



NORTH CAROLINA
STATEWIDE TELEPSYCHIATRY PROGRAM

Quarterly Progress Update

Sy Atezaz Saeed, MD, MS, FACPpsych,
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





NC-STEP Advisory Council Meeting
Wednesday, December 14, 2022
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 September 21, 2022 Minutes
10:45- 11:45 a.m.	NC-STEP FY23-Q1 (Jul-Sep) 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
12:00 p.m.	Adjourn



Join Zoom Meeting

<https://us06web.zoom.us/j/85603673506?pwd=ays3Y0xlR1VsZFh3ZlZKT0NGcVhFQT09>

Meeting ID: 856 0367 3506

Passcode: 558639



Advisory Council

1. Teresa Bowleg, MSN, RN

Chief Nursing Officer, Erlanger Murphy Medical Center

2. Scott W. Brown, MD, FACEP

NCCEP Board of Directors/ Harnett Heath System

3. John Bigger

Corporate Director of Behavioral Health, Cape Fear Valley Health

4. Joy Futrell, MBA

Chief Executive Officer, Trillium Health Resources

5. Robin Huffman

Executive Director, North Carolina Psychiatric Association

6. Keith McCoy, MD

Deputy CMO for Behavioral Health and I/DD Community Systems, NC-DHHS

7. Shakeerah McCoy, MSN,RN,PCCN

Director, Rural Health Innovation

8. Amy Roberts, MHA

Executive Director Telehealth – Mission Health

9. Sy Atezaz Saeed, MD, MS

Executive Director, NC-Step (*Chair*)

10. Glenn M. Simpson, MBA, MA, NCC

Behavioral Health Service Line Administrator, ECU Health

11. Ashley Stoop, MPH

Health Director, Albemarle Regional Health Services

12. Marvin Swartz, MD

Professor & Head Division of Social & Community Psychiatry, Duke

Ex Officio Members

1. Ryan Baker, NC-Step/ECU

2. Kalyan Muppavarapu, MD, MPH, NC-Step

3. Renee Clark, MSW, DHHS-ORH

4. Sheila Davies, Ph.D., NC-Step/MedAccess Partners

5. Phil Donahue, NC-Step/MedAccess Partners

6. Art Eccleston, Ph.D., DHHS, Division of Mental Health

7. Nick Galvez, DHHS-ORH

8. Katherine Jones, Ph.D., NC-Step/ECU

9. Maggie Sauer, DHHS-ORH

NC-STeP Quality Management and Outcomes Monitoring Processes: July – September 2022

- 39 hospitals in the network, 38 hospitals were live
- 29 hospitals reporting Telepsychiatry patients in their ED
 - not all live hospitals had telepsychiatry patients
- Total number of assessments for this quarter = 1,432
- Total number of encounters for this quarter = 1,283
- Patient assessments billed for Model 1 hospitals = 1,021

NC-STeP Quality Management and Outcomes Monitoring Processes: July - September 2022

- The Median Length of Stay was 39.5 hours
- The Average Length of Stay was 72.1 hours
 - 72.6 hours for those discharged to home
 - 62.6 hours for those transferred to another facility
- Average Consult Elapsed Time (in Queue to Exam Complete) for Model 1 hospitals was 6 hours and 07 minutes.

NC-STeP Quality Management and Outcomes Monitoring Processes: July – September 2022


- 890 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
 - 362 (40.7%) of those patients did not have an IVC in place when discharged.
- Of the ED patients who received telepsychiatry services:
 - 48.0% were discharged to home
 - 45.6% were discharged to another facility

NC-STeP Quality Management and Outcomes Monitoring Processes: July - September

- 23 Community based sites were live as of 09/30/2022.
- There were 1,363 total behavioral health visits.
 - 151 visits with a Psychiatrist.
 - 1,212 visits with a behavioral health manager.
 - 4 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
Total Patient Encounters	42,927	1,235	1,321	1,283	
Model 1 Hospital Patient Encounters	26,262	797	869	872	
Model 2 Hospital Patient Encounters	16,665	438	452	411	
Total Number of Assessments (Billed Assessments for Model 1 Hospitals + Number of Patient Encounters for Model 2 Hospitals)	55,812	1,526	1,559	1,432	

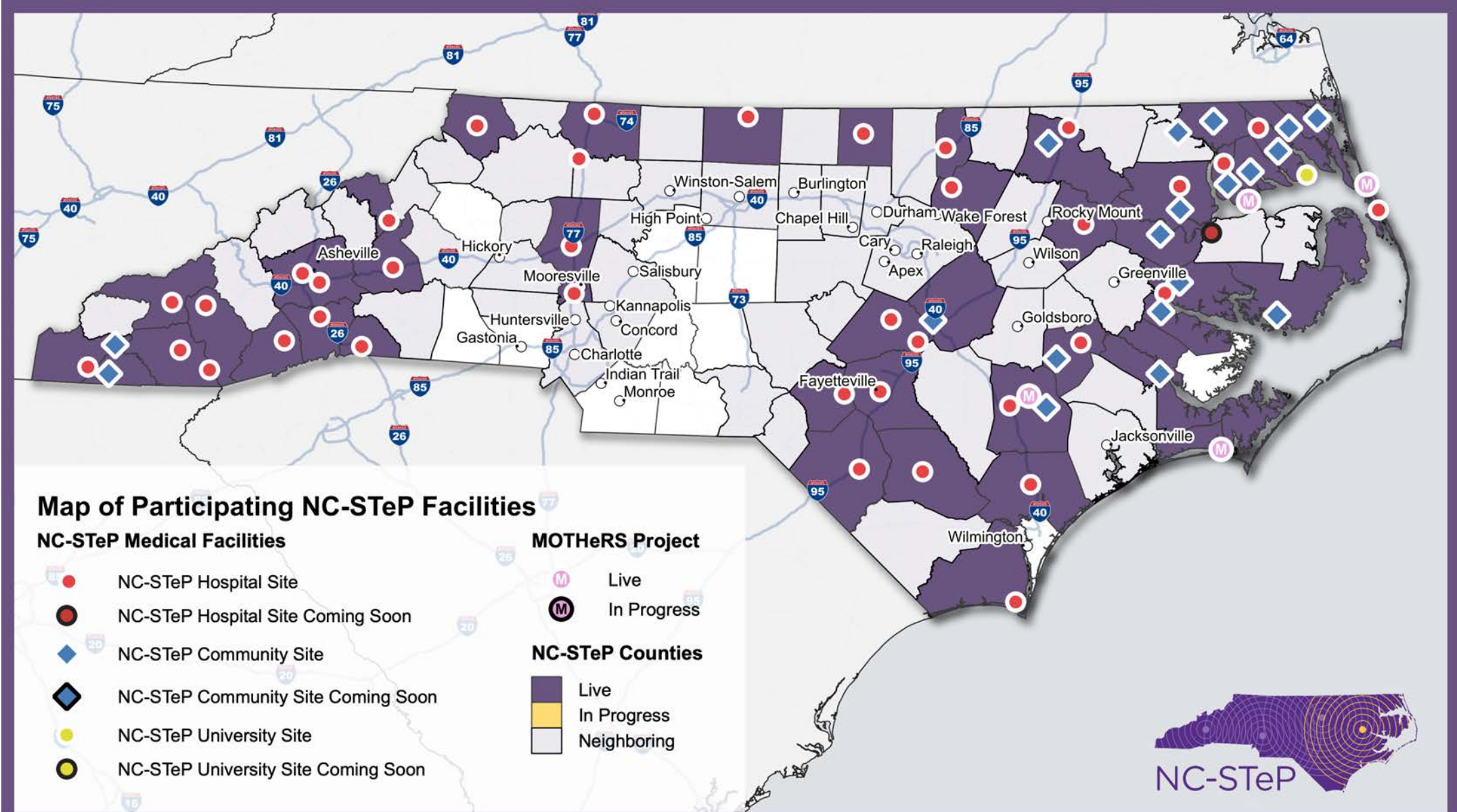
 NC-STeP	Since project inception in November 2013	During Calendar Year 2014	During Calendar Year 2015	During Calendar Year 2016	During Calendar Year 2017	During Calendar Year 2018	During Calendar Year 2019	During Calendar Year 2020	During Calendar Year 2021
Total Patient Encounters	42,927	5,144	7,128	1,896	3,971	6,104	4,835	4,305	4,763
Model 1 Hospital Patient Encounters	26,262	4,578	5,849	706	2,044	2,654	1,902	2,152	2,897
Model 2 Hospital Patient Encounters	16,665	566	1,279	1,190	1,927	3,450	2,933	2,153	1,866
Total Number of Assessments (Billed Assessments for Model 1 Hospitals + Number of Patient Encounters for Model 2 Hospitals)	55,812	8,130	13,573	1,942	4,348	6,680	5,287	4,820	5,641

NC-STeP Benchmarks



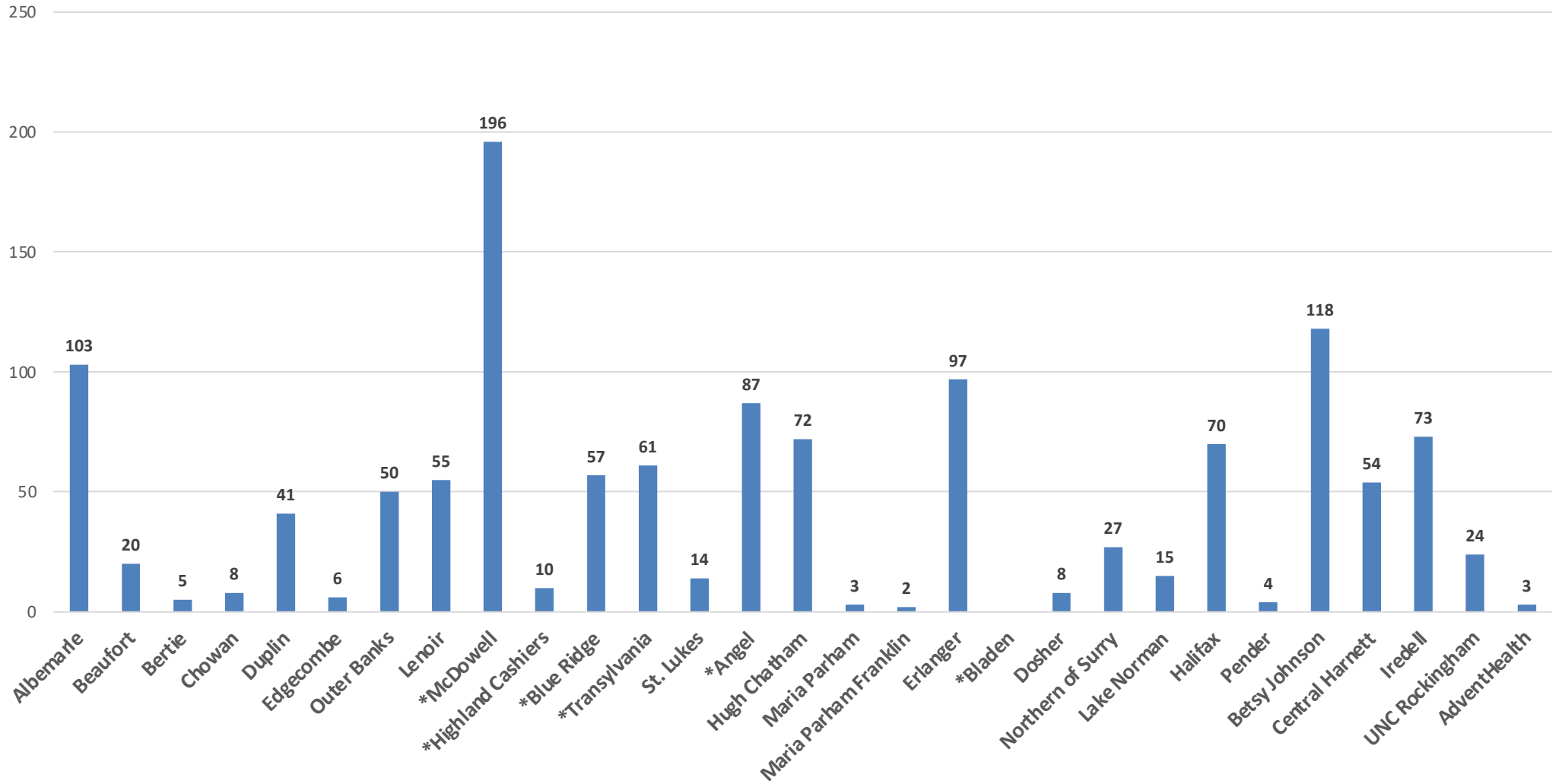
	Goals	Values Reached		
	Cumulative Target to be reached by (06/30/2023)	Value Reached as of most recent previous quarter (06/31/2022)	Value Reached as of this reporting quarter (06/30/2022)	Year-to-Date Total with % of the Yearly Target (09/30/2022)
Number of IVCs	TBD	906	890	890
Number of IVCs Overturned	TBD	390	362	362
Total Number of Assessments (Billed assessments for Model 1 hospitals + Number of patient encounters for Model 2 hospitals.)	TBD	1,559	1,432	1,432

NC-STeP Status as of September 30, 2022



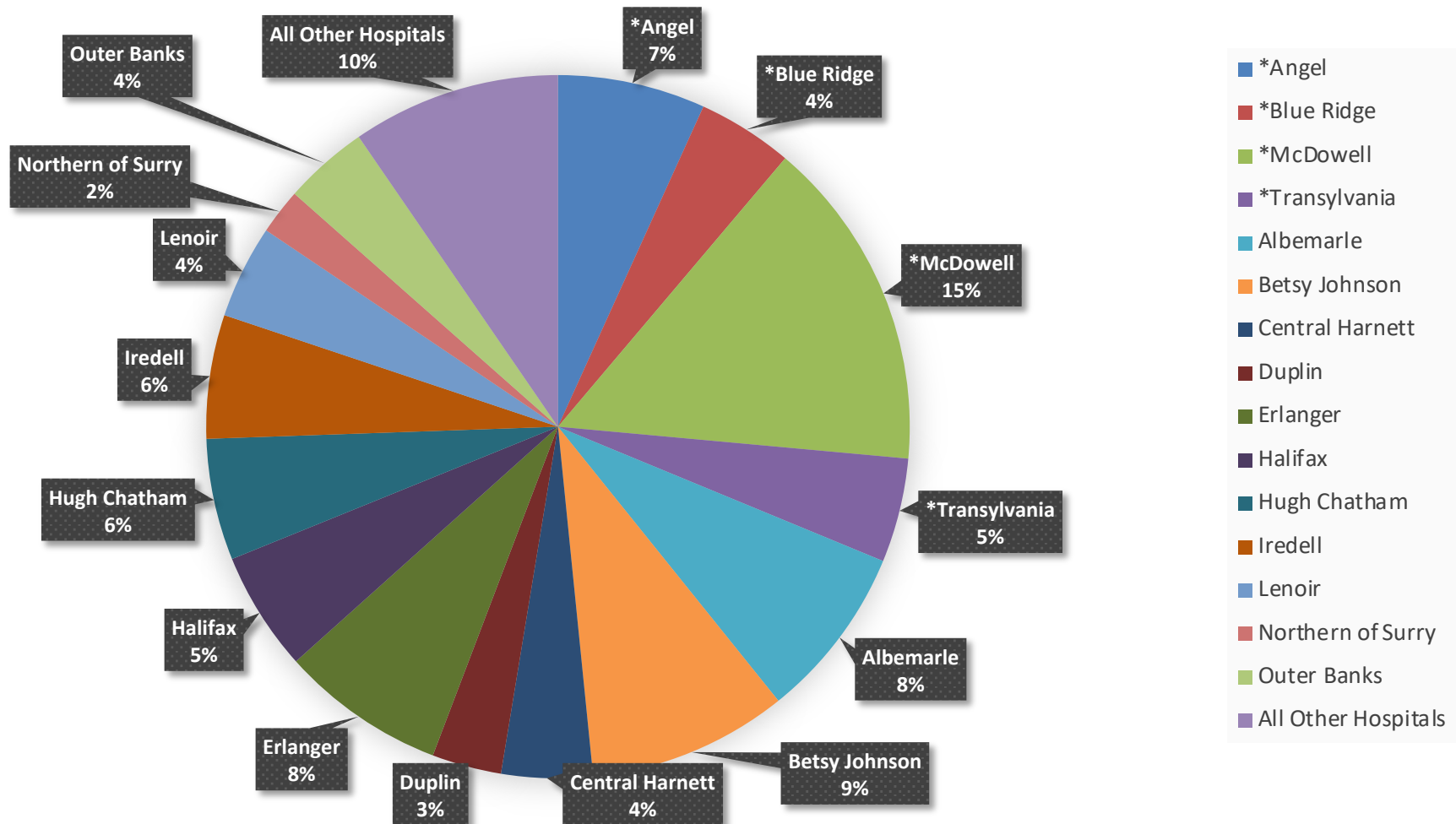
Number of NC-STeP Patients by Hospital

July - September 2022



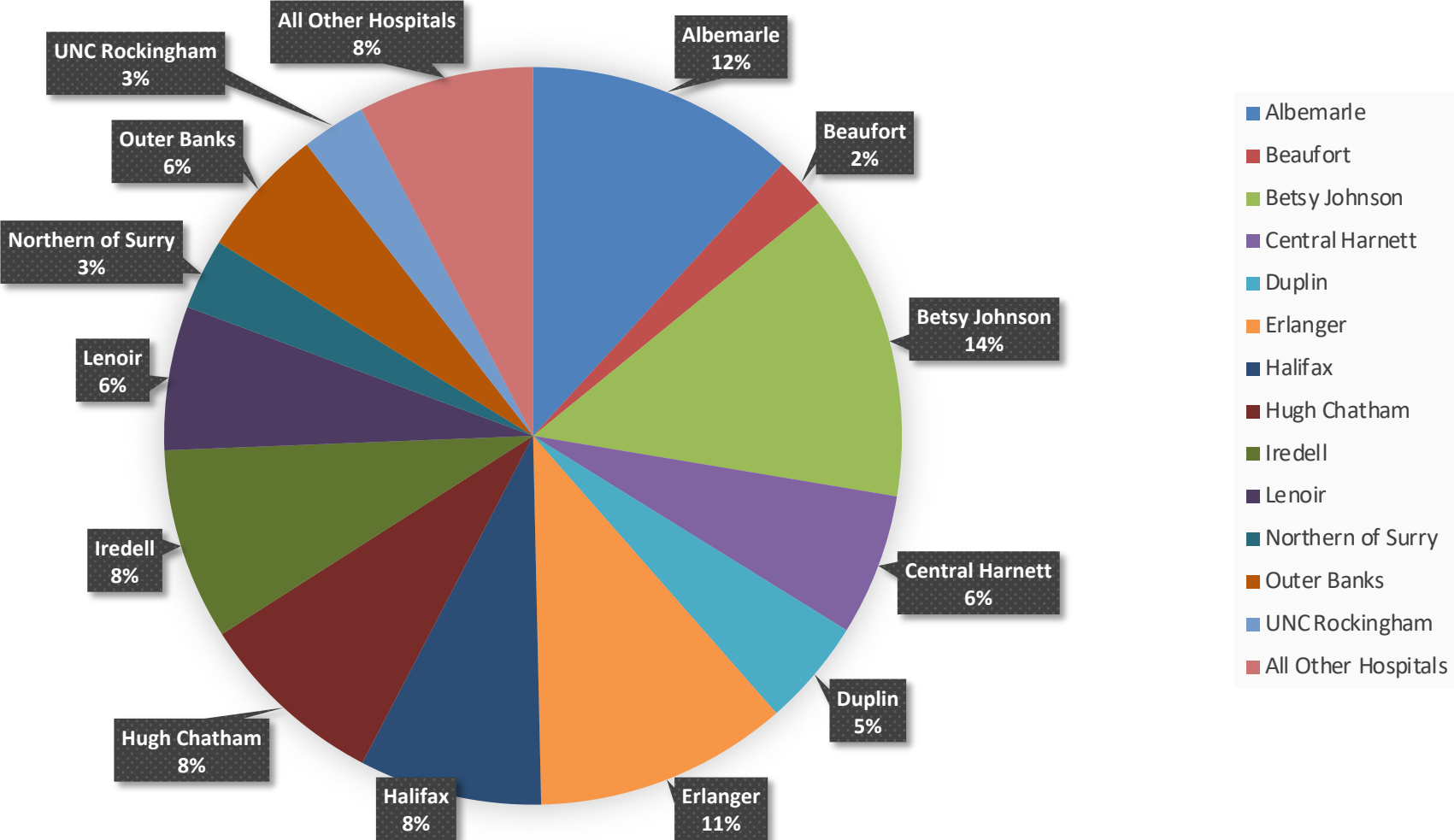
Percent of Use by Hospital Jul - Sep 2022

(based on number of encounters)



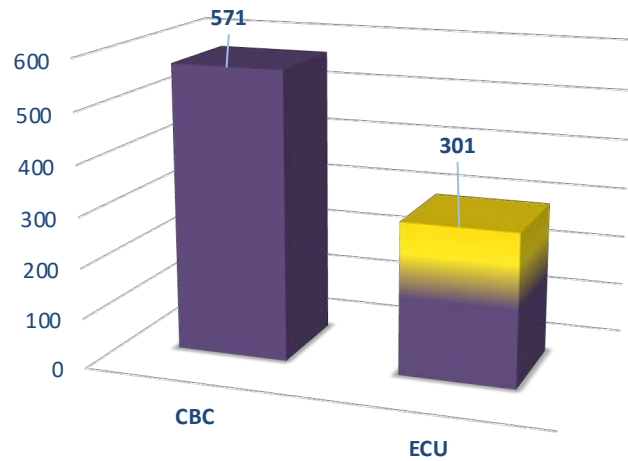
Percent of Use for Model 1 Hospitals Jul - Sep 2022

(based on number of encounters)

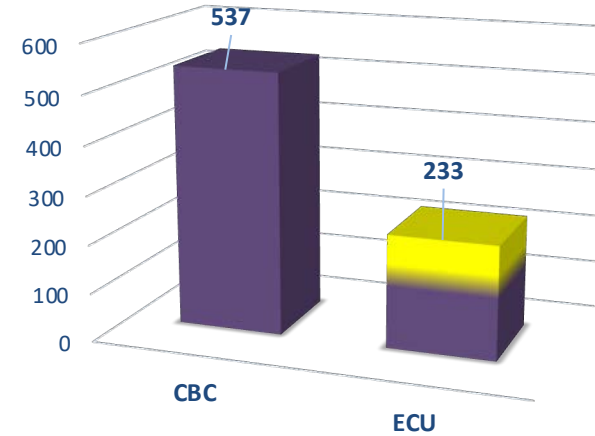


Number of Patients by Provider (Model 1)

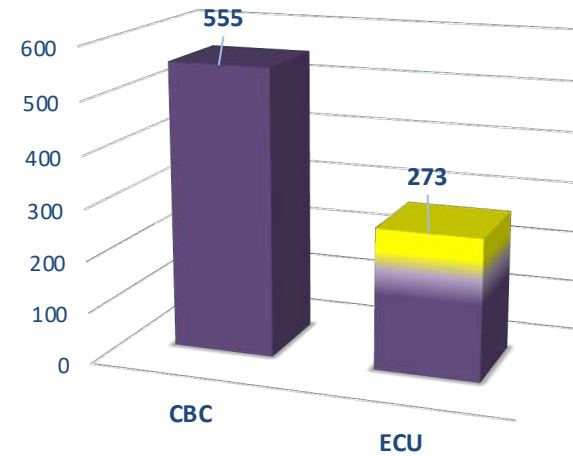
Jul-Sep 2022



Jan-Mar 2022

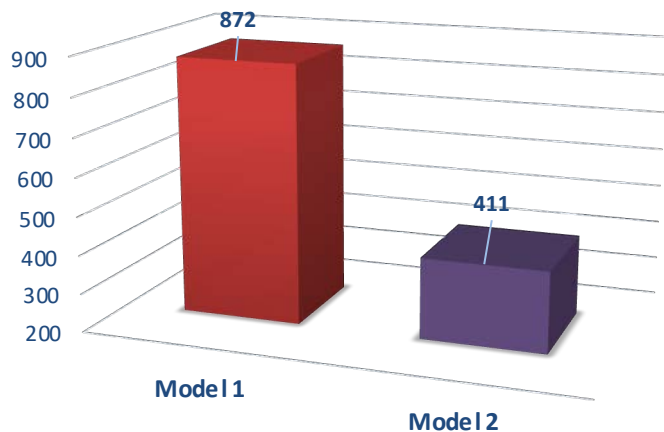


Apr-Jun 2022

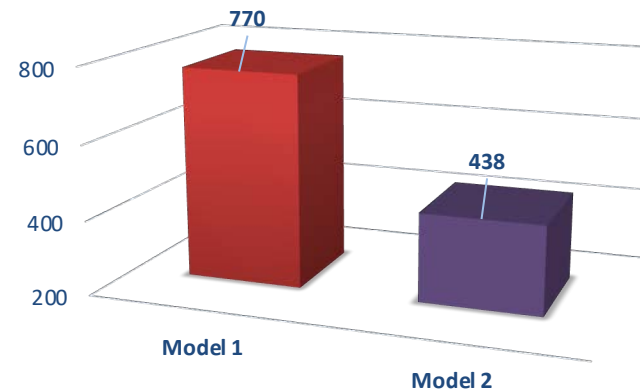


Number of Patients by Model

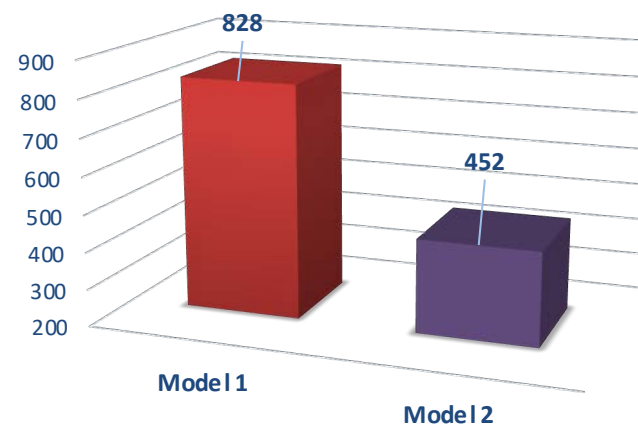
Jul-Sep 2022



Jan-Mar 2022

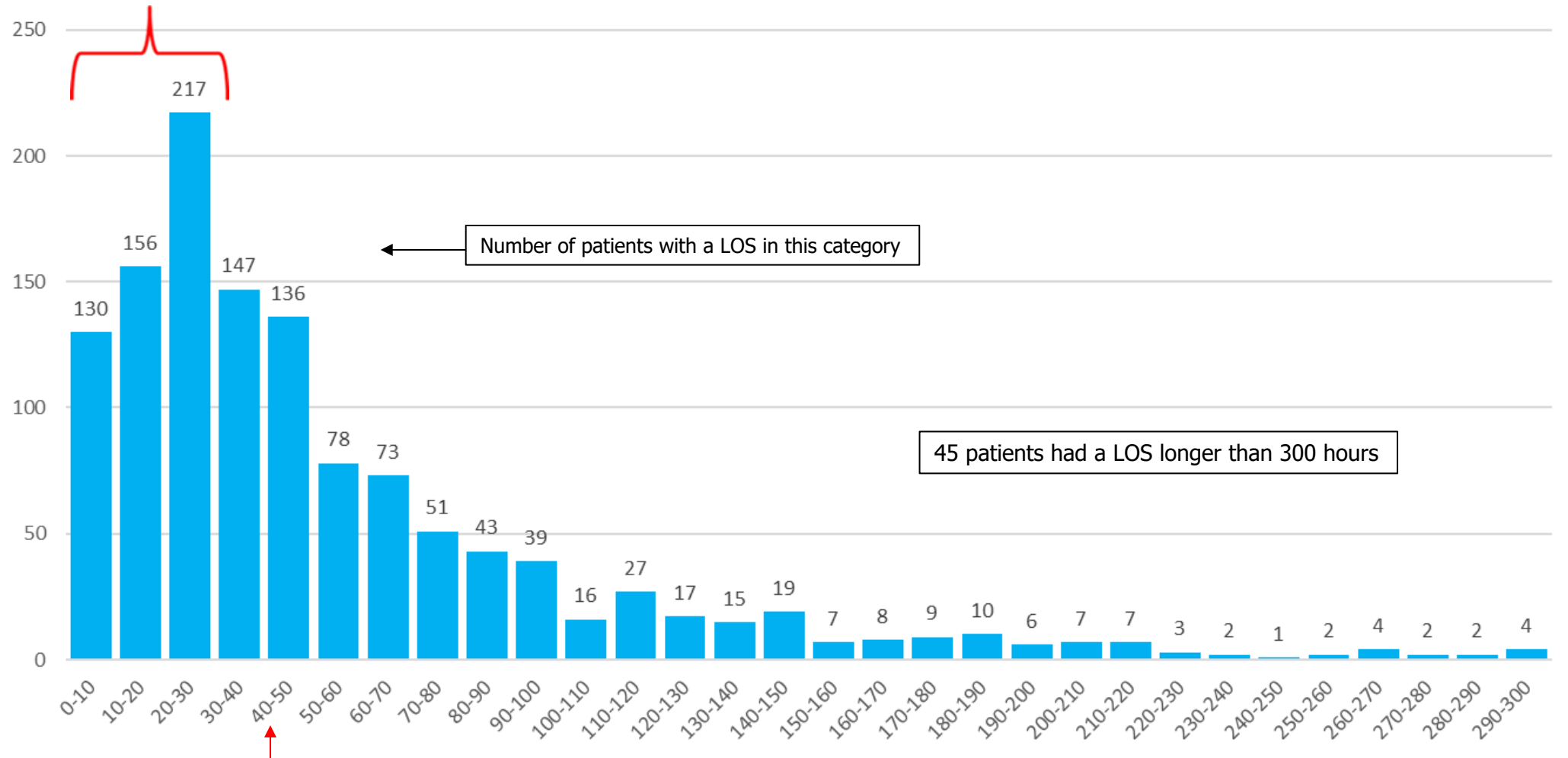


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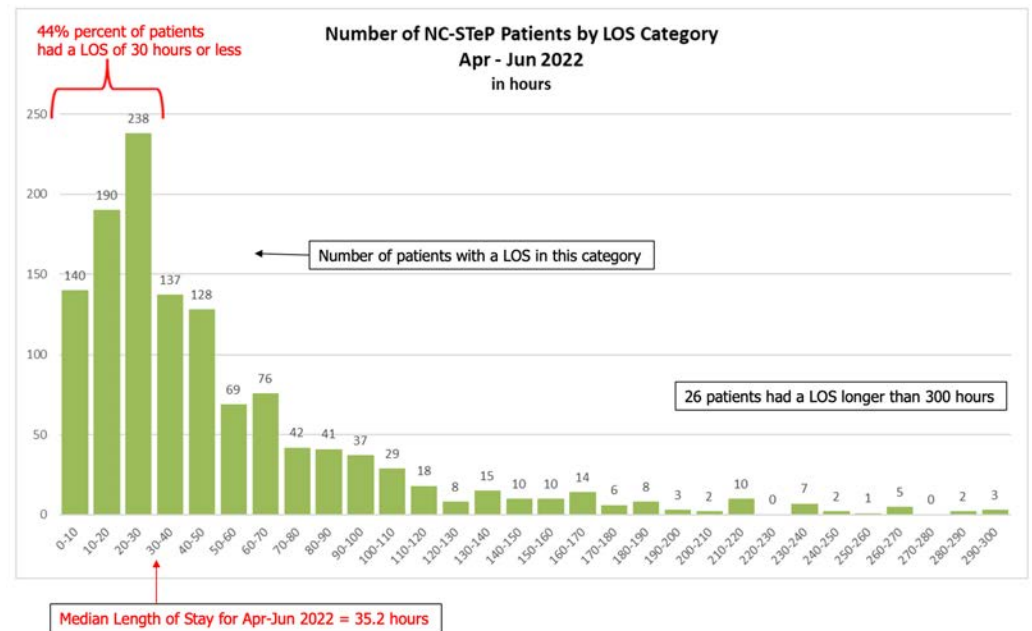
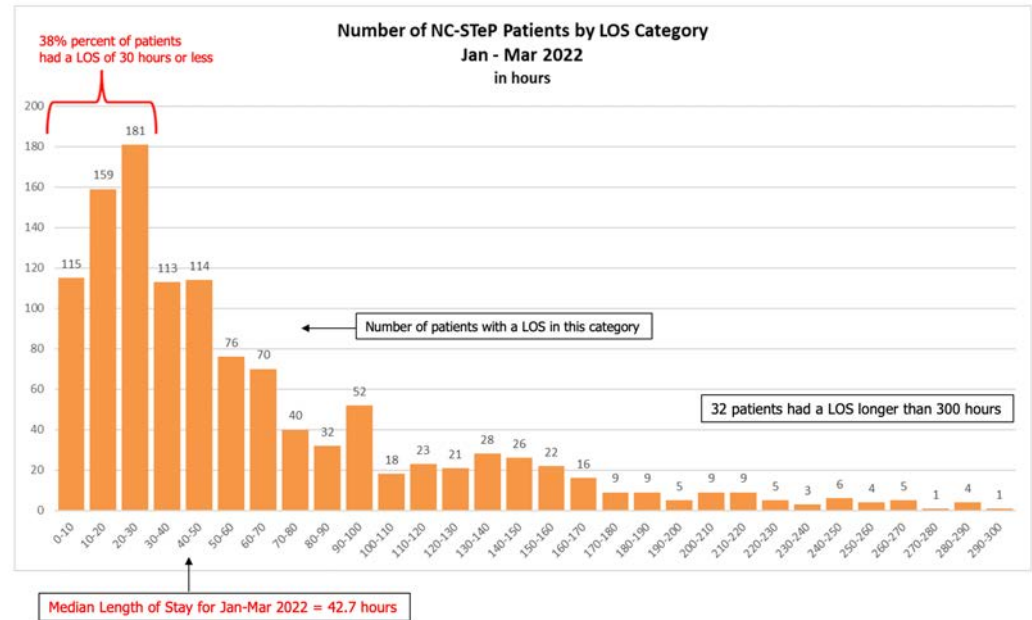
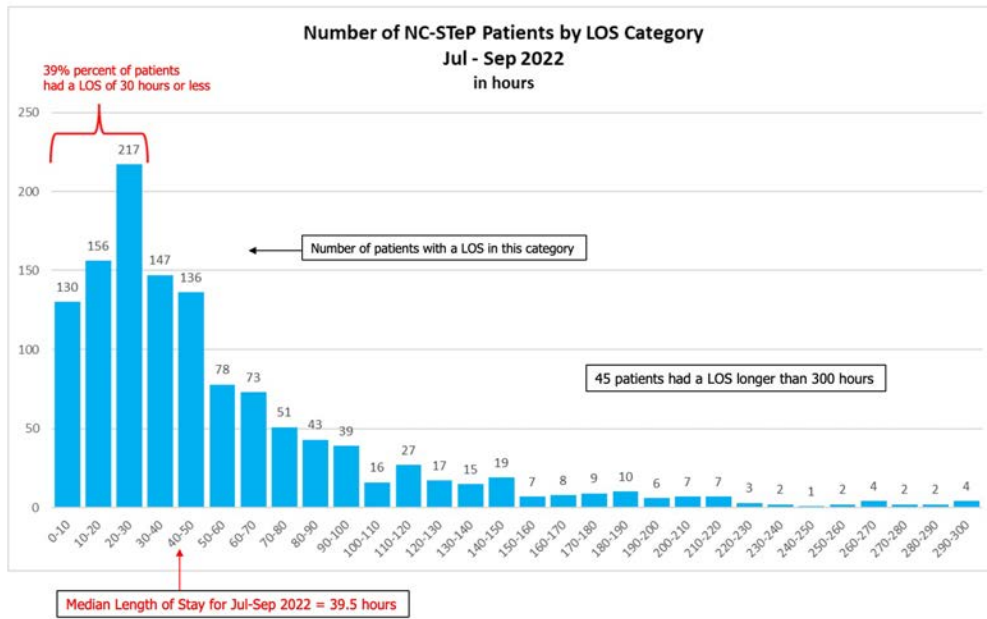


Number of NC-STeP Patients by LOS Category Jul - Sep 2022 in hours

39% percent of patients
had a LOS of 30 hours or less

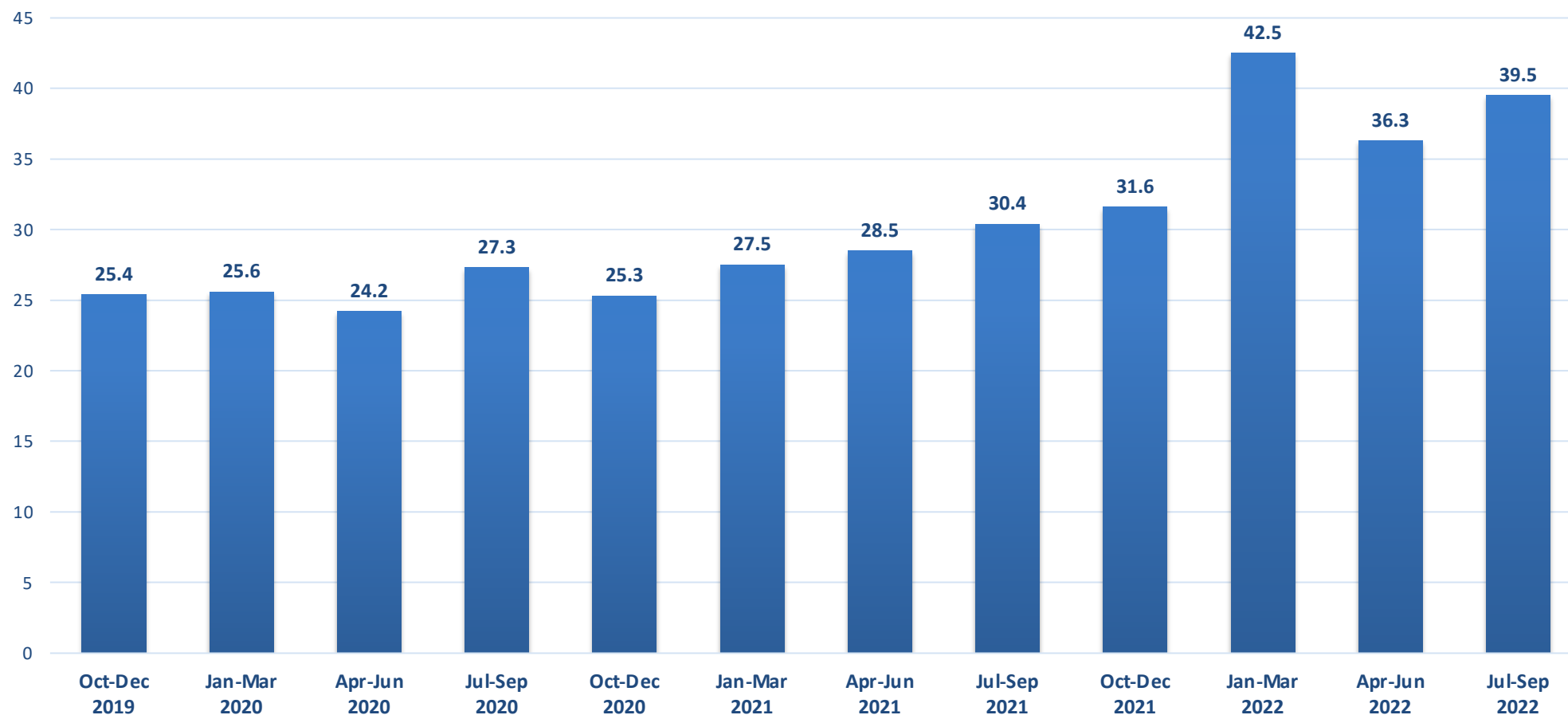


Median Length of Stay for Jul-Sep 2022 = 39.5 hours

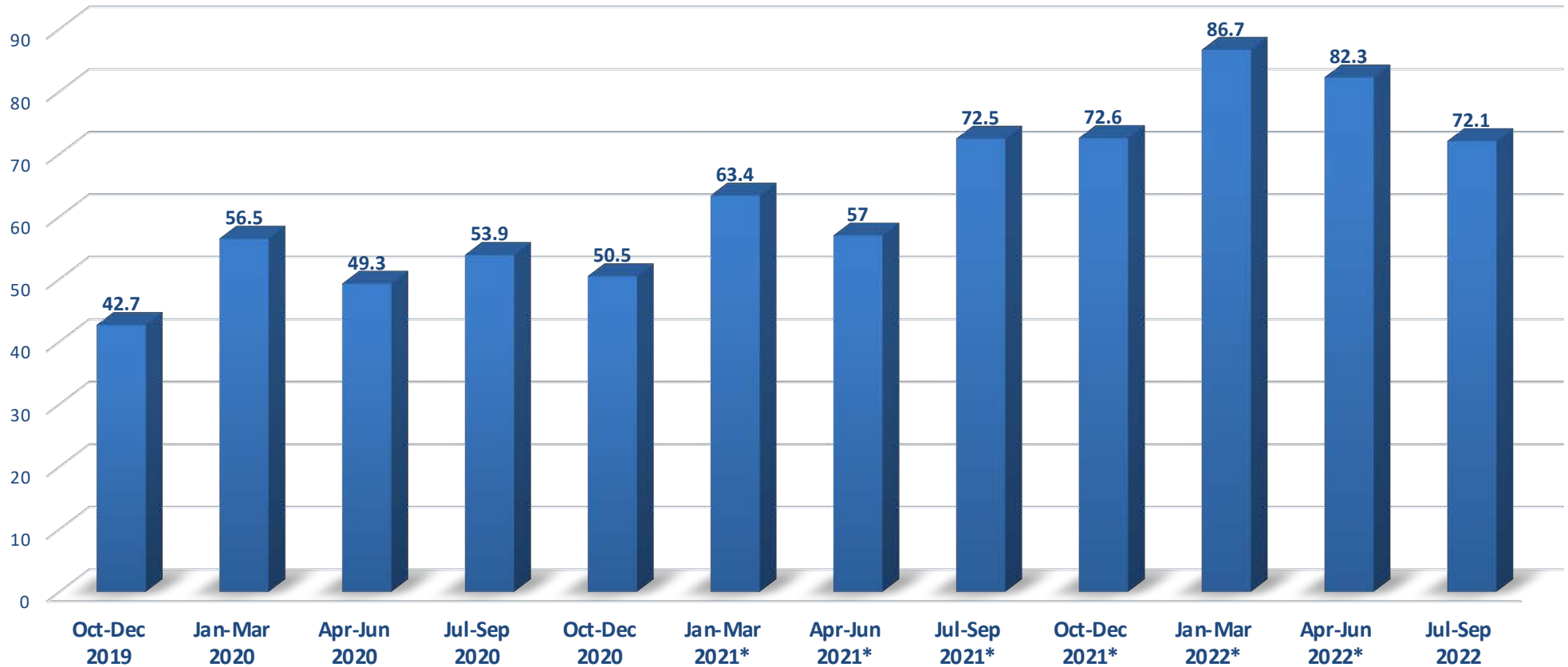


Median Length of Stay by Quarter

(in hours)



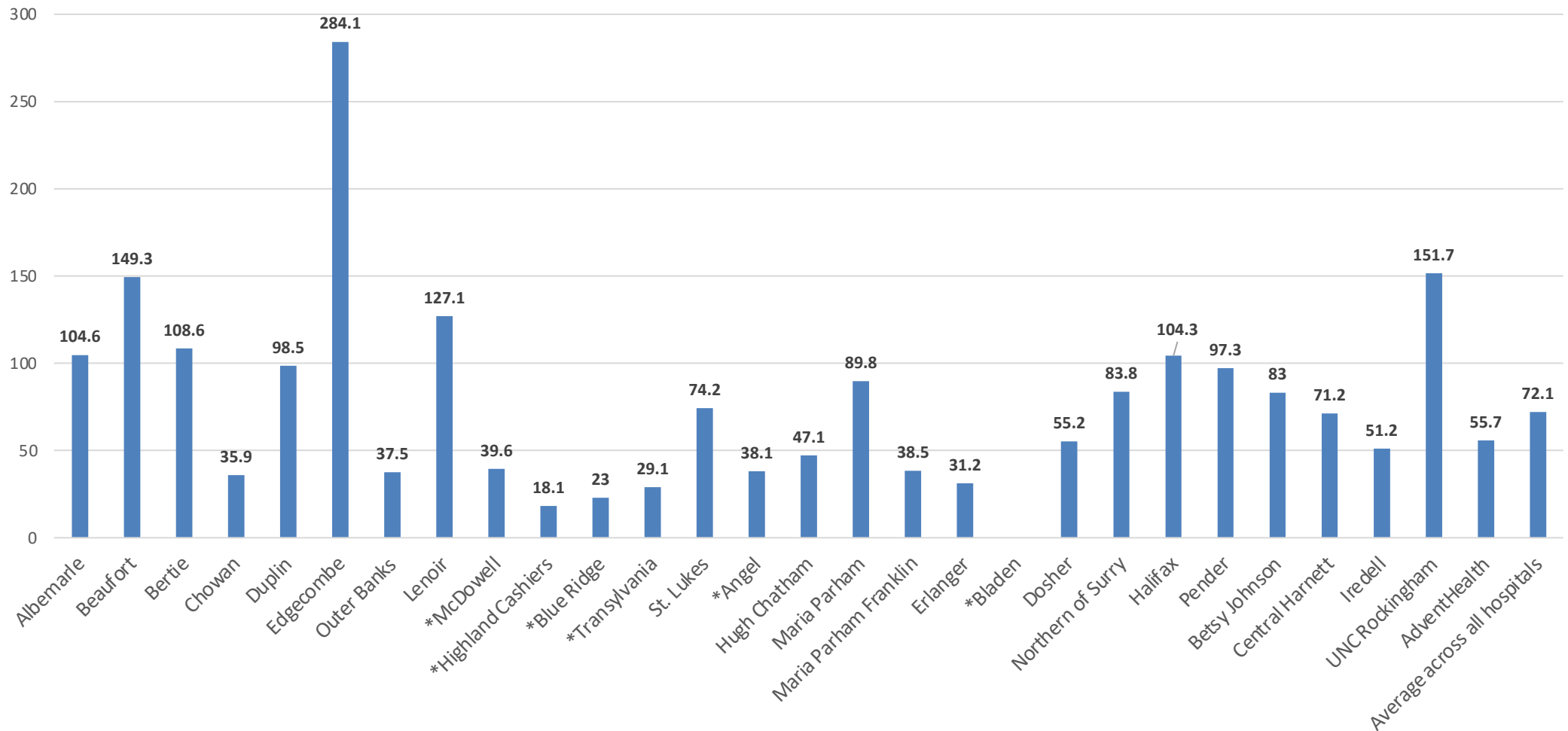
Average Length of Stay by Quarter (in hours)



Average Length of Stay by Hospital

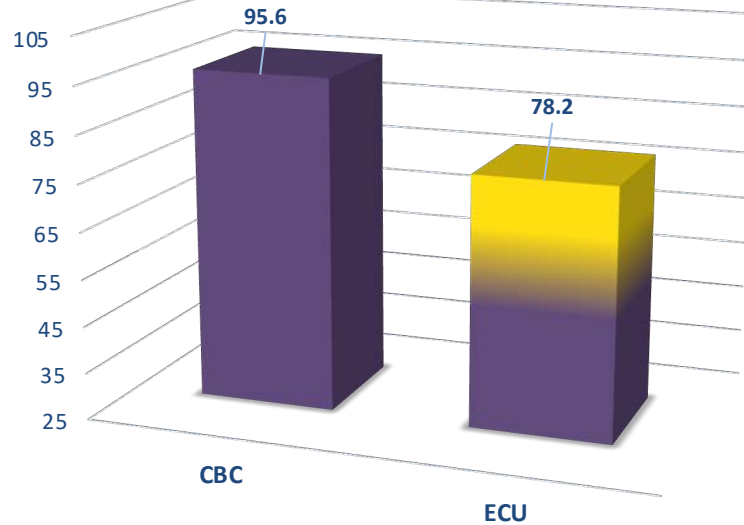
July - September 2022

(in hours)

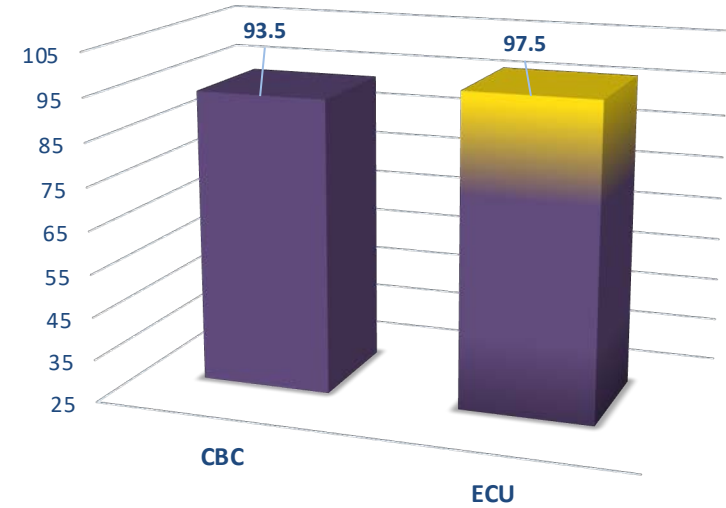


Average LOS by Provider (in hours)

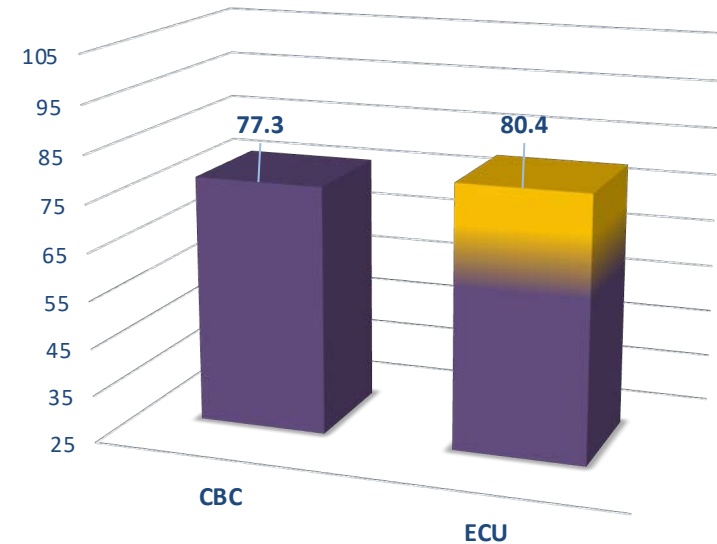
Jul-Sep 2022



Jan-Mar 2022

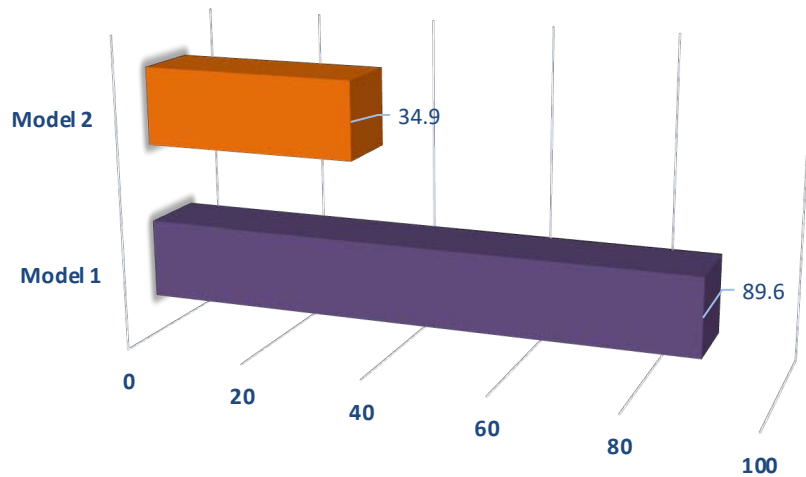


Apr-Jun 2022

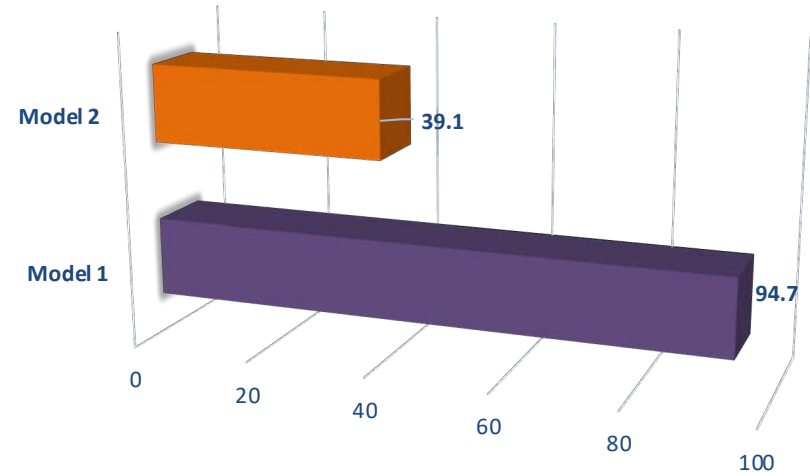


Average LOS by Model

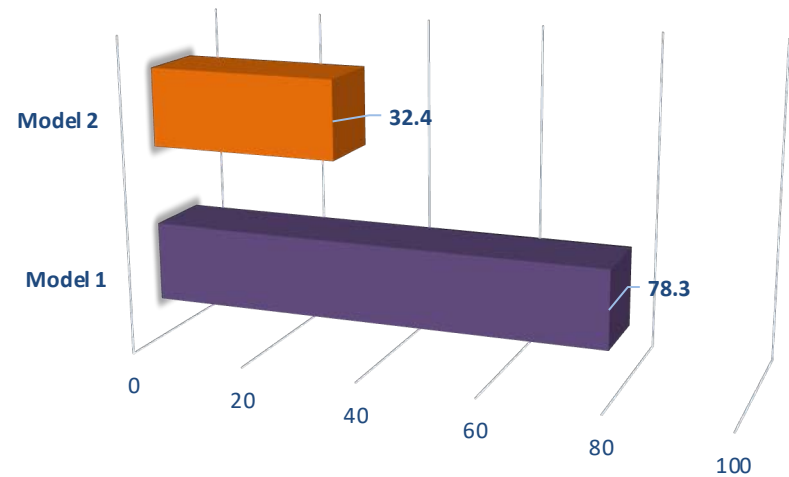
Jul-Sep 2022 (in hours)



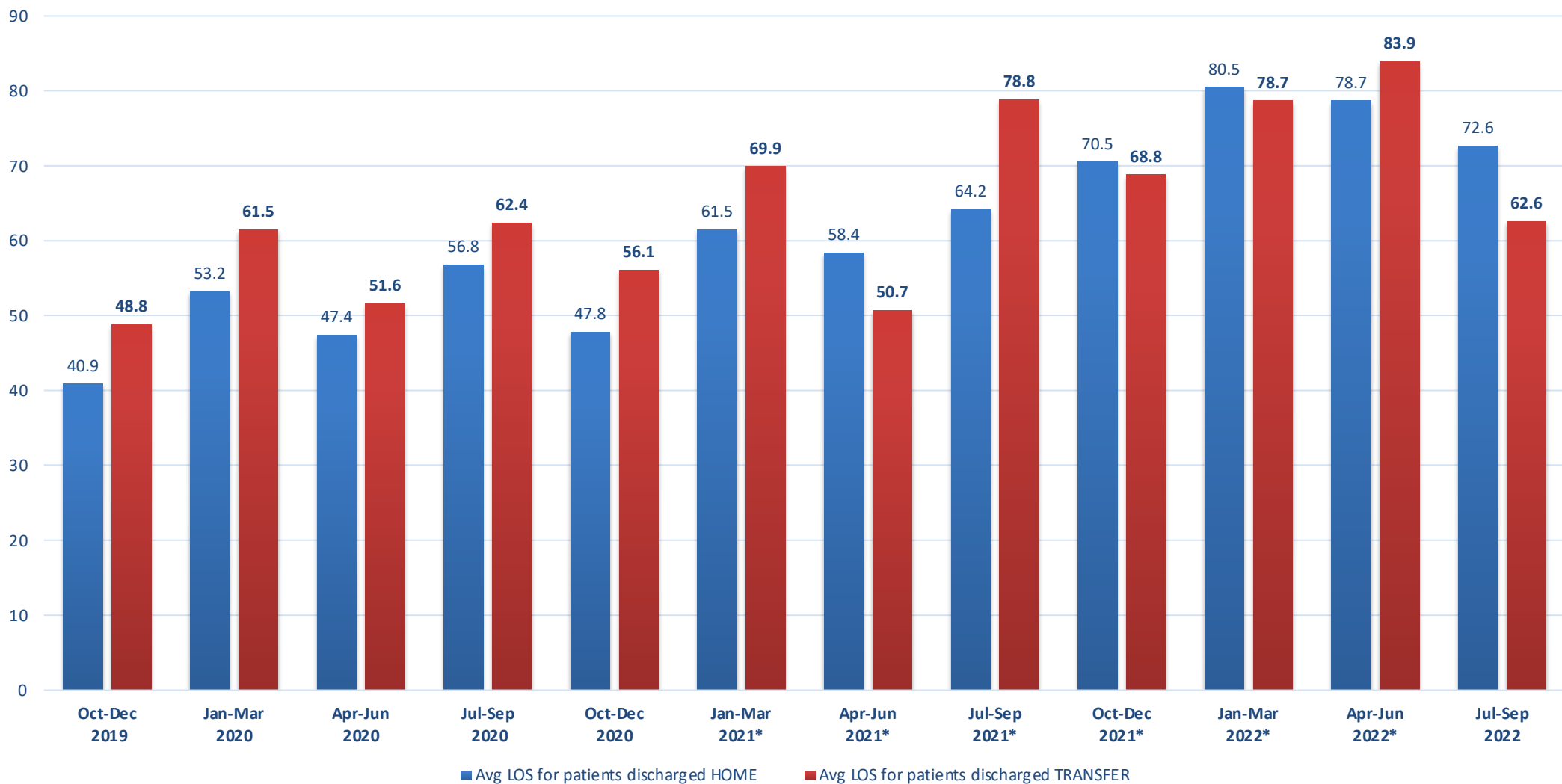
Jan-Mar 2022 (in hours)



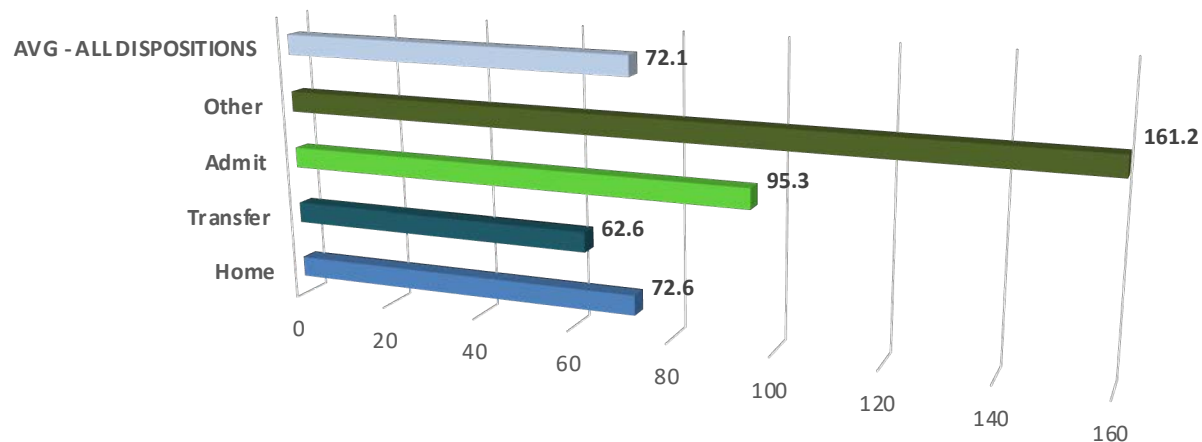
Apr-Jun 2022 (in hours)



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

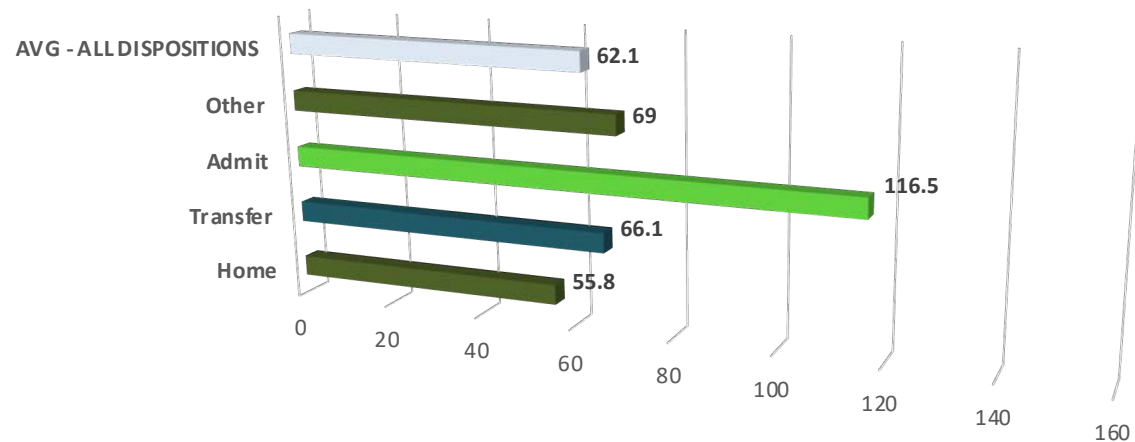


Jul-Sep 2022 (in hours)



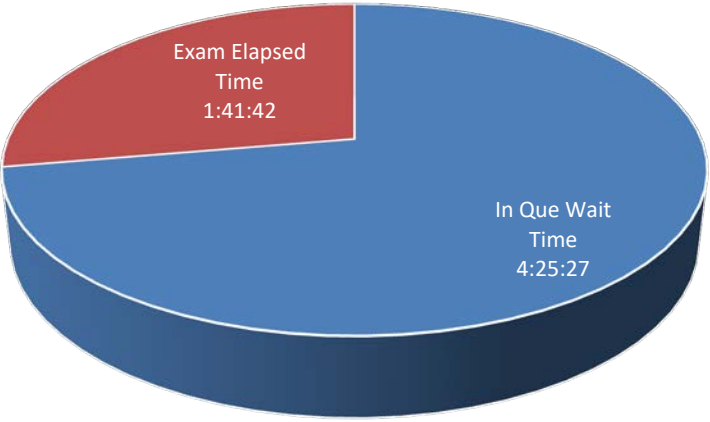
Average LOS by Discharge Disposition

Apr-Jun 2022 (in hours)



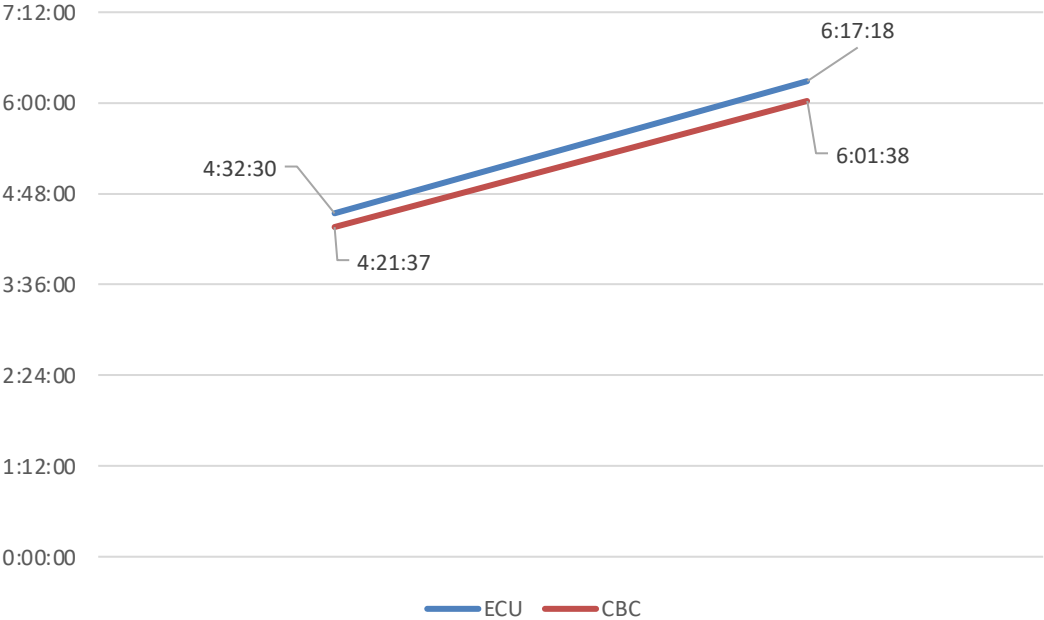
Consult Elapsed Time: July - September 2022

CBC & ECU
Average Consult Exam Elapsed Time
In Que to Exam Complete
FY23-Q1 September 2022

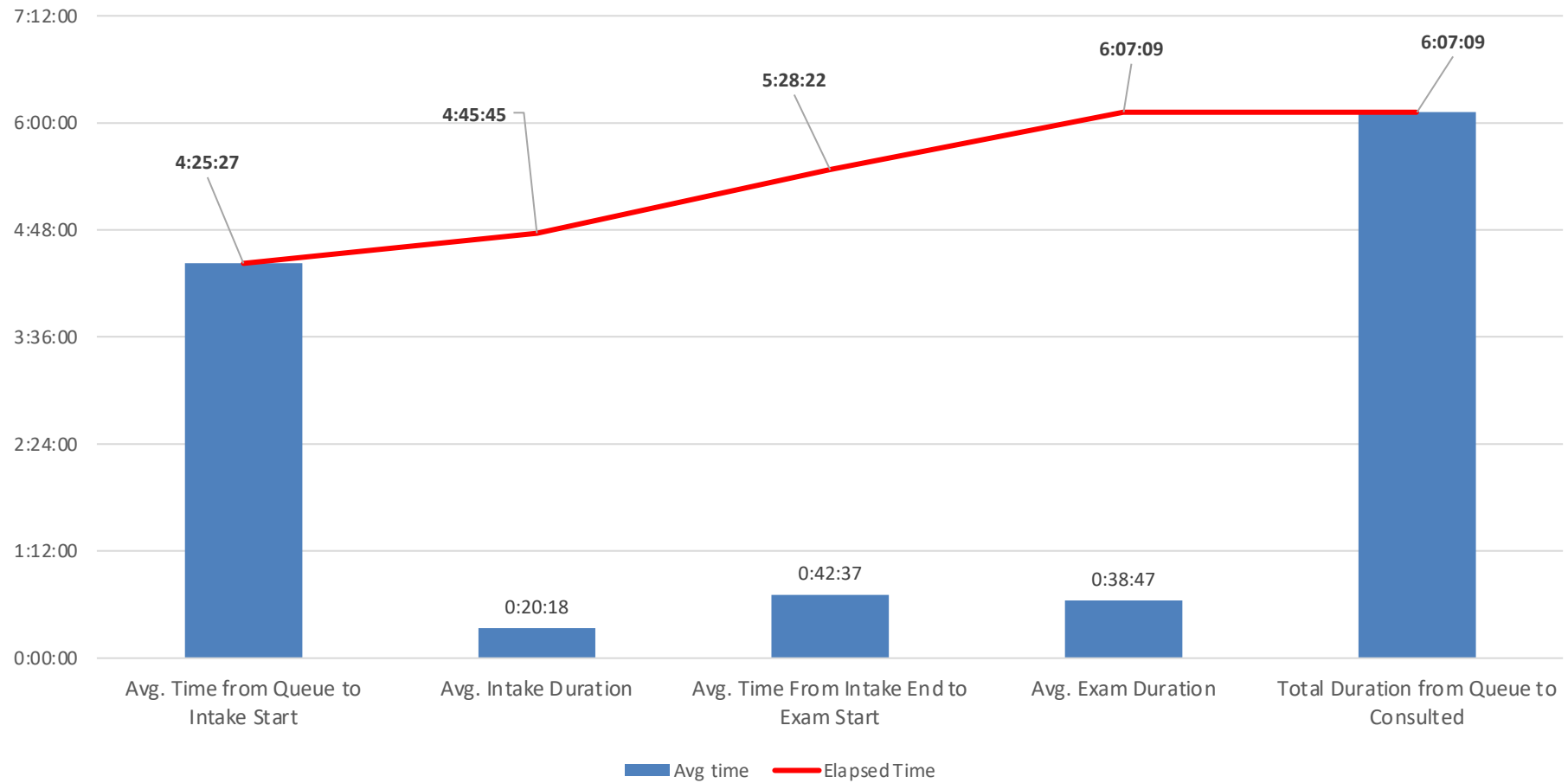


■ In Que Wait Time ■ Exam Elapsed Time

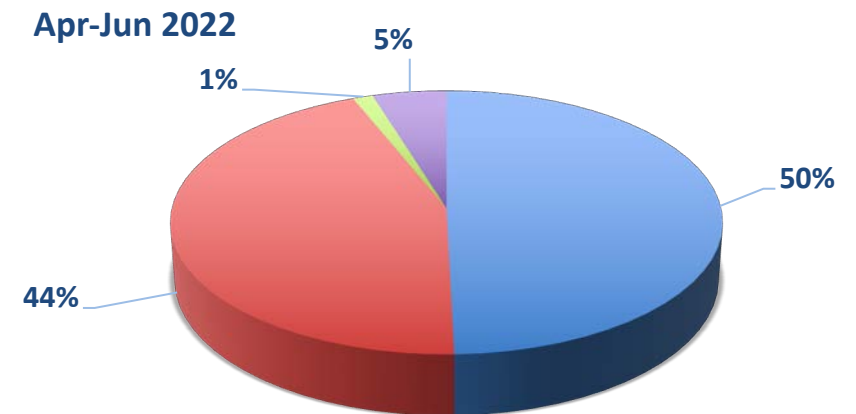
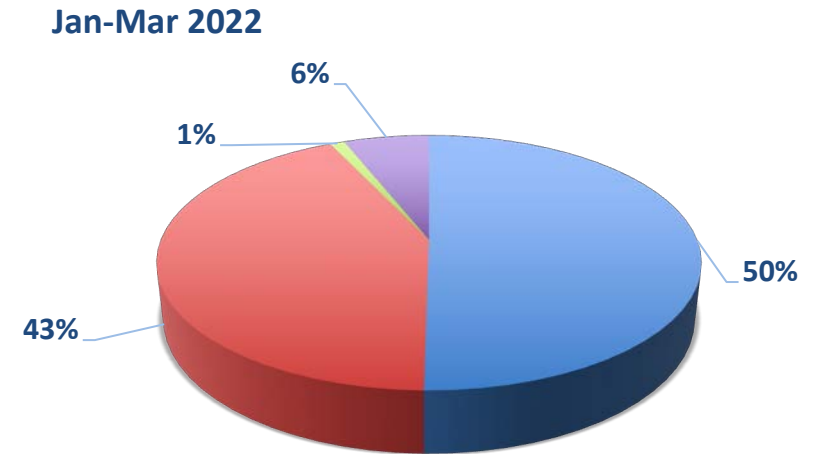
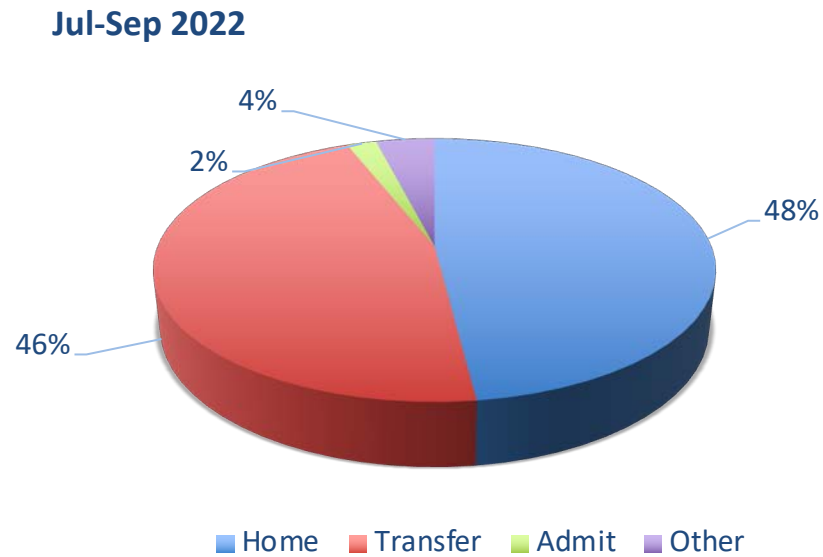
Comparison CBC & ECU
Average Consult Elapsed Time
In Que to Exam Complete
FY23-Q1 September 2022



Key Processes and Elapsed Times Averages CBC and ECU: July – September 2022

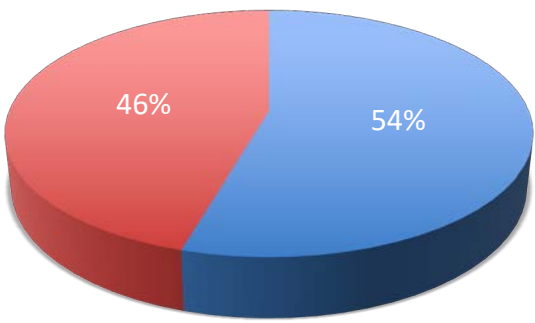
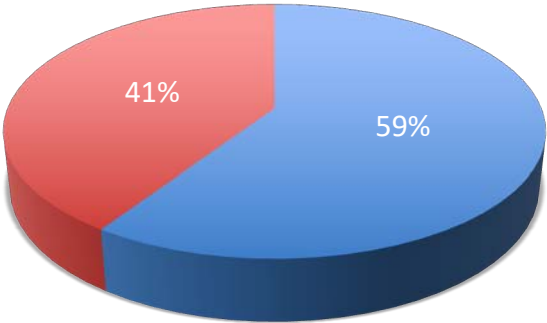


Percent of Patients by Discharge Disposition



Jul-Sep 2022

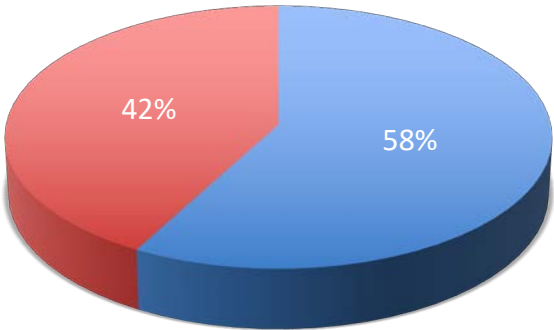
Jan-Mar 2022



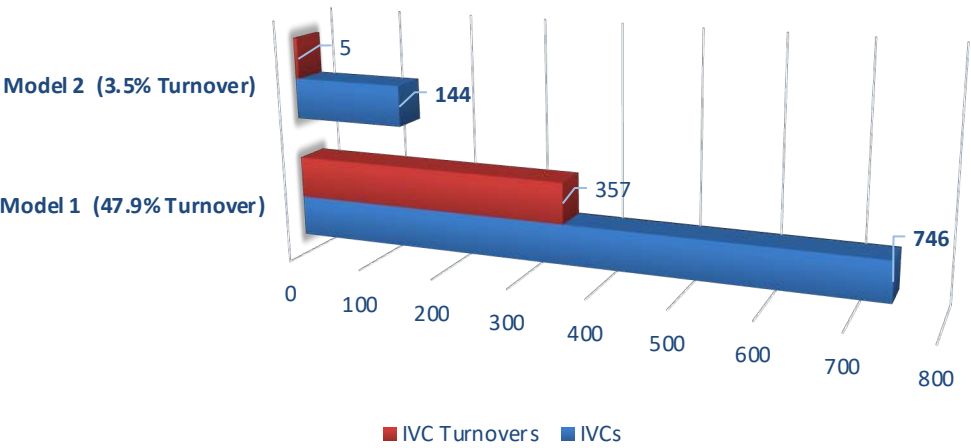
**IVCs –
By Release Status**

- IVCs - percent not released
- IVCs - percent released

Apr-Jun 2022

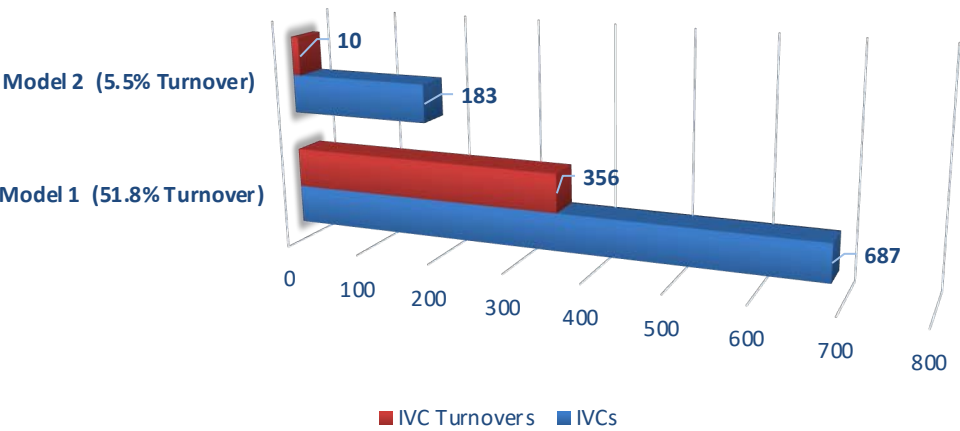


Jul-Sep 2022

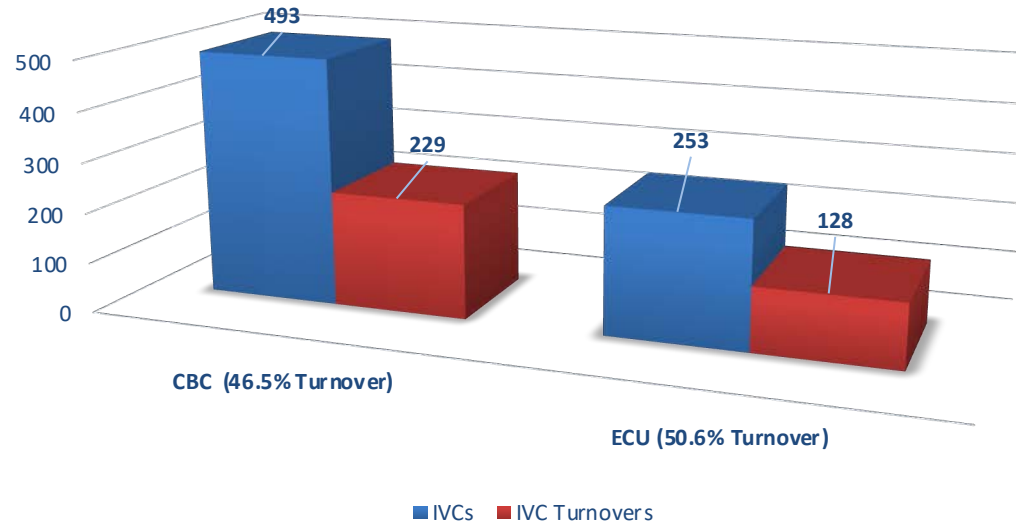


Number of IVCs and IVC Turnovers by Model

Apr-Jun 2022

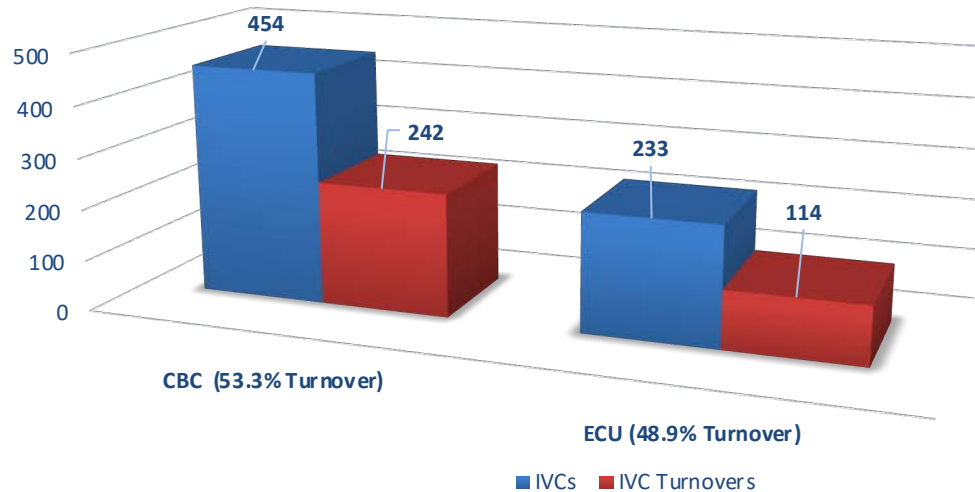


Jul-Sep 2022



Number of IVCs and IVC Turnovers by Provider

Apr-Jun 2022



Satisfaction Surveys

- Satisfaction surveys are done twice a year.
- Most recent surveys were conducted in August 2022.
- 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 2022 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

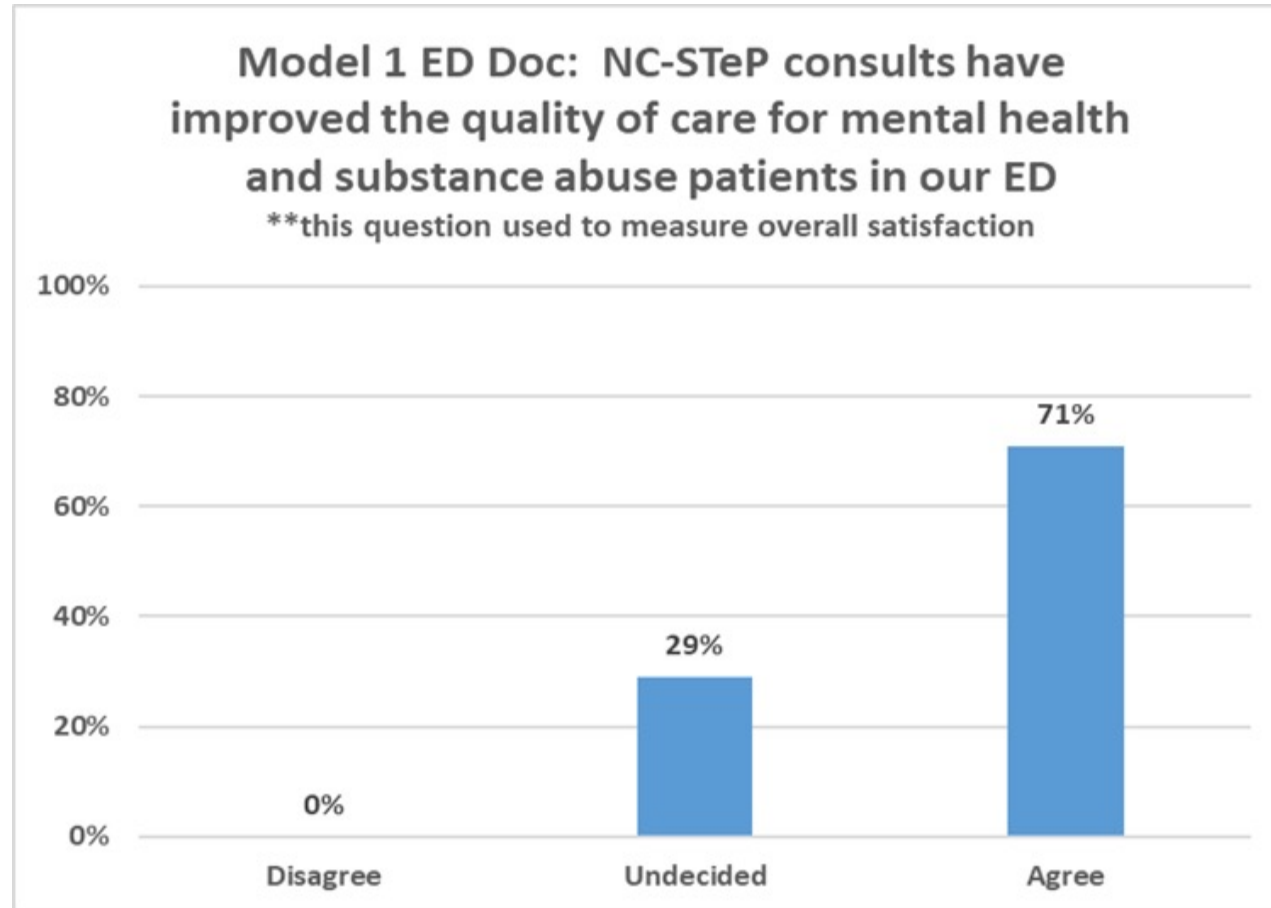
Each group was given a different survey (with different questions) based on their role in the program.



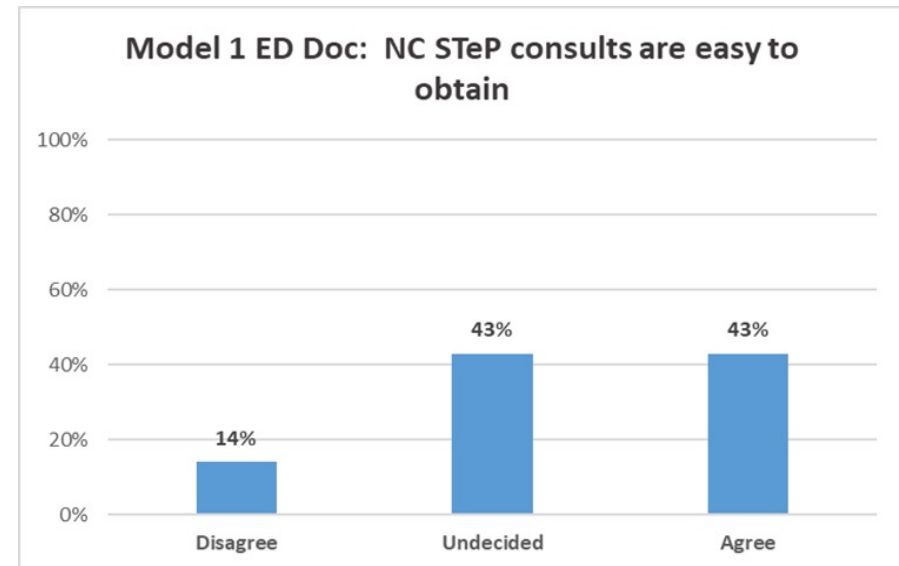
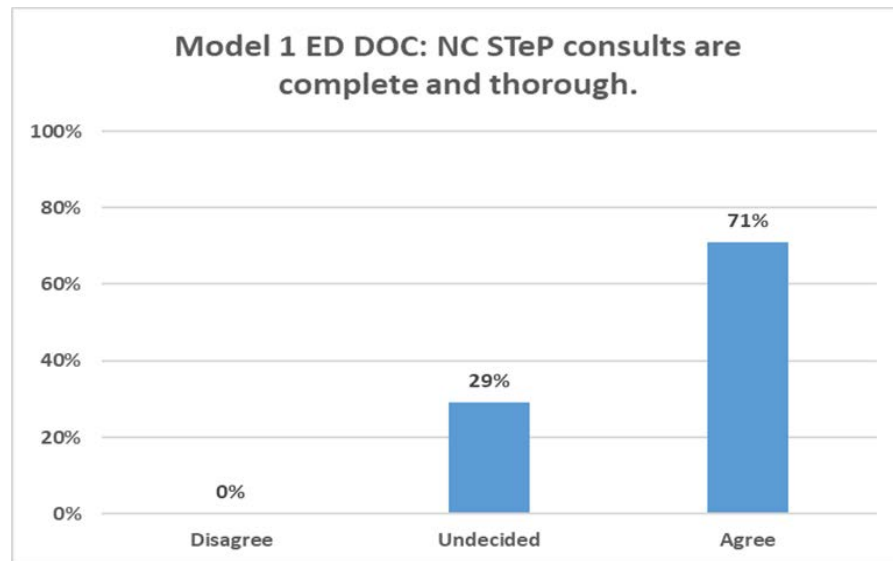
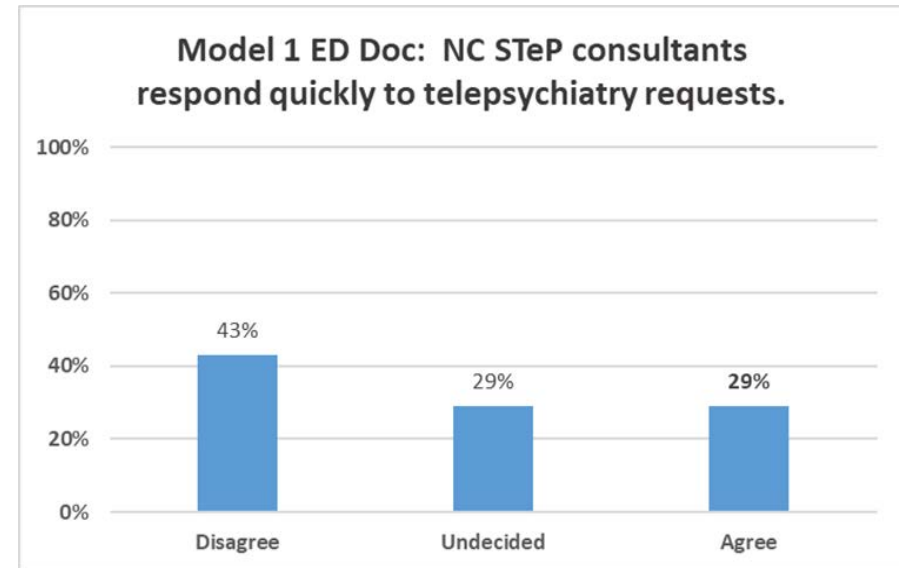
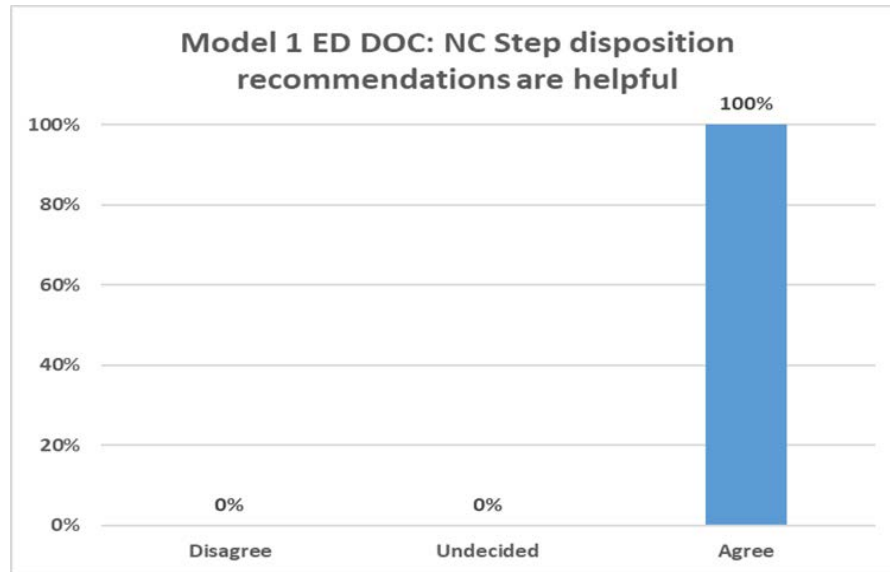
Satisfaction Surveys Methodology

- 52 individuals responded to the survey (N = 52).
- For each group, one summary question is selected for an overall “satisfaction” rate.
- **The overall satisfaction rate is 81%.**

Model 1 Hospital ED Physicians Results (n=7)

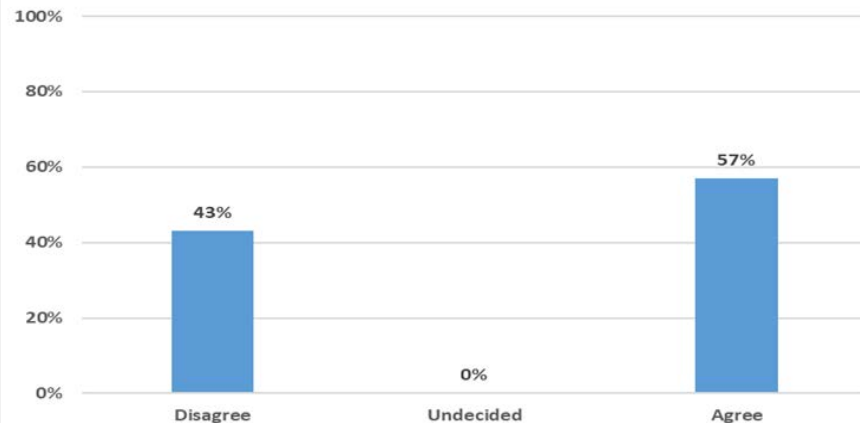


Model 1 Hospital ED Physicians Results (n=7)

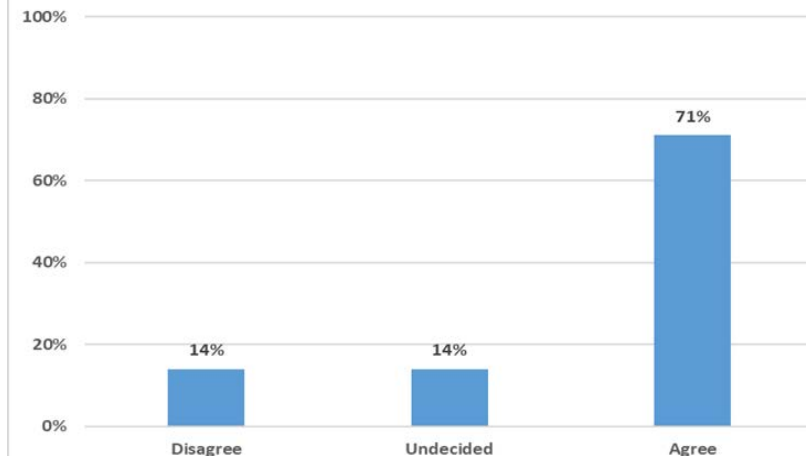


Model 1 Hospital ED Physicians Results (n=7)

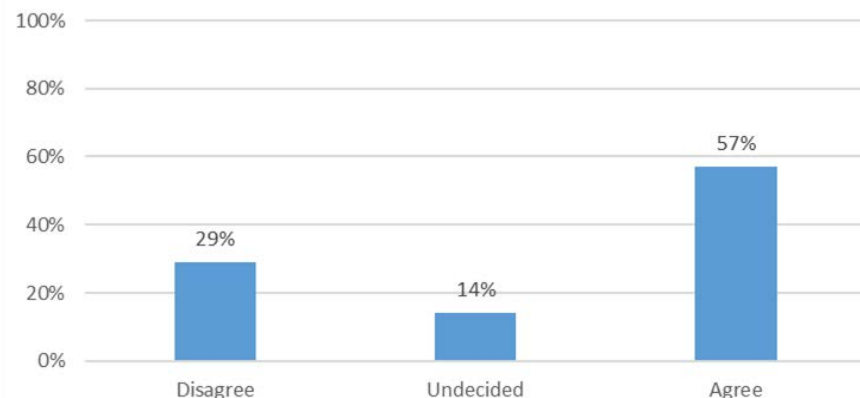
Model 1 ED Doc: NC-STeP consults have made me more comfortable assessing and treating patients with mental health/substance abuse issues



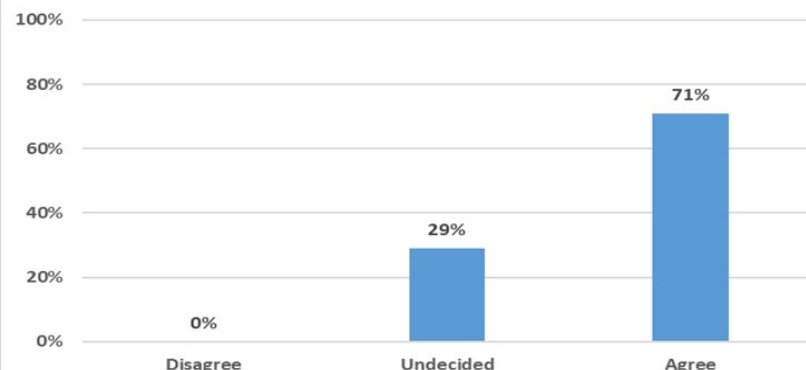
Model 1 ED Doc: NC STeP documentation is straightforward



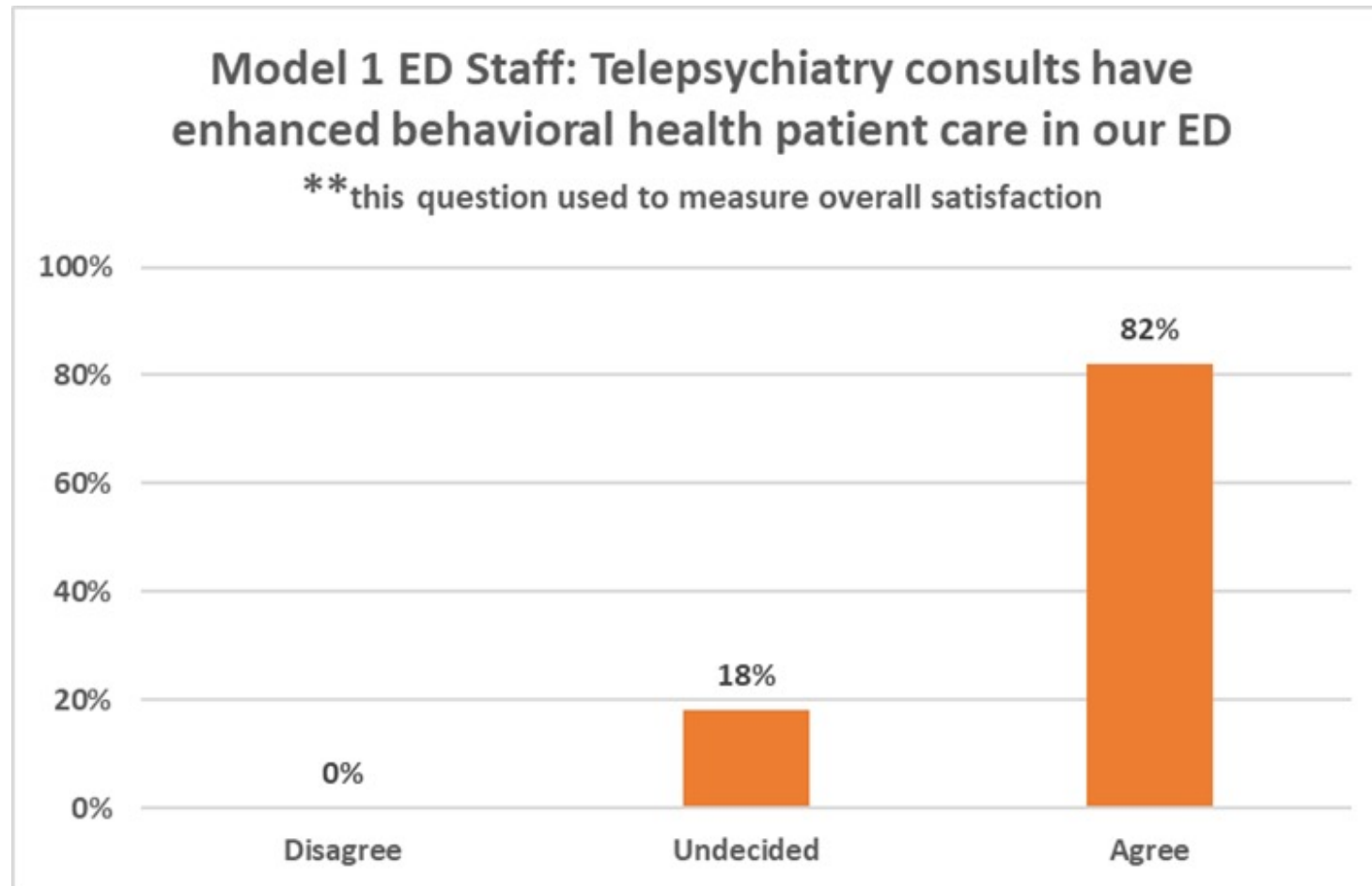
Model 1 ED Doc: Telepsychiatry consults have improved the work flow in the ED



Model 1 ED Doc: NC-STeP consults have improved the quality of care for mental health and substance abuse patients in our ED
**this question used to measure overall satisfaction

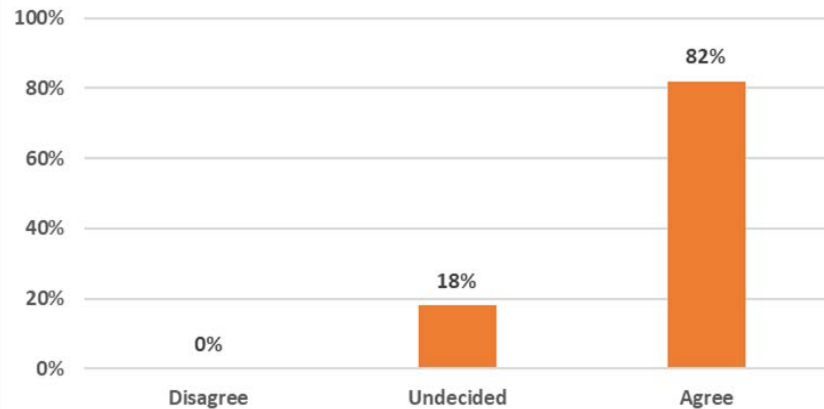


Model 1 Hospital ED Staff Results (n=22)

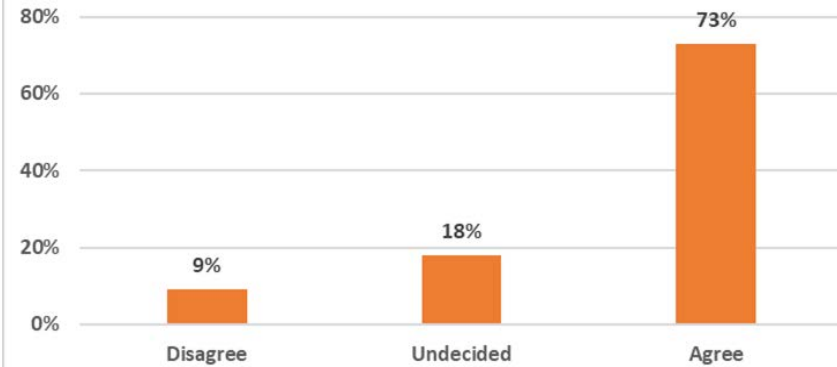


Model 1 Hospital ED Staff Results (n=22)

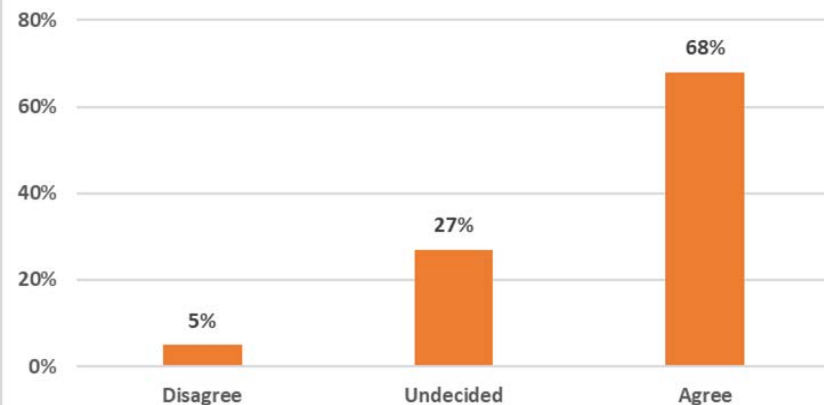
Model 1 ED Staff: The telepsychiatry equipment is easy to use



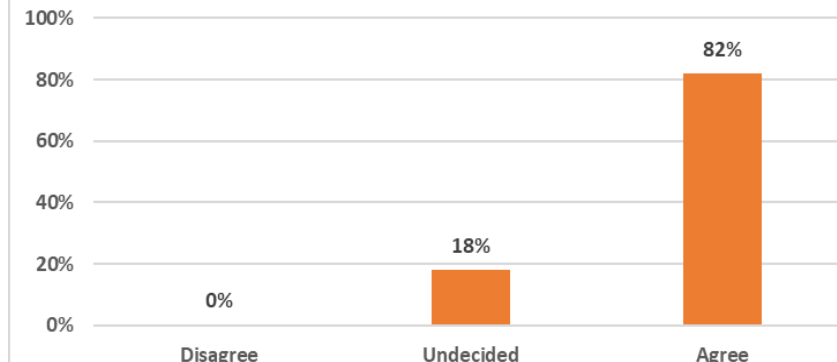
Model 1 ED Staff: I received adequate training/instruction preparing me to use the telepsychiatry cart



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

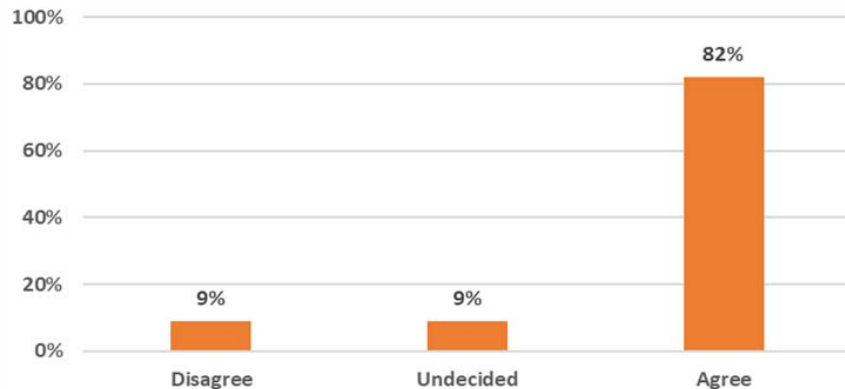


Model 1 ED Staff: Patients appear comfortable interacting with the psychiatric providers via telepsychiatry

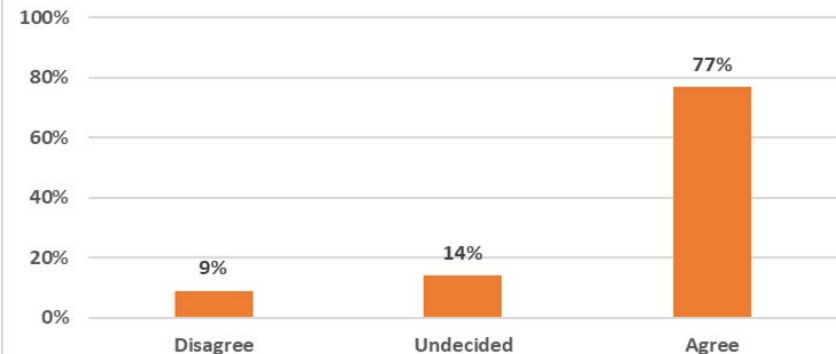


Model 1 Hospital ED Staff Results (n=22)

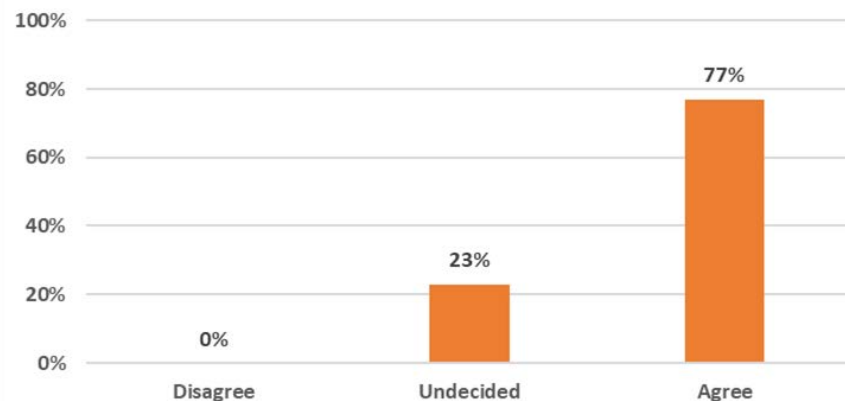
Model 1 ED Staff: The NC-STeP portal is easy to use.



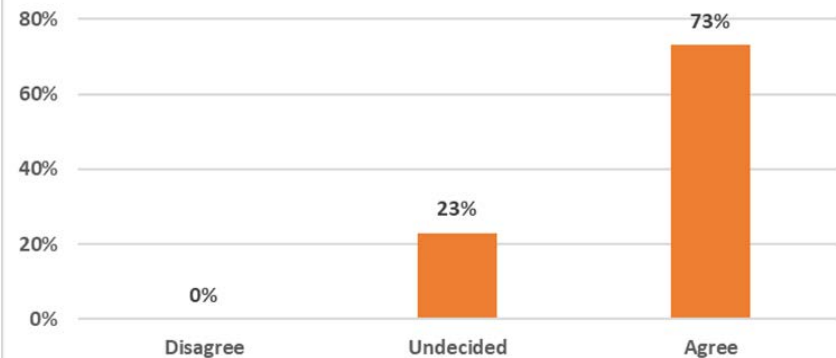
Model 1 ED Staff: The training and resources provided adequately prepared me to use the NC-STeP portal.



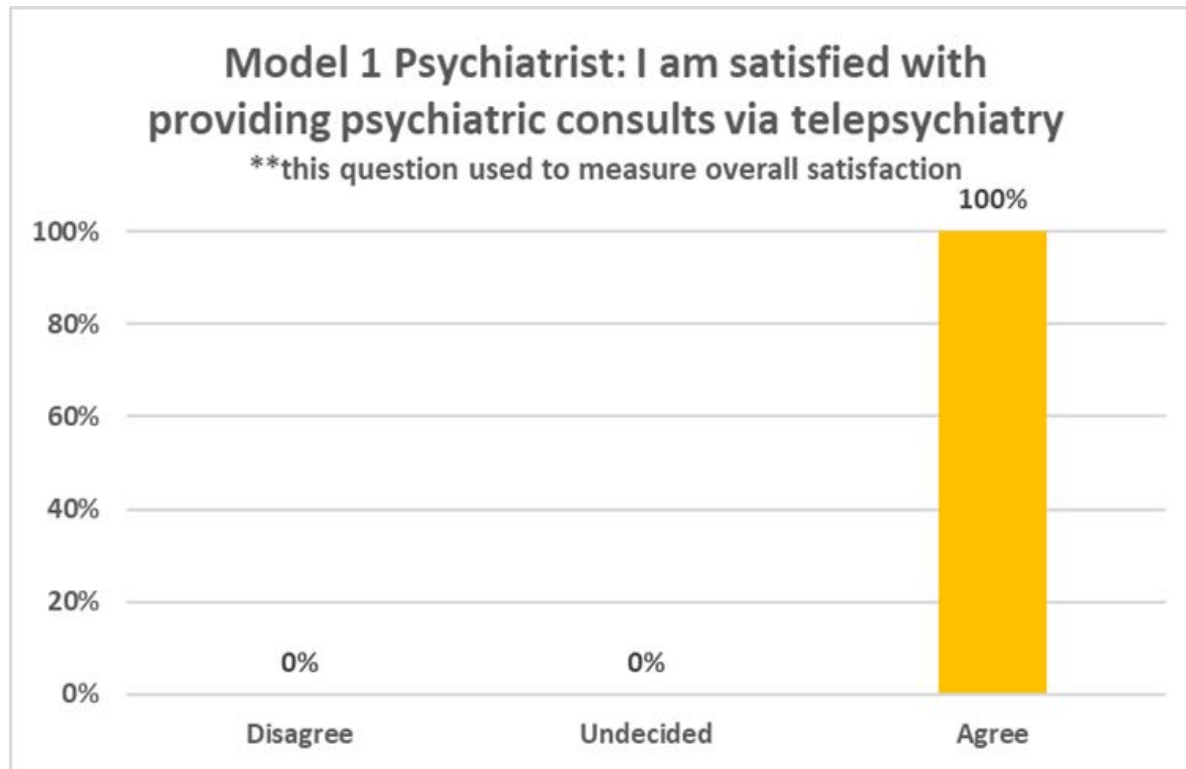
Model 1 ED Staff: The NC-STeP portal is reliable and unscheduled downtime is rare.



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

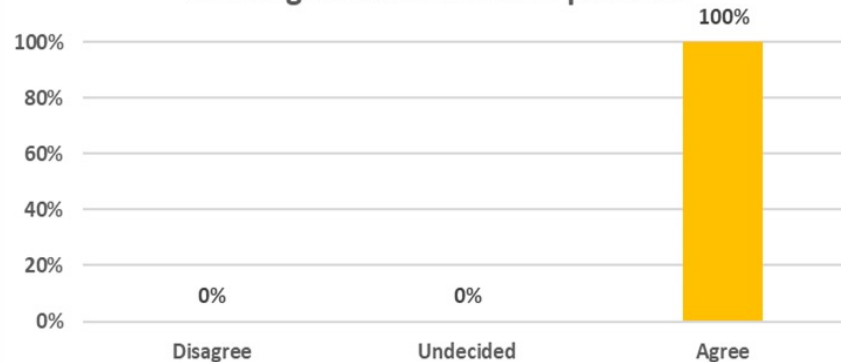


Model 1 Provider Psychiatrist Results (n= 5)



Model 1 Provider Psychiatrist Results (n=5)

Model 1 Psychiatrist: Telepsychiatry is an effective and efficient way of assessing and treating behavioral health patients



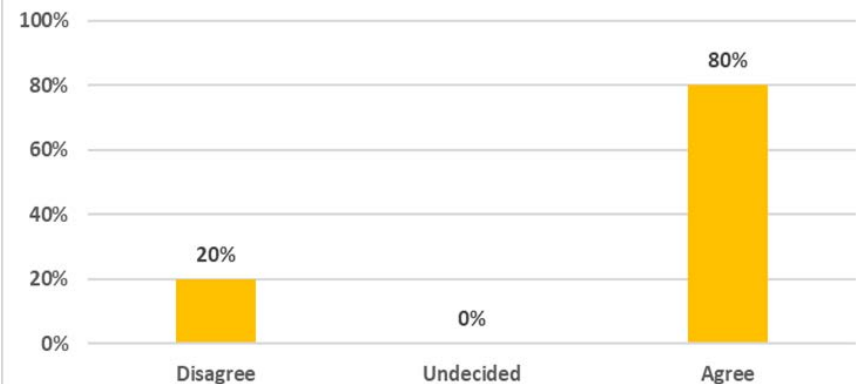
Model 1 Psychiatrist: I believe the quality of psychiatric care I provide via telepsychiatry is comparable to the quality of care I deliver face to face



Model 1 Psychiatrist: I believe the quality of psychiatric care I provide via telepsychiatry is comparable to the quality of care I deliver face to face

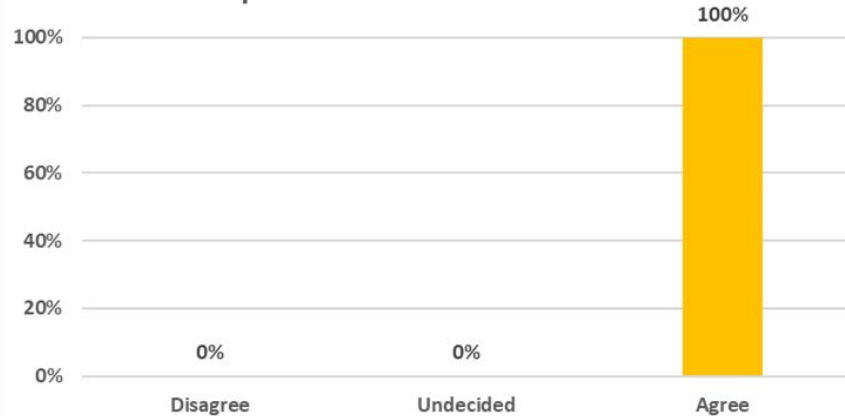


Model 1 Psychiatrist: The NC-STeP portal is straightforward to use.

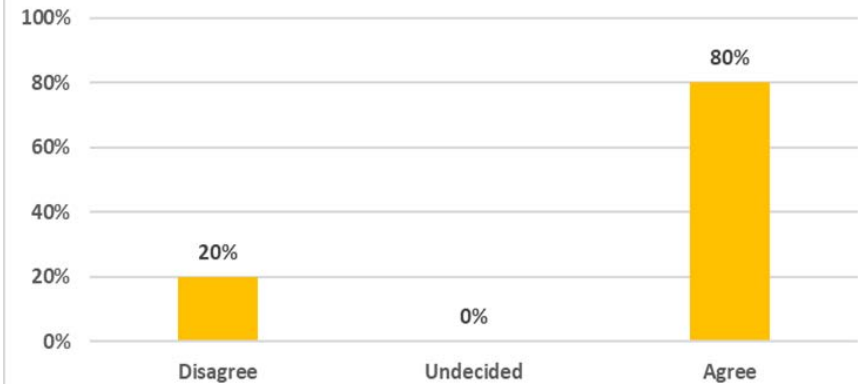


Model 1 Provider Psychiatrist Results (n= 5)

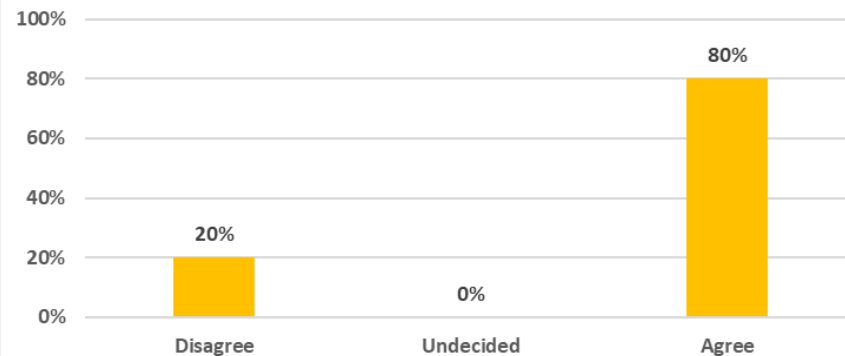
Model 1 Psychiatrist: The telepsychiatry desktop unit is reliable and seldom down



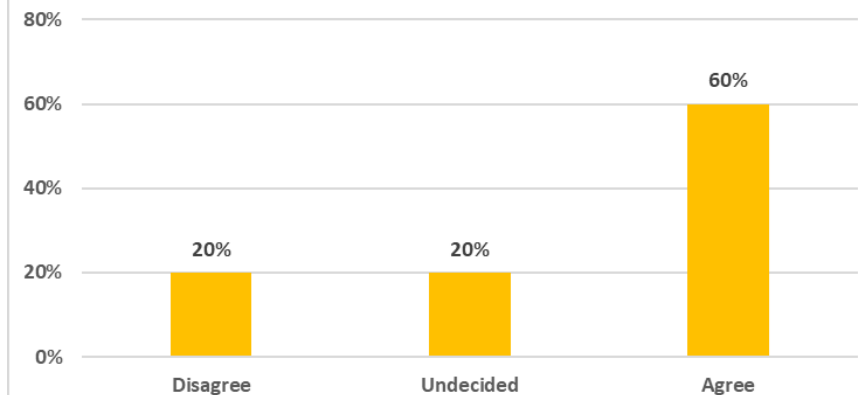
Model 1 Psychiatrist: The NC-STeP portal is straightforward to use.



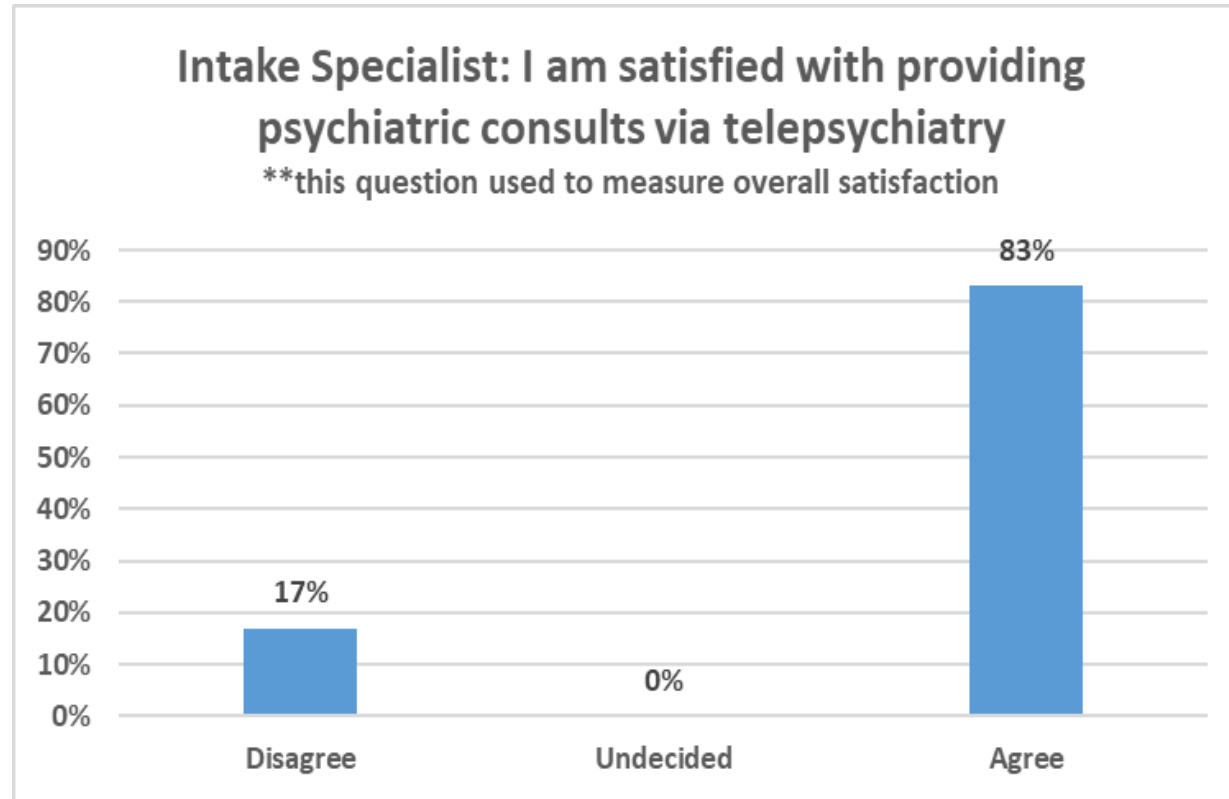
Model 1 Psychiatrist: I received adequate training and resources preparing me to use the NC-STeP portal



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

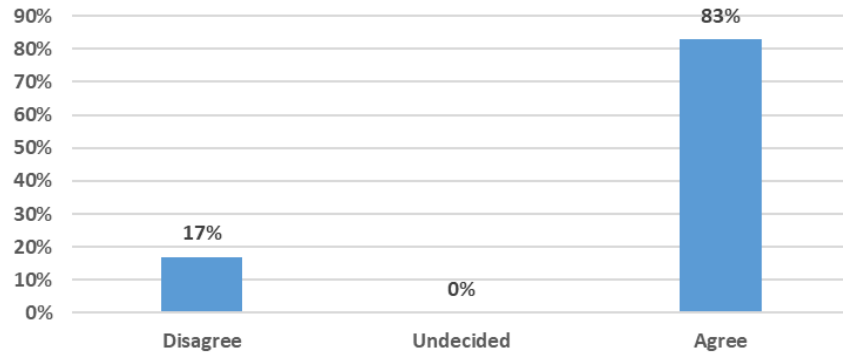


Model 1 Psychiatric Intake Specialist Results (n=6)

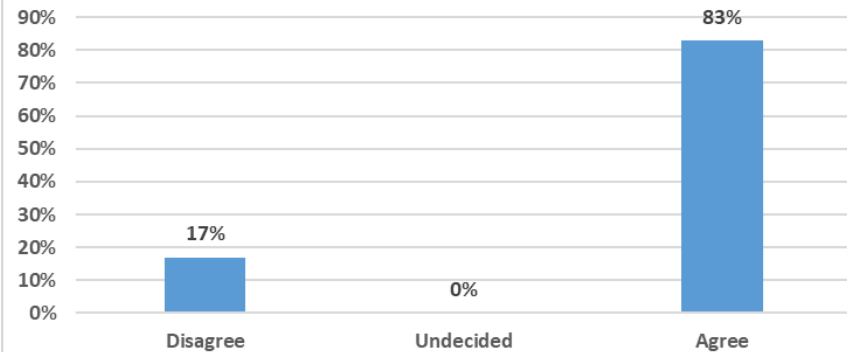


Model 1 Psychiatric Intake Specialist Results (n=6)

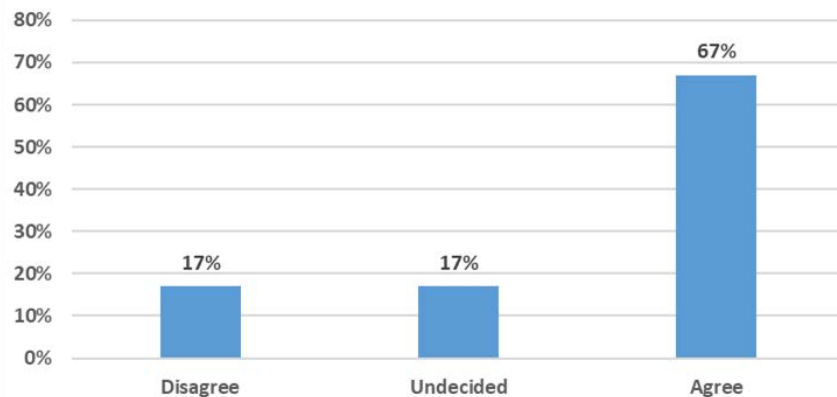
Intake Specialist: Telepsychiatry is an effective and efficient way of assessing and treating behavioral health patients



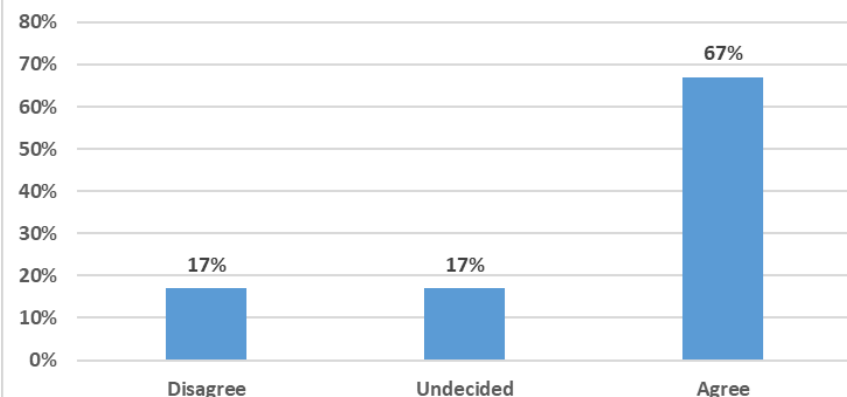
Intake Specialist: Telepsychiatry is an effective and efficient way of assessing and treating behavioral health patients



Intake Specialist: Telepsychiatry increases my productivity and/or efficiency.

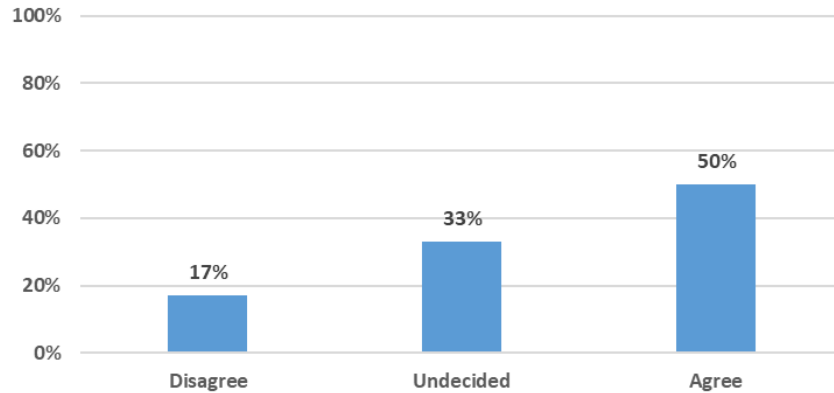


Intake Specialist: The telepsychiatry desktop unit is straightforward to use

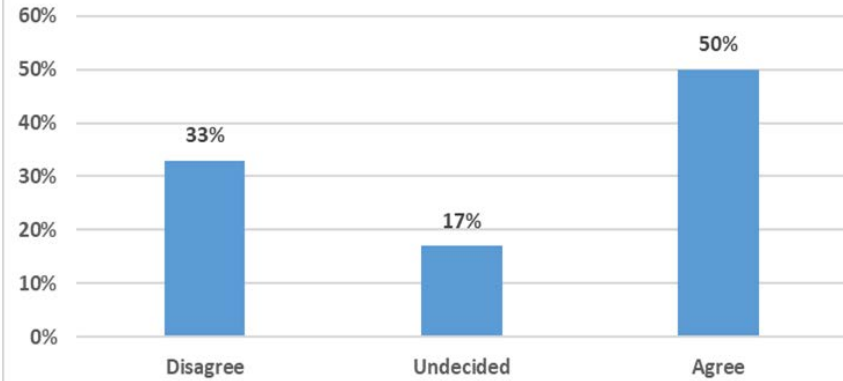


Model 1 Psychiatric Intake Specialist Results (n=6)

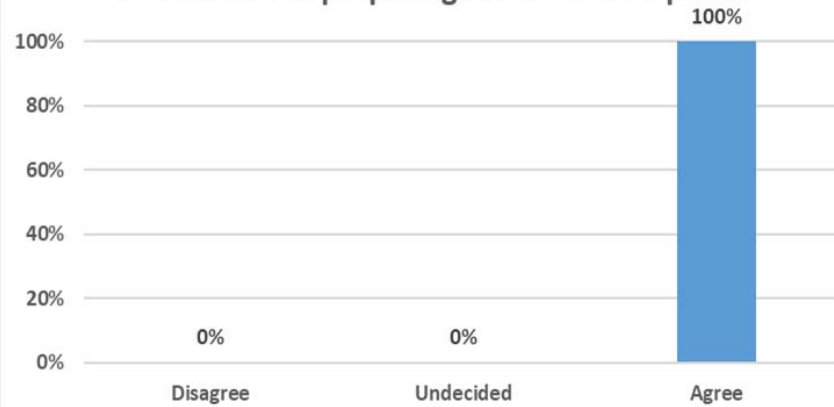
Intake Specialist: The telepsychiatry desktop unit is reliable and seldom down



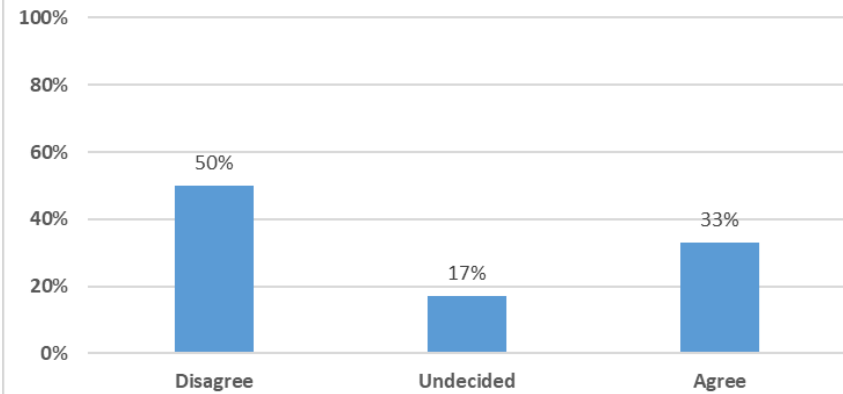
Intake Specialist: The NC-STeP portal is straightforward to use



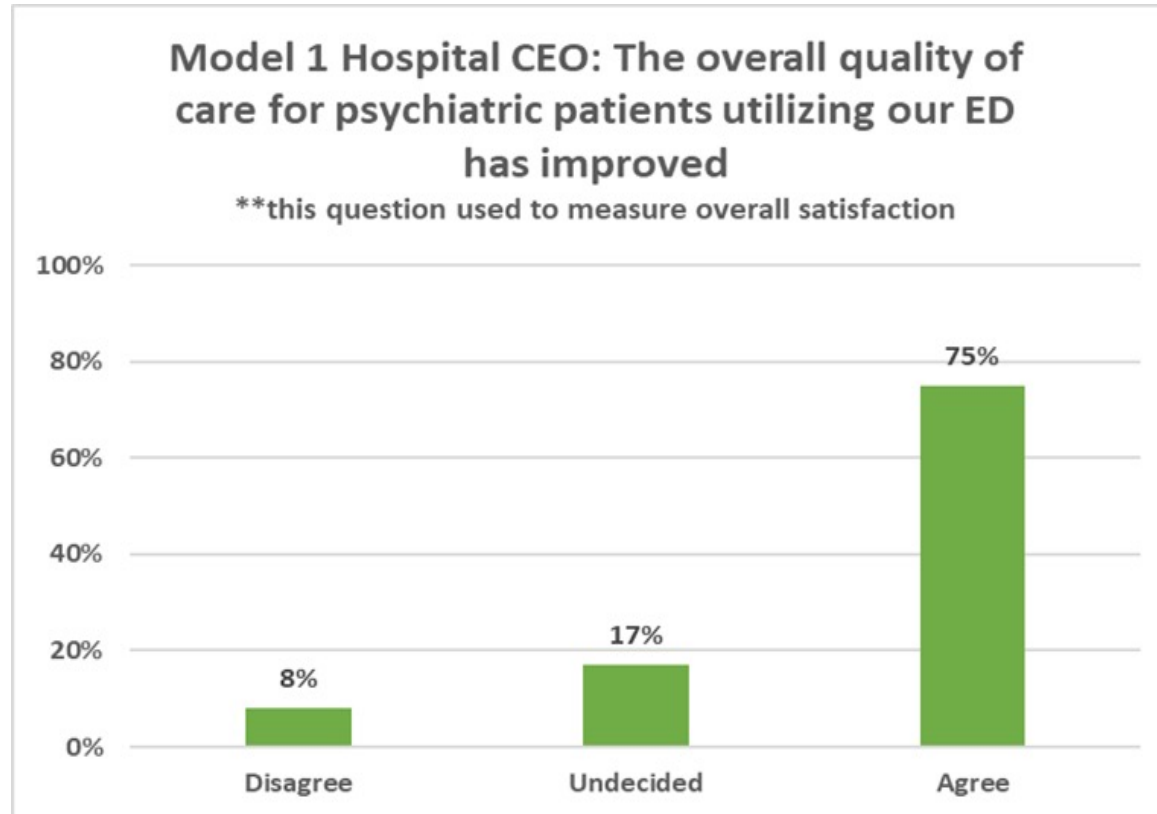
Intake Specialist: I received adequate training and resources preparing me to use the portal



Intake Specialist: The NC-STeP portal works well without excessive delays or downtime

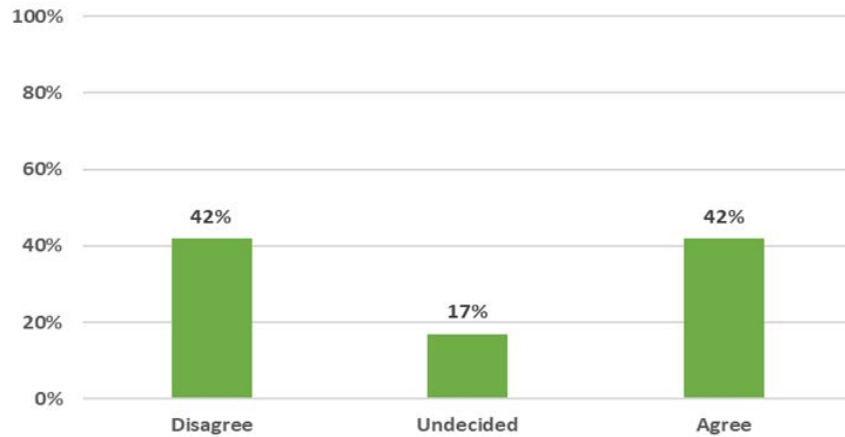


Model 1 CEO/CNO/CFO Results (n=12)

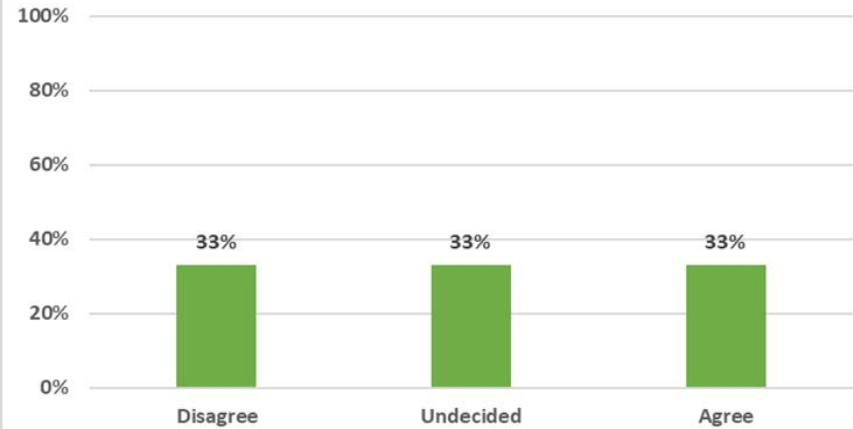


Model 1 CEO/CNO/CFO Results (n=12)

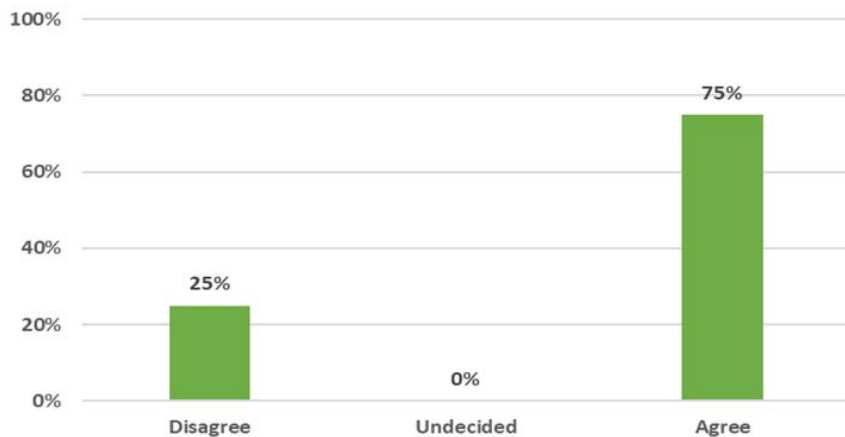
Model 1 Hospital CEO: The LOS for psychiatric patients in our ED has reduced



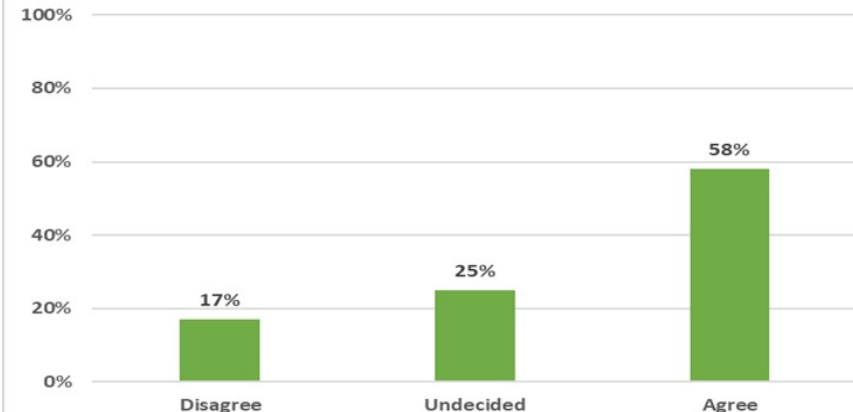
Model 1 Hospital CEO: Overall, ED throughput has improved.



Model 1 Hospital CEO: Overall, ED staff satisfaction has improved

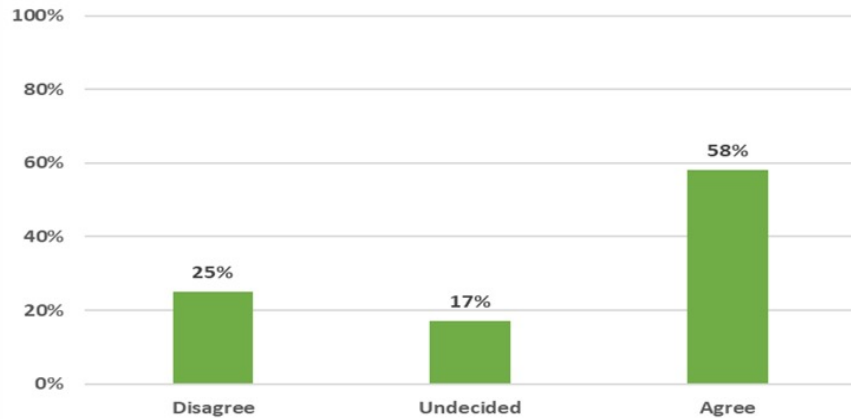


Model 1 Hospital CEO: There has been an improvement in discharge planning and referrals for psychiatric patients in our ED

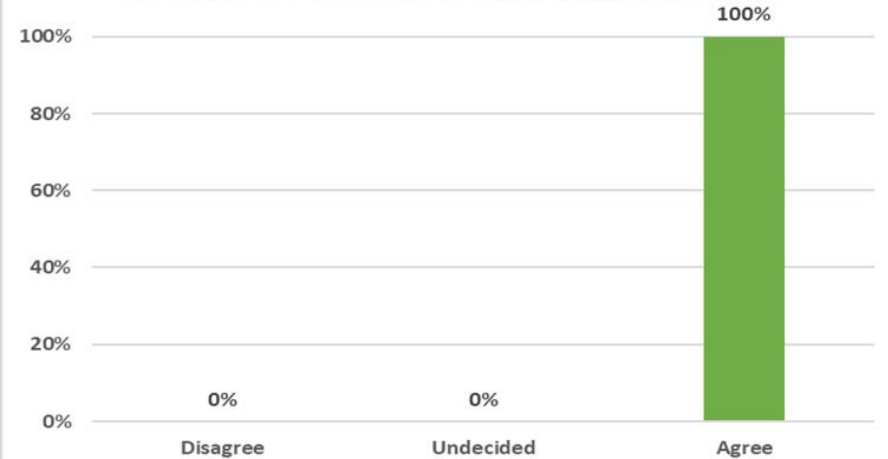


Model 1 CEO/CNO/CFO Results (n=12)

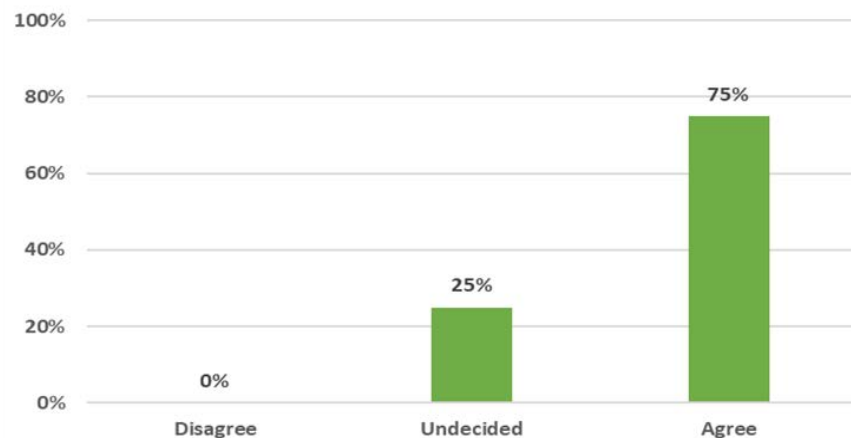
Model 1 Hospital CEO: Medical staff's understanding of mental health issues and treatment options in our ED has improved



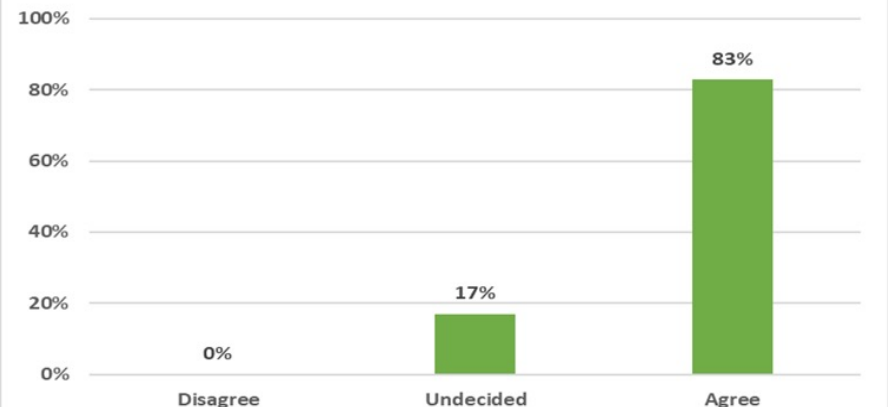
Model 1 Hospital CEO: Our hospital's use of NC-STeP consultants has been cost effective



Model 1 Hospital CEO: I would recommend NC-STeP to other hospitals

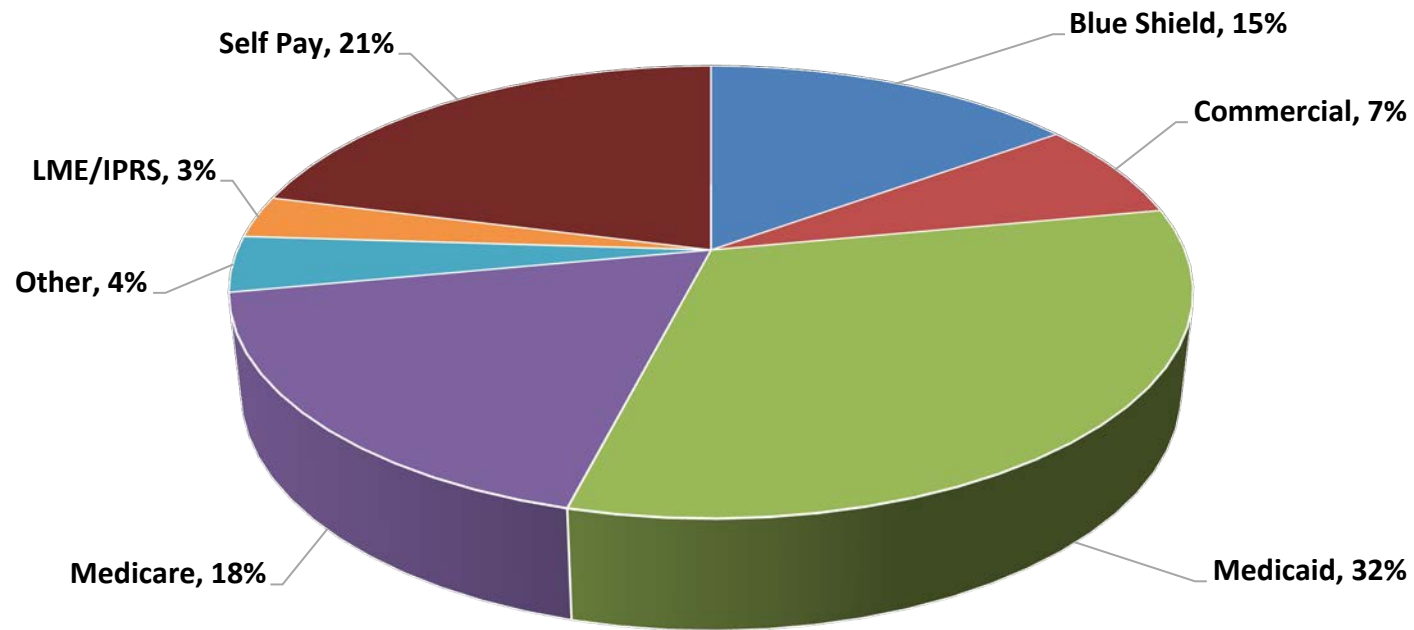


Model 1 Hospital CEO: I would pursue additional uses of telemedicine technology for other medical specialty areas



NC-STeP Charge Mix

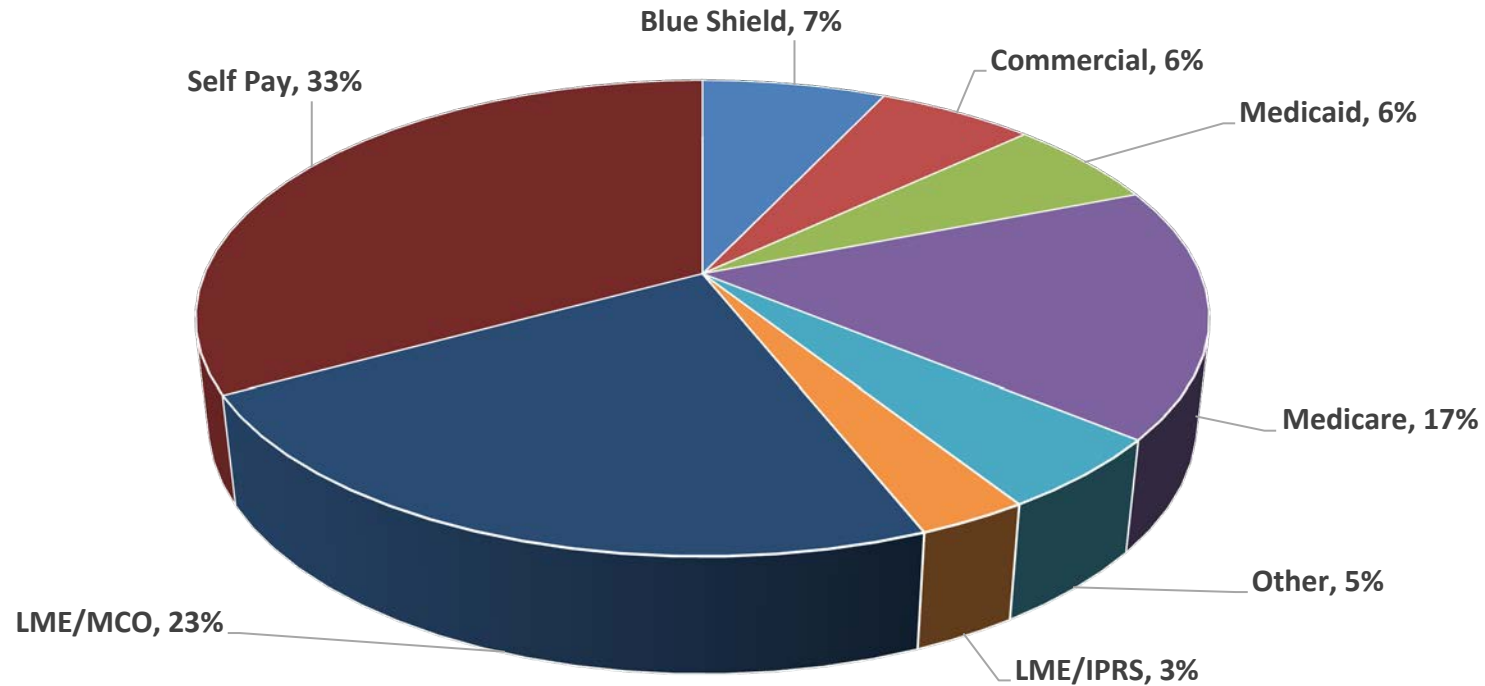
QTD FY2023 - Quarter 1



■ Blue Shield ■ Commercial ■ Medicaid ■ Medicare ■ Other ■ LME/IPRS ■ Self Pay

NC-STeP Charge Mix - Project to Date

Service Dates: October 1, 2013 – September 30, 2022



■ Blue Shield ■ Commercial ■ Medicaid ■ Medicare ■ Other ■ LME/IPRS ■ LME/MCO ■ Self Pay

Community-Based Sites as of September 30, 2022

EVALUATION CRITERIA	VALUES/MEASURES REACHED AS OF 9/30/2022
The number of full-time equivalent (FTE) providers supporting the program	1.6 FTEs
The number of community-based sites contracted	23
Number of patient visits with medical (psychiatric) doctor	151 PTD= 1,477
The number return visits	952 PTD= 11,077
The number of patient visits with a mid-level provider	1,212 PTD= 12,586
The number of new patient visits	411 PTD= 3,036



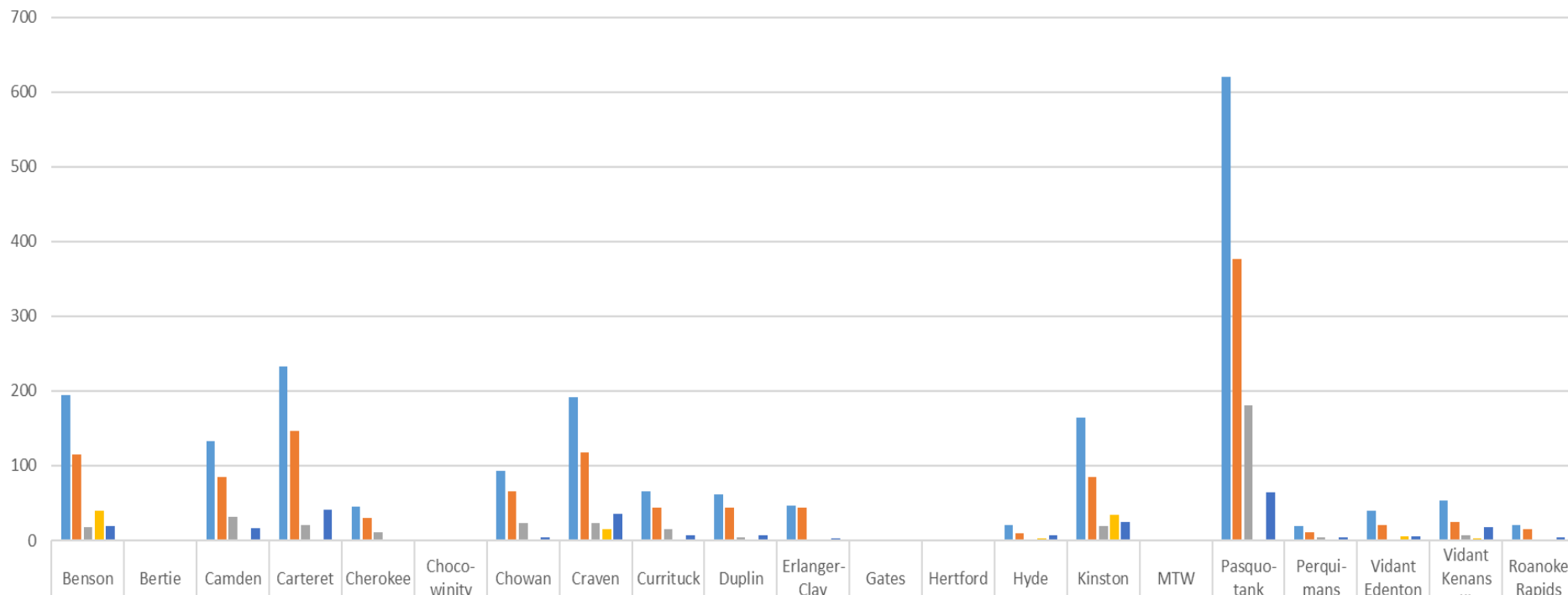
NC-STeP Community Patient Visits

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
With Medical Doctor	1,477	8	536	265	316	103	98	151
With Mid-Level Provider	12,586	7	2,006	3,217	4,122	1,036	986	1,212
Total Patient Visits	14,152	15	2,633	3,477	4,440	1,139	1,085	1,363

NC-Step Appointment by Site

Appointments, Visits Kept, Rescheduled, Cancelled, No Show

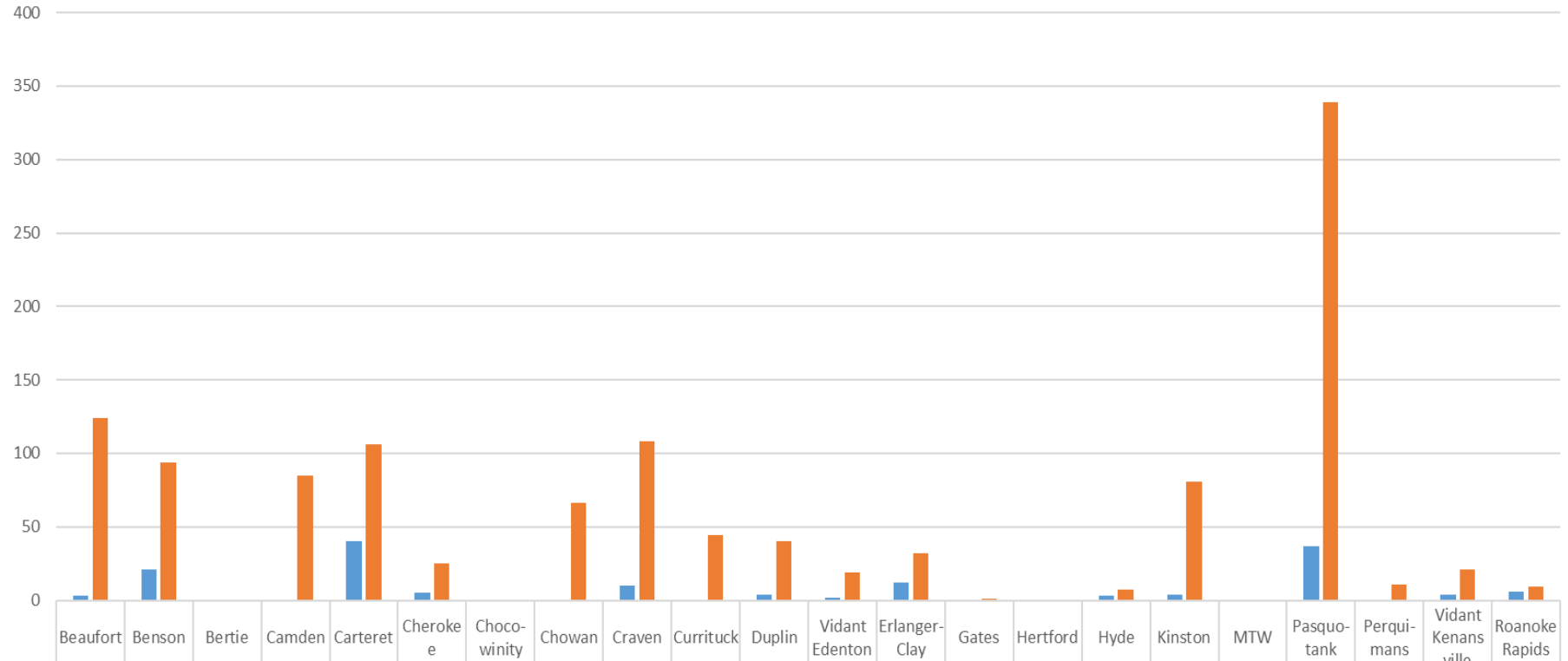
July - September 2022



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



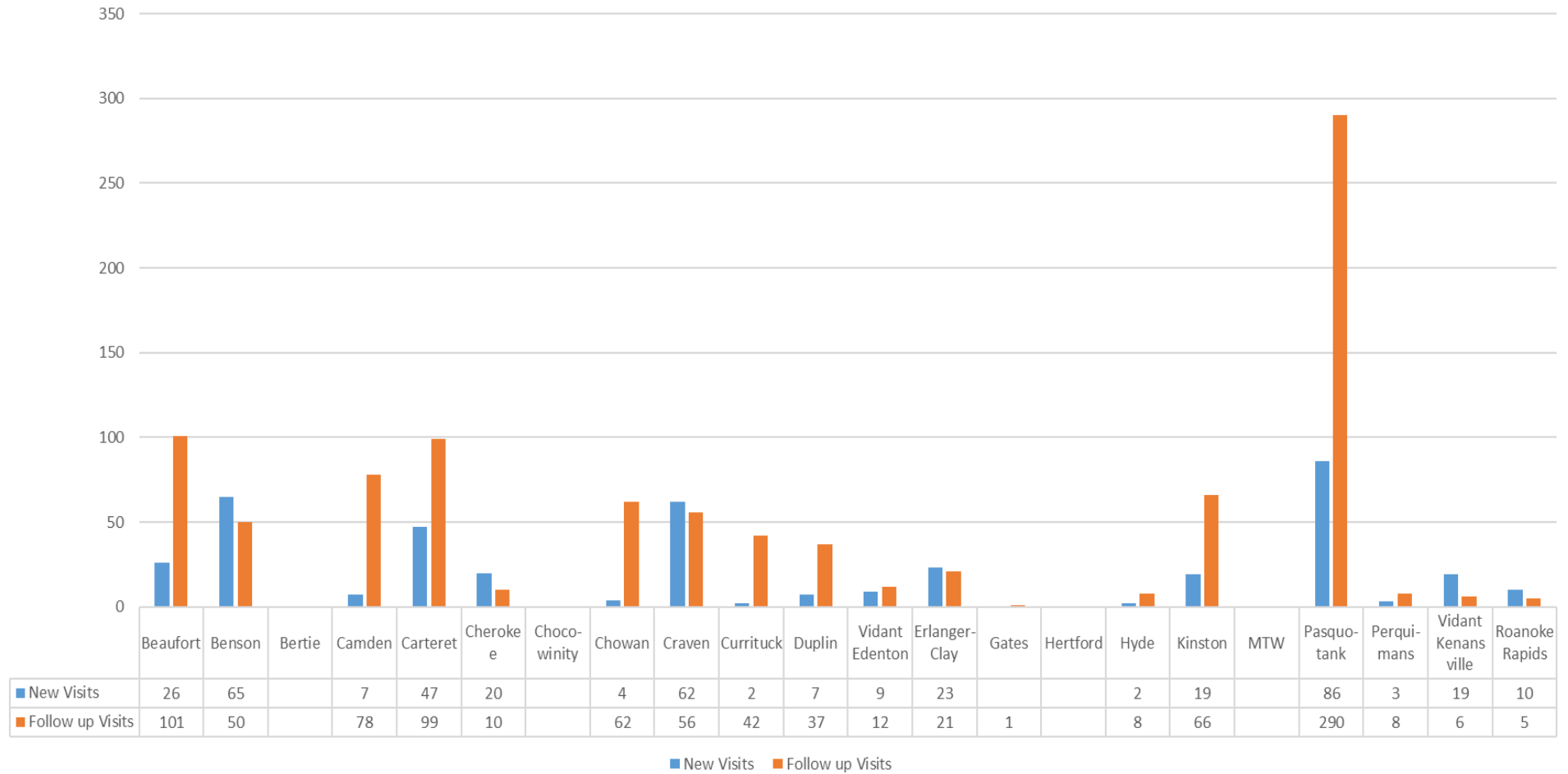
NC-Step Community Visits by Site by Provider Type July - September 2022



■ Psychiatric Provider Visits ■ BH Mgr Visits



NC-STeP Community Visits by Site New and Follow-Up July - September 2022



NC-STeP Status as of September 30, 2022

- 39 hospitals in the network. 38 live.
- 55,812 total psychiatry assessments since program inception
- 9,155 IVCs overturned
 - Cumulative return on investment = \$49,437,00
(savings from preventing unnecessary hospitalizations)
- Four Clinical Provider Hubs with 52 consultant providers
- Over 32% of the patients served had no insurance coverage



NC-STeP Status as of September 30, 2022

- 23 community-based sites.
- 14,063 total patient visits since program inception in October 2018.
 - 1,477 total patient visits with a psychiatrist
 - 12,586 total patient visits with a mid-level provider



Contact

Sy Atezaz Saeed, MD, MS, FACP_{psych}

Professor and Chair Emeritus

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

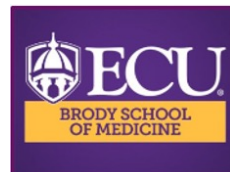
Executive Director

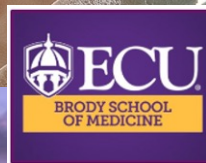
North Carolina Statewide Telepsychiatry Program (NC-STeP)

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Greenville, NC 27834





NORTH CAROLINA
STATEWIDE TELEPSYCHIATRY PROGRAM

