



NORTH CAROLINA
STATEWIDE TELEPSYCHIATRY PROGRAM

Quarterly Progress Update



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East Carolina University
CENTER FOR TELEPSYCHIATRY

NC-STeP Quality Management and Outcomes Monitoring Processes: January -March 2016

- 12 hospitals reported Telepsychiatry patients in their ED during this period
 - Several additional hospitals were live but did not have telepsychiatry patients.
 - 29 hospitals were live as of 3/31/16.
- 388 initial patient assessments were conducted during the report period.
- The Median Length of Stay for all ED patients who received telepsychiatry services was 24.0 hours.



NC-STeP Quality Management and Outcomes Monitoring Processes: January -March 2016

- 170 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
 - 62 (36.4%) of those patients did not have an IVC in place when they were discharged.
- Of the ED patients who received telepsychiatry services
 - 33.5% were discharged to home.
 - 59.2% were discharged to another facility.



NC-STeP Status as of March 31, 2016

- Four Clinical Providers' Hubs
 - Cape Fear Valley
 - Cone Health
 - Mission
 - Novant
- Four new hubs in various stages of development
 - Two Weekday Model-1 Hubs
 - One Weekend and Holidays Model-1 Hub
 - One Multi-Hospital Model-2 Hub



NC-STeP Status as of March 31, 2016

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 09/30/2015	TARGET TO BE REACHED BY 06/30/2016	VALUES/MEASURES REACHED AS OF 03/31/2016
<ul style="list-style-type: none"> To maintain the number of full-time equivalent (FTE) positions supported by this contract at 0.70 FTEs. 	0.70 FTEs	0.70 FTEs	0.70 FTEs
<ul style="list-style-type: none"> To increase the number of overturned involuntary commitments by 106, from 1,059 to 1,165 in order to address unnecessary hospitalization of behavioral health patients 	1059	1165	62 in this quarter Cumulative total since program inception 2009
<ul style="list-style-type: none"> To increase the number of participating consultant providers by 1, from 32 to 33 	32	33	37*
<ul style="list-style-type: none"> To increase the number of telepsychiatry assessments conducted by 1,067, from 10,665 to 11,732 	10,665	11,732	51 in this quarter Cumulative total since program inception 20,783

NC-STeP Status as of March 31, 2016

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 09/30/2015	TARGET TO BE REACHED BY 06/30/2016	VALUES/MEASURES REACHED AS OF 03/31/2016
5. To increase the number of state-supported telepsychiatry referring sites by 14, from 59 to 73	59 Referring sites	73 referring sites	58 in network** 29 live 29 in process
6. To increase the reports of involuntary commitments to an enrolled hospital by 436, from 4,364 to 4,800	4364	4,800	170 in this quarter Cumulative total since program inception 8264
7. To reduce the average (mean) Length of Stay for all patients with a primary mental health diagnosis across all dispositions by approximately 19 hours, from 42 to 23 hours	42 hours	23 hours	45.4 mean this quarter Median = 24.0
9. To increase the ratio of the overall revenues (billing, subscription fees), exclusive of grant funding, to program costs (exclusive of start-up costs)	0.64:1.00	>1.00:1.00	0.97:1.00

NC-STeP Status as of March 31, 2016

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 09/30/2015	TARGET TO BE REACHED BY 06/30/2016	VALUES/MEASURES REACHED AS OF 03/31/2016
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COMMENTS/EXPLANATIONS:

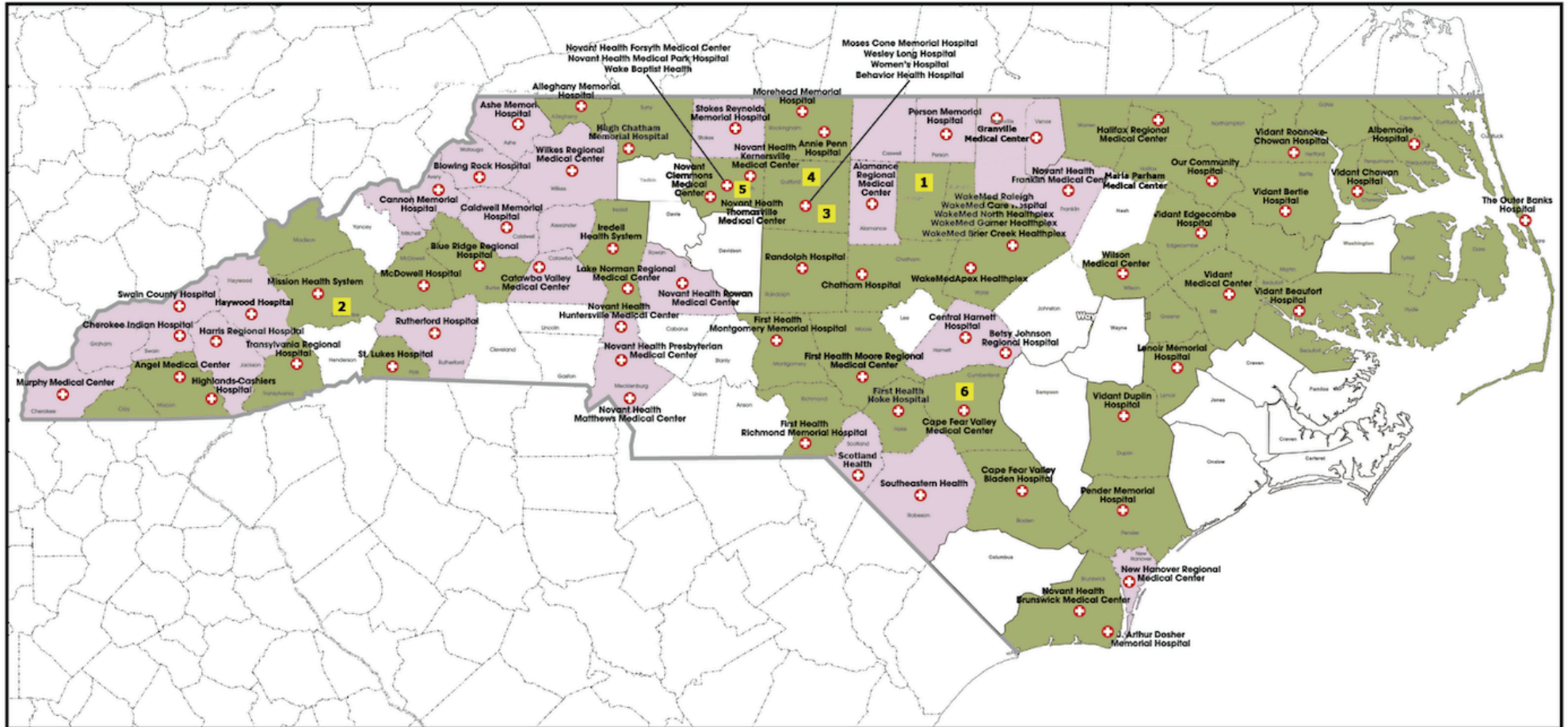
** A lot of changes occurred over this past quarter as a result of CCNC no longer providing services. We have established 3 new provider hubs with a total of 17 new providers being credentialed to serve NC STeP. Ten (10) hospitals have terminated, 2 hospitals closed, 4 have suspended progress, 29 are in process of going live (i.e. waiting on credentialing/restarting under new Provider hub) and 29 are currently live under Model 2 hubs.



Provider Hubs

1. Carolina Behavioral Care
2. Mission
3. Cone Health

4. Old Vineyard
5. Novant
6. Cape Fear

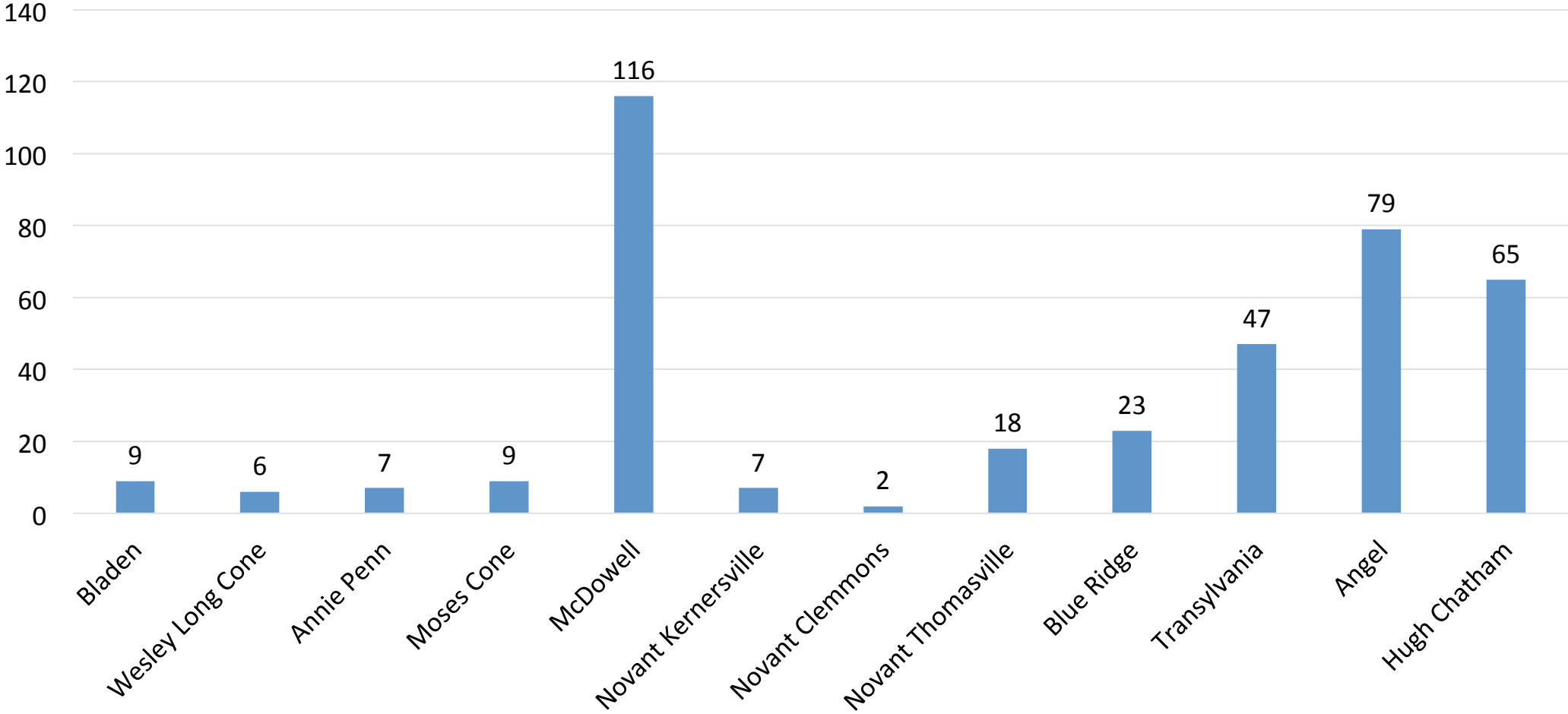


Green = Hospitals contracted with NC STEP.

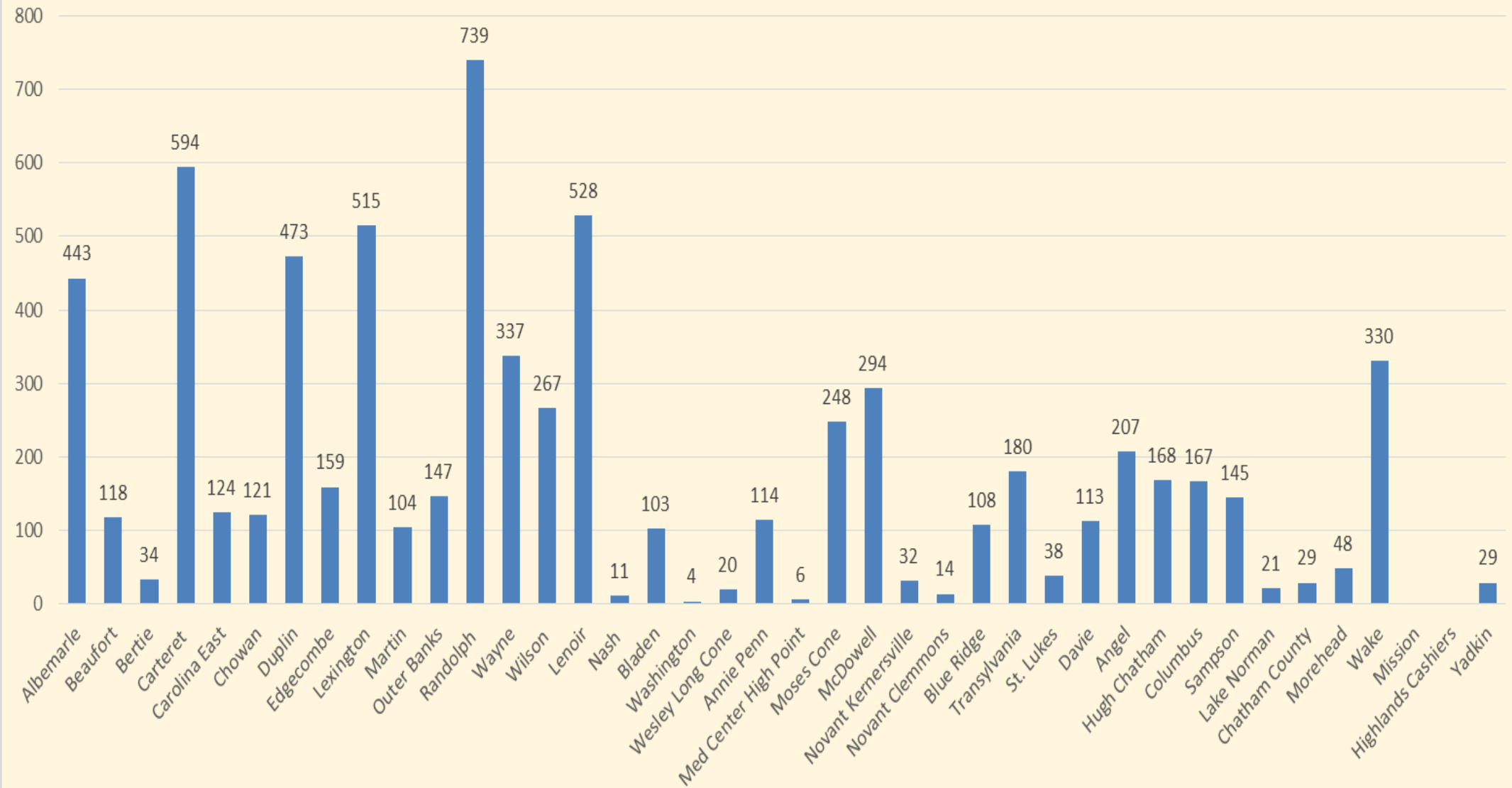
Pink = Hospitals in process of going live with NC STEP.

Yellow = Provider Hub

Number of ED Patients by Hospital January - March 2016



Total Number of ED Telepsychiatry Patients by Hospital for 2015 (January - December)



Patient Encounters and Assessments

	Since project inception in November 2013	During Calendar Year 2014	During Calendar Year 2015	During Quarter January - March 2016
Total Patient Encounters	13,606	5,144	7,132	388
Model 1 hospitals	11,464	4,578	5,852	92
Model 2 hospitals	2,142	566	1,280	296
Number of Assessments (assessment numbers are only reported for Model 1 hospitals)	20,783	8,438	12,294	51



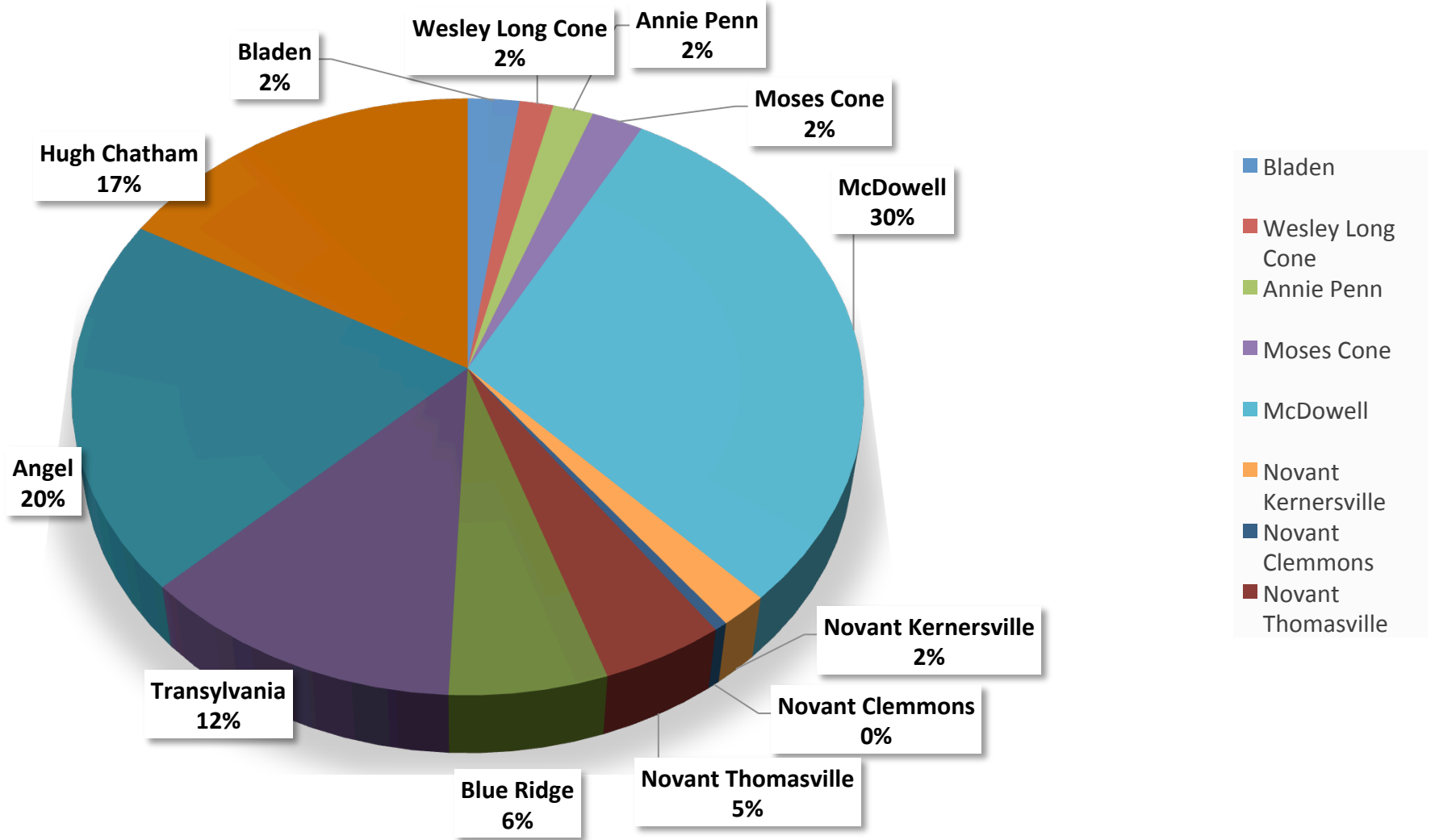
Targets and Values Reached

	Goals		Values Reached	
	Cululative Target to be reached by 6/30/2016 (this target is set by DHHS)	Cumulative Target to be reached by 6/30/2016 plus additions from Duke	Value Reached as of most recent previous quarter (12/31/2015)	Value reached as of this reporting quarter (3/31/2016)
# of IVCs	4,800	add 1,425 = 6,225	1089 (cumulative total 8,076)	170 (cumulative total 8,264)
# of IVCs Overturned	1,165	add 356 = 1,521	281 (cumulative total 1,947)	62 (cumulative total 2,009)
# of Assessments (reported only for Model 1 hospitals)	11,732	add 4,320 = 16,052	2788 (cumulative total 20,687)	51 (cumulative total 20,783)



Percent of Use by Hospital January - March 2016

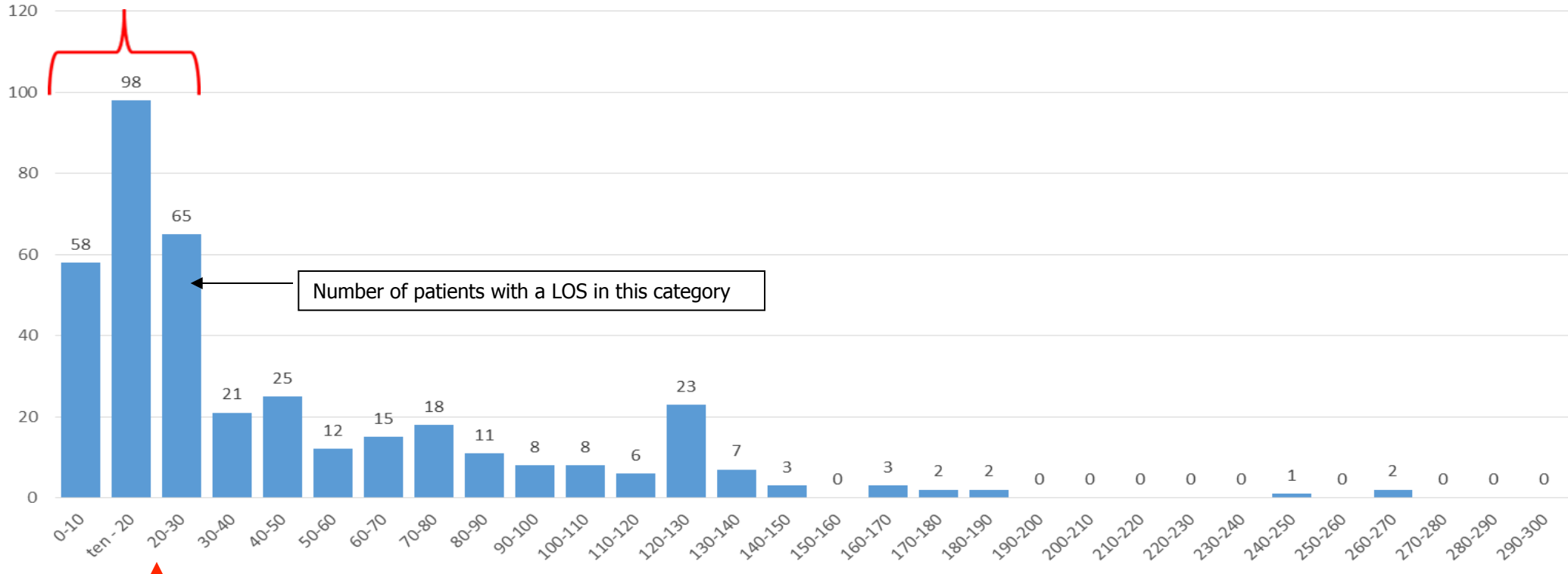
(based on number of patient encounters)



Length of Stay (in hours)

NC STeP January - March 2016 Number of Patients by LOS Category
(in hours)

56% percent of patients
Had a LOS of 30 hours or less



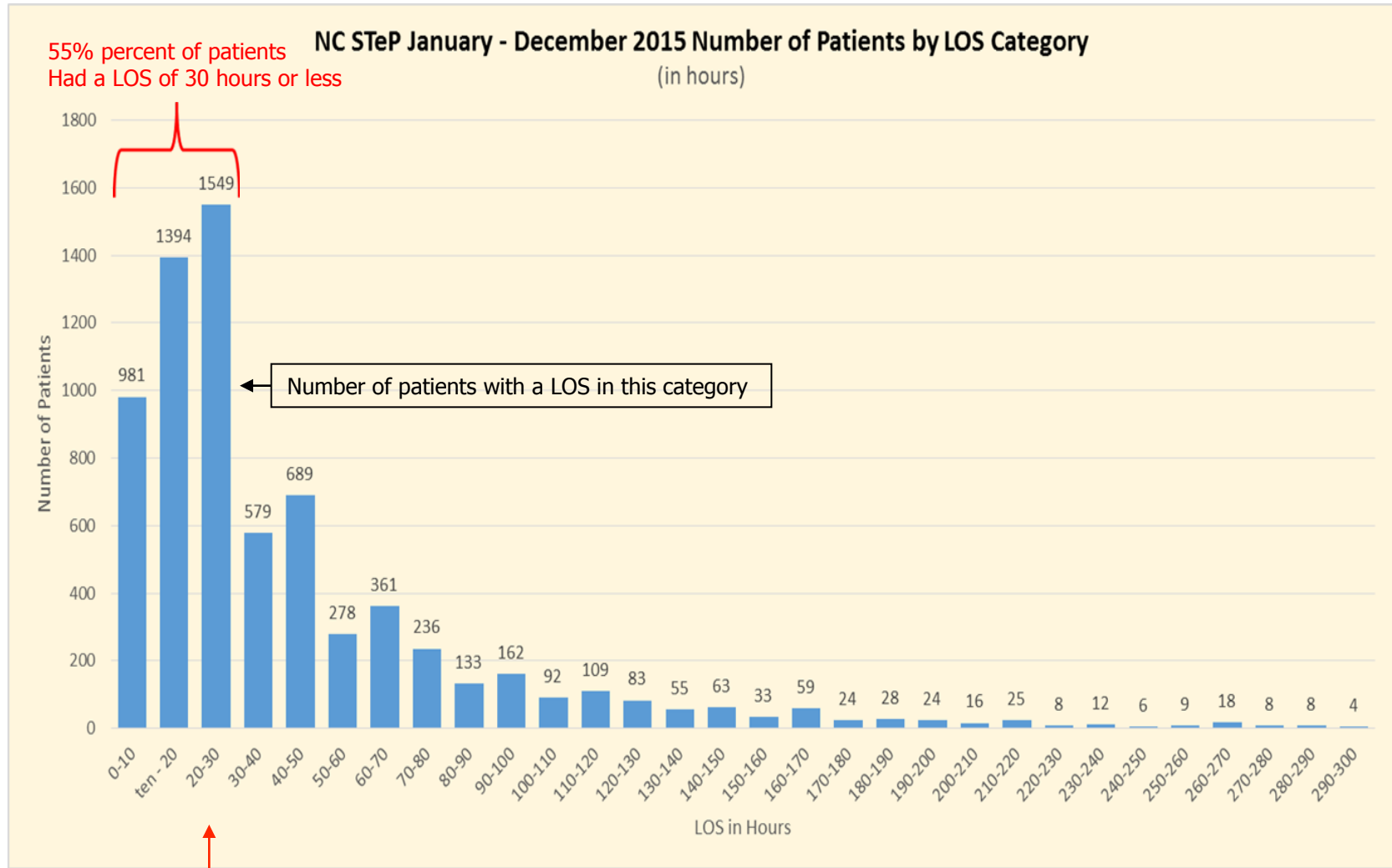
Number of patients with a LOS in this category

Median Length of Stay for January 2016 – March 2016 = 24.0 Hours

There were 23 patients with LOS of 120-130 hours (5 – 5 ½ days)
20 of those patients were ultimately transferred to another facility
2 were discharged to home



Annual Charts for January – December 2015

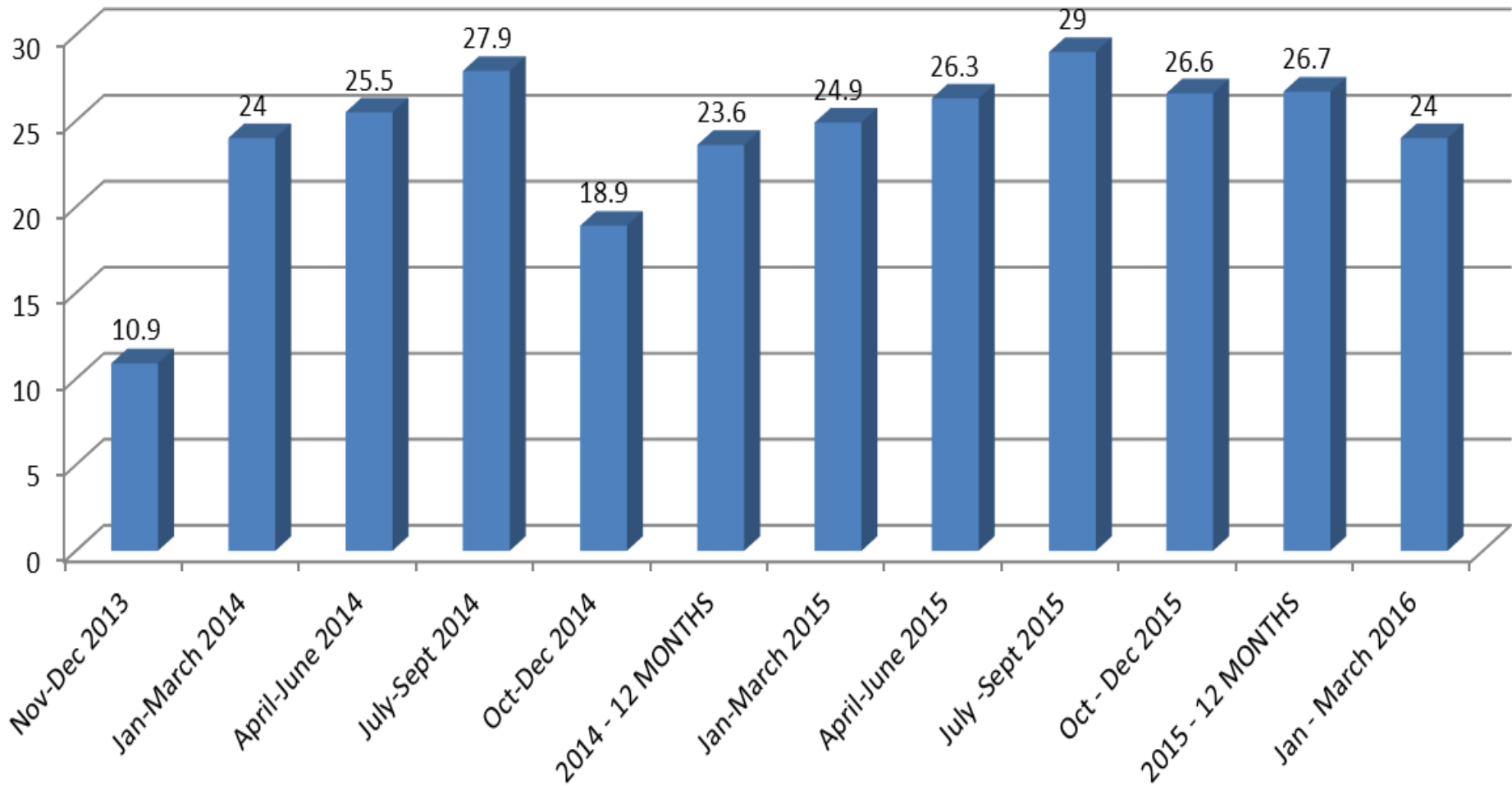


Median Length of Stay for January – December 2015 = 26.7 Hours

There were 90 patients (1.2%) with a length of stay longer than 300 hours.



Median Length of Stay in Hours



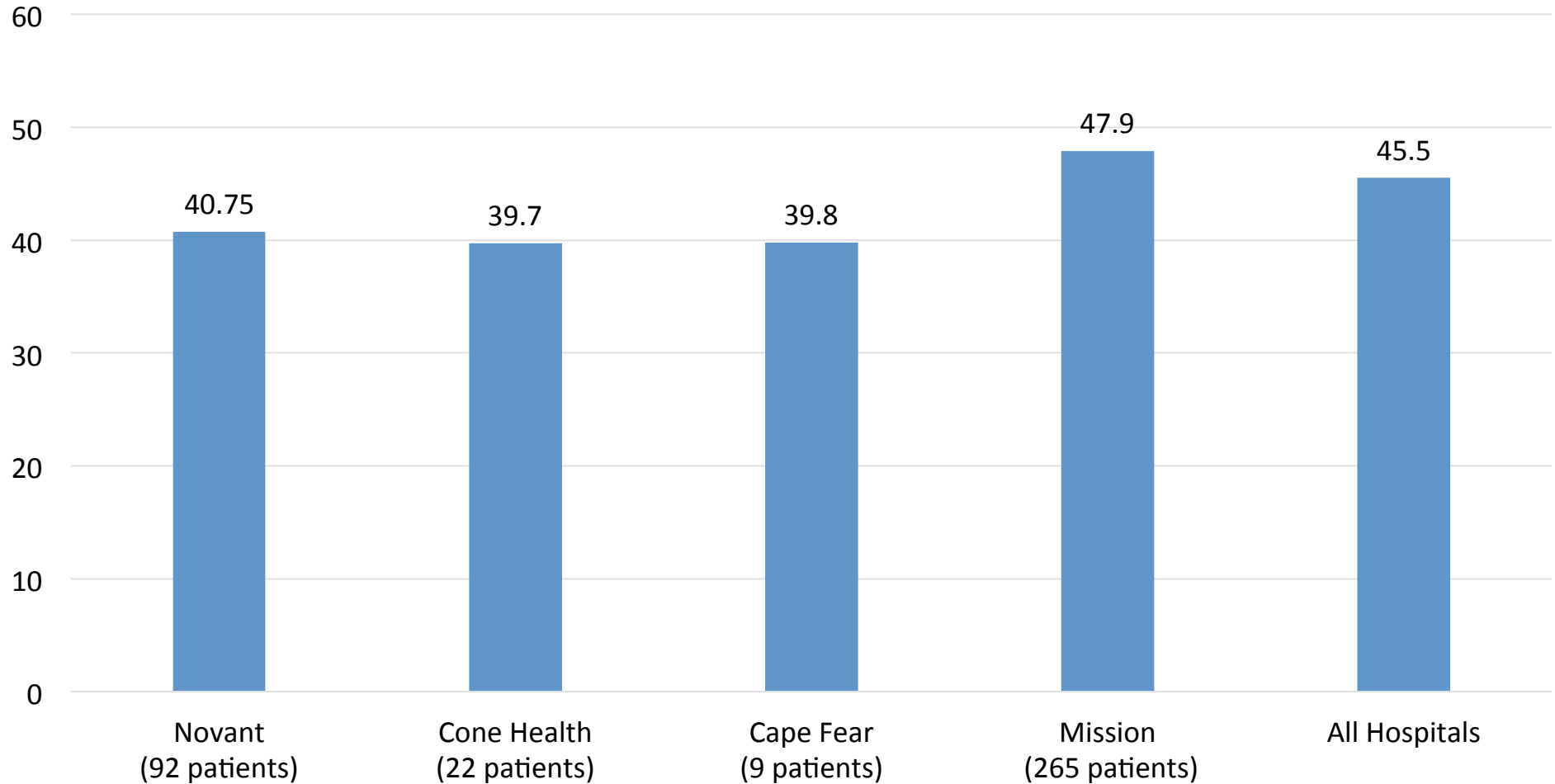
NC-STeP



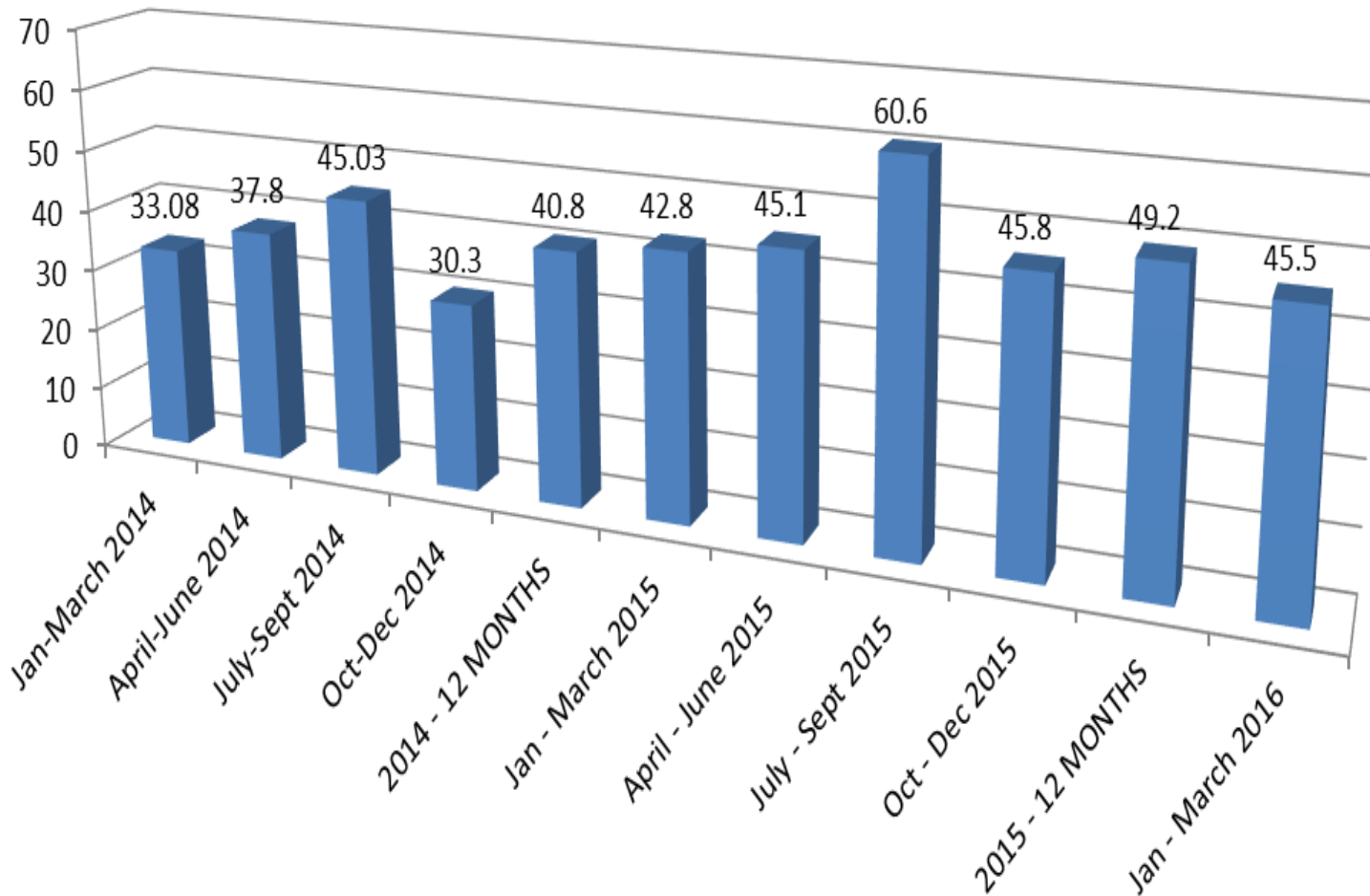
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Average Length of Stay by Provider

Jan-March 2016 (in hours)

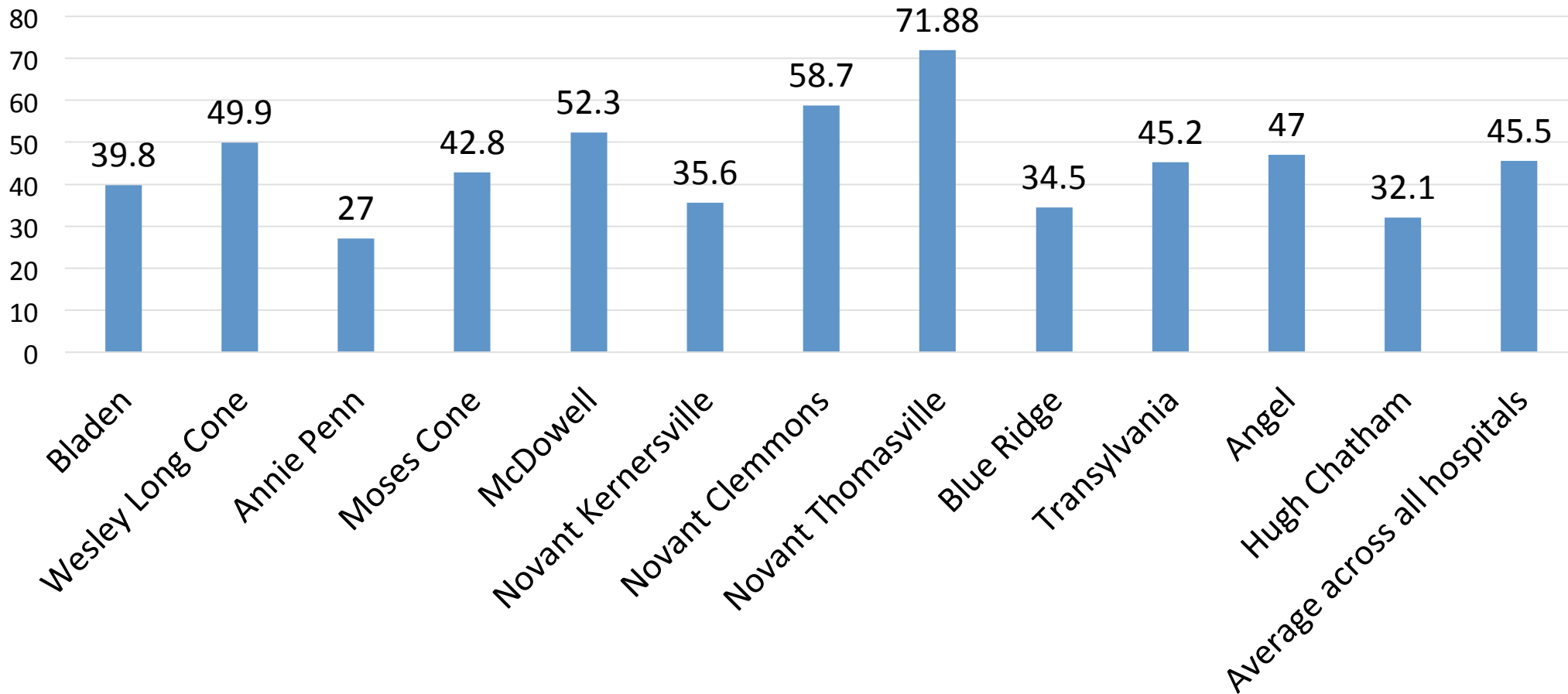


Average Length of Stay for Hospitals Participating in NC STeP

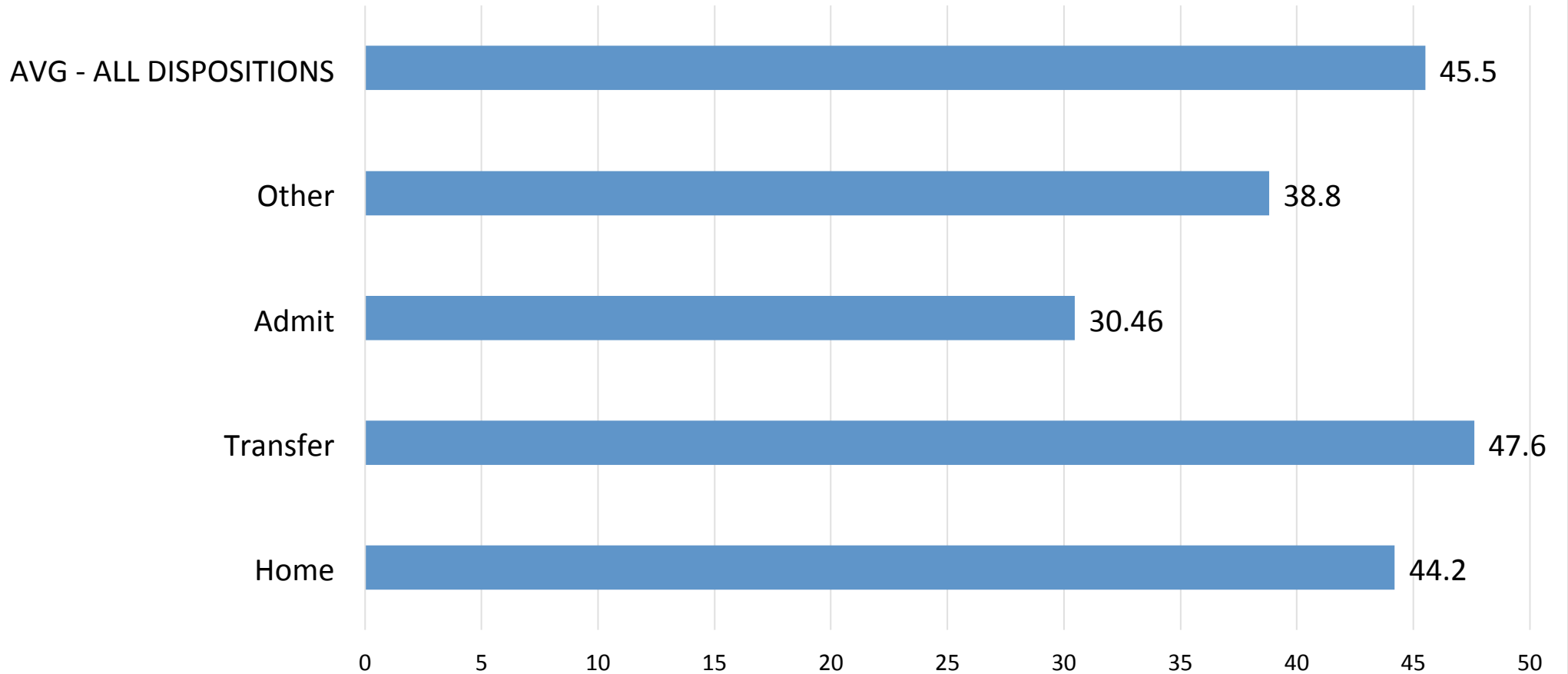


Average Length of Stay by Hospital

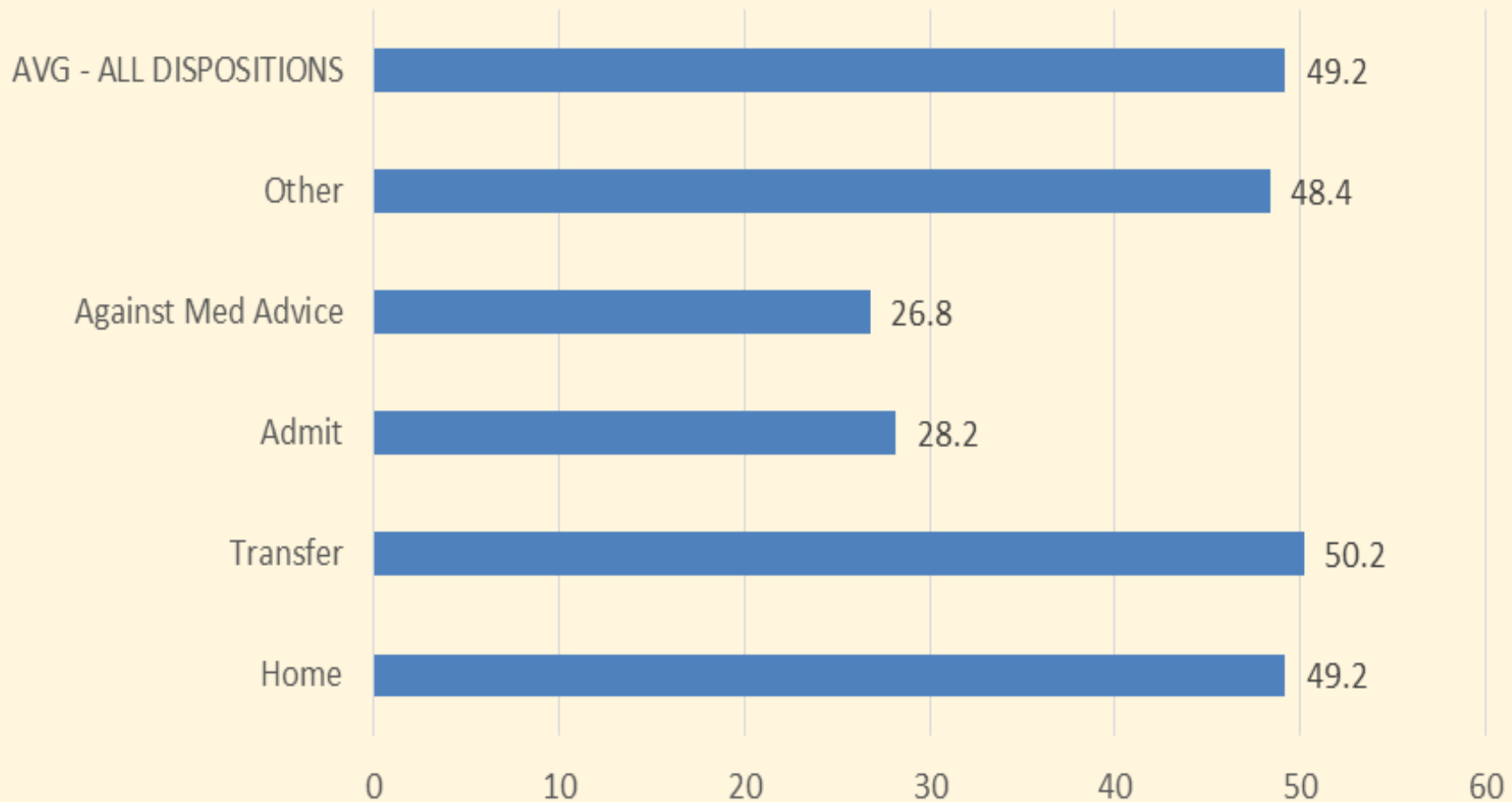
for January - March 2016 (in Hours)



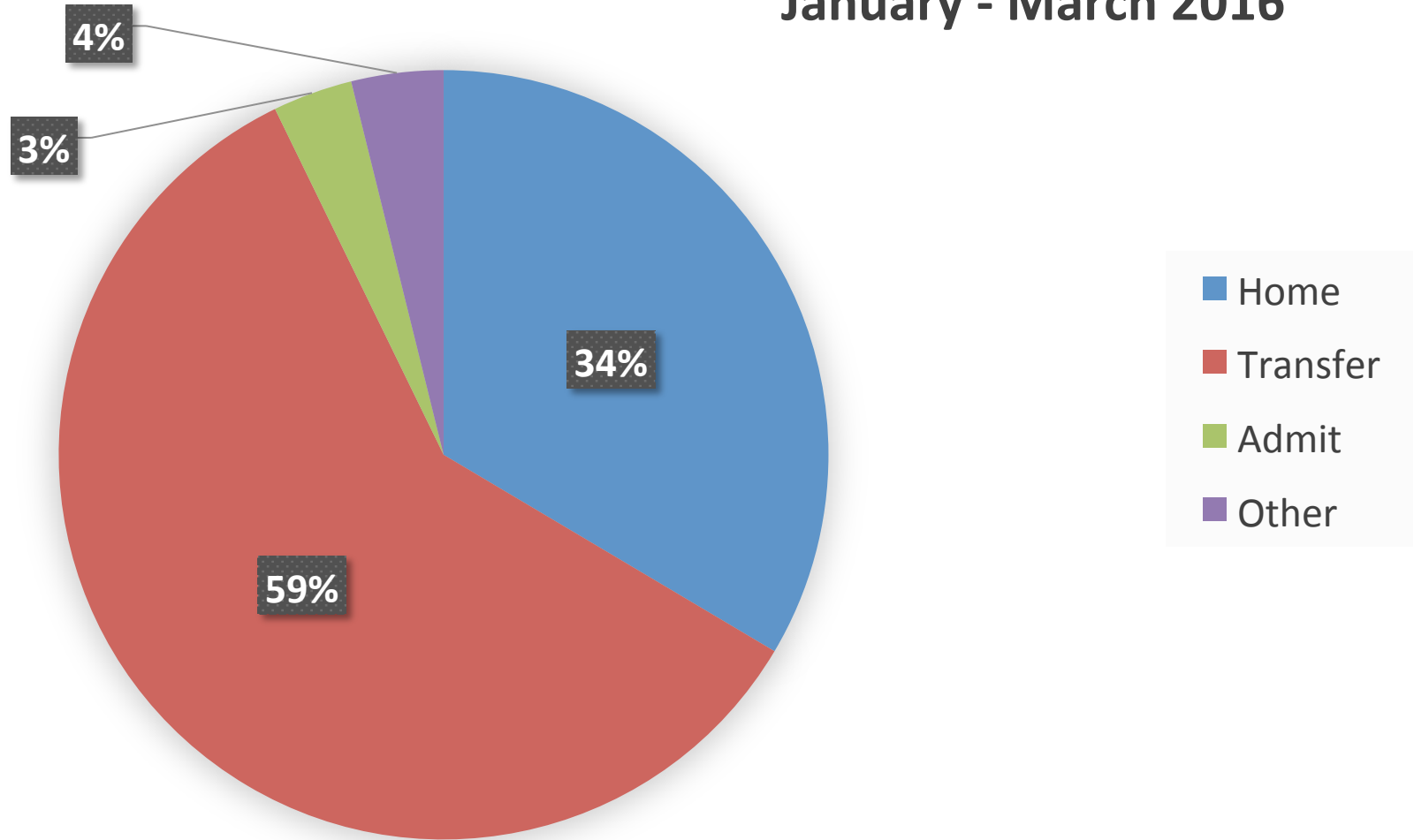
Average LOS by Disposition for ED Telepsychiatry Patients in hours - for Jan - March 2016



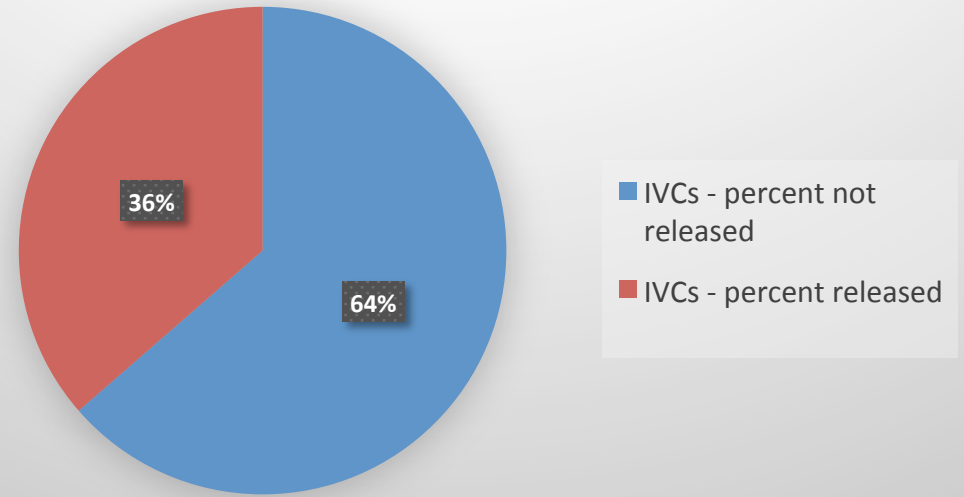
Average LOS by Disposition in Hours for 2015 (Jan - Dec.)



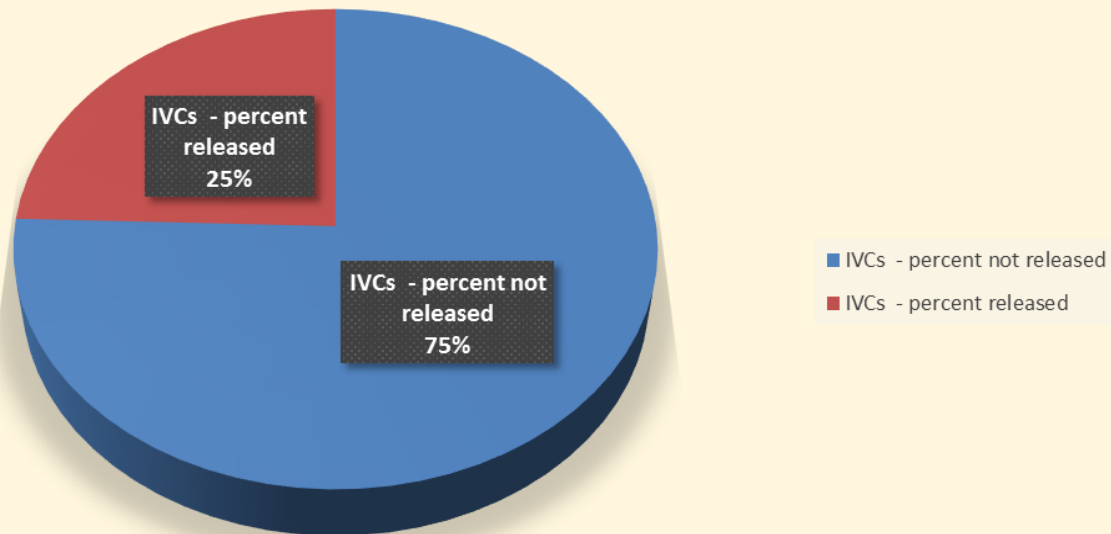
Percent of Telepsychiatry Patients by Discharge Disposition January - March 2016



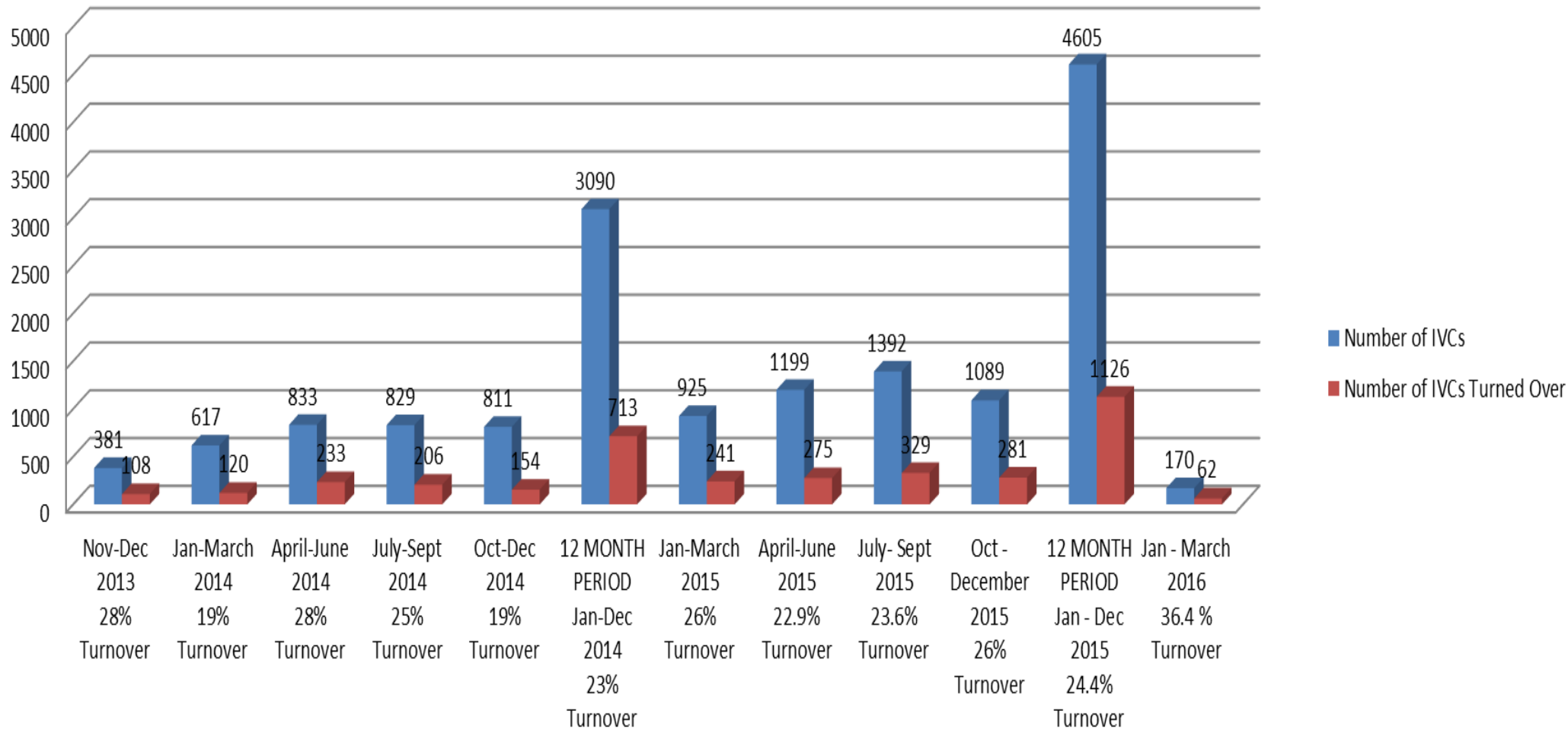
IVCs - By Release Status Jan - March 2016



IVCs - By Release Status for January - December 2015

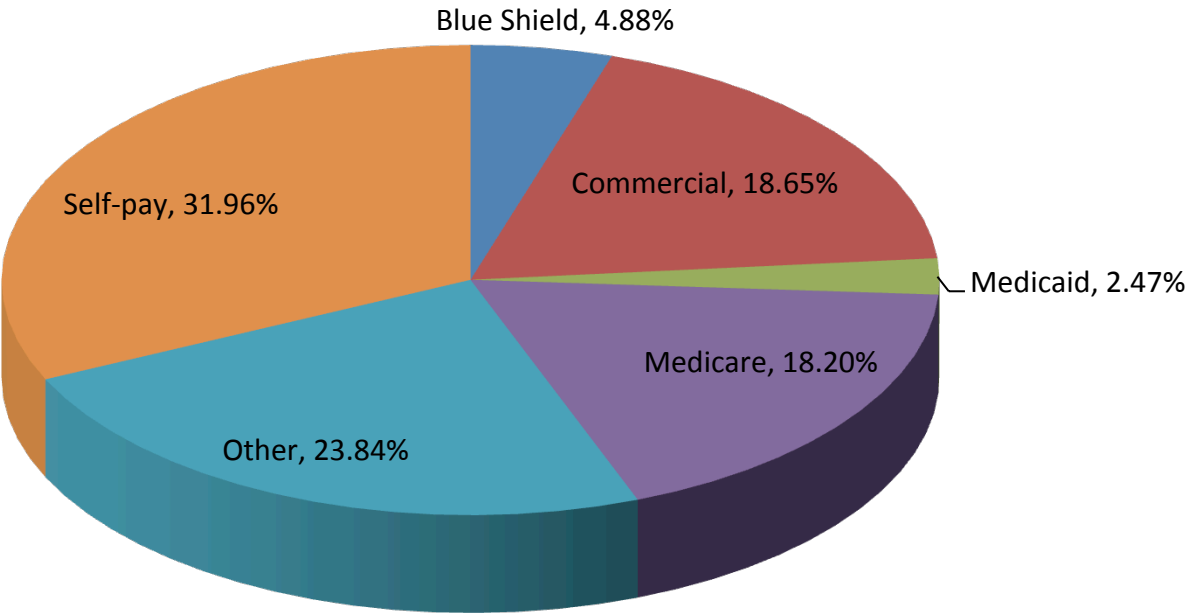


NC STeP: Number of IVCs for Participating Hospitals by Quarter

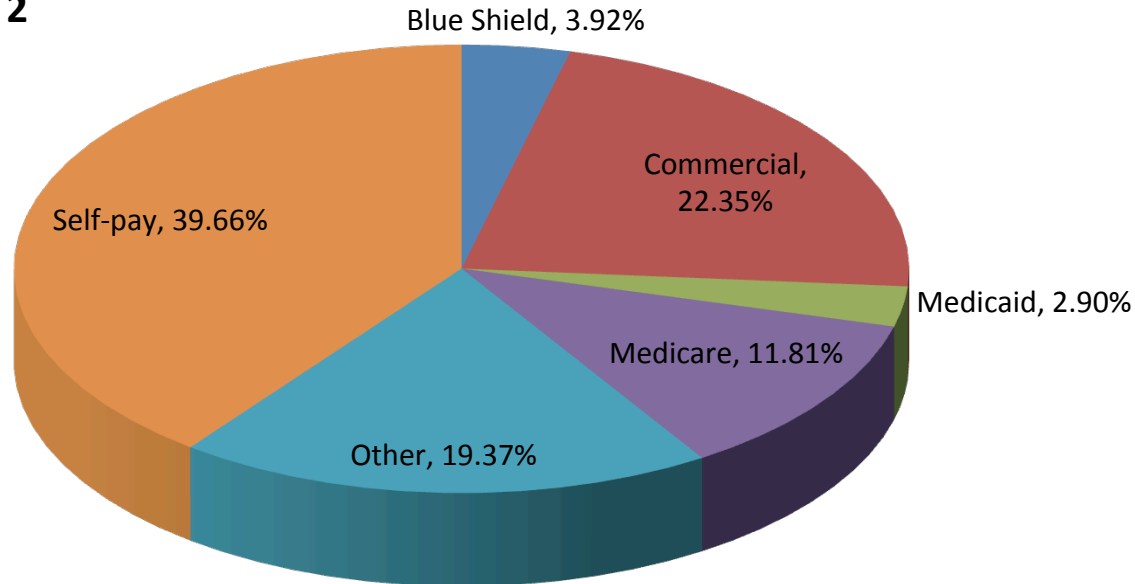


NC-STeP CHARGE MIX FY 2016 (based on initial status)

Quarter 1

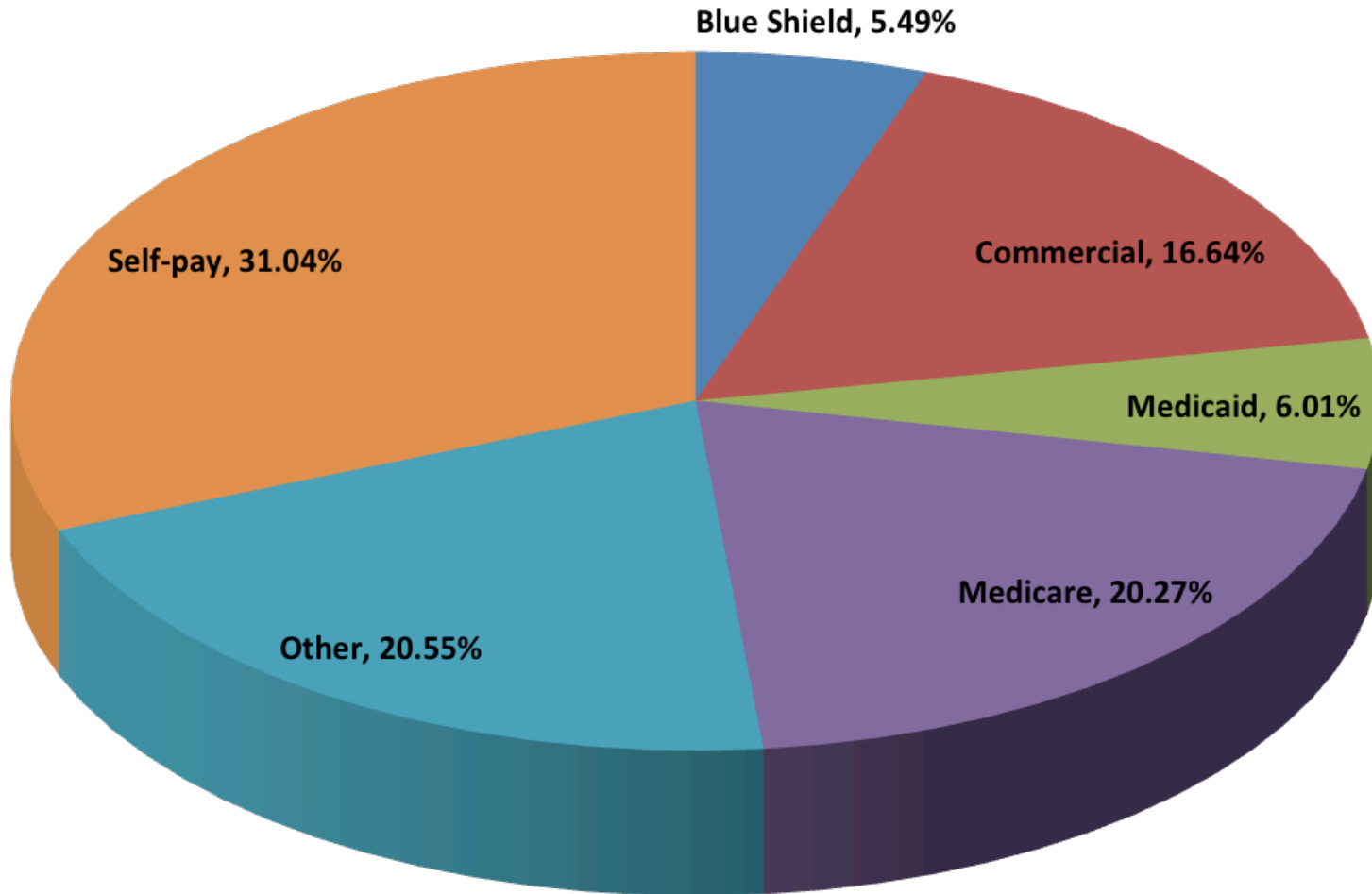


Quarter 2



NC-STeP Charge Mix – Project to Date

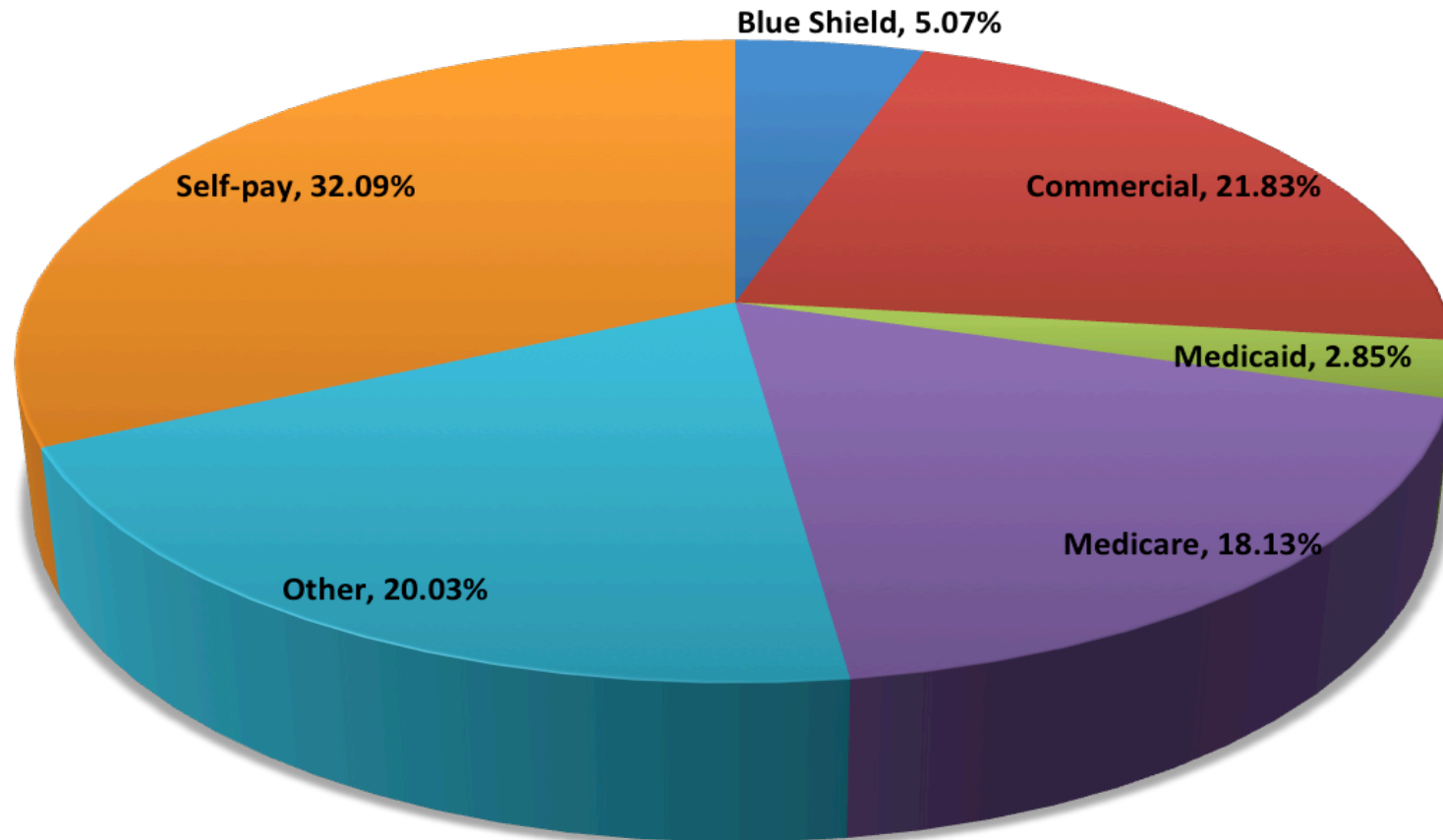
10/01/2013 – 03/31/2016



■ Blue Shield ■ Commercial ■ Medicaid ■ Medicare ■ Other ■ Self-pay



NC-STeP Charge Mix FYTD 2016 – Quarter 3



■ Blue Shield ■ Commercial ■ Medicaid ■ Medicare ■ Other ■ Self-pay



Satisfaction Data

- Satisfaction surveys conducted in March 2016 with 3 groups:
 - Model-2 ED Physicians
 - Model-2 Hospital ED Staff
 - Model-2 Provider Physicians
- Invitations to participate were sent via e-mail
- Surveys were completed online via Qualtrics software
- Each group was given a different survey (with different questions) based on their role in the telepsychiatry program
- For each group, one summary question is selected for an overall “satisfaction” rate.

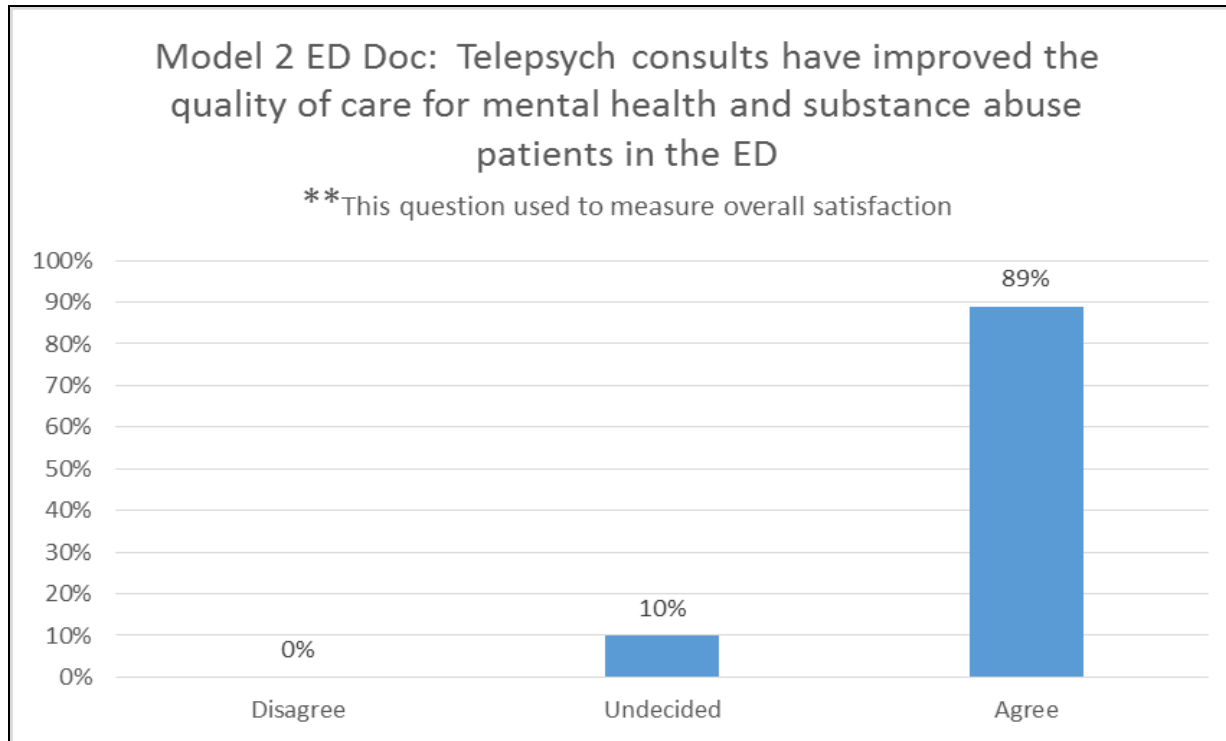
Number of responders:

ED Physicians	= 19
Hospital ED Staff	= 41
Provider Psychiatrists	= 10



Model-2 Hospital ED Physicians results:

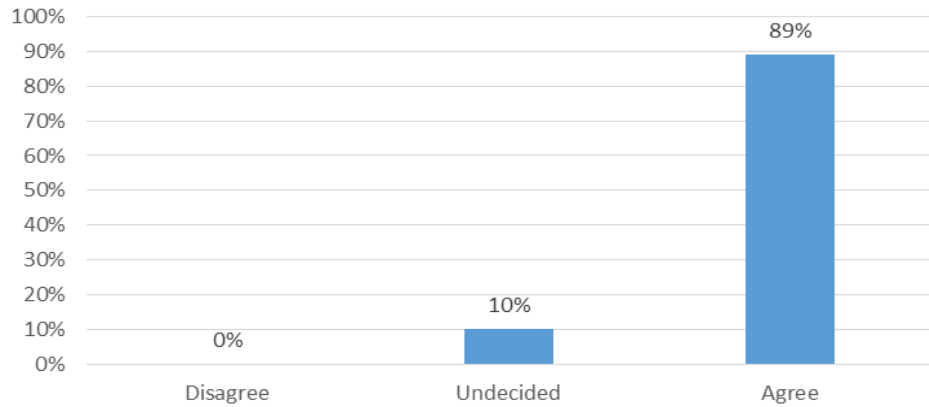
- 89% report that the telepsychiatry consults are easy to obtain.
- 84% report that equipment is easy to use.
- 78% report that equipment is reliable and seldom down.
- 68% report that telepsychiatry consults have made me more comfortable assessing and treating patients with mental health/substance abuse.
- **89% report that the consults have improved the quality of care for mental health/substance abuse patients in the ED.**



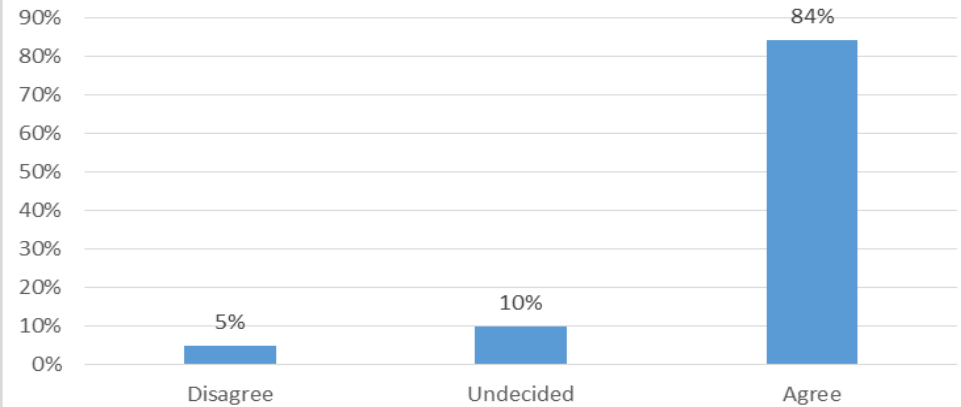
April 22, 2016



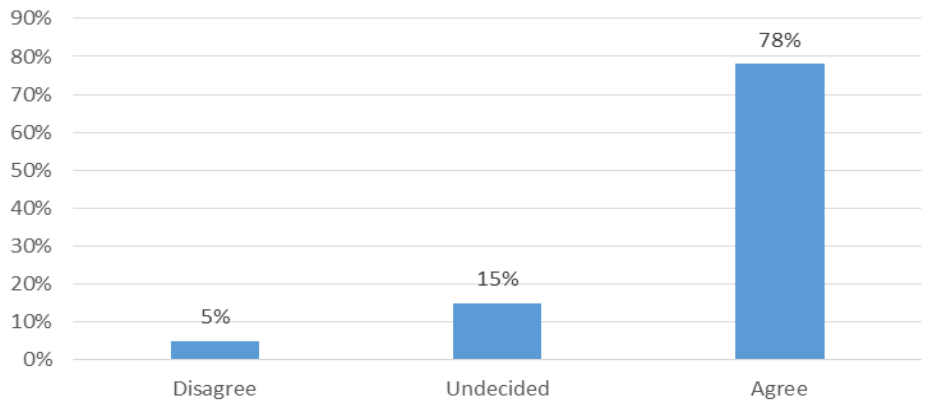
Model 2 ED Doc: Telepsychiatry consults are easy to obtain



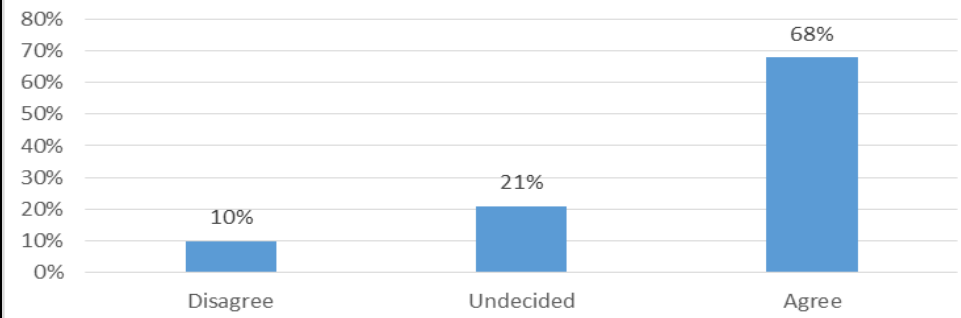
Model 2 ED Doc: Telepsychiatry equipment is easy to use and safely arranged



Model 2 ED Doc: Telepsychiatry equipment is reliable and seldom down

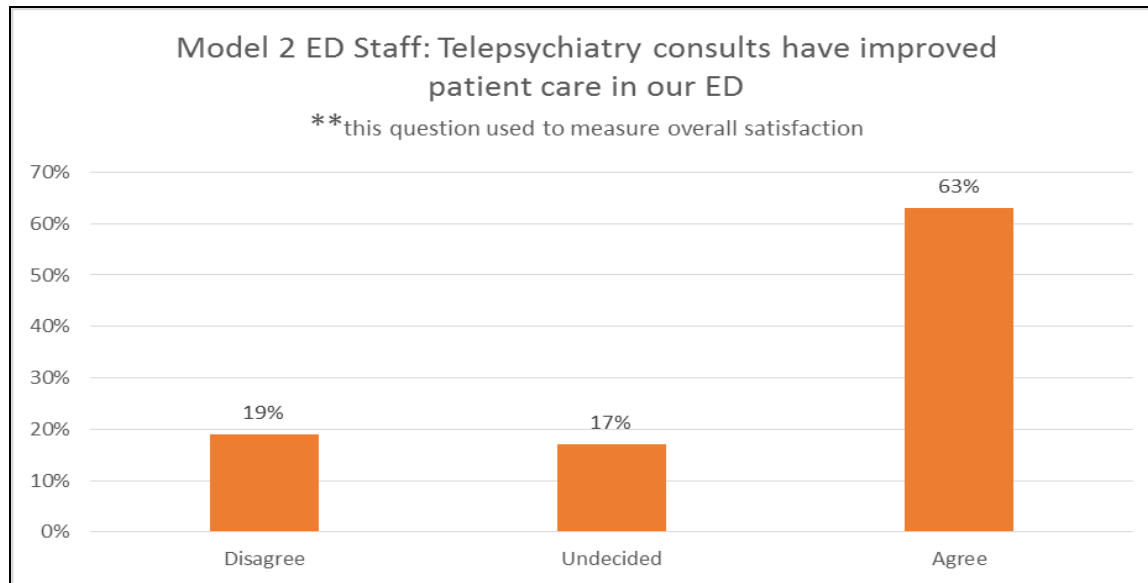


Model 2 ED Doc: Telepsychiatry consults have made me more comfortable assessing and treating patients with mental health/substance abuse

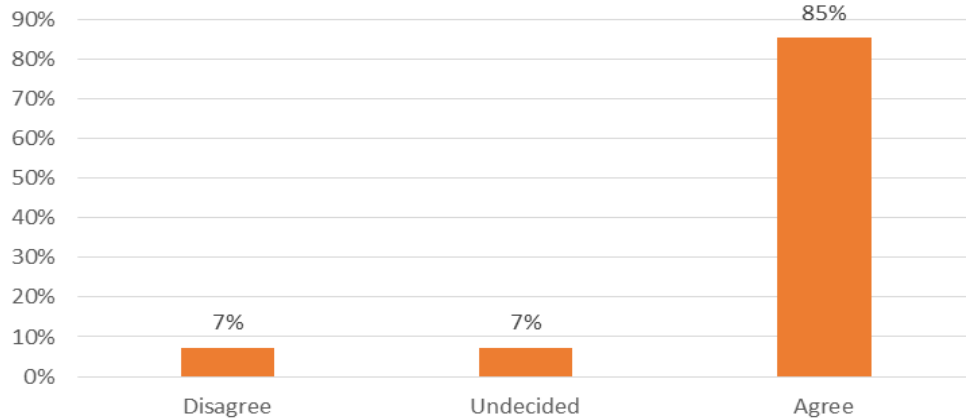


Model 2 Hospital Staff results:

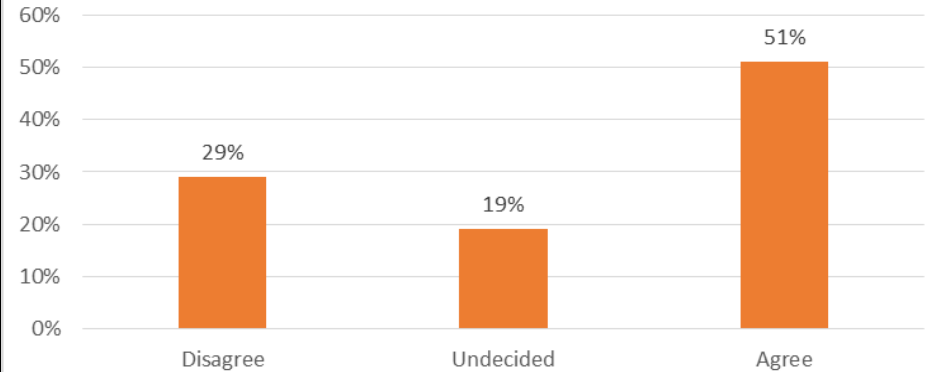
- 85% report the equipment is easy to use.
- 51% reported that they received adequate training and instruction;
- 41% said they can do simple troubleshooting, 46% disagreed with that statement.
- 75% reported that the system works well (without static, delays in transmission, or limits of picture or audio).
- 66% said the system rarely goes down.
- 63% agreed with the statement that it is an efficient use of their time. 7% disagreed with this statement, and 29% were undecided.
- 57% reported that patients appear comfortable, and 73% said patients were cooperative.
- 63% agreed with the statement that the program has improved patient care in our ED. 19% disagreed with this statement, and 17% were undecided.



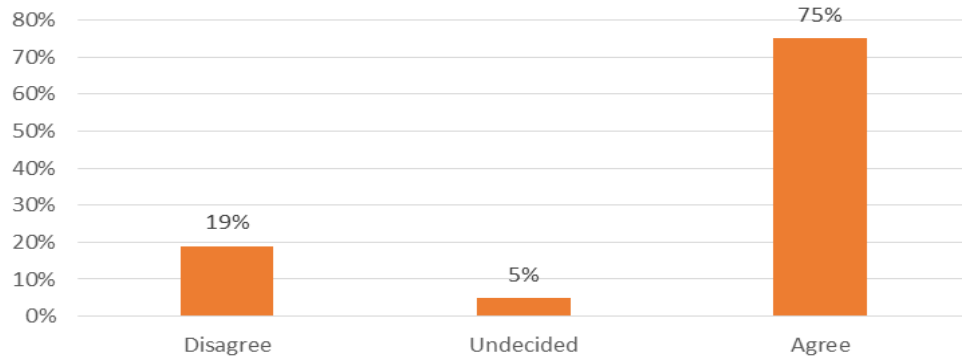
ED Staff: The telepsychiatry equipment is easy to use



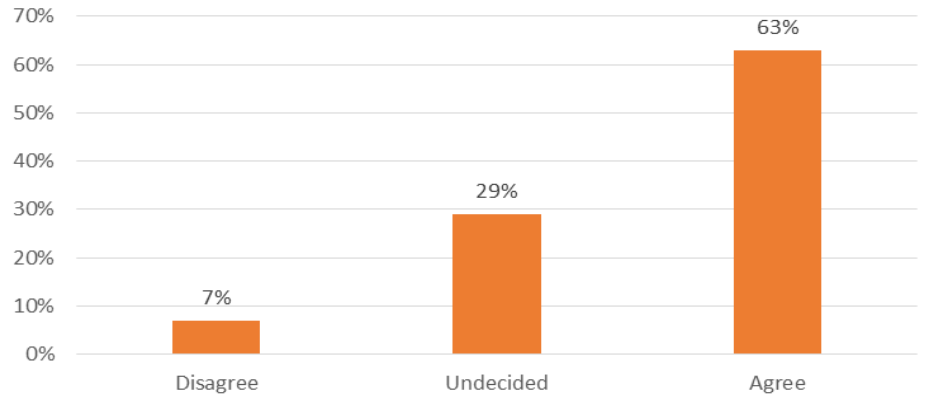
Model 2 ED Staff: I received adequate training/instruction preparing me to use the system



Model 2 ED Staff: The system works well without static, delays in transmission, or limits of picture or audio

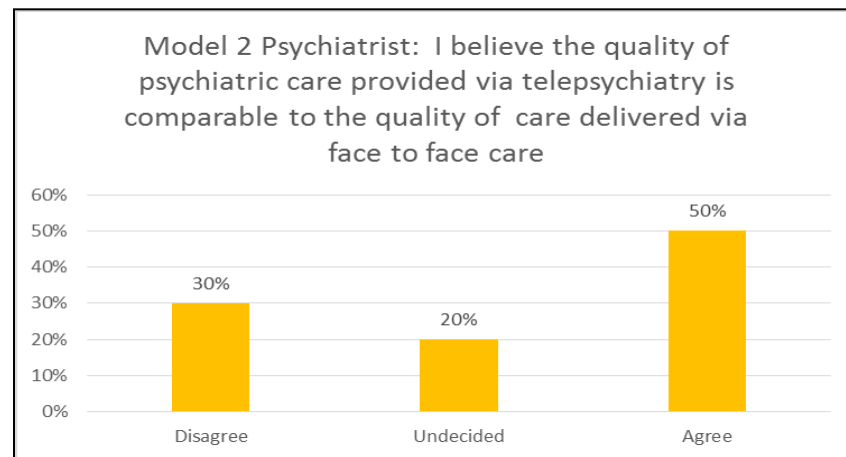
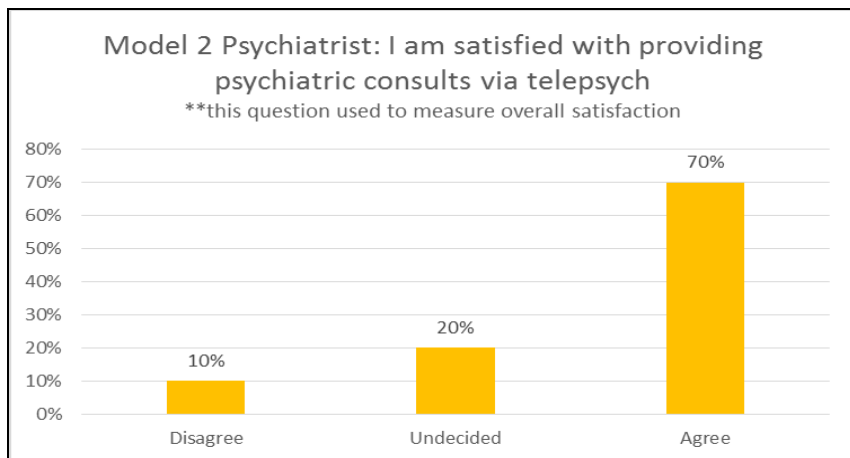
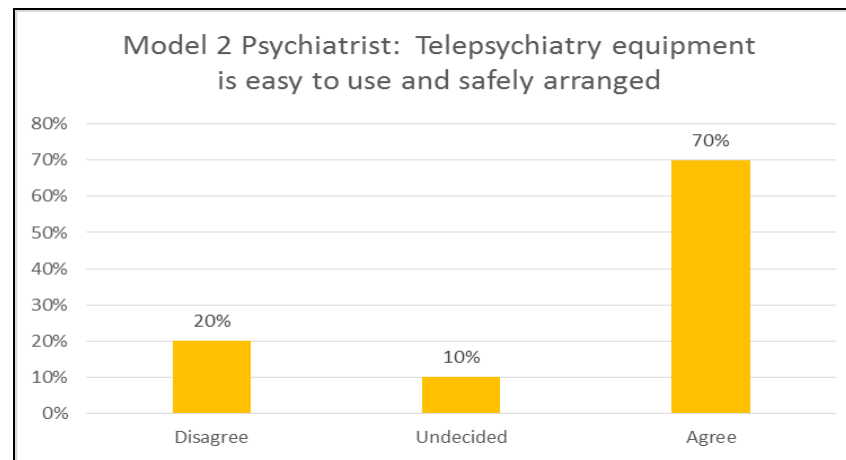
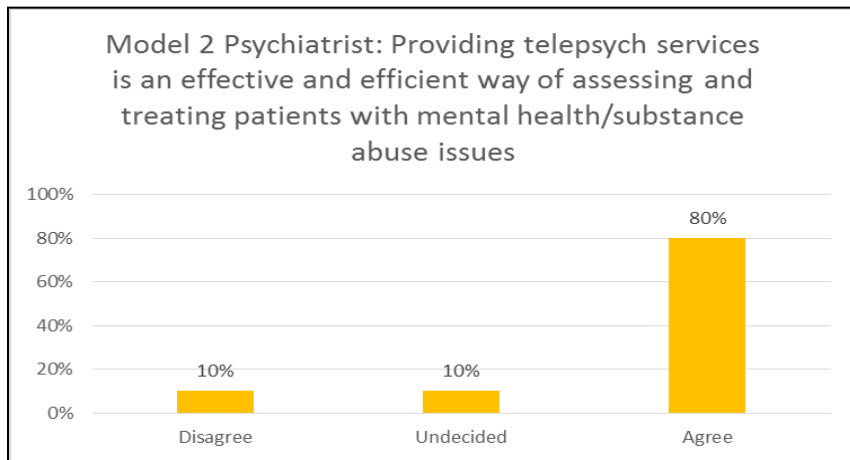


Model 2 ED Staff: Assisting in telepsychiatry consults is an efficient use of my time



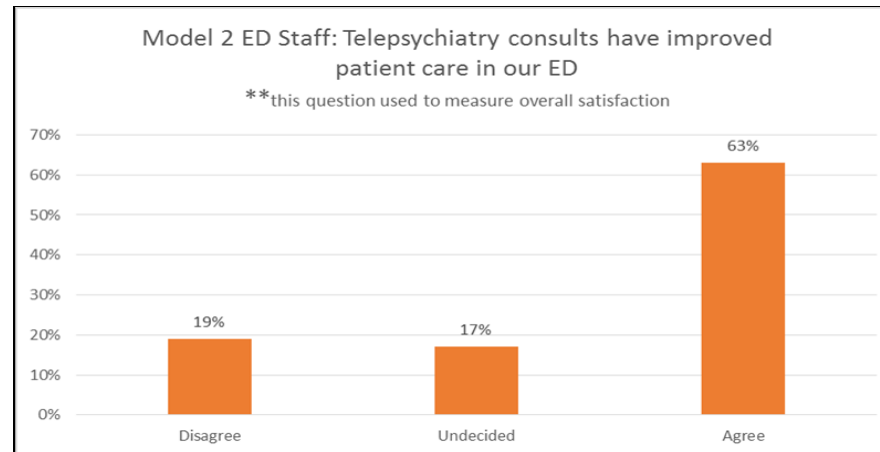
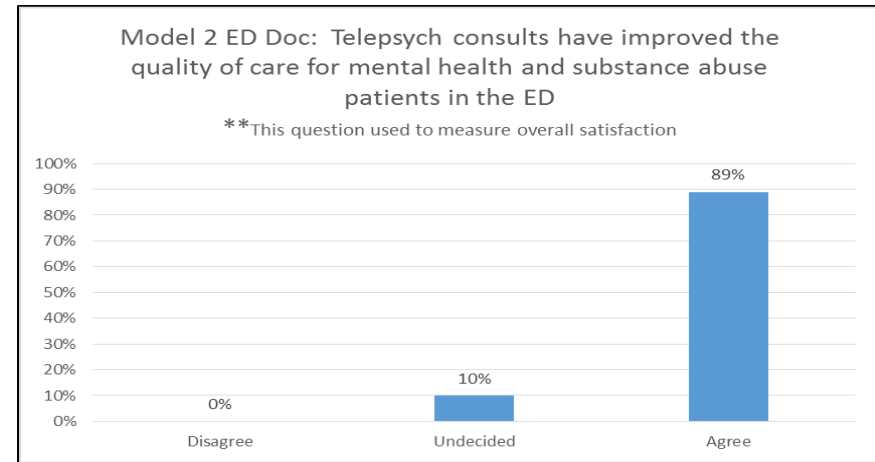
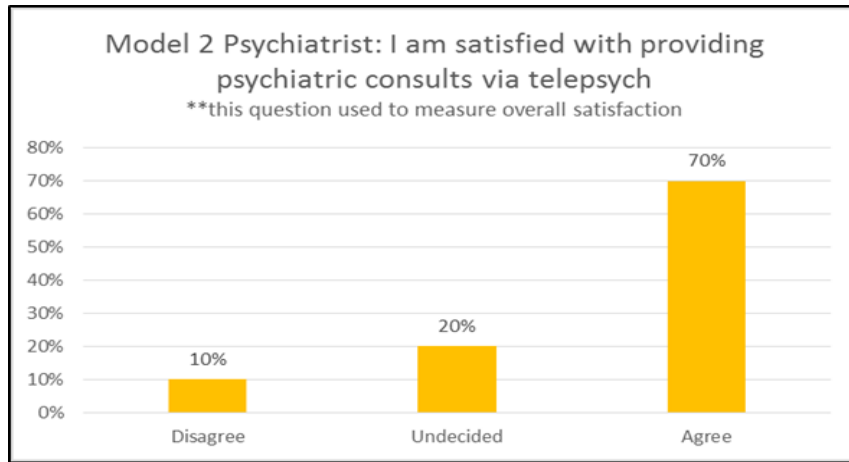
Model 2 Provider Psychiatrist results:

- 80% Believe that providing telepsychiatry services is an effective and efficient way of assessing and treating patients with mental health and substance abuse issues.
- 70% agree that the telepsychiatry equipment is easy to use and safely arranged.
- 70% are satisfied with providing psychiatric consults via telepsychiatry.
- 50% agree the quality of psychiatric care provided via telepsychiatry is comparable to face to face care. 30% disagree with that statement and 20% are undecided.



Overall Satisfaction - Summary

- Satisfaction for the Provider Psychiatrists was 70%.
- Satisfaction for the ED Physicians was 89%.
- Satisfaction for the ED staff was 63%.





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