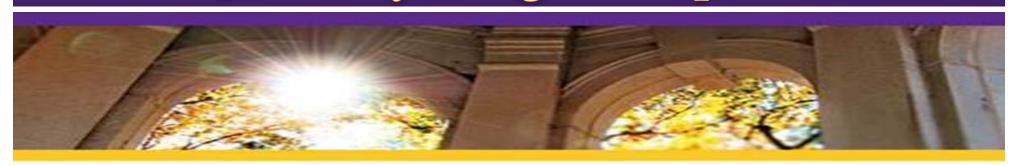


# Quarterly Progress Update



### Sy Saeed, MD, MS, FACPsych,

Professor and Chair

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Director

North Carolina Statewide Telepsychiatry Program (NC-STeP)



# NC-STeP Quality Management and Outcomes Monitoring Processes: April-June 2017

- 62 hospitals in network, 43 hospitals live, as of 06/30/17 with
   32 hospitals reporting Telepsychiatry patients in their ED
  - not all live hospitals had telepsychiatry patients
- 1,187 assessments for both Model-1 and Model-2 hospitals
- 678 patient assessments were billed for Model-1 hospitals
- The Median Length of Stay was 33.7 hours
- The Average Length of Stay was 56.6 hours
  - 56.9 hours for those discharged to home
  - 62.6 hours for those transferred to another facility





# NC-STeP Quality Management and Outcomes Monitoring Processes: April-June 2017

- 677 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
  - 331 (48.8%) of those patients did not have an IVC in place when discharged.
- Of the ED patients who received telepsychiatry services, 41.5% were discharged to home. 37% were discharged to another facility.

\*Note: Data for Bladen hospital not submitted yet. Data for Cone hospitals 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.





NC-STeP	Since project inception in November 2013		During Calendar Year 2015	During Calendar Year 2016	During Quarter Jan- Mar 2017	During Quarter Apr- June 2017
Total Patient Encounters	17,121	5,144	7,128	1,896	916	1,095
Model-1 Hospital Patient Encounters	13,124	4,578	5,849	706	463	586
Model-2 Hospital Patient Encounters	3,997	566	1,279	1,190	453	509
Total Number of Assessments (Billed Assessments for Model-1 Hospitals + Number of Patient Encounters for Model-2 Hospitals)	26,699	8,130	13,573	1,942	993	1,187

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2016	TARGET TO BE REACHED BY 06/30/2017	VALUES/MEASURES REACHED AS OF 06/30/2017
The number of full- time equivalent (FTE) positions supported by these contracts	1.9 FTEs	3.24 FTEs	3.24 FTEs
2. The number of overturned involuntary commitments	2,009	3,160	331 in this quarter YTD Total 754 Cumulative total since program inception 2,816
3. The number of participating consultant providers	37	40	36

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2016	TARGET TO BE REACHED BY 06/30/2017	VALUES/MEASURES REACHED AS OF 06/30/2017
4. The number of telepsychiatry assessments conducted.	20,783	33,950	1,187 in this quarter YTD Total 3,352 Cumulative total since program inception 26,699
5. The number of telepsychiatry referring sites	58	62	62 43 Live
6. The reports of involuntary commitments to enrolled hospitals	8,264	12,264	677 in this quarter YTD Total 1,720 Cumulative total since program inception 10,130

NC-STeP

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2016	TARGET TO BE REACHED BY 06/30/2017	VALUES/MEASURES REACHED AS OF 06/30/2017
7. The average (mean) Length of Stay for all patients with a primary mental health diagnosis across all dispositions.	45 hours	43 hours	QTD = 56.6 Median = 33.7
8. The rate of "satisfied" or "strongly satisfied" among emergency department staff participating in NC- STeP.	63%	85%	Satisfaction surveys not conducted this quarter

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2016	TARGET TO BE REACHED BY 06/30/2017	VALUES/MEASURES REACHED AS OF 06/30/2017
9. The rate of "satisfied" or "strongly satisfied" among hospital CEOs/COOs participating in NC-STeP.	NA (no responses received)	85%	Satisfaction surveys not conducted this quarter
10. The rate of "satisfied" or "strongly satisfied" among consulting (hub) providers participating in NC-STeP.	70%	85%	Satisfaction surveys not conducted this quarter

	NC STeP Satisfaction Sur	vey Results Fiscal Year 2017		
	Percent that are Sat	Percent that are Satisfied or Very Satisfied		
	July - September 2016 - percent	January - March 2017 - percent		
ED Staff	59	55		
Psychiatric Providers	72	72		
ED Doctors	90	80		
CEO/CFO	*	*		
	*Number too small to report			



EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2016	TARGET TO BE REACHED BY 06/30/2017	VALUES/MEASURES REACHED AS OF 06/30/2017
11. The rate of "satisfied" or "strongly satisfied" among emergency department physicians participating in the statewide telepsychiatry program.	89%	85%	Satisfaction surveys not conducted this quarter
12. The ratio of overall revenues (billing, subscription fees), exclusive of grant funding, to program costs (exclusive of start-up costs).	0.97:1.00	>1.00:1.00	0.25:1.00 NC-STe

EVALUATION CRITERIA	BASELINE VALUES/MEASURES AS REPORTED ON 03/31/2016	TARGET TO BE REACHED BY 06/30/2017	VALUES/MEASURES REACHED AS OF 06/30/2017
13. Reduction in the 30-day emergency department recidivism rates for mental health patients.	TBD	15%	Data not currently available.
14. Cumulative return on investment to state psychiatric facilities through overturned involuntary commitments.	\$10,848,600	\$17,063,878	\$1,787,400 in this quarter YTD \$3,925,800 Cumulative total since program inception \$15,066,000

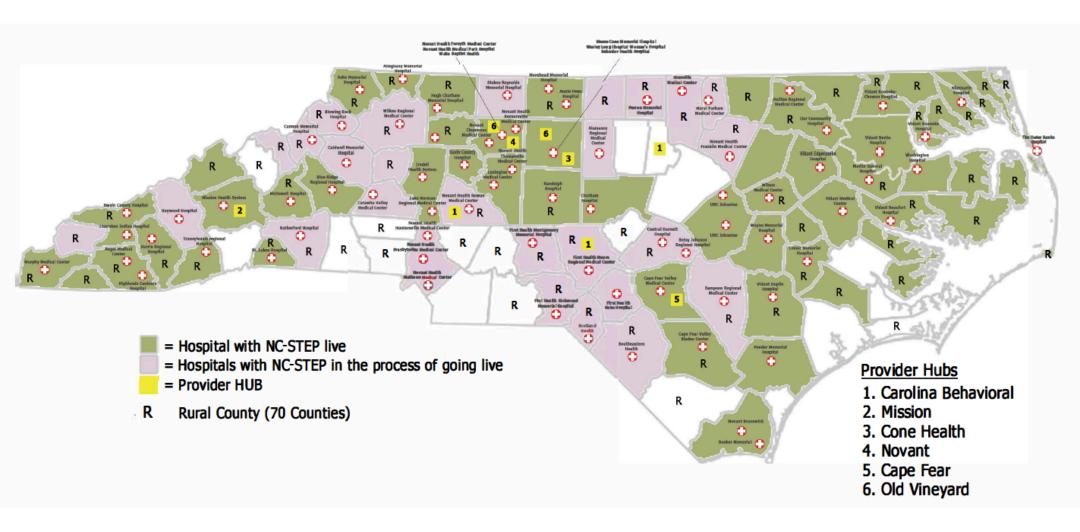
### **COMMENTS/EXPLANATIONS:**

**Evaluation Criteria #2, #4, and #6**: YTD and PTD totals were adjusted upward to include Cone data for Q Jan-March 2017 that was submitted too late to be included in the previous quarterly report. Increase of 138 assessments, 42 IVCs, 26 overturned IVCs.

### **Evaluation Criteria #4**:

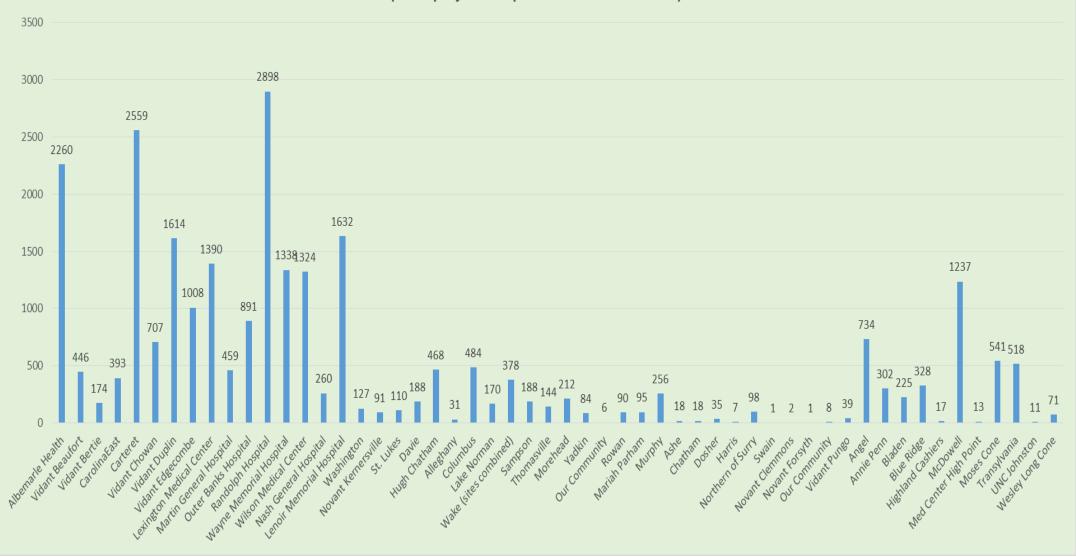
- Assessment numbers are calculated based on billed assessments for Model 1 hospitals, and number of encounters for Model 2 hospitals.
- The assessment volumes continue to trend much lower than anticipated which
  we suspect is due to behavioral health programs that were implemented at
  various hospital sites during the NC-STeP break of service.

**Evaluation Criteria #12**: The Revenues to Cost Ratio is low as we continue the process of on-boarding hospitals to the Portal (credentialing has significantly impacted the on-boarding process).





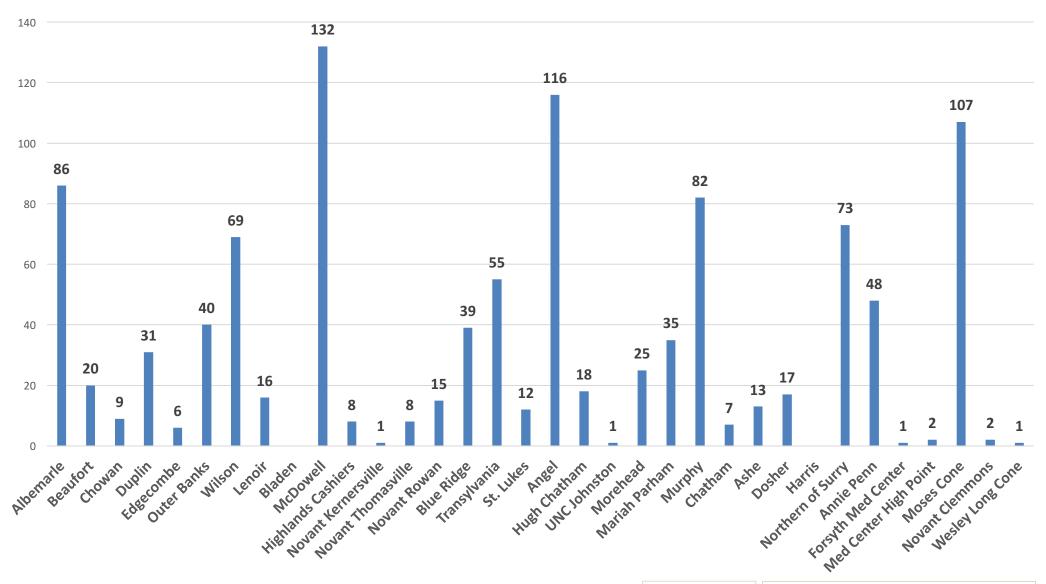
# Total Assessments by Hospital as of 6-30-2017 (since project inception in November 2013)







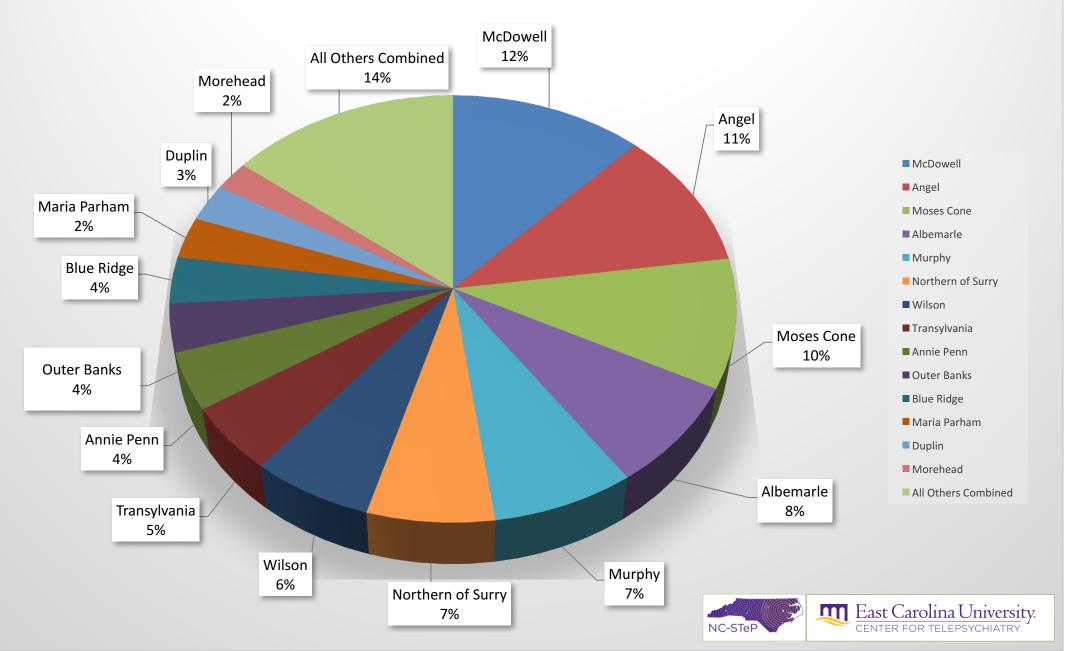
### **Number of Patients for April - June 2017**





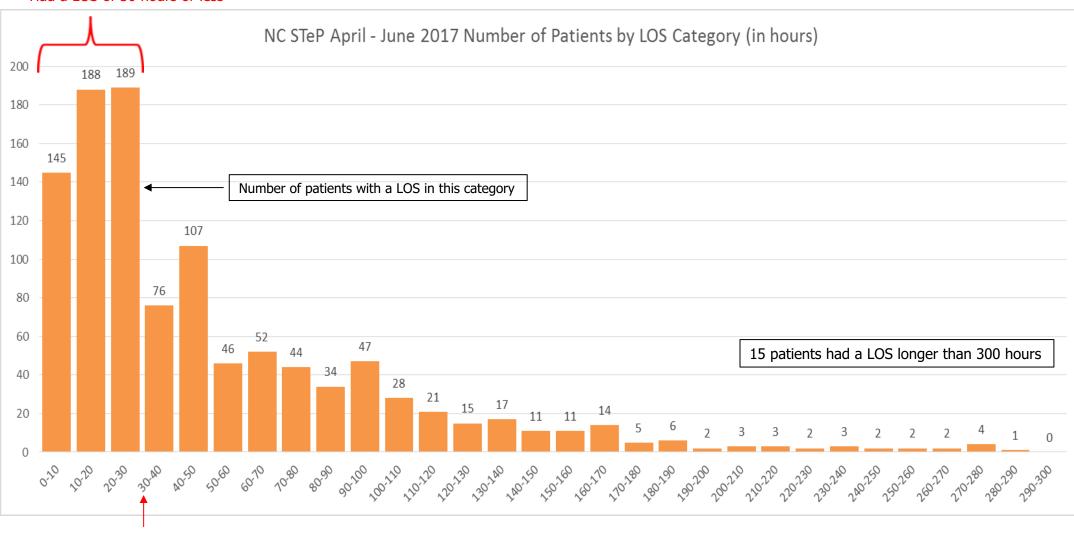


# Percent of Use by Hospital April - June 2017 (based on number of patient encounters)



### Length of Stay (in hours): April- June 2017

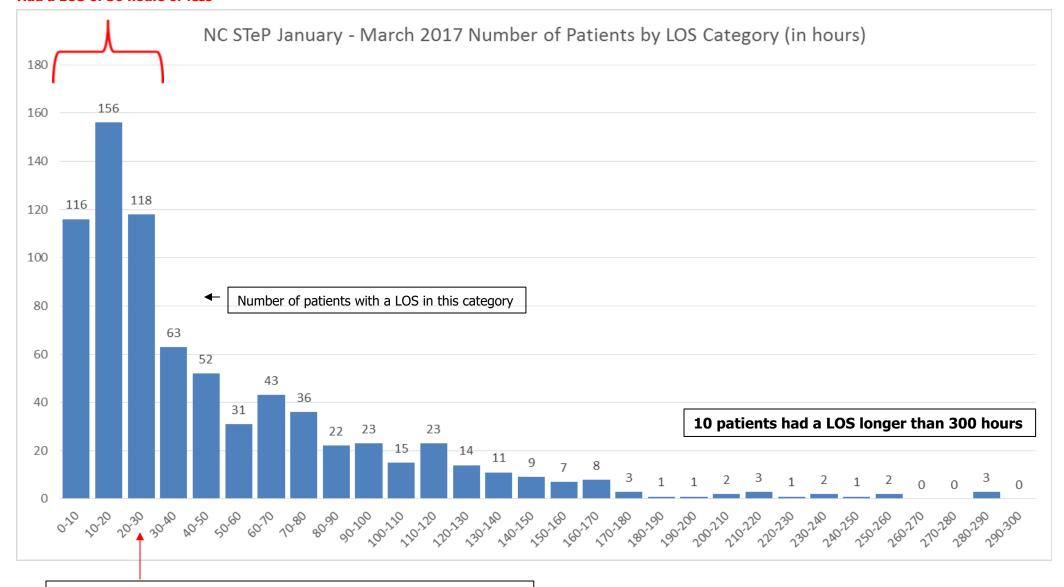
47.6% percent of patients Had a LOS of 30 hours or less



Median Length of Stay for April – June 2017 = 33.7 Hours

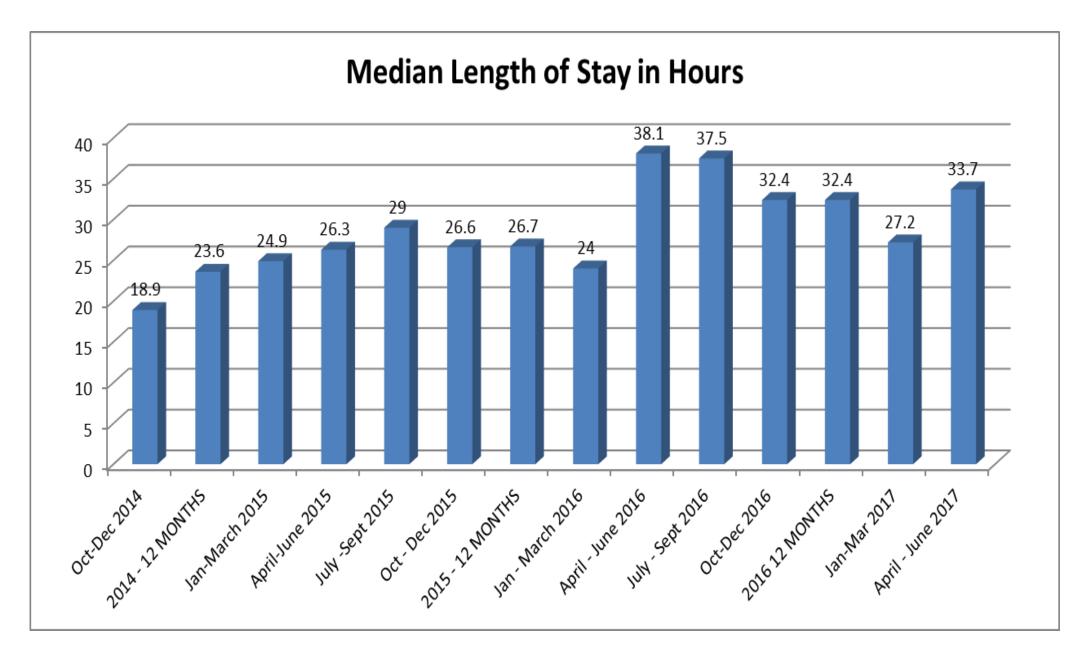


#### 50.2% percent of patients Had a LOS of 30 hours or less



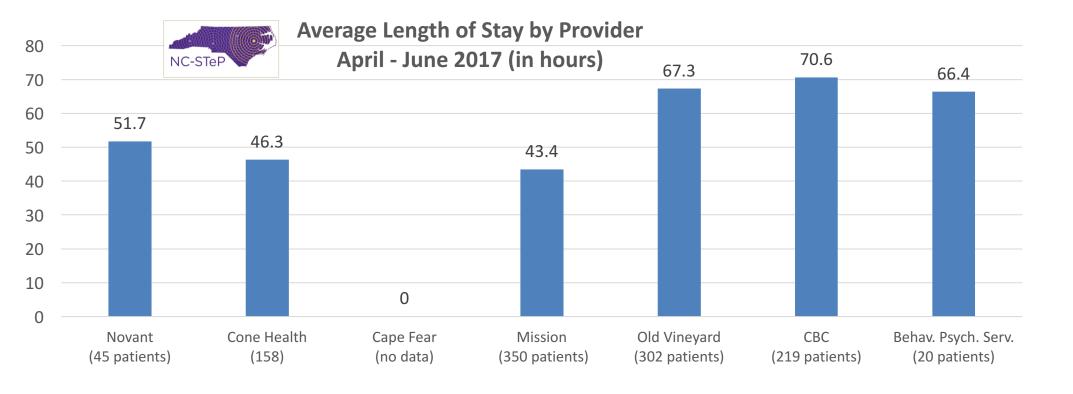
**Median Length of Stay for Jan – March 2017 = 29.8 Hours** 



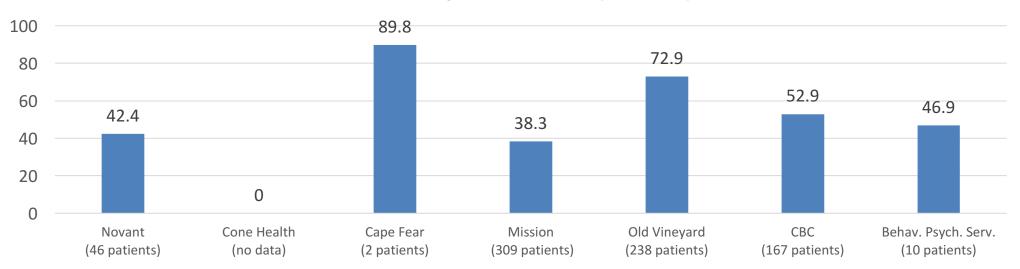




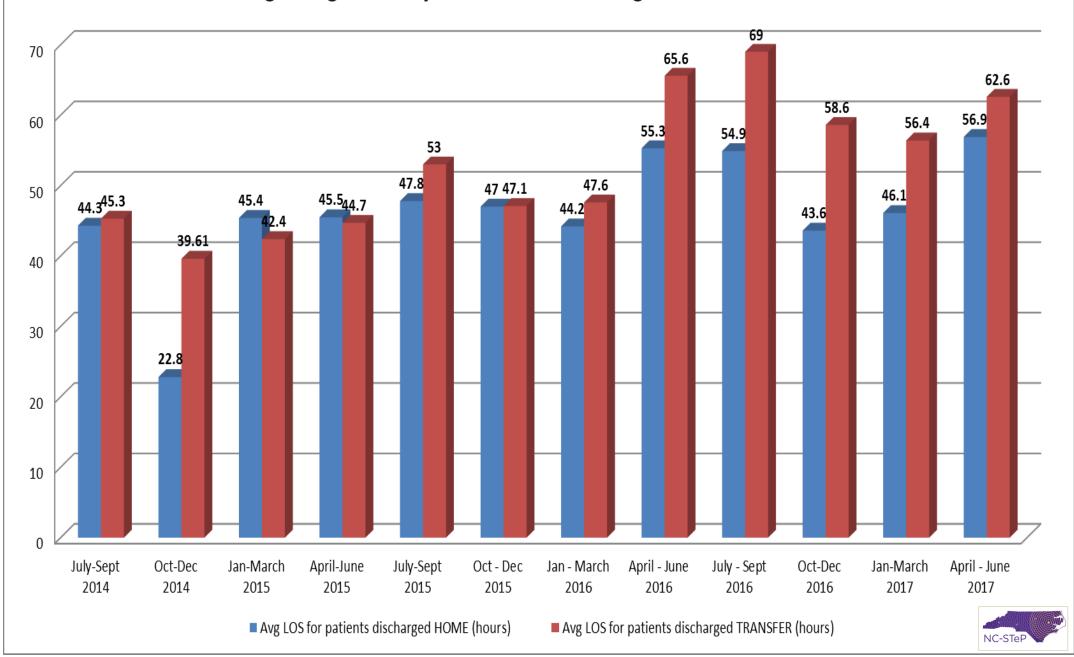




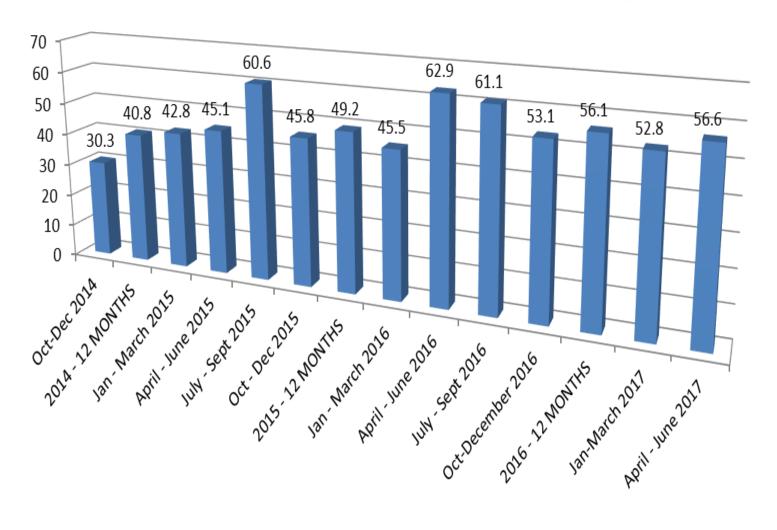
### January - March 2017 (in hours)



### **Average Length of Stay for Patients Discharged to Home or Transfer**



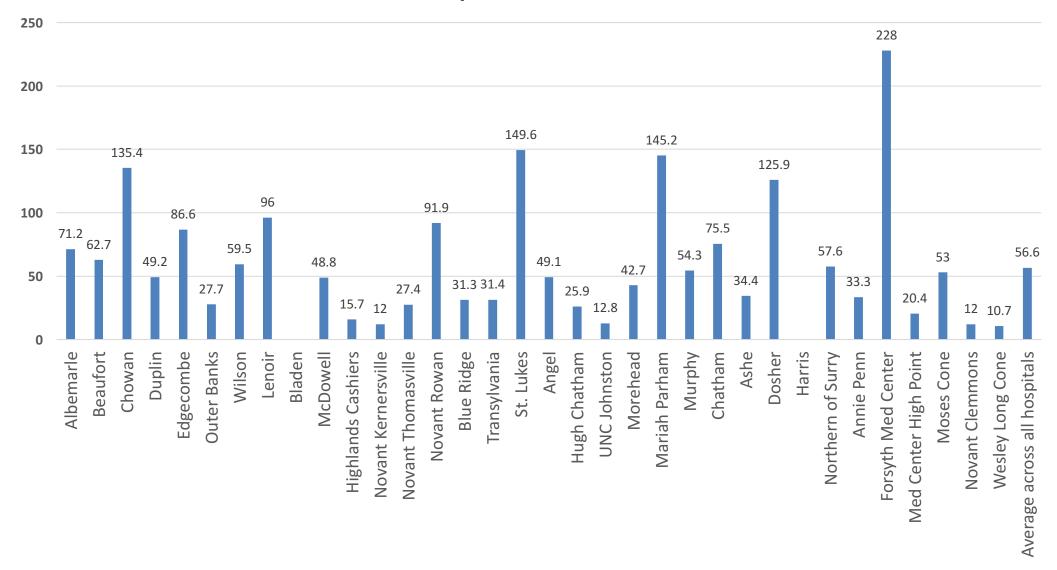
### Average Length of Stay for Hospitals Participating in NC STeP







# Average Length of Stay (in Hours) by Hospital April - June 2017

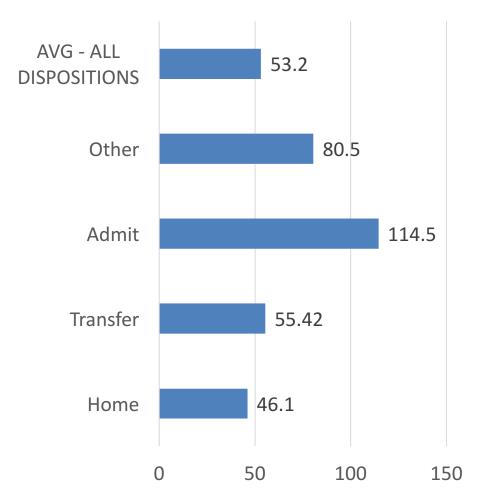






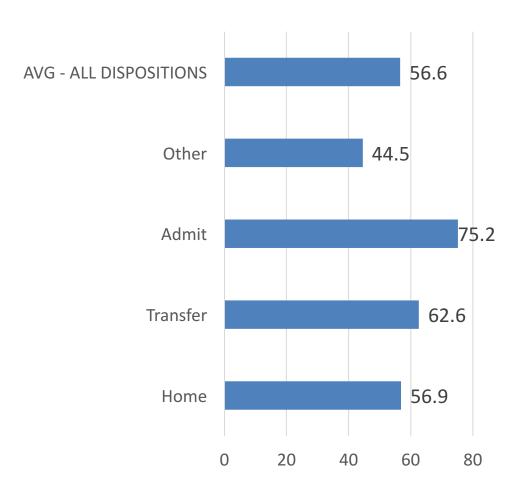
### **Average LOS by Disposition**

January - March 2017 (in hours)



### **Average LOS by Disposition**

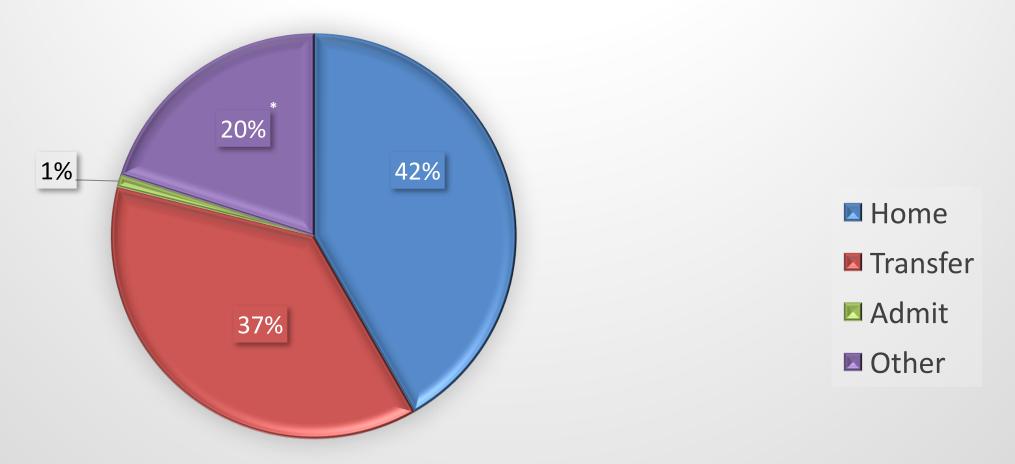
April - June 2017 (in hours)







### Percent of Patients by Discharge Disposition April - June 2017



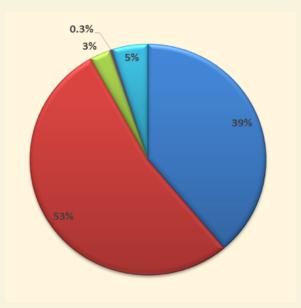
<sup>\*</sup>This category is so high because the data from Cone this quarter did not include any discharge disposition information, coded as "unknown" and included in with the "other" category. If taken out, the other category would be a more typical 5.6% and the unknown would be 14.4%.

# January - March 2017 52%





### January – December 2015

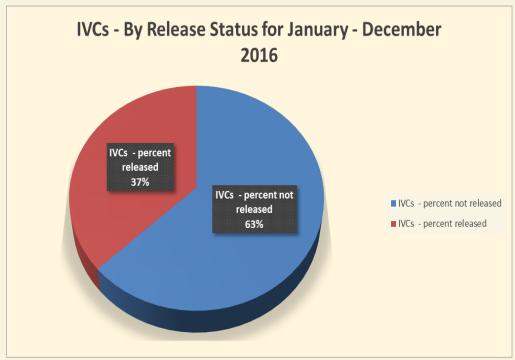




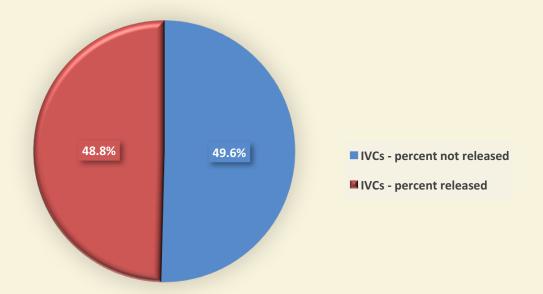
43%



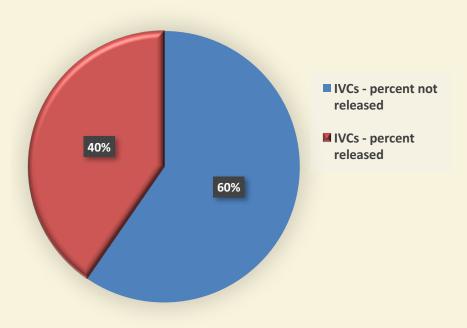




April - June 2017



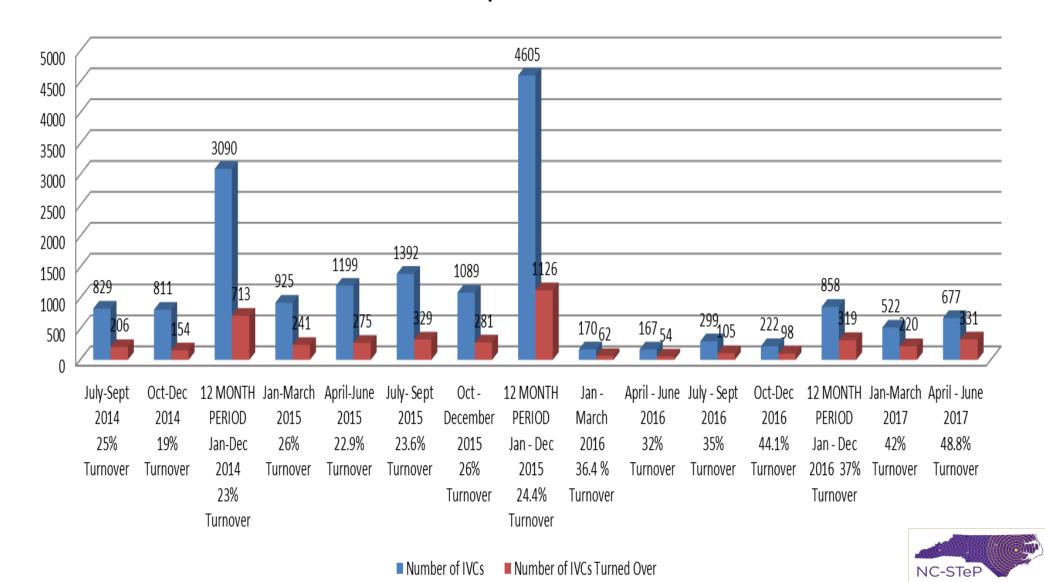
### January - March 2017





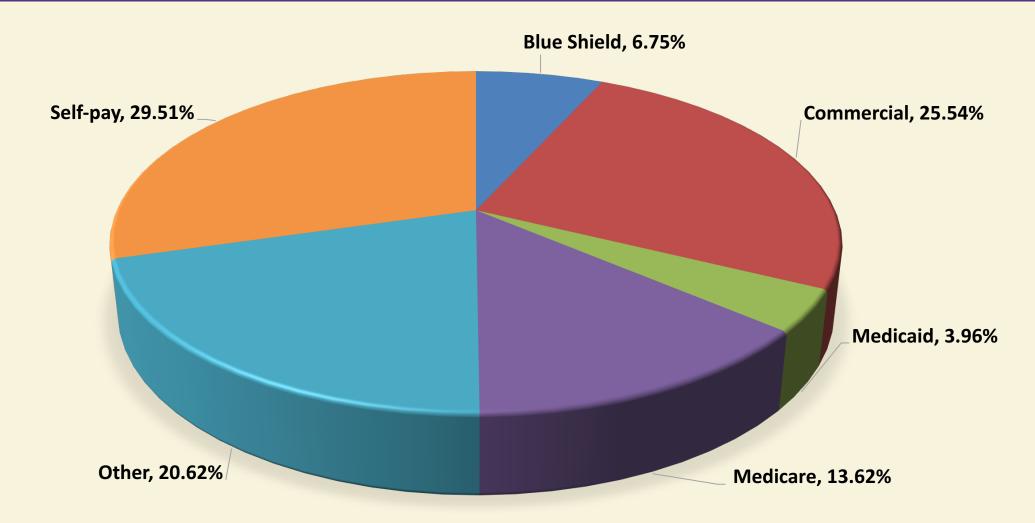


# NC STeP: Number of IVCs for Participating Hospitals by Quarter



### **NC-STeP Charge Mix**

FYTD 2017- Quarter 4

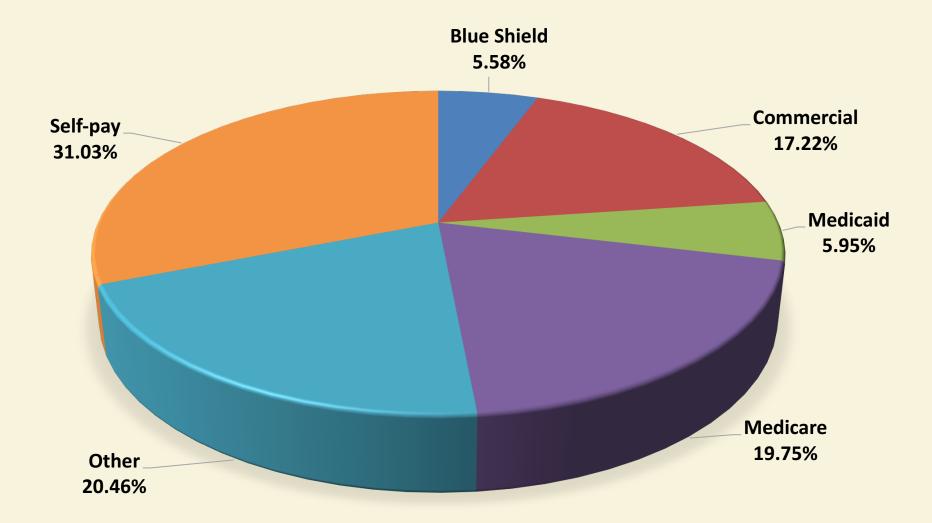






### NC-STeP Charge Mix – Project to Date

Service Dates 10/01/2013 - 06/30/2017







- 62 hospitals in the network. 43 live.
- 26,699 total psychiatry assessments since program inception
- 2,816 IVCs overturned
  - Cumulative return on investment = \$15,066,000
     (from savings from preventing unnecessary hospitalizations)
- High levels of satisfaction
- Six Clinical Providers' Hubs with 36 consultant providers
- Administrative costs below industry's standard
- Over 31% of the patients served had no insurance coverage





# NC-STeP

### Model 1 – Live

Hospital Name	Portal Go Live
Vidant Outer Banks Hospital	8/8/2016
Vidant Bertie Hospital	8/15/2016
Vidant Chowan Hospital	8/15/2016
Vidant Edgecombe Hospital	8/15/2016
Sentara Albemarle Medical Center	8/17/2016
Vidant Beaufort Hospital	8/22/2016
Vidant Duplin Hospital	8/22/2016
Lenoir Memorial Hospital	9/6/2016
St Lukes Hospital	9/7/2016
Wilson Medical Center	9/20/2016
Morehead Memorial Hospital	10/5/2016
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 Dosher Memorial Hospital	1/7/17
Ashe Memorial Hospital	1/26/17
Northern Hospital of Surry County	3/7/17

# NC-STeP

### Model 1 – In Process

Model I — III Process	
Hospital Name	Portal Go Live
Southeastern Regional Medical Center	8/8/17
DLP Haywood Regional Medical Center	Summer 2017
DLP Person Memorial Hospital	Summer 2017
FirstHealth Regional Hospital – Hoke	Summer 2017
FirstHealth Montgomery Memorial Hospital	Summer 2017
FirstHealth Moore Regional Hospital	Summer 2017
FirstHealth Richmond Memorial Hospital	Summer 2017
FirstHealth Sandhills Regional Medical Center	Summer 2017
Halifax Regional Medical Center	Summer 2017
Alleghany Memorial Hospital	Fall 2017
DLP Rutherford Regional Medical Center	Fall 2017
Lake Norman Regional Medical Center	Fall 2017
Pender Memorial Hospital	Fall 2017
Our Community Hospital	Fall 2017



### **Model 1 – Participation Pending**

Hospital Name	Program Status
DLP Central Carolina Hospital	Reviewing Contract
Granville Medical Center	Reviewing Contract
Wayne Memorial Hospital	Reviewing Contract
Pioneer Community Hospital of Stokes	Reviewing Contract
Washington County Hospital	Reviewing Contract

# NC-STeP

## Model 2

Hospital Name	Go Live Date/Status
Cape Fear Valley Medical Center	6/14
Cape Fear Valley Bladen Hospital	7/14
Cone Health Behavioral Health Hospital	7/14
Cone Health MedCenter High Point	7/14
Forsyth Medical Center	7/14
McDowell Hospital	7/14
Mission Hospital	7/14
Novant Health Clemmons Medical Center	7/14
Novant Health Kernersville Medical Center	7/14
Wesley Long Hospital	7/14
Mission Children's Hospital	8/14
Annie Penn Hospital	8/14
Moses H. Cone Memorial Hospital	8/14
Blue Ridge Regional Hospital	9/14
Transylvania Regional Hospital	9/14
Women's Hospital – Cone Health	10/14
Angel Medical Center	1/15
Highlands-Cashiers Hospital	3/15
Novant Health Thomasville Medical Center	3/15
Hugh Chatham Memorial Hospital	12/15
Cape Fear Valley Hoke Hospital	6/16
UNC Johnston, Clayton	6/16
UNC Johnston Smithfield	6/16

# Hospital Status Report as of June 2017 Expressed Possible Interest



Hospital Name	Program Status	NC-STeP Model
Central Harnett Hospital	TBD	TBD
Duke Regional Hospitals	TBD	TBD
Iredell Memorial Hospital	TBD	TBD
Pioneer Community Hospital of Stokes (King & Greene)	TBD	TBD

# Hospital Status Report as of March 2017



### **Terminated**

Hospital Name	Hospital Name	
Carolina East	WakeMed Apex	
Carteret	WakeMed Briar Creek	
Columbus Regional	WakeMed Cary	
Davie Medical	WakeMed Garner	
Lexington	WakeMed North Healthplex	
Martin County General	WakeMed Raleigh	
Nash General Hospital	WakeMed Raleigh Children's ED	
Sampson	WakeMed Psychiatric Observation Unit	

# Hospital Status Report as of March 2017



### **No Information Available**

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





STATEWIDE TELEPSYCHIATRY PROGRAM



