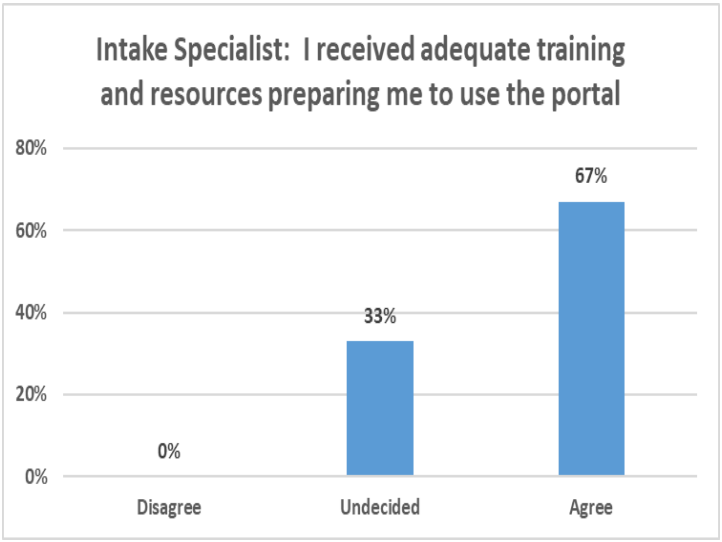
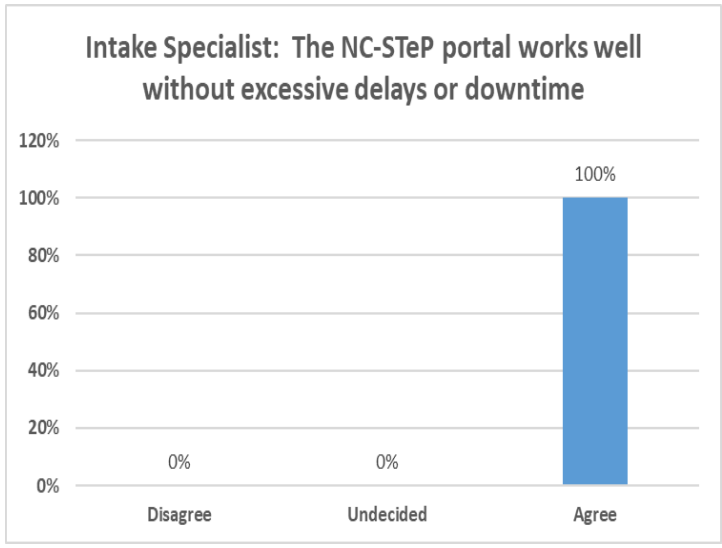
Model 1 Psychiatric Intake Specialist Results (n=3)









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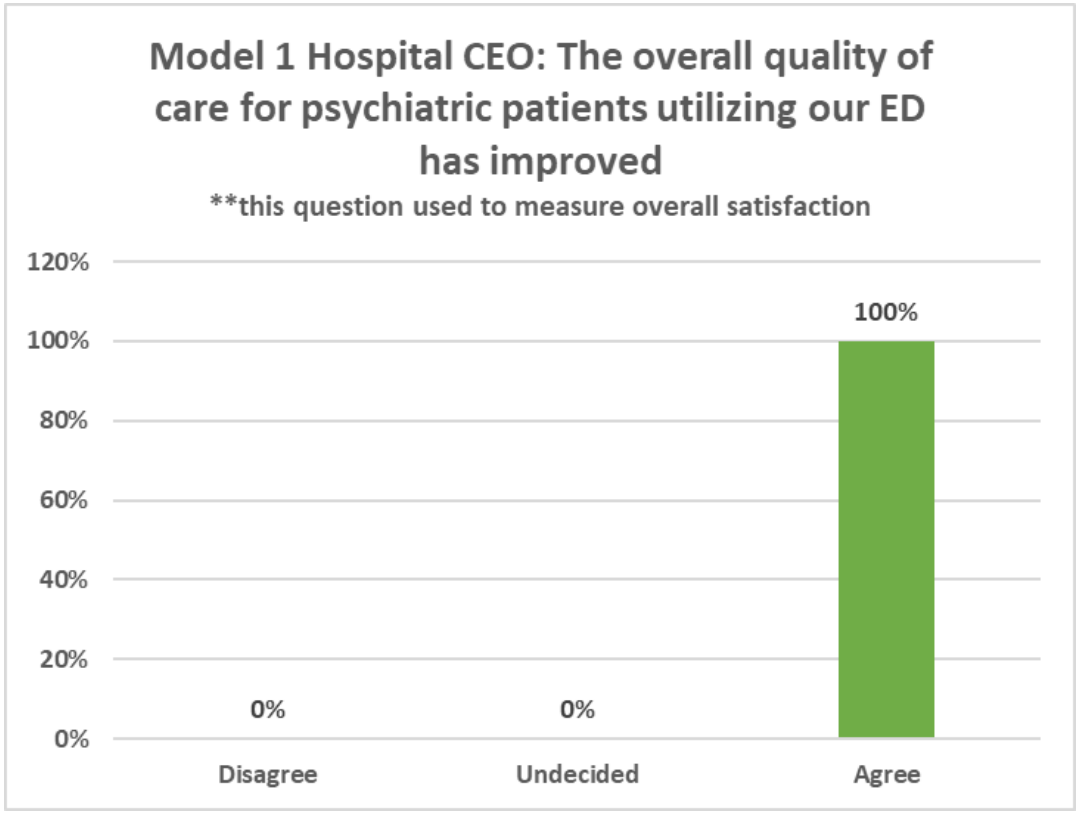
Model 1 CEO/CNO/CFO Results (n=4)



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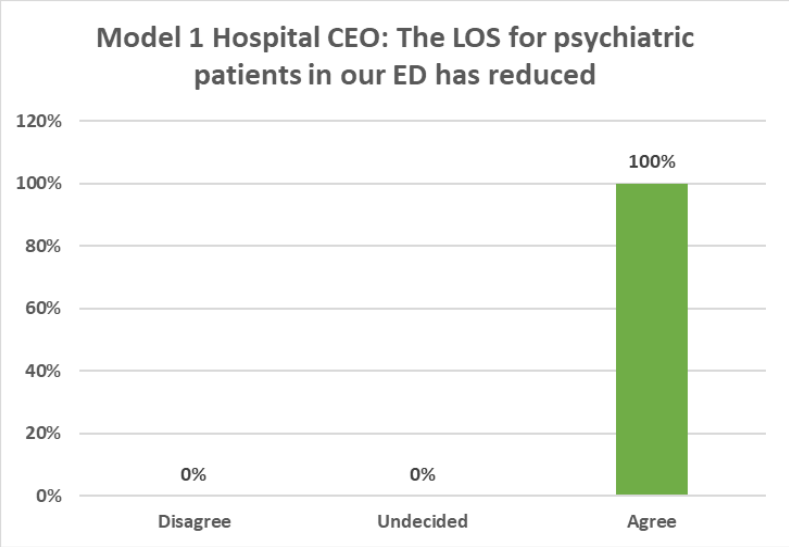
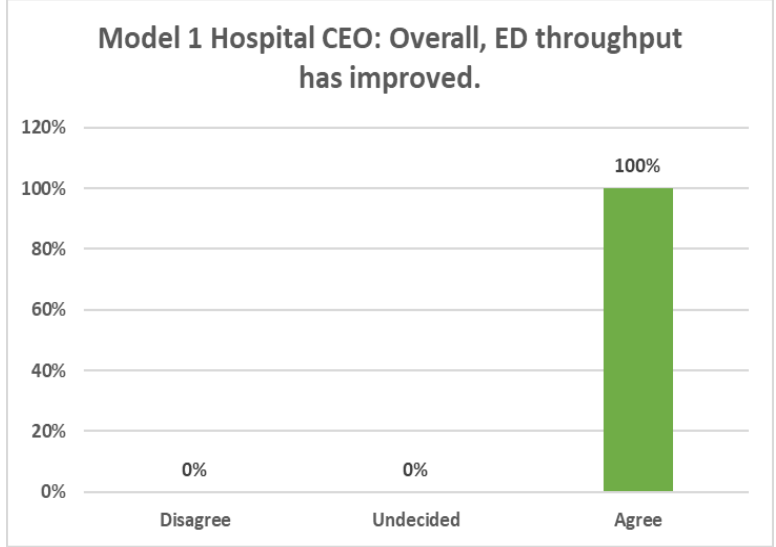
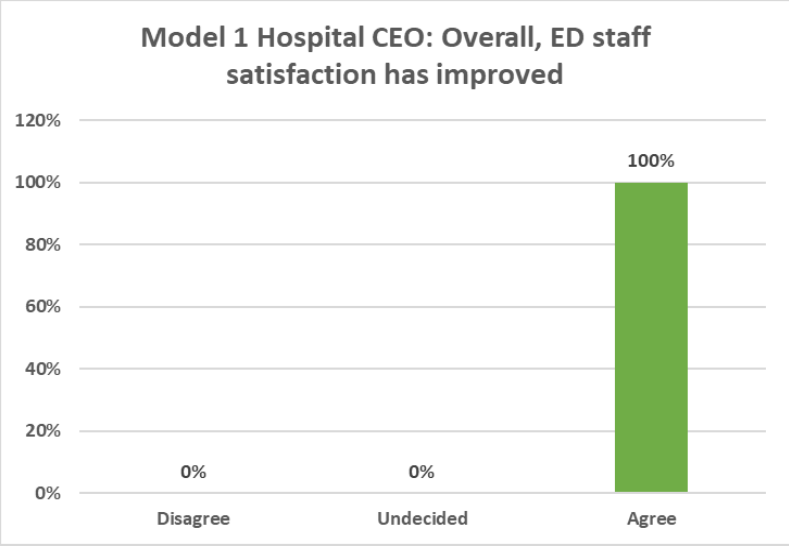
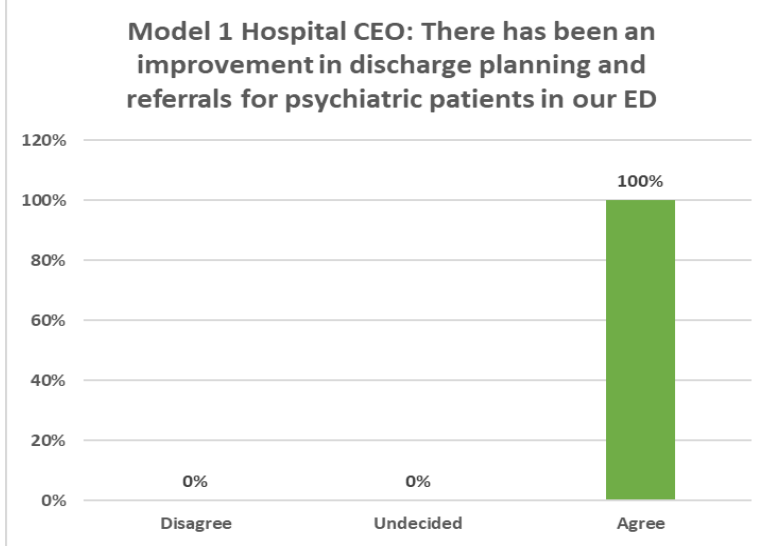
Model 1 CEO/CNO/CFO Results (n=4)









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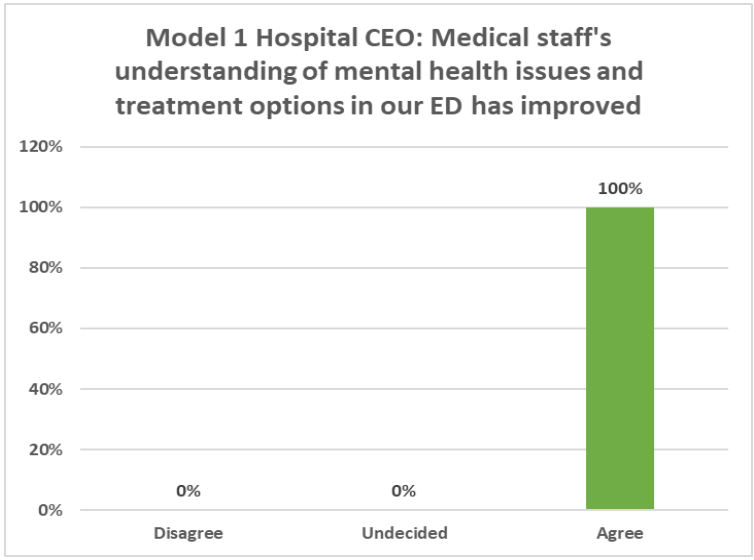
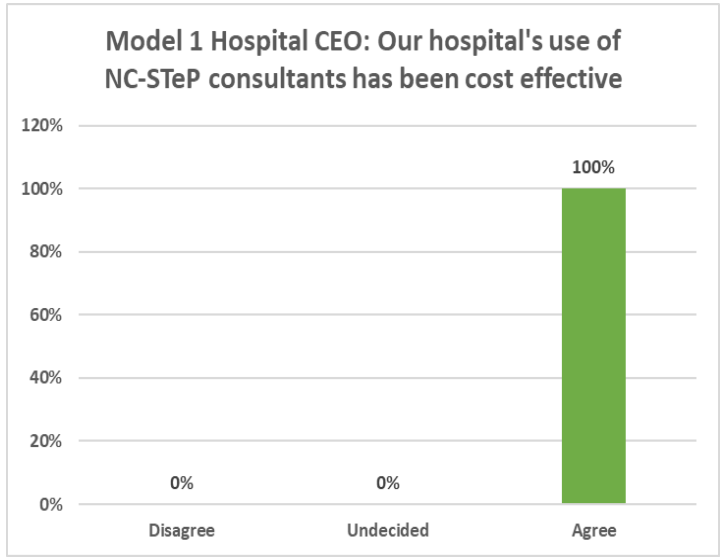
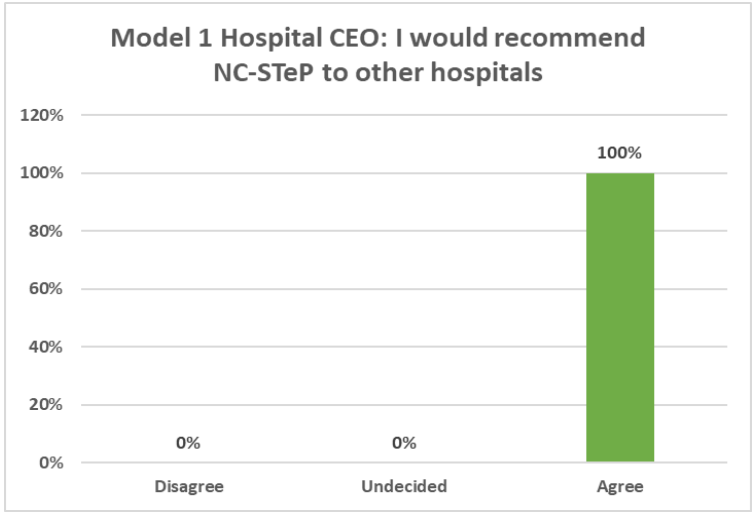
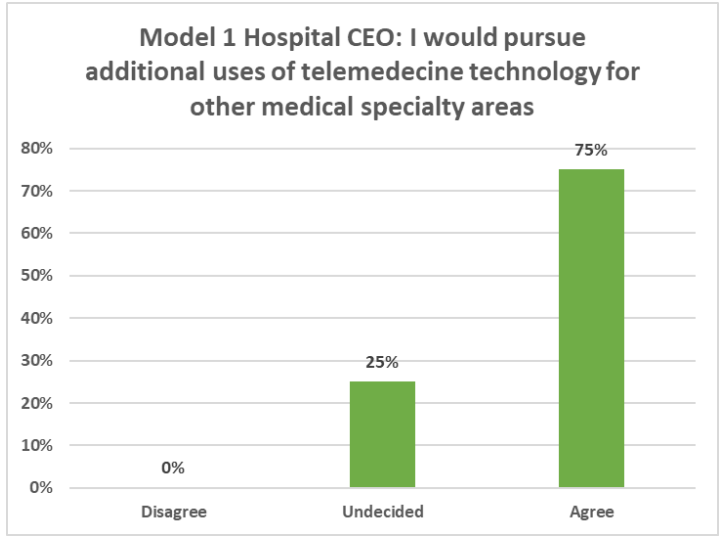
Model 1 CEO/CNO/CFO Results (n=6)









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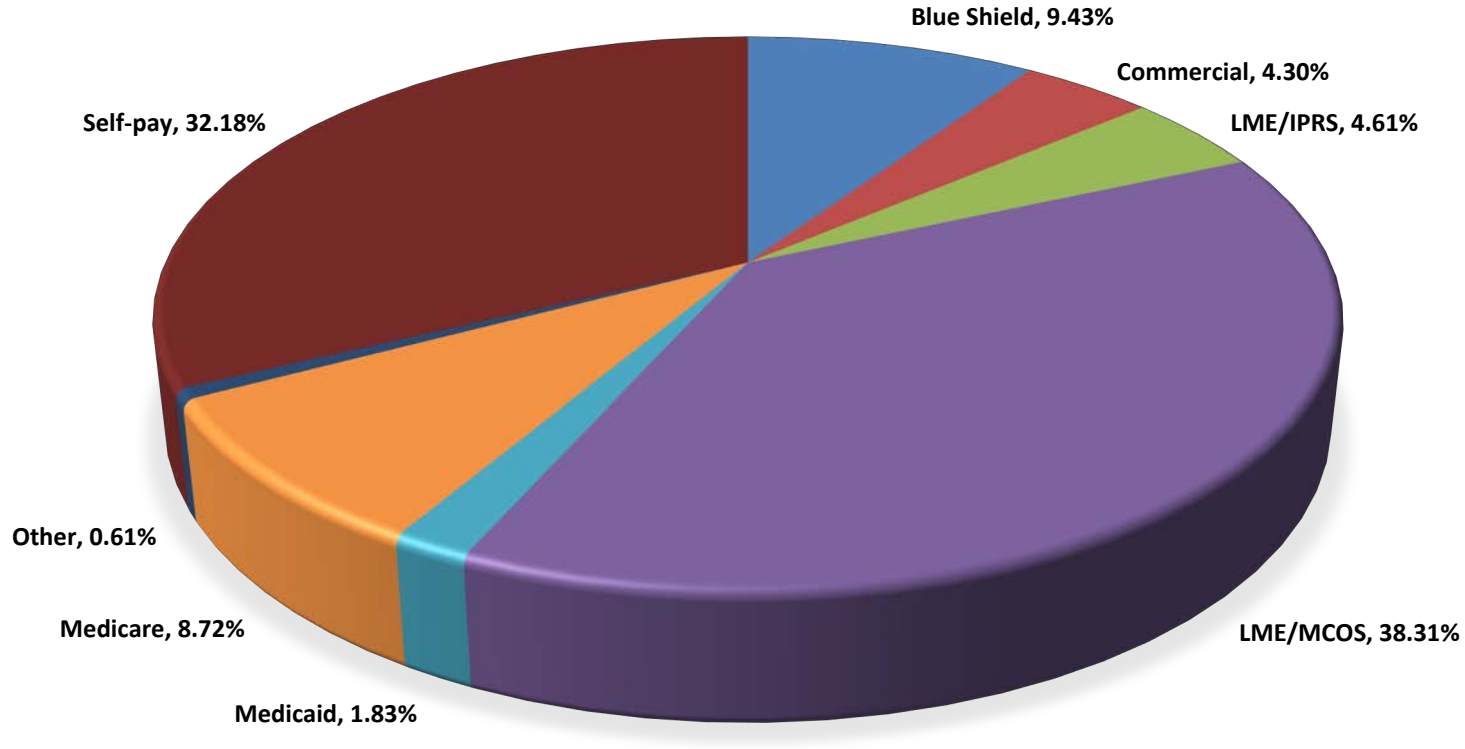
NC-STeP Charge Mix

QTD 2021 - Quarter 3



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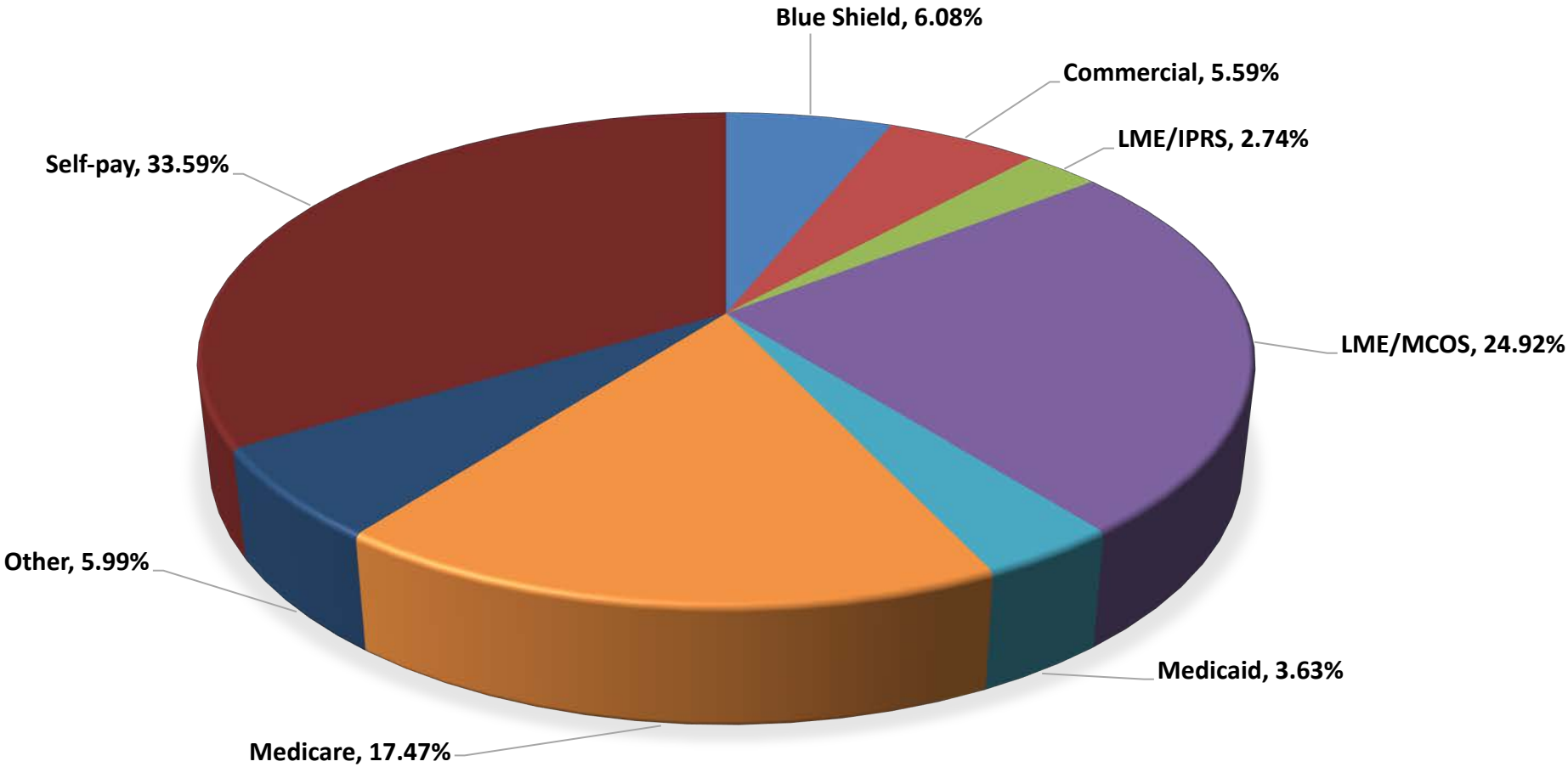
NC-STeP Charge Mix - Project to Date

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



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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
Total Patient Visits	7,228	15	2,633	3,477	1,103

- 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

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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.

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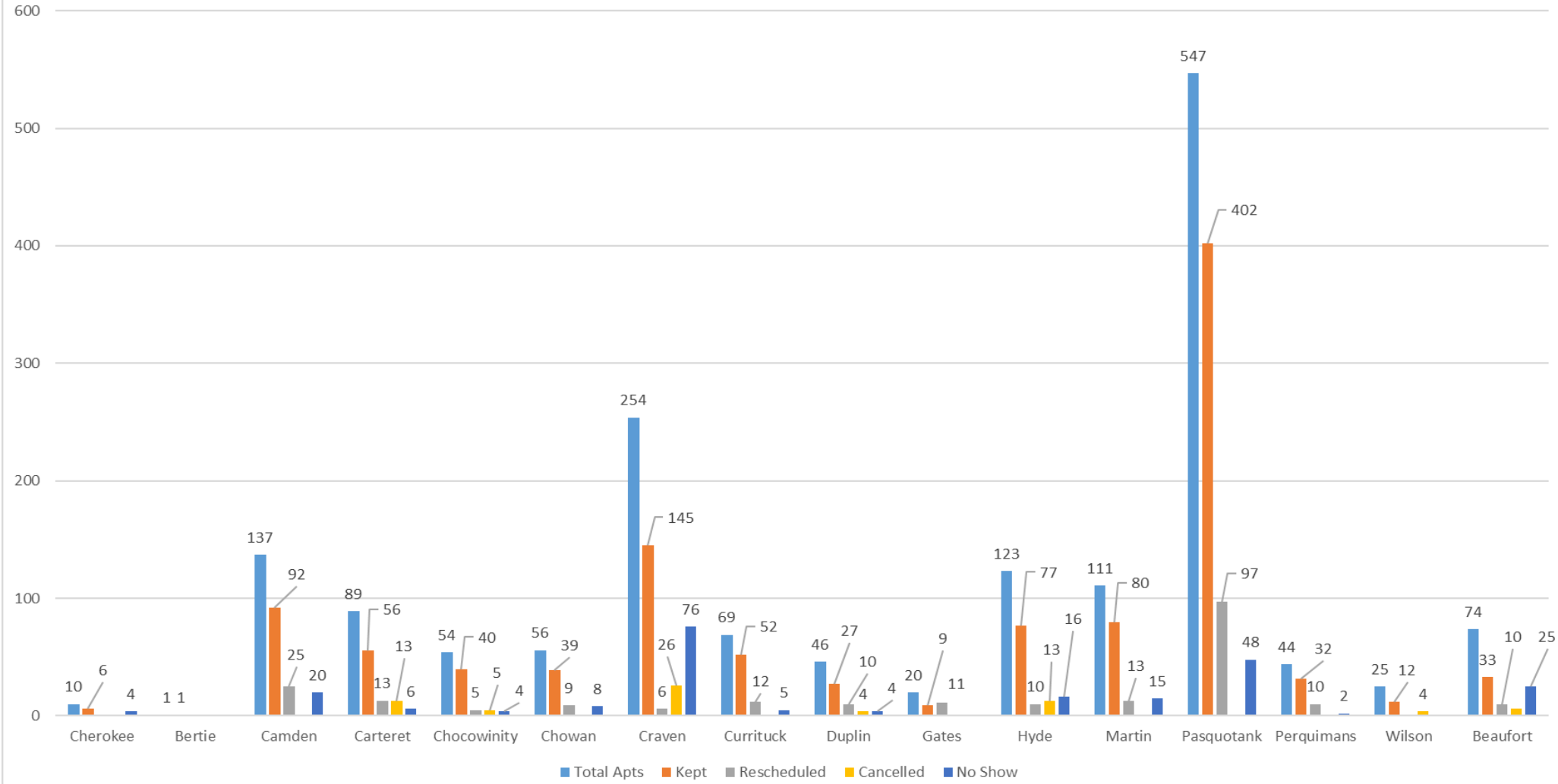
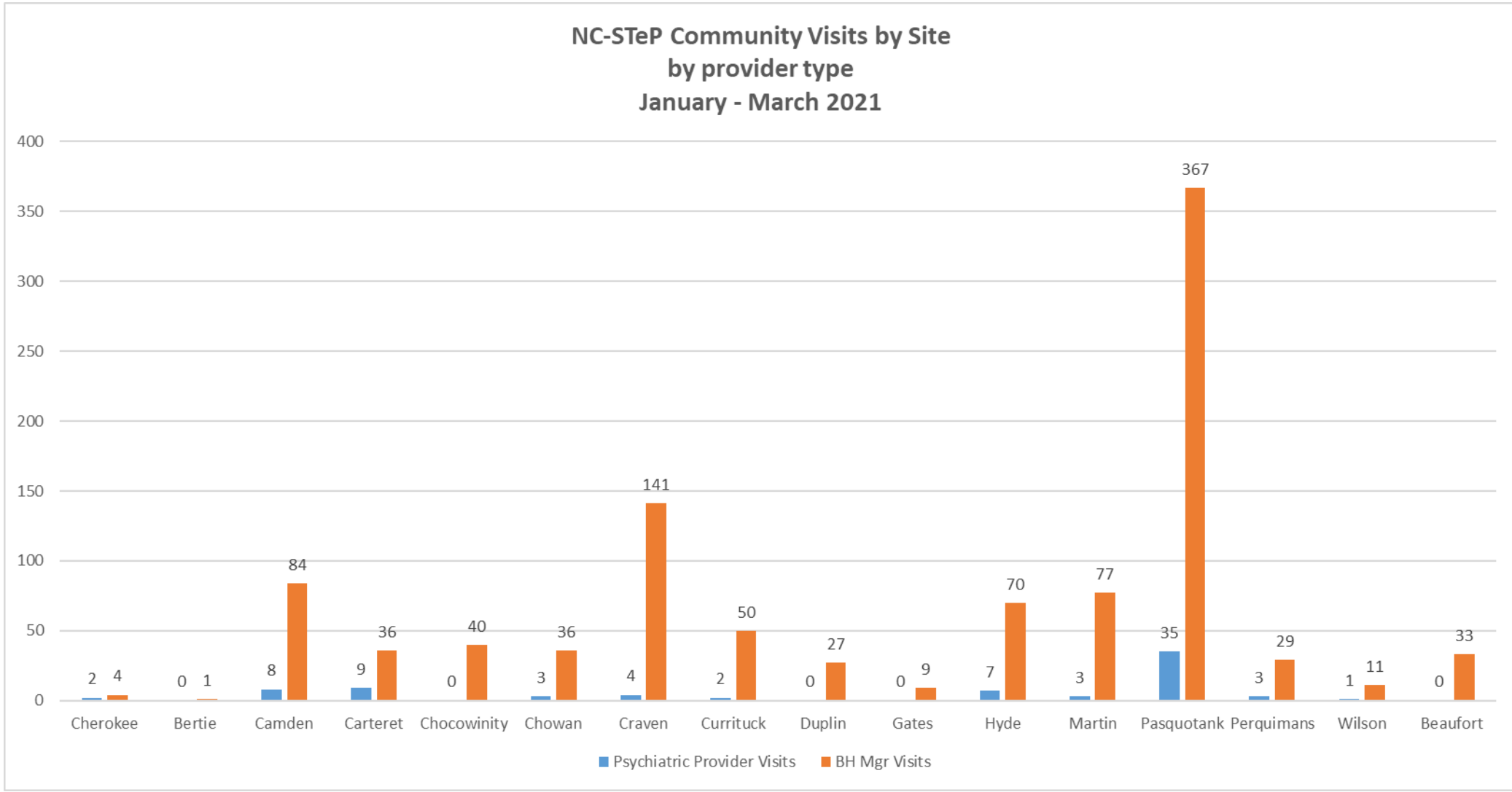
NC-STeP

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



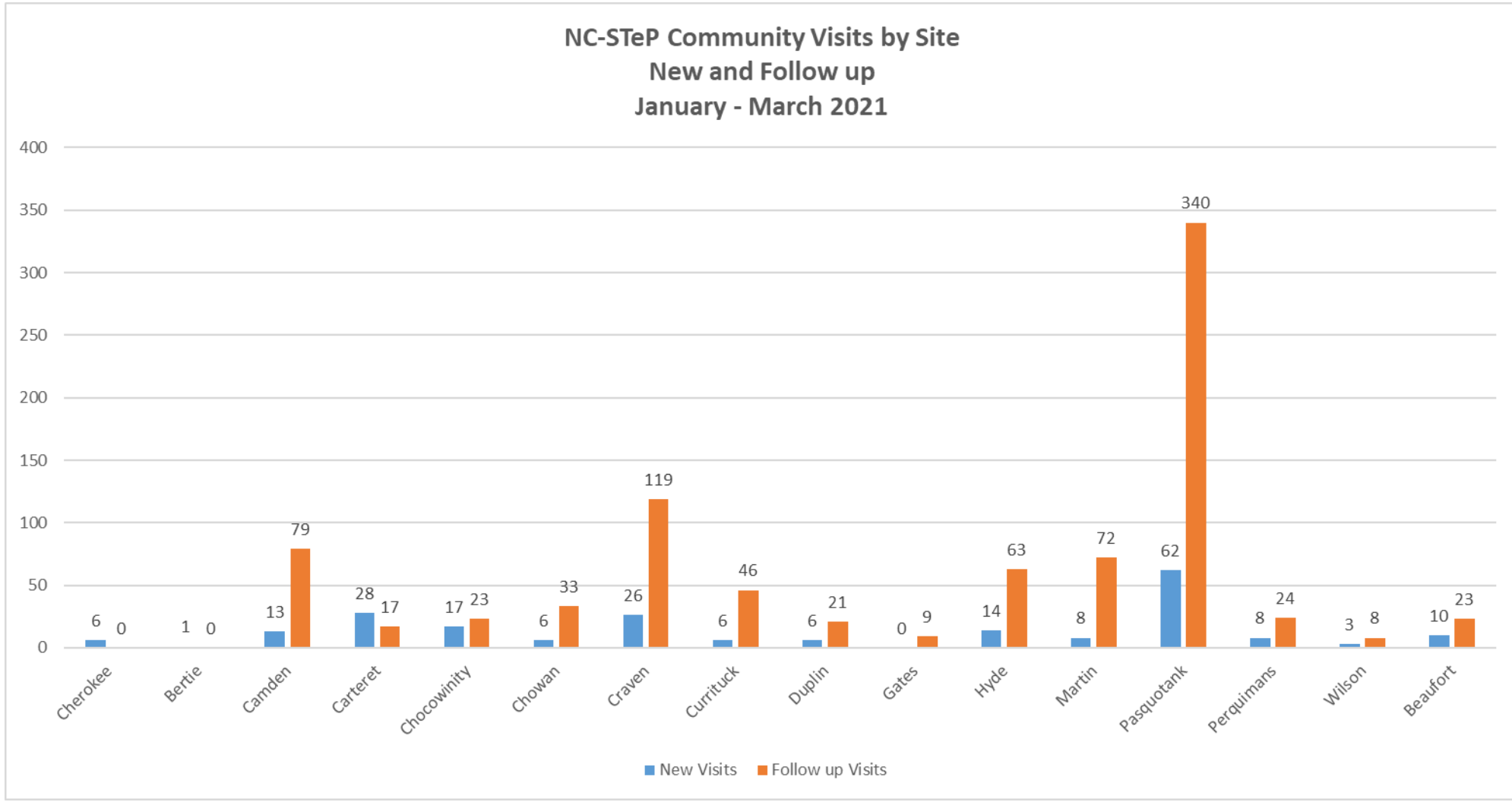
East Carolina University
CENTER FOR TELEPSYCHIATRY

NC-STeP



East Carolina University
CENTER FOR TELEPSYCHIATRY

NC-STeP



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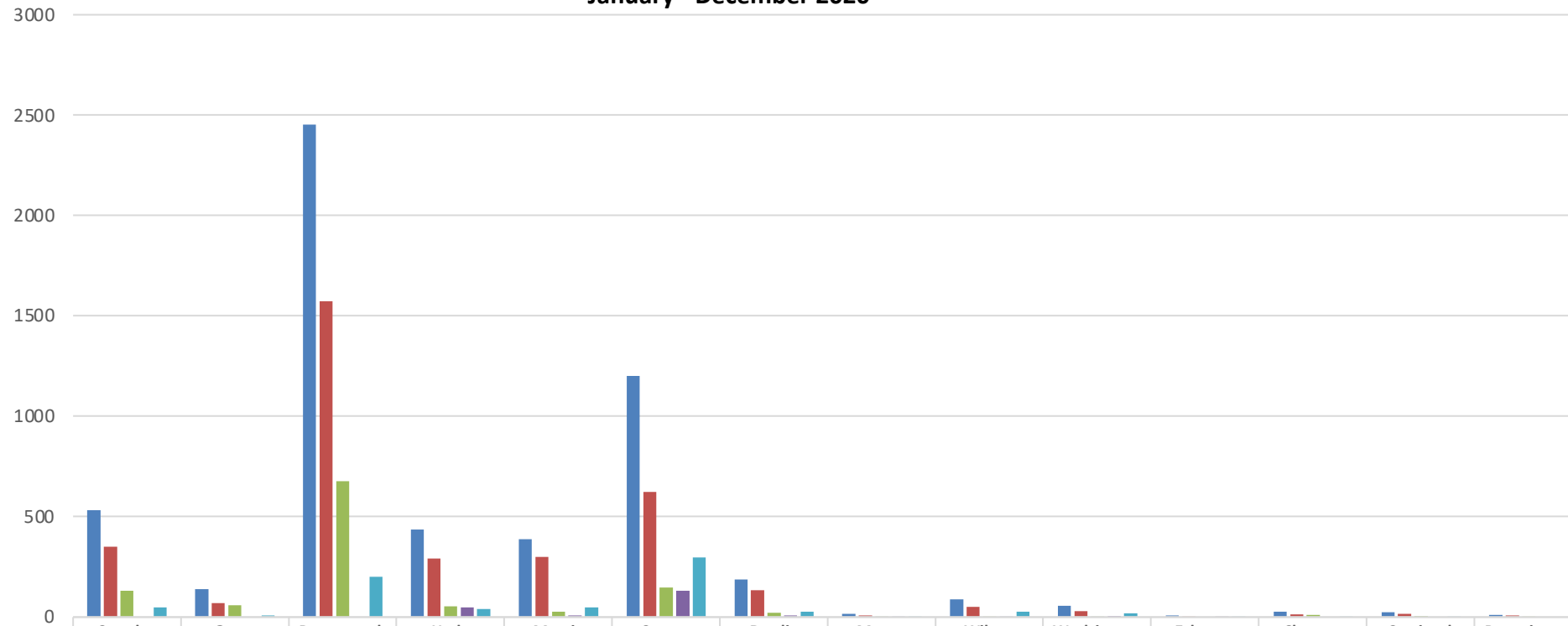
NC-STeP

NC-STeP Community Appointments by Site

Appointments, Visits Kept, Rescheduled, Cancelled, No Show

January - December 2020



	Camden	Gates	Pasquotank	Hyde	Martin	Craven	Duplin	Macon	Wilson	Washington	Erlanger	Chowan	Currituck	Perquimans
Total Appointments	532	138	2454	435	387	1201	188	17	88	56	9	26	25	11
Visits Kept	351	71	1574	293	300	623	133	8	52	29	4	13	17	9
Rescheduled	132	58	677	55	27	146	21	4	1	3	0	11	6	2
Cancelled				48	8	132	8	2	1	5	3			
No Show	49	9	202	39	47	296	26	3	28	18	2	2	2	

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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NC-STeP

Contact

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Greenville, NC 27834

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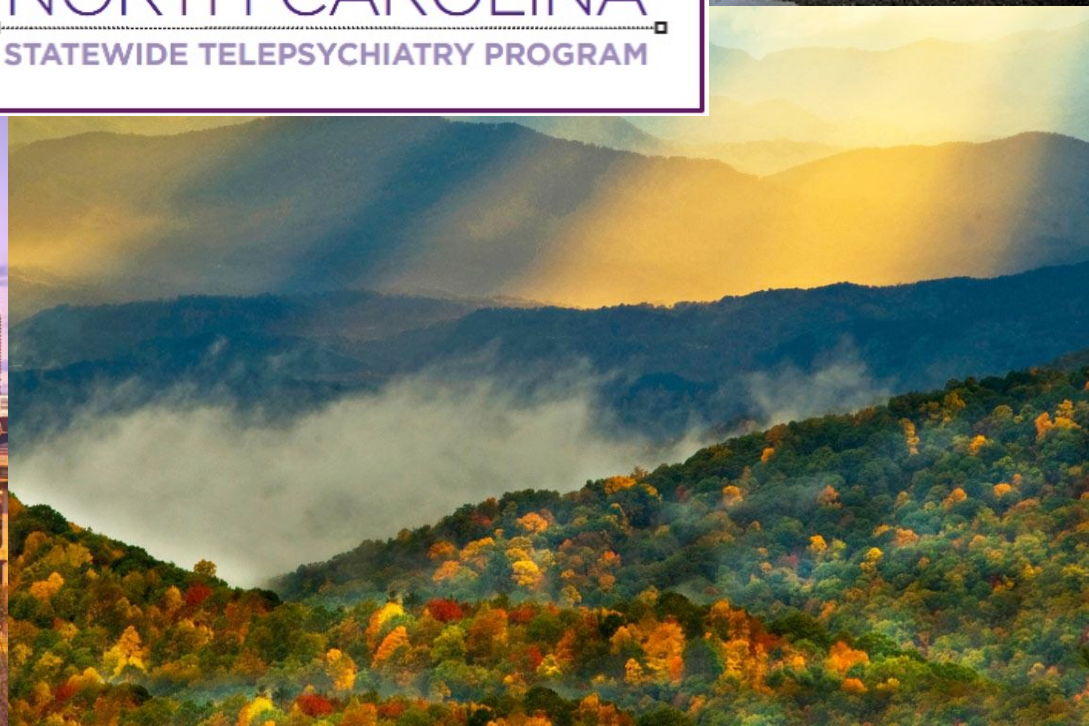
NC-STeP

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

zoom

Join Zoom Meeting
https://zoom.us/j/94425768672?pwd=d0JJYk5tTjh5blZqOTdzL2Y2ZDRwdz09