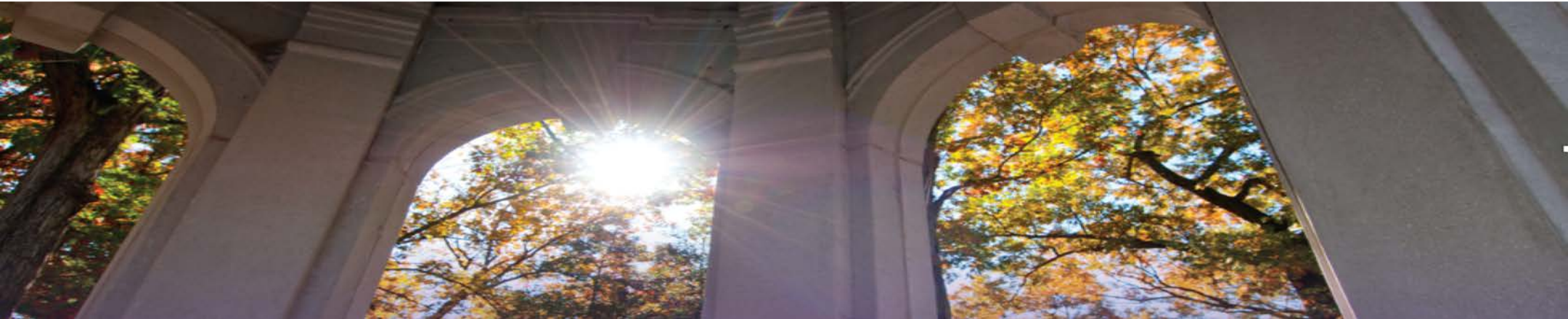




NORTH CAROLINA
STATEWIDE TELEPSYCHIATRY PROGRAM

Quarterly Progress Update



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North Carolina Statewide Telepsychiatry Program (NC-STeP)



East Carolina University
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NC-STeP Quality Management and Outcomes Monitoring Processes: April - June 2018

- 60 hospitals in network, 53 hospitals live, with 31 hospitals reporting Telepsychiatry patients in their ED
 - not all live hospitals had telepsychiatry patients
- 825 patient assessments were billed for Model 1 hospitals during the reporting period
- The Median Length of Stay was 25.7 hours
- The Average Length of Stay was 51.7 hours
 - 47.4 hours for those discharged to home
 - 48.5 hours for those transferred to another facility

NC-STeP Quality Management and Outcomes Monitoring Processes: April - June 2018

- 808 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
 - 352 (43.5%) of those patients did not have an IVC in place when discharged.
- Of the ED patients who received telepsychiatry services, 42.5% were discharged to home. 37.9% were discharged to another facility.

*Note: Data for Bladen hospital was not submitted as of June 30, 2018. Data for Cone hospitals through June 2018 did not include a discharge disposition, so Cone is not included in the average LOS calculation by discharge (i.e. Home, Transfer). They are included in the overall average LOS and median LOS.

	Since project inception in November 2013	During Quarter Jan-Mar 2017	During Quarter Apr-Jun 2017	During Quarter Jul-Sep 2017	During Quarter Oct-Dec 2017	During Quarter Jan-Mar 2018	During Quarter Apr-Jun 2018
Total Patient Encounters	21,596	916	1,096	967	991	1,238	1,278
Model 1 Hospital Patient Encounters	15,428	463	587	486	507	641	669
Model 2 Hospital Patient Encounters	6,168	453	509	481	484	597	609
Total Number of Assessments (Billed Assessments for Model 1 Hospitals + Number of Patient Encounters for Model 2 Hospitals)	31,693	993	1,189	1,049	1,116	1,393	1,434

NC-STeP Benchmarks



Goals	Values Reached		
Cumulative Target to be reached by (06/30/2018)	Value Reached as of most recent previous quarter (03/31/2018)	Value Reached as of this reporting quarter (06/30/2018)	Year-to-Date Total with % of the Yearly Target
Number of IVCs	2,584	770	2,791 108% of Yearly Target
Number of IVCs Overturned	1,034	354	1,198 115% of Yearly Target
Total Number of Assessments (Billed assessments for Model 1 hospitals + Number of patient encounters for Model 2 hospitals.)	5,473	1,393	4,992 91% of Yearly Target

NC-STeP Status as of June 30, 2018

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2017	TARGET TO BE REACHED BY 06/30/2018	VALUES/MEASURES REACHED AS OF 06/30/2018
1. The number of full-time equivalent (FTE) positions supported by these contracts	2.1 FTEs	2.3 FTEs	1.9 FTEs
2. The number of overturned involuntary commitments (inpatient admission prevented)	396	1,034	352 in this quarter YTD Total 1,198 Cumulative total since program inception 4,014
3. The number of participating consultant providers	30	47	47

NC-STeP Status as of June 30, 2018

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2017	TARGET TO BE REACHED BY 06/30/2018	VALUES/MEASURES REACHED AS OF 06/30/2018
4. The number of telepsychiatry assessments conducted.	2,024	5,743	1,434 in this quarter YTD Total 4,992 Cumulative total since program inception 31,693
5. The number of telepsychiatry referring sites	43	59	60 53 Live
6. The reports of involuntary commitments to enrolled hospitals	999	2,584	808 in this quarter YTD Total 2,791 Cumulative total since program inception 12,922

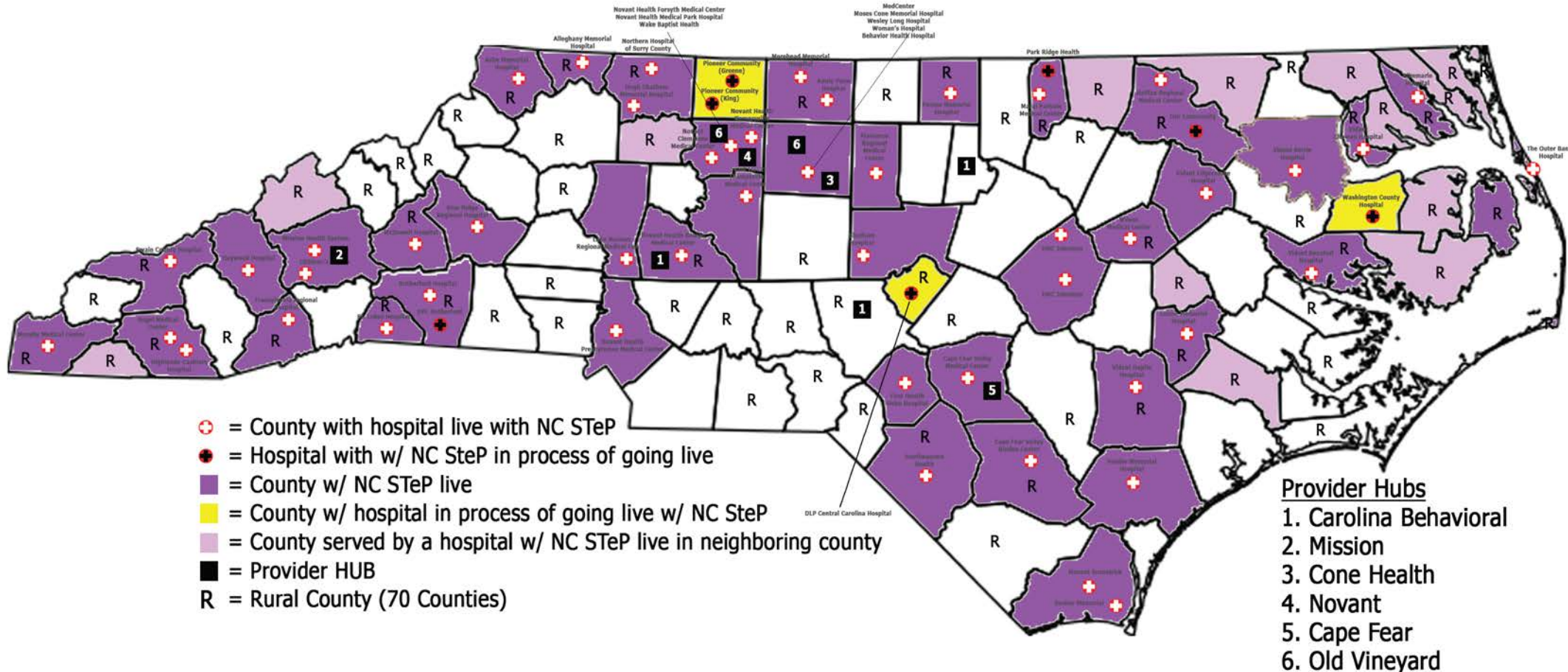
NC-STeP Status as of June 30, 2018

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2017	TARGET TO BE REACHED BY 06/30/2018	VALUES/MEASURES REACHED AS OF 06/30/2018
7. The average (mean) Length of Stay for all patients with a primary mental health diagnosis across all dispositions.	53.2 hours	53 hours	QTD = 51.7 Median = 25.7
8. The rate of "satisfied" or "strongly satisfied" among emergency department staff participating in NC-STeP.	55.4%	85%	Satisfaction surveys not conducted this quarter.

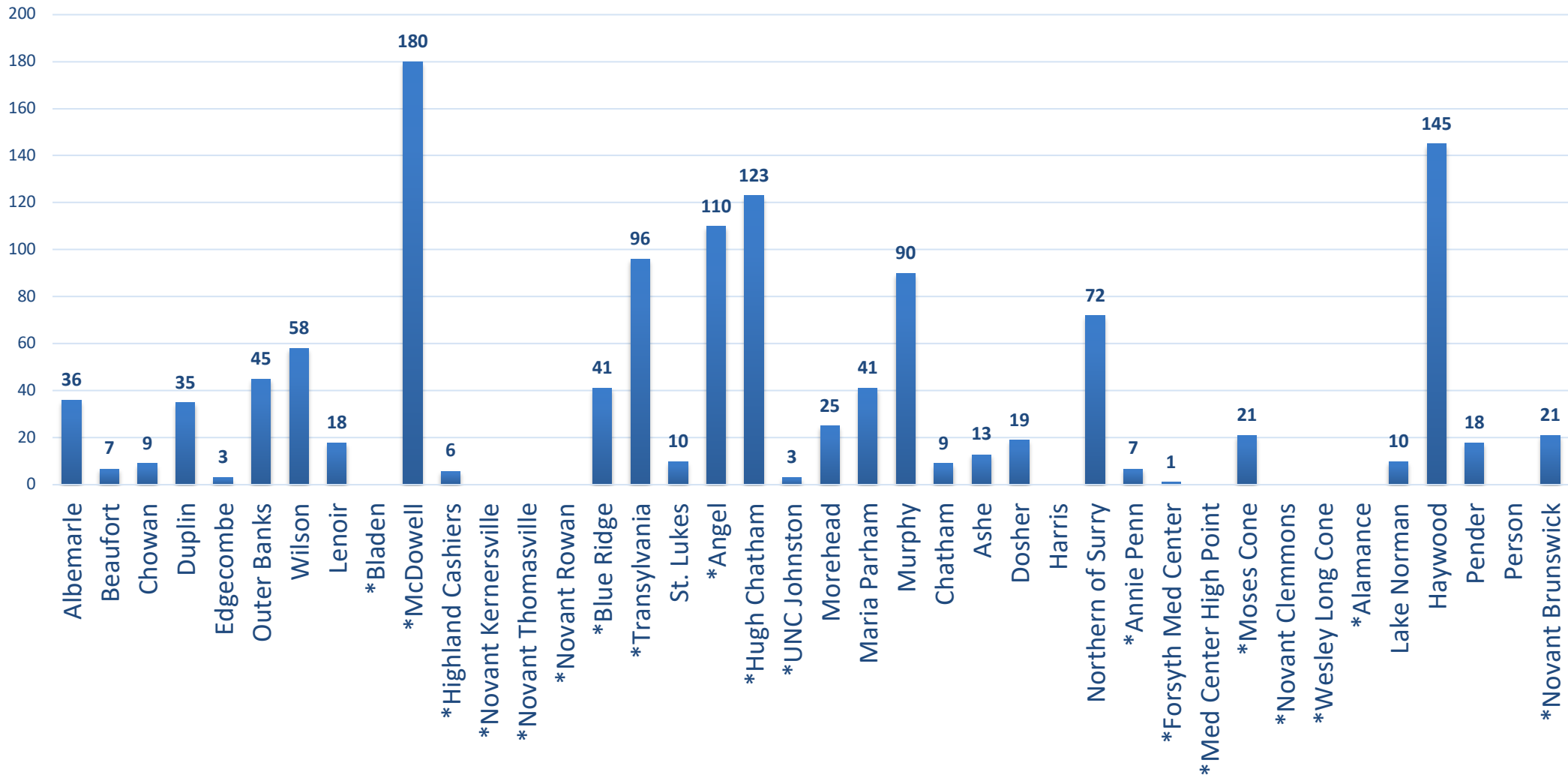
NC-STeP Status as of June 30, 2018

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2017	TARGET TO BE REACHED BY 06/30/2018	VALUES/MEASURES REACHED AS OF 06/30/2018
<p>13. Cumulative return on investment to state psychiatric facilities through overturned involuntary commitments.</p> <p>(inpatient admission prevented)</p>	<p>\$2,138,400</p>	<p>\$5,583,600</p>	<p>\$1,900,800 in this quarter YTD \$6,469,200 Cumulative total since program inception \$21,675,600</p>

NC-STeP Status as of June 30, 2018



Number of NC-STeP Patients by Hospital April - June 2018

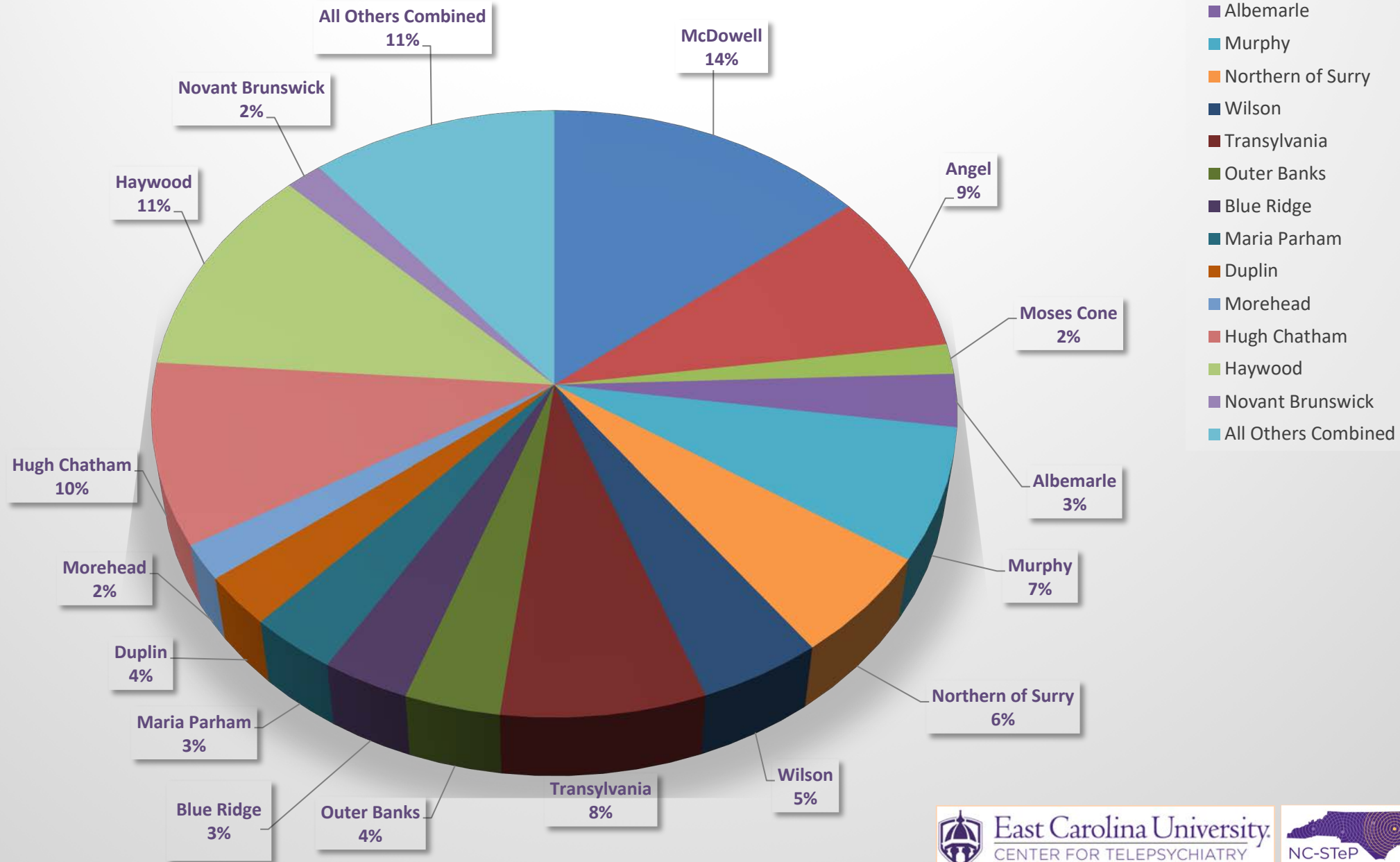


* Indicates Model 2 hospitals

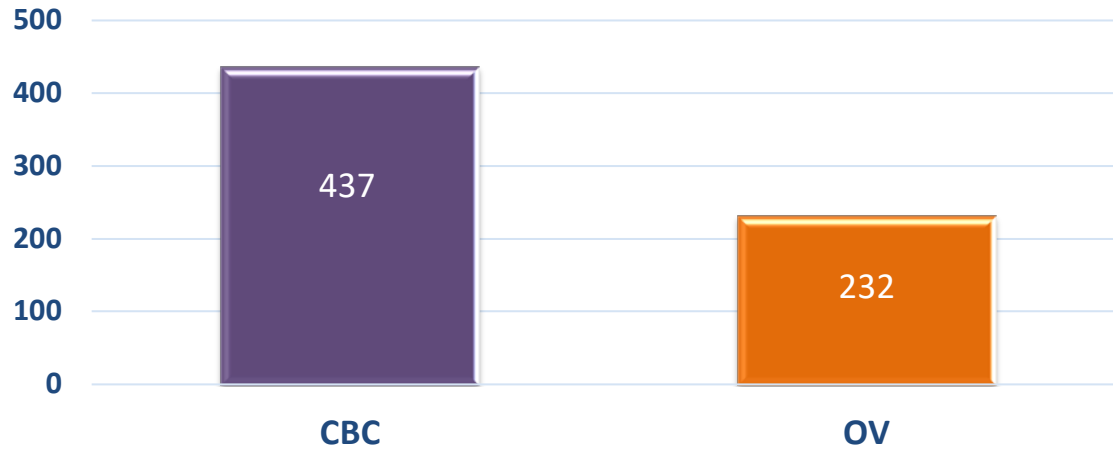


Percent of Use by Hospital April - June 2018

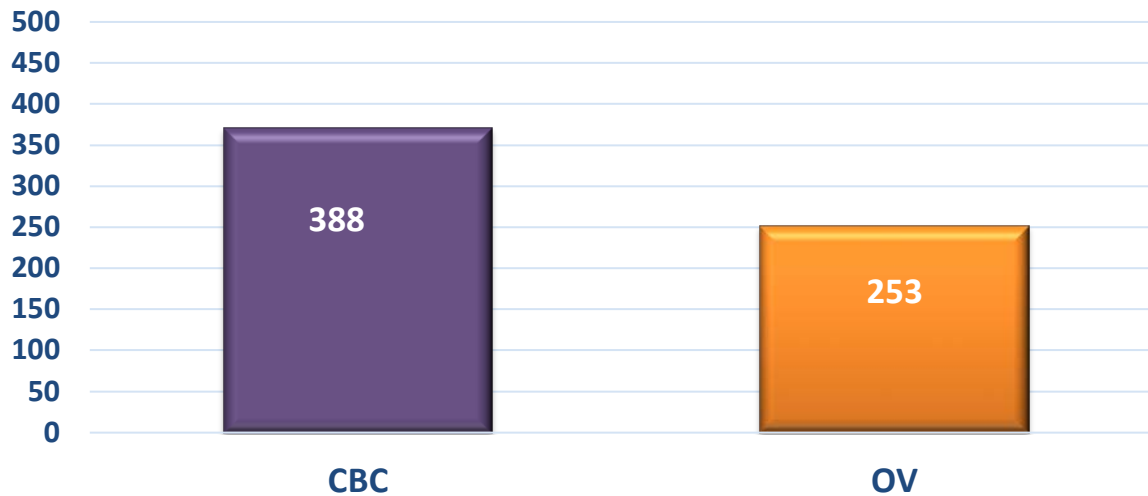
(based on number of patient encounters)



April - June 2018



January - March 2018

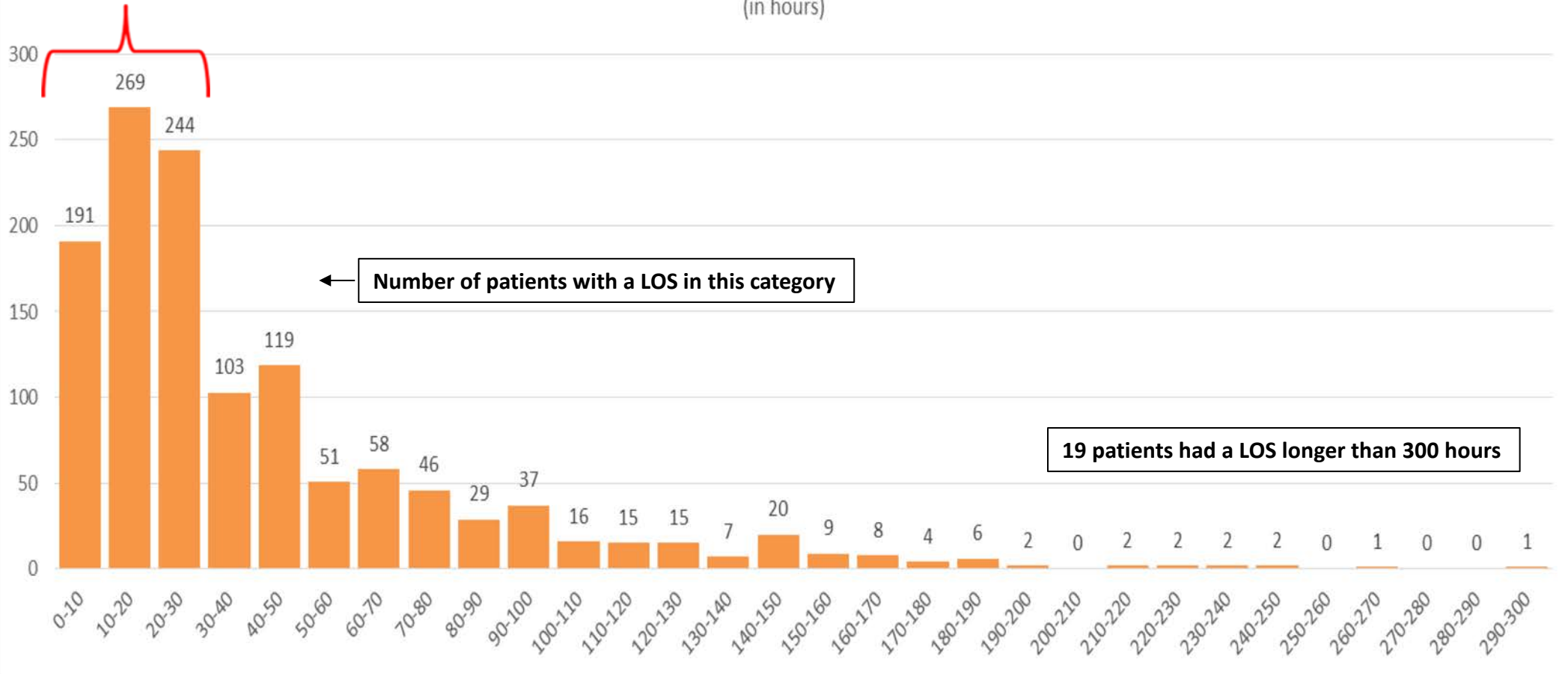


Number of Patients by Provider (Model 1)



Number of NC-STeP Patients by LOS Category April - June 2018 (in hours)

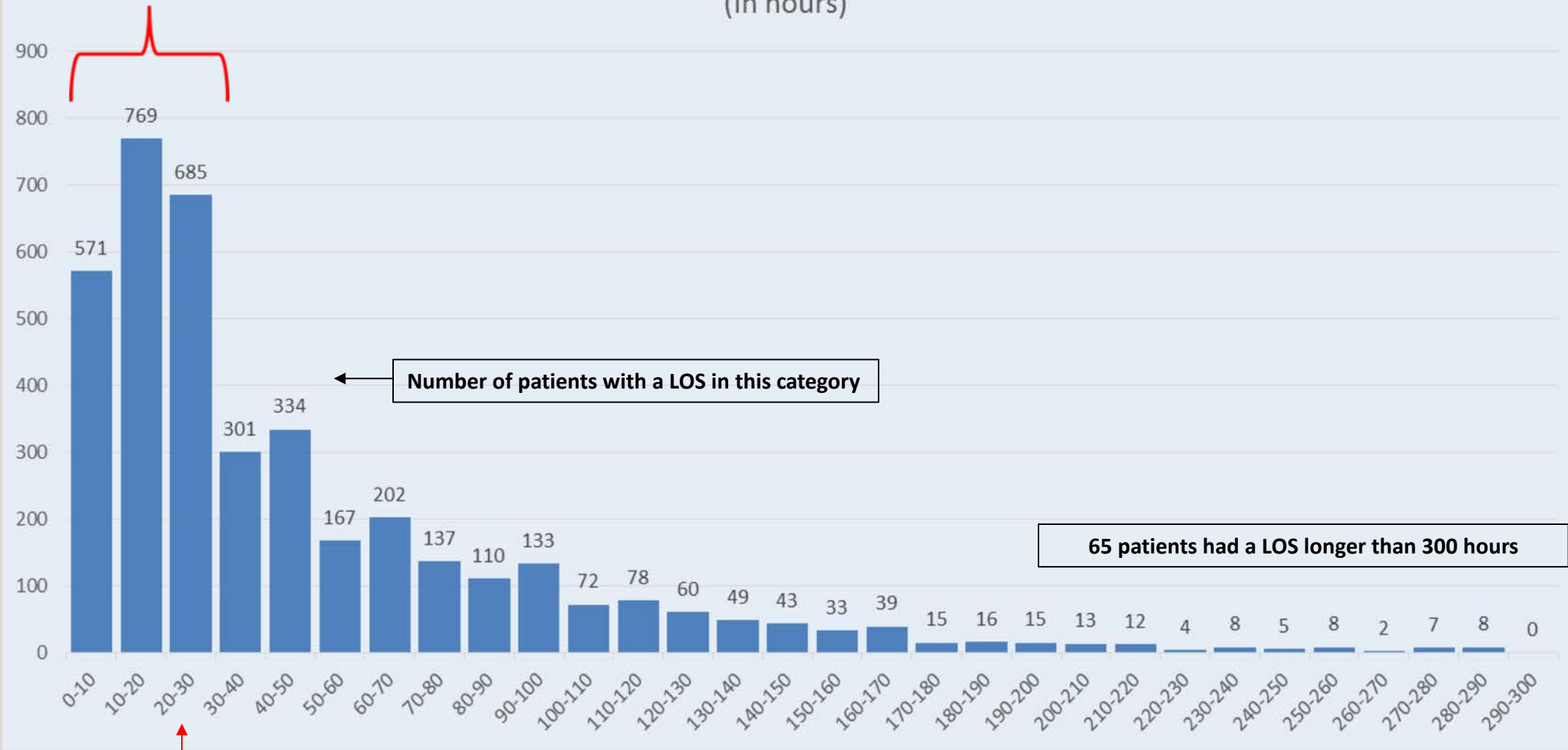
**55% percent of patients
had a LOS of 30 hours or less**



Median Length of Stay for Apr-Jun 2018 = 25.7 hours

Number of NC-STEP Patients by LOS Category January - December 2017 (in hours)

51% percent of patients had a LOS of 30 hours or less

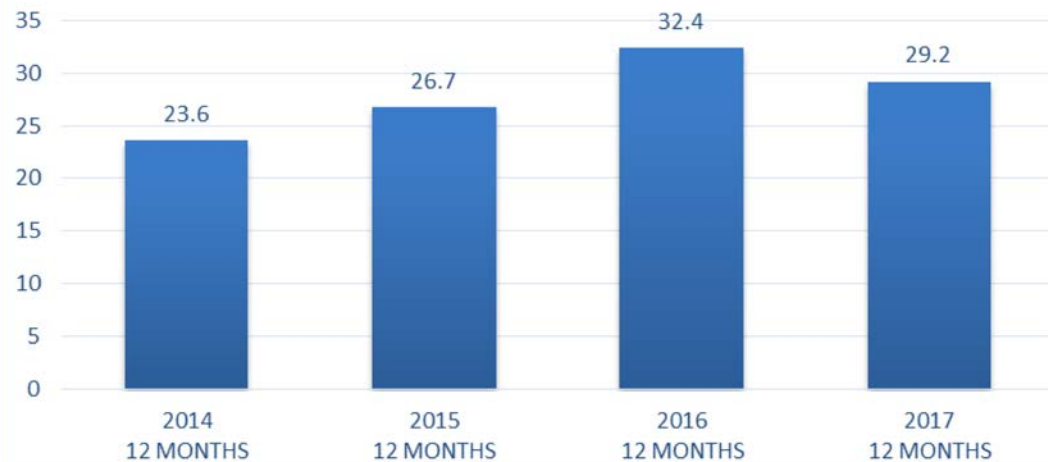


Median Length of Stay for Jan-Dec 2017 = 29.2 hours

Median Length of Stay by Quarter (in hours)

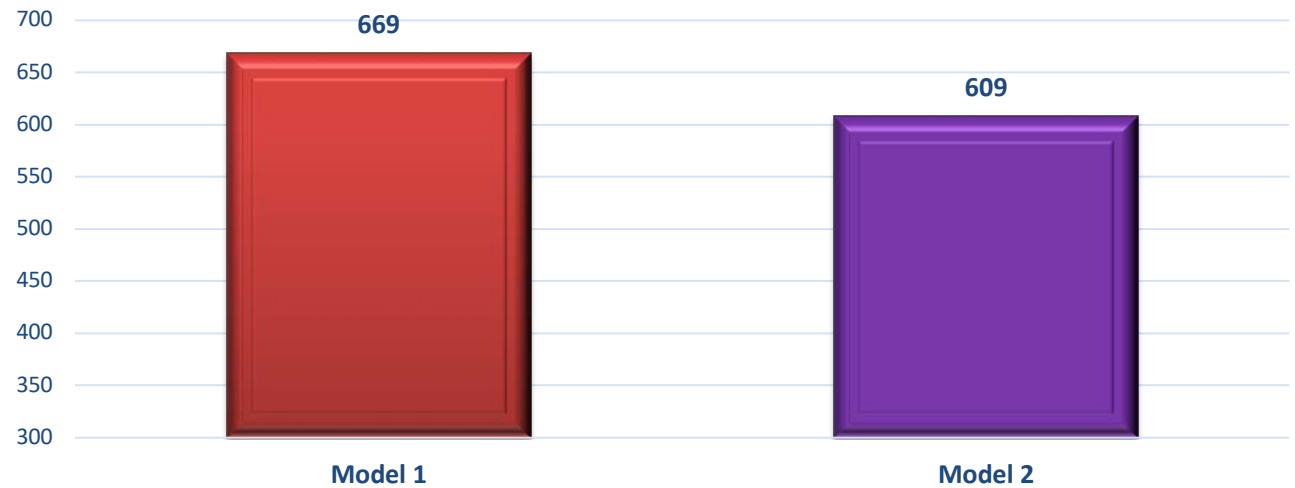


Median Length of Stay by Year (in hours)

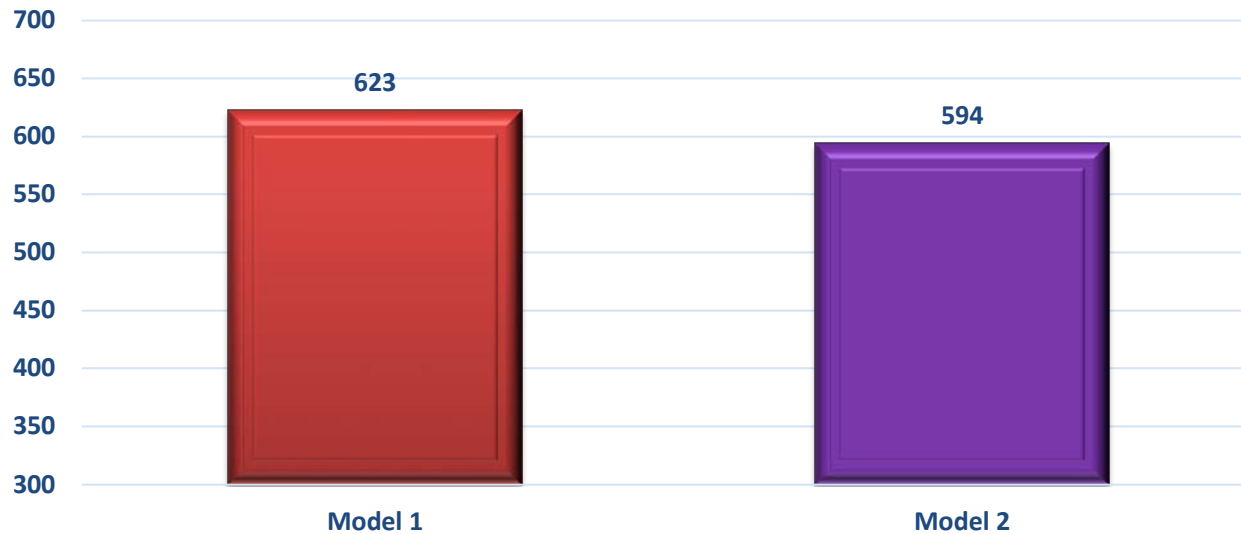


Number of Patients by Model

April - June 2018

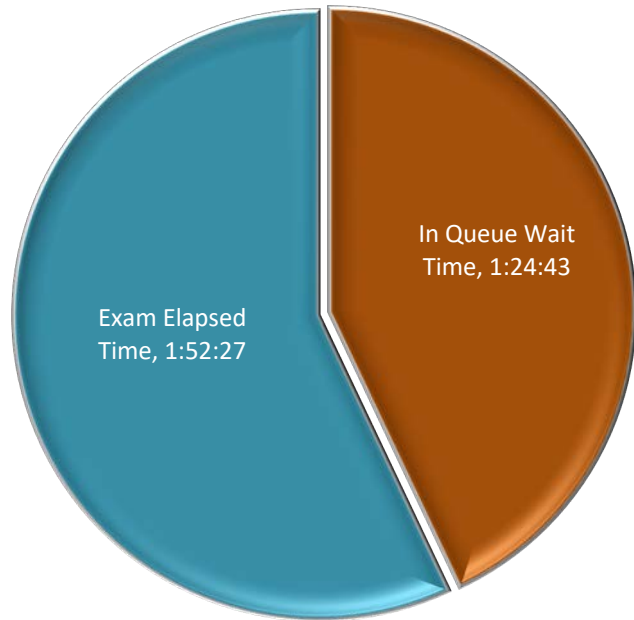


January - March 2018



Consult Elapsed Time: April – June 2018

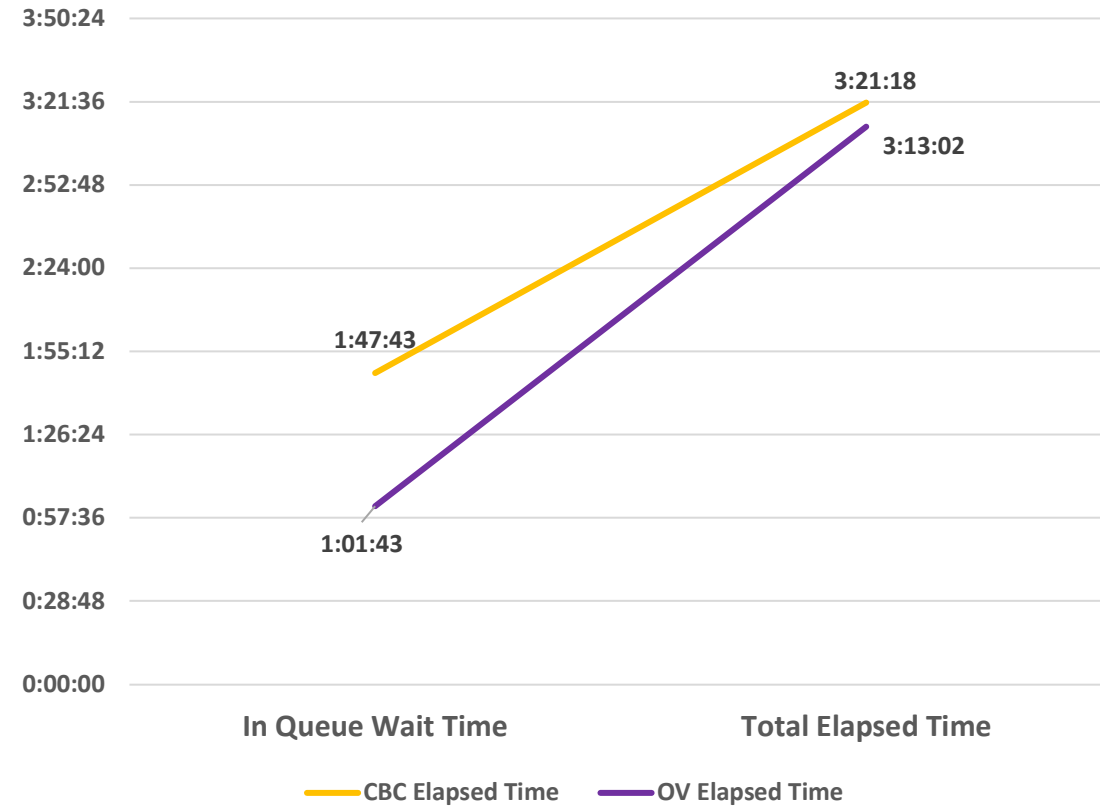
Average Consult Elapsed Time In Queue to Exam Complete (hh:mm:ss)



 In Queue Wait Time  Exam Elapsed Time

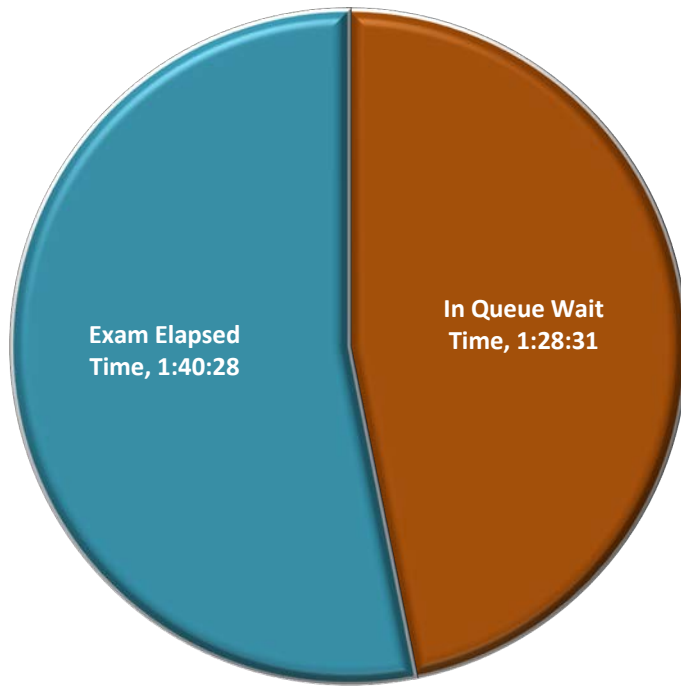
Comparison of CBC and OV

Average Consult Elapsed Time In Queue to Exam Complete (hh:mm:ss)



Consult Elapsed Time: January – March 2018

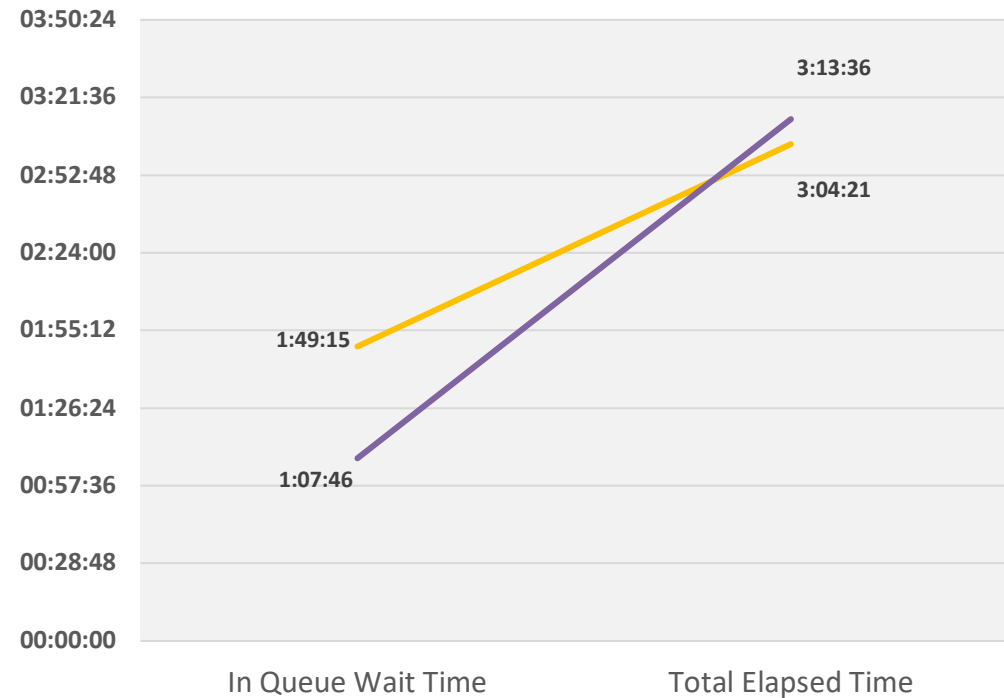
Average Consult Elapsed Time
In Queue to Exam Complete
(hh:mm:ss)



■ In Queue Wait Time ■ Exam Elapsed Time

Comparison of CBC & OV

Average Consult Elapsed Time
In Queue to Exam Complete (hh:mm:ss)

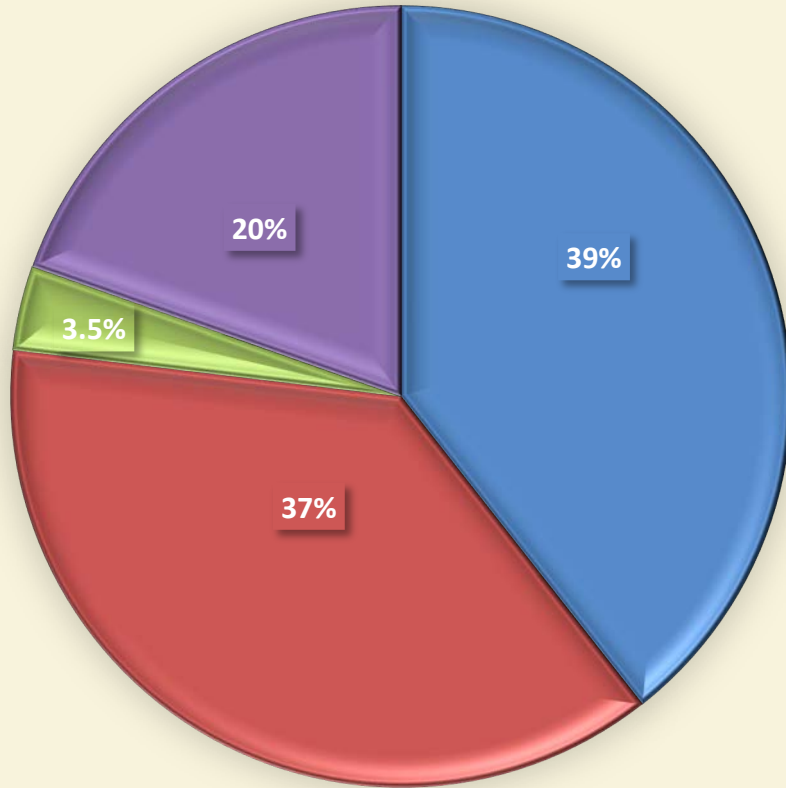


— CBC Elapsed Time — OV Elapsed Time

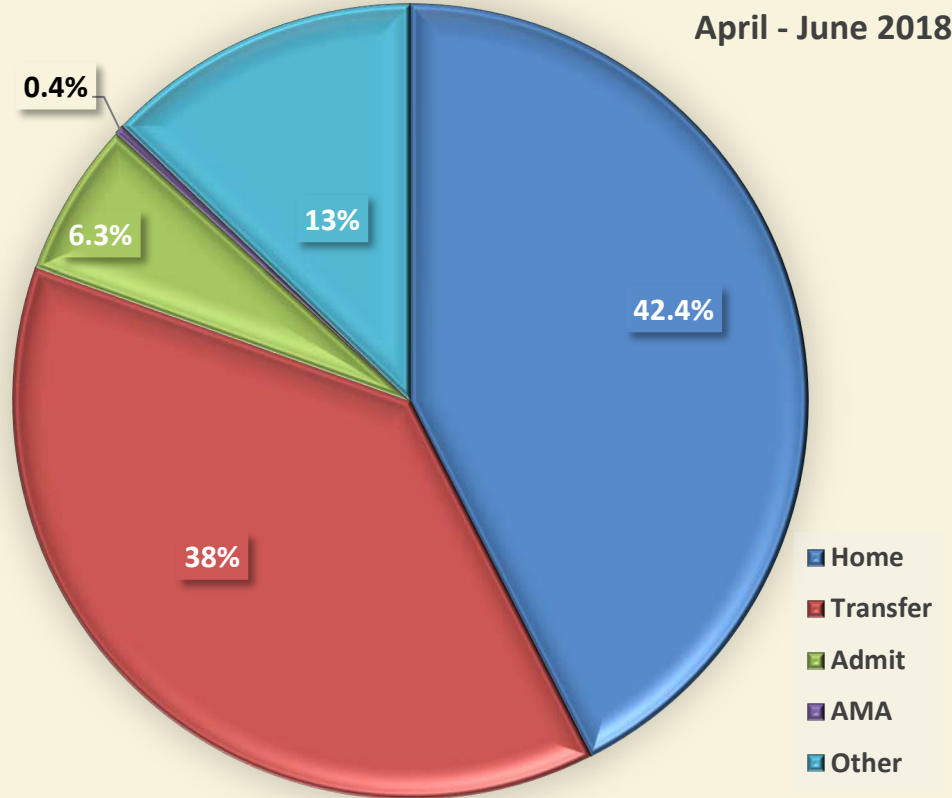


Percent of Patients by Discharge Disposition

January – March 2018



April - June 2018



- Home
- Transfer
- Admit
- AMA
- Other

- Home
- Transfer
- Admit
- Other

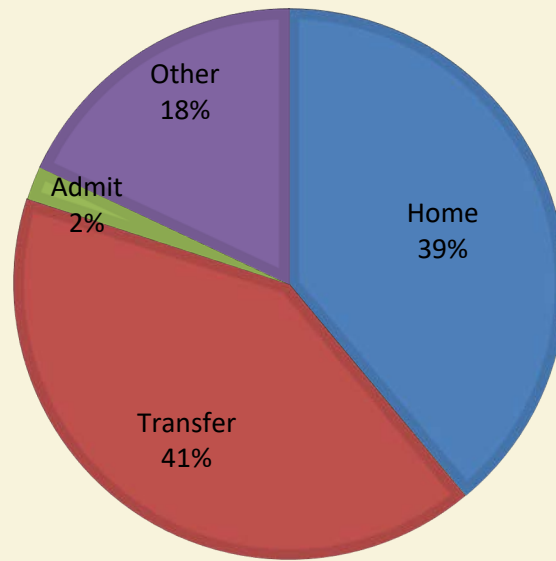
Note: Data for Cone hospitals did not include a discharge disposition so it was coded as "Other," so the 13% for "Other" is higher than it otherwise would be.



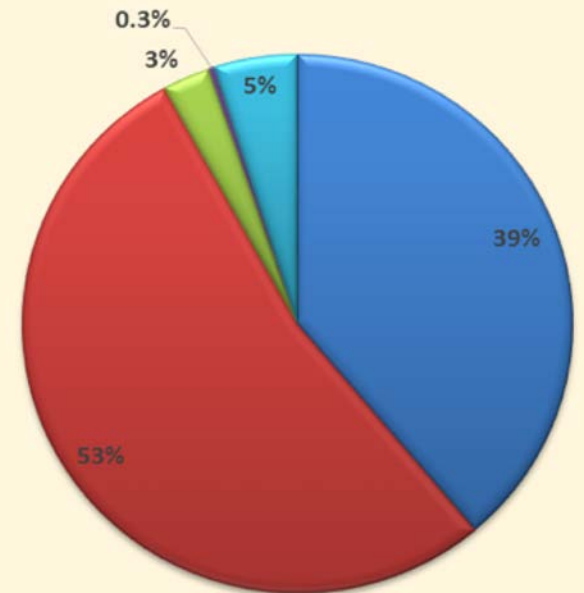
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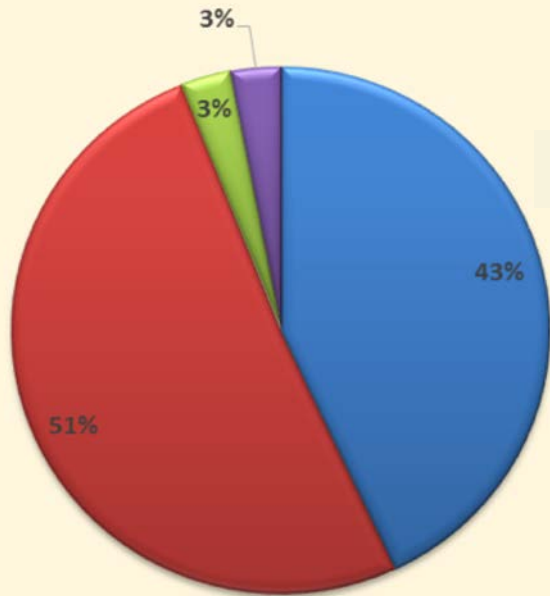
Percent of Patients By Discharge Disposition January - December 2017



January – December 2015

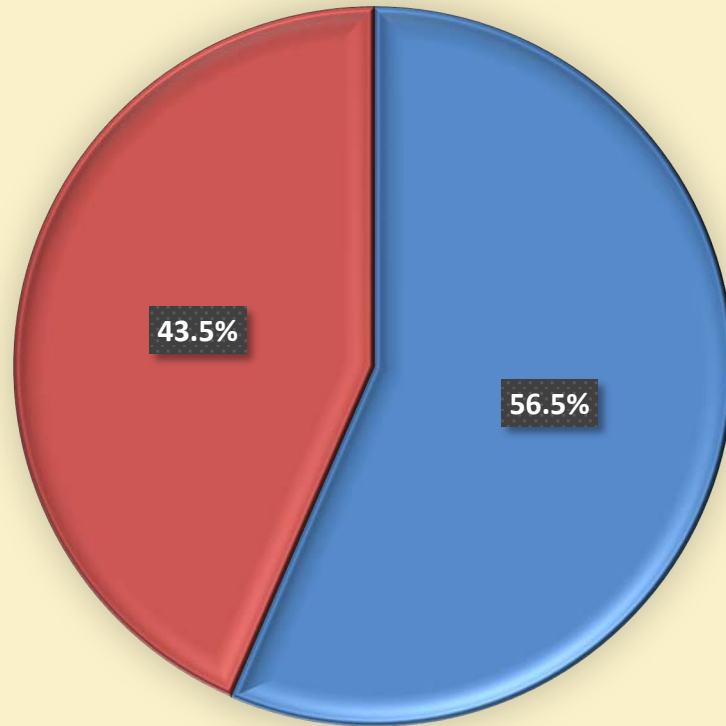


January – December 2016



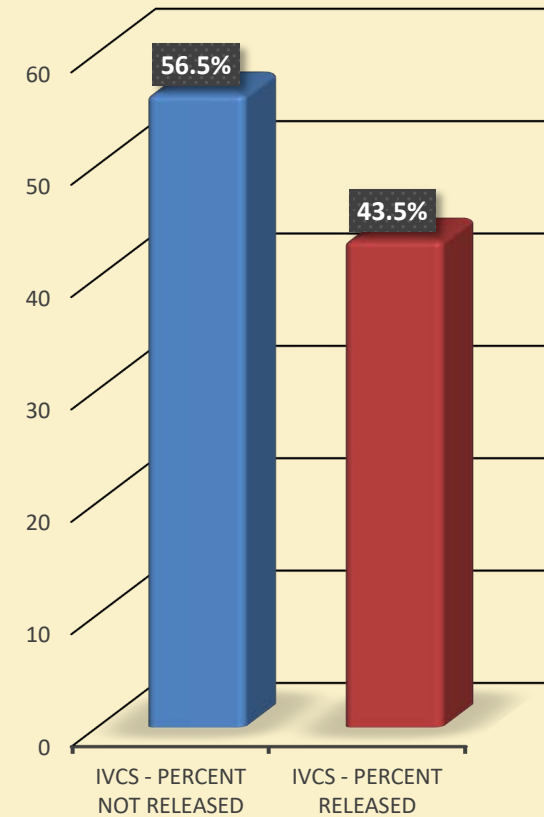
IVCs - By Release Status

April - June 2018



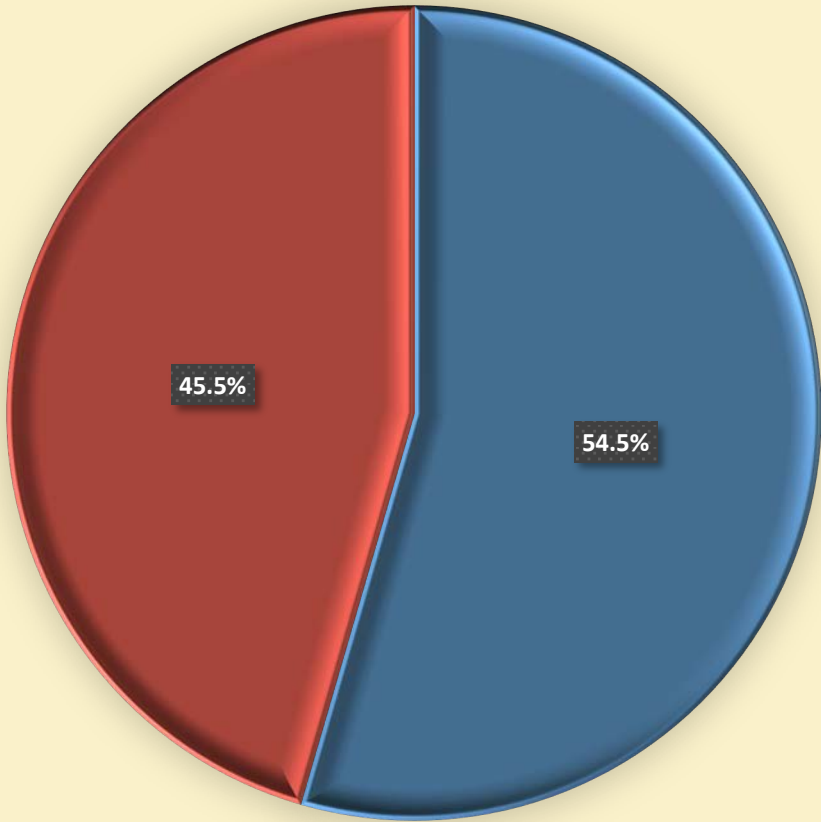
■ IVCs - percent not released

■ IVCs - percent released

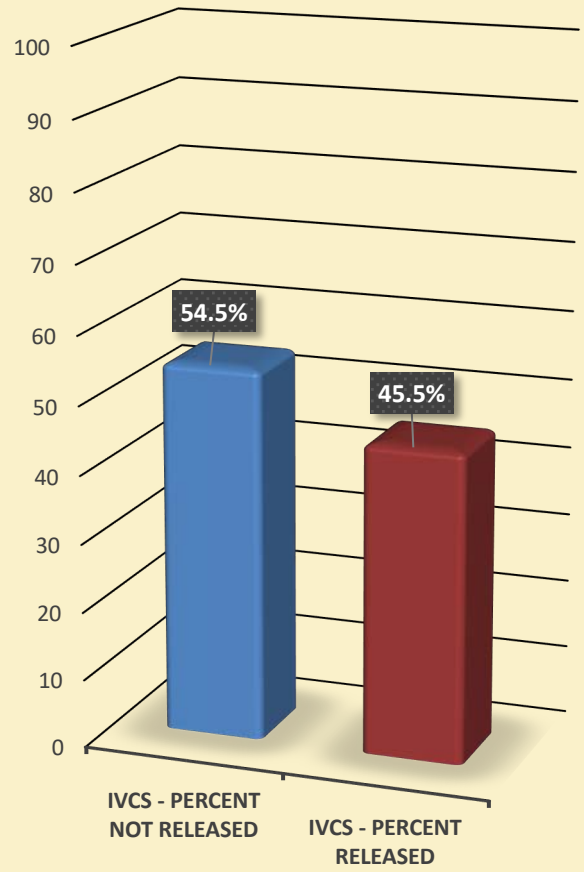


IVCs - By Release Status

January - March 2018

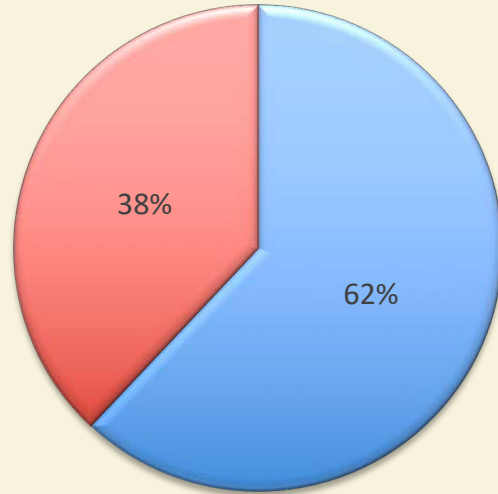


- IVCs - percent not released
- IVCs - percent released

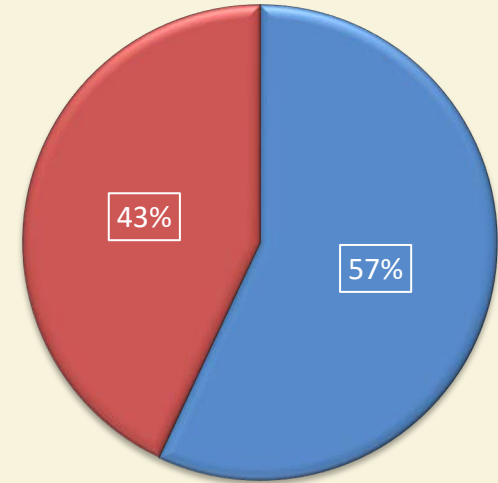


IVCs - By Release Status

October - December 2017



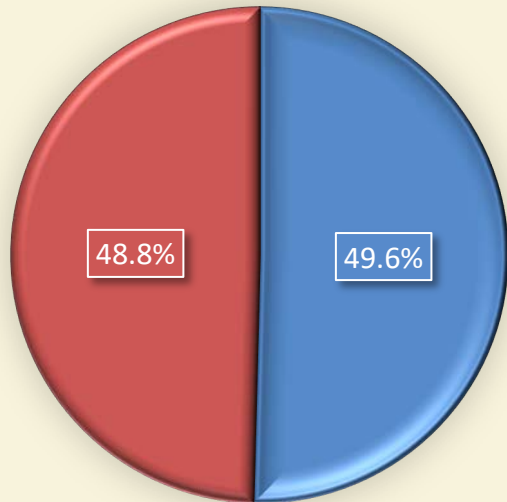
July - September 2017



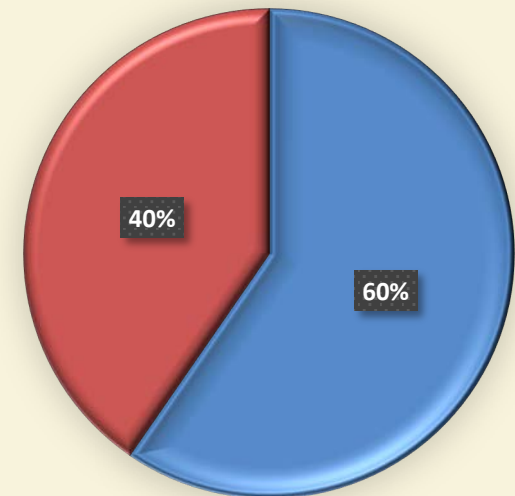
■ IVCs - percent not released

■ IVCs - percent released

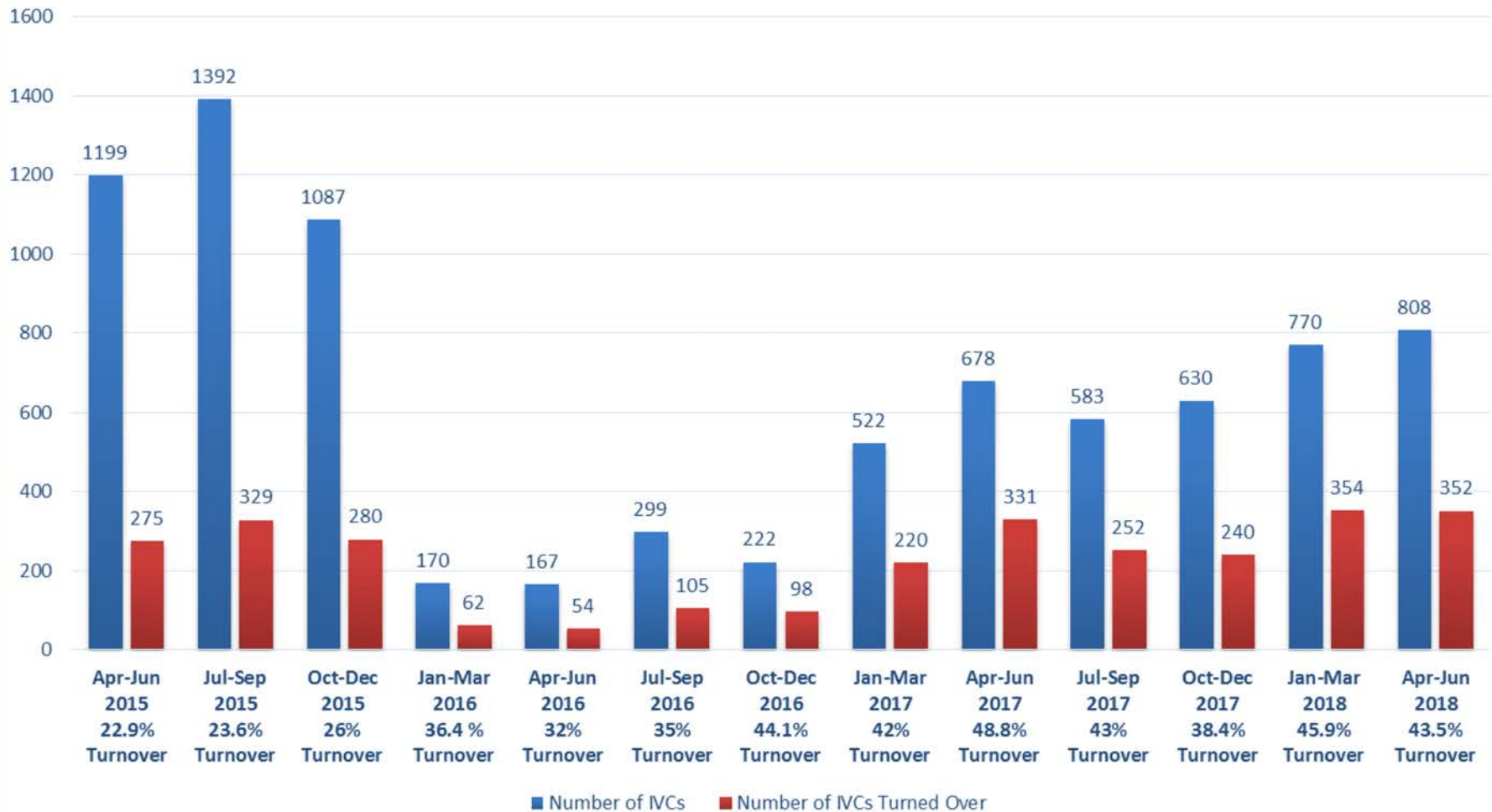
April - June 2017



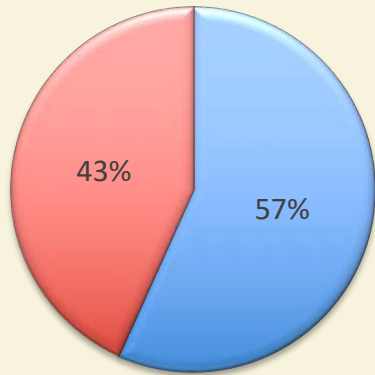
January - March 2017



Number of IVCs and IVCs Turned Over by Quarter

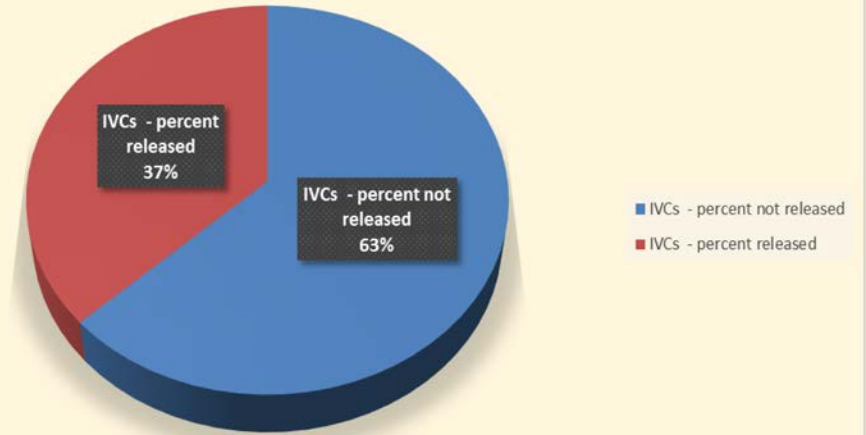


IVCs - By Release Status for January - December 2017

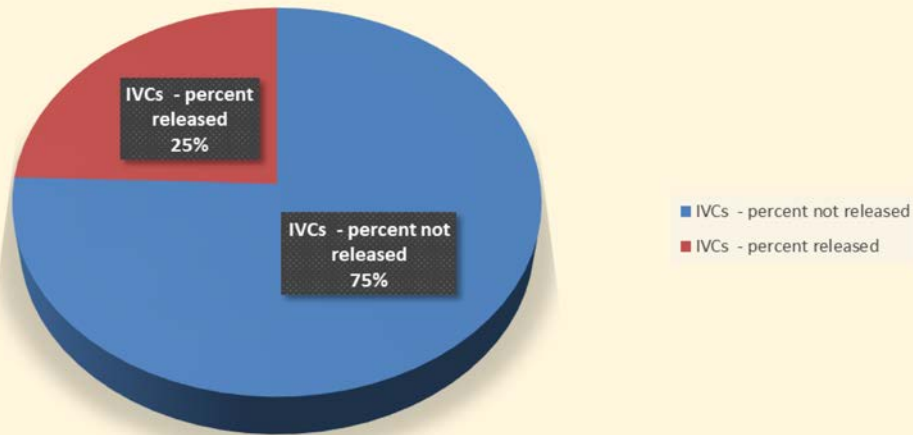


■ IVCs - percent not released ■ IVCs - percent released

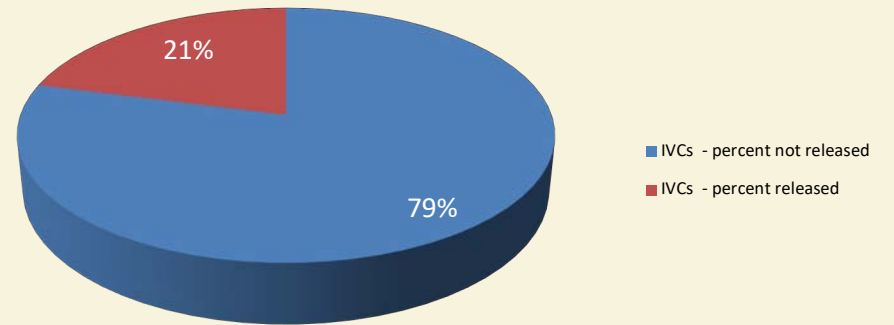
IVCs - By Release Status for January - December 2016



IVCs - By Release Status for January - December 2015



IVCs - By Release Status for January - December 2014



Are Overturned IVCs Really the Hospitalizations Avoided?

IVCs		April 1, 2018 - June 30, 2018 Model 1 and Model 2	
Total IVCs			808
Overturned IVCs			352
Overturned IVCs by Disposition Summary Code		Number (percent of overturned IVCs)	
Admit		8	(2.2%)
AMA		2	(0.5%)
Home		301	(85.5%)
Other		26	(7.3%)
Transfer		15	(4.3%)

Are Overturned IVCs Really the Hospitalizations Avoided?

Model 1 IVCs (4/1/2018 through 6/30/2018)

Total IVCs	506
Overturned IVCs	269

Overturned IVCs by Disposition Summary Code	Number (% overturned IVCs)	by Full Disposition	Number
Admit	8 (2.9%)	admitted to psychiatric ward of the same general hospital	8
AMA	2 (0.7%)	left after receiving medical advice against leaving	2
Home	232 (86.2%)	discharged to home or self care, routine discharge	232
Other	15 (5.6%)	other	10
		transferred to court, law enforcement, Jail	5
Transfer	12 (4.5%)	transfer to another type of institution	1
		transfer to group home	4
		transfer to intermediate care facility	1
		transfer to psychiatric unit of another general hospital	3
		transfer/discharge to skilled nursing facility	2
		transfer to substance abuse facility other than state ADATC	1



Are Overturned IVCs Really the Hospitalizations Avoided?

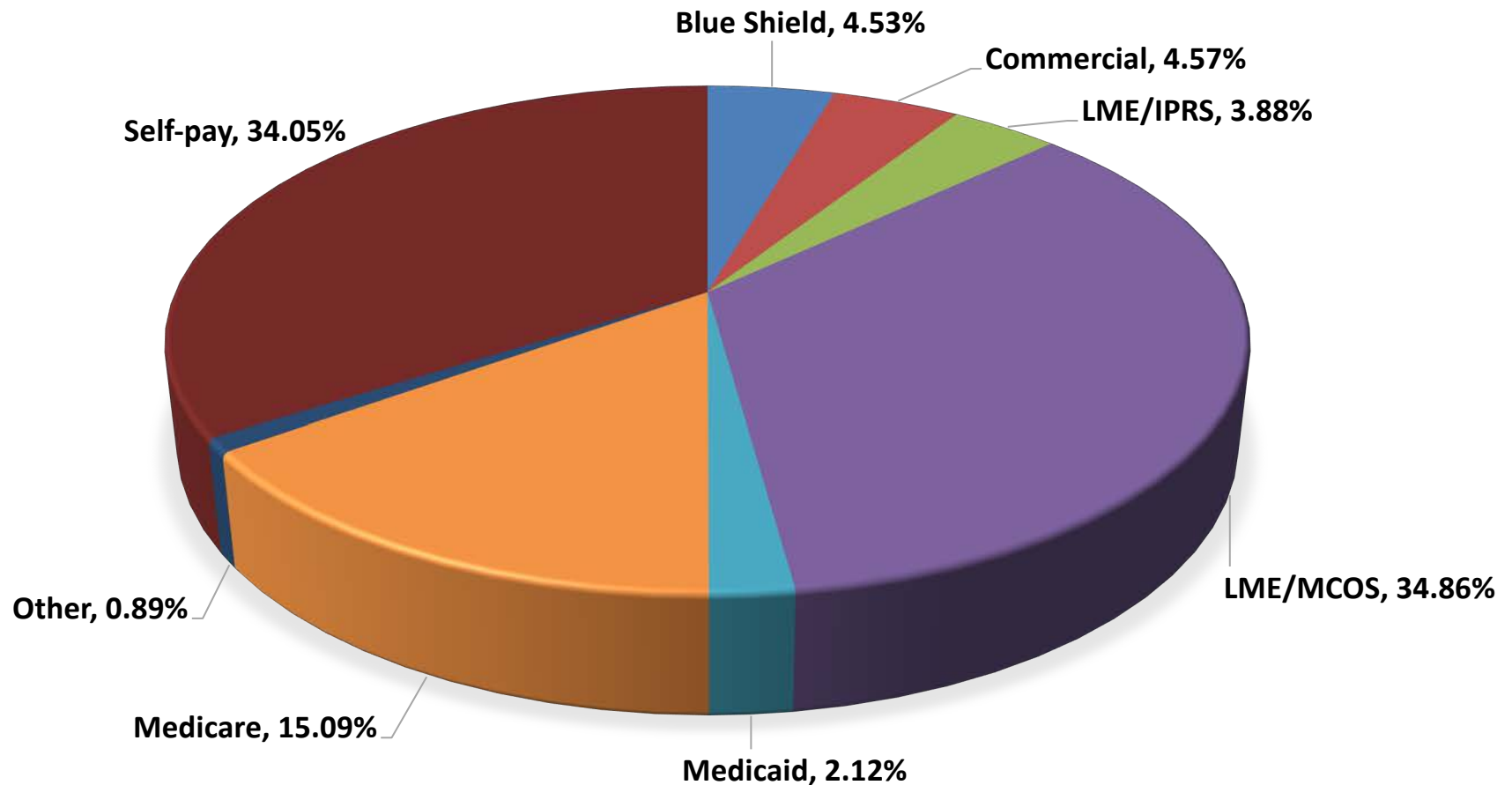
Model 2 IVCs (4/1/2018 through 6/30/2018)	
Total IVCs	302
Overturned IVCs	83

Model 2 Overturned IVCs by Disposition Summary Code	Number (percent of overturned IVCs)
Admit	
AMA	
Home	69 (83%)
Other	11 (13.3%)
Transfer	3 (3.6%)



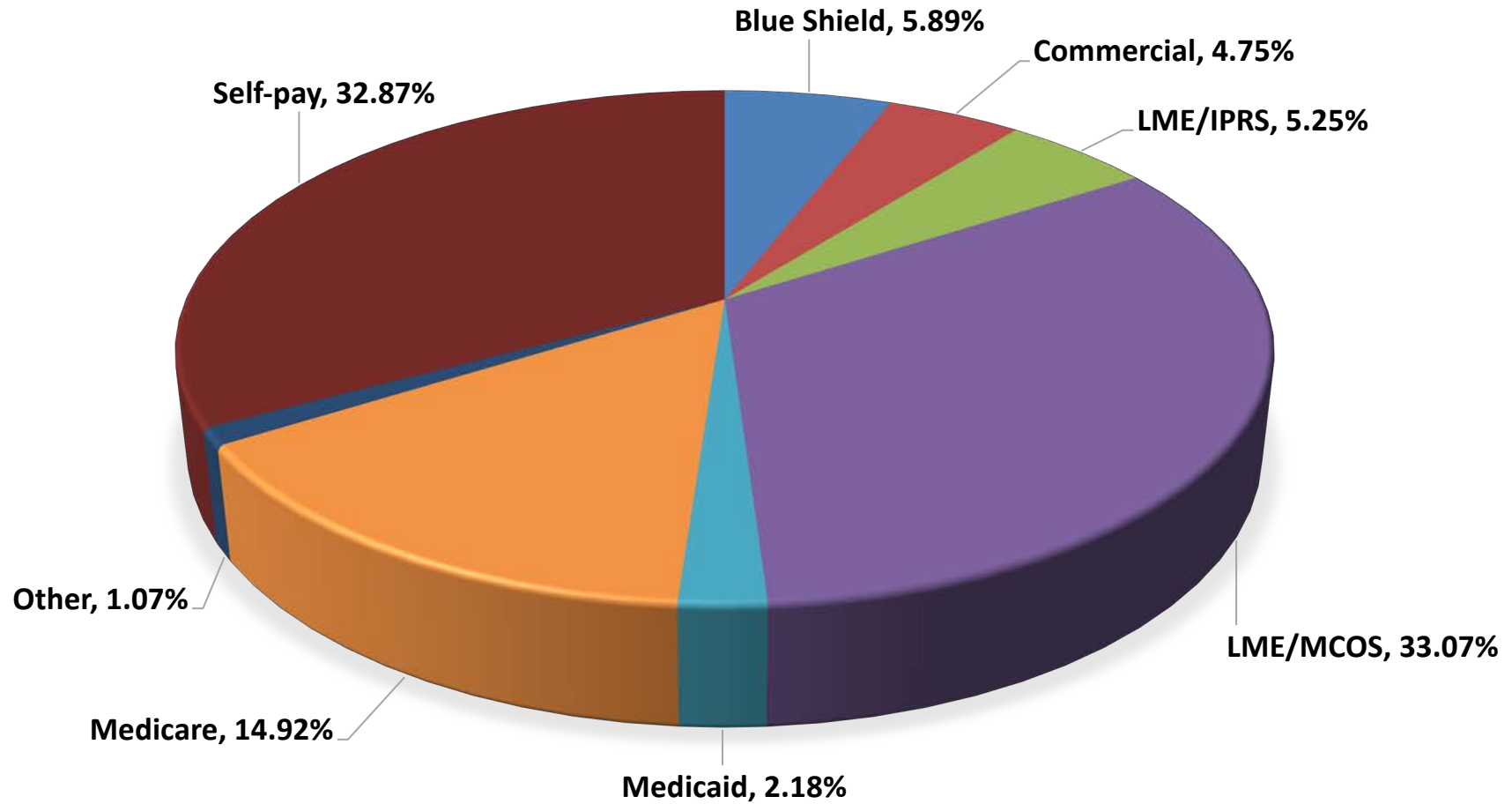
NC-STeP Charge Mix

QTD 2018 - Quarter 4



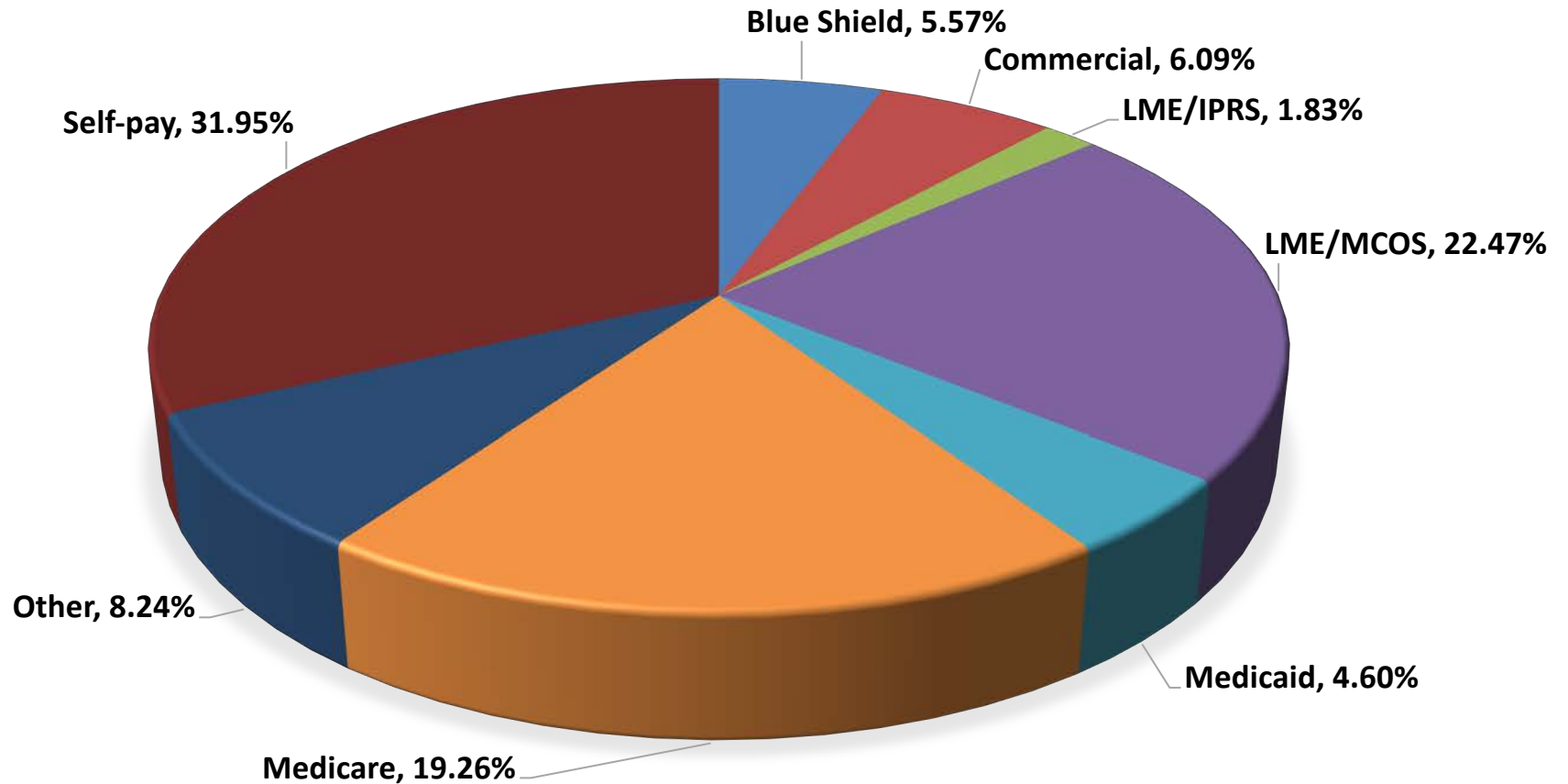
NC-STeP Charge Mix

FYTD 2018 - Quarter 4



NC-STeP Charge Mix – Project to Date

Service Dates: October 1, 2013 – June 30, 2018



NC-STeP Status as of June 30, 2018

- 60 hospitals in the network. 53 live.
- 31,693 total psychiatry assessments since program inception
- 4,014 IVCs overturned
 - Cumulative return on investment = \$21,675,600
(savings from preventing unnecessary hospitalizations)
- Seven Clinical Provider Hubs with 47 consultant providers
- Administrative costs below industry standard
- Over 31% of the patients served had no insurance coverage



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Hospital Status Report as of June 2018



Model 1 – Live

Hospital Name	Portal Go Live
Vidant Outer Banks Hospital	08/08/2016
Vidant Bertie Hospital	08/15/2016
Vidant Chowan Hospital	08/15/2016
Vidant Edgecombe Hospital	08/15/2016
Sentara Albemarle Medical Center	08/17/2016
Vidant Beaufort Hospital	08/22/2016
Vidant Duplin Hospital	08/22/2016
Lenoir Memorial Hospital	09/06/2016
St Lukes Hospital	09/07/2016
Wilson Medical Center	09/20/2016
Morehead Memorial Hospital	10/05/2016
DLP Harris Regional Medical	10/14/2016
DLP Swain Community Hospital	10/14/2016
Murphy Medical Center	10/26/2016
DLP Maria Parham Medical Center	11/15/2016
UNC Chatham Hospital	12/21/2016
J. Arthur Doshier Memorial Hospital	01/07/2017
Ashe Memorial Hospital	01/26/2017
Northern Hospital of Surry County	03/07/2017
Southeastern Regional Medical Center	08/08/2017
Halifax Regional Medical Center	08/08/2017
DLP Person Memorial Hospital	08/17/2017
DLP Haywood Regional Medical Center	08/22/2017
Alleghany Memorial Hospital	10/17/2017
Lake Norman Regional Medical Center	10/17/2017
Pender Memorial Hospital	12/07/2017

Hospital Status Report as of June 2018

Model 1 – In Process



Hospital Name	Portal Go Live
DLP Rutherford Regional Medical Center	Fall 2018

Hospital Status Report as of June 2018

Model 1 – Participation Pending



Hospital Name	Program Status
DLP Central Carolina Hospital	Reviewing Contract
Our Community Hospital	Reviewing Contract
Park Ridge Health	Reviewing Contract
Pioneer Community Hospital of Stokes (Greene)	Reviewing Contract
Pioneer Community Hospital of Stokes (King)	Reviewing Contract
Washington County Hospital	Reviewing Contract

Hospital Status Report as of June 2018



Model 2

Hospital Name	Go Live Date/Status
Cape Fear Valley Medical Center	06/2014
Cape Fear Valley Bladen Hospital	07/2014
Cone Health Behavioral Health Hospital	07/2014
Cone Health MedCenter High Point	07/2014
Forsyth Medical Center	07/2014
McDowell Hospital	07/2014
Mission Hospital	07/2014
Novant Health Clemmons Medical Center	07/2014
Novant Health Kernersville Medical Center	07/2014
Wesley Long Hospital	07/2014
Mission Children's Hospital	08/2014
Annie Penn Hospital	08/2014
Moses H. Cone Memorial Hospital	08/2014
Blue Ridge Regional Hospital	09/2014
Transylvania Regional Hospital	09/2014
Women's Hospital – Cone Health	10/2014
Angel Medical Center	01/2015
Highlands-Cashiers Hospital	03/2015
Novant Health Thomasville Medical Center	03/2015
Alamance Regional Medical Center	04/2015
Hugh Chatham Memorial Hospital	12/2015
Cape Fear Valley Hoke Hospital	06/2016
UNC Johnston, Clayton	06/2016
UNC Johnston, Smithfield	06/2016
Novant Health Presbyterian Hospital	11/2016
Novant Health Rowan Medical Center	07/2017
Novant Health Brunswick Medical Center	07/2017

Hospital Status Report as of June 2018



Expressed Possible Interest

Hospital Name	Program Status	NC-STeP Model
Central Harnett Hospital	TBD	TBD
DLP Maria Parham - Franklin	TBD	Model 1
Duke Regional Hospitals	TBD	TBD
Novant Matthews Medical	TBD	Model 2
Iredell Memorial Hospital	TBD	TBD

Hospital Status Report as of June 2018



Terminated

Hospital Name	Hospital Name
Carolina East	Nash General Hospital
Carteret	Sampson
Columbus Regional	UNC Hillsborough
Davie Medical	WakeMed Apex
FirstHealth Montgomery Memorial Hospital	WakeMed Briar Creek
FirstHealth Moore Regional Hospital	WakeMed Cary
FirstHealth Regional Hospital - Hoke	WakeMed Garner
FirstHealth Richmond Memorial Hospital	WakeMed North Healthplex
FirstHealth Sandhills Regional Medical	WakeMed Raleigh
Lexington	WakeMed Raleigh Children's ED
Martin County General	WakeMed Psychiatric Observation Unit

Hospital Status Report as of June 2018

No Information Available



Hospital Name	Program Status	NC-STeP Model
Caldwell Memorial	TBD	TBD
Cherokee Indian Hospital	TBD	TBD
New Hanover	TBD	TBD
Novant Franklin Medical	TBD	TBD
Onslow Memorial	TBD	TBD
Scotland Health	TBD	TBD
Wilkes Regional Medical	TBD	TBD



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NC-STEP

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CAPTURE YOUR HORIZON



NC-STeP

NORTH CAROLINA

STATEWIDE TELEPSYCHIATRY PROGRAM

