NC- Statewide Telepsychiatry Program

What Do the First 10-Months Data Tell Us

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Joint Legislative Oversight Committee on Health and Human Services October 14, 2014

Mental disorders are common

- An estimated 26.2% of Americans ages 18 and older (about 1 in 4) Americans have a mental disorder in any one year[1].
  - When applied to the 2004 U.S. Census residential population estimate for ages 18 and older, this figure translates to 57.7 million[2].
- The main burden of illness is concentrated in a much smaller proportion — about 6 percent, or 1 in 17 — who suffer from a serious mental illness[1].

1. Kessler RC, Chiu WT, Demler O, Walters EE. Prevalence, severity, and comorbidity of twelve-month DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). Archives of General Psychiatry, 2005 Jun;62(6):617-27.
2. U.S. Census Bureau Population Estimates by Demographic Characteristics. Table 2: Annual Estimates of the Population by Selected Age Groups and Sex for the United States: April 1, 2000 to July 1, 2004 (NC-EST2004-02) Source: Population Division, U.S. Census Bureau Release Date: June 9, 2005. http://www.census.gov/popest/national/asrh/

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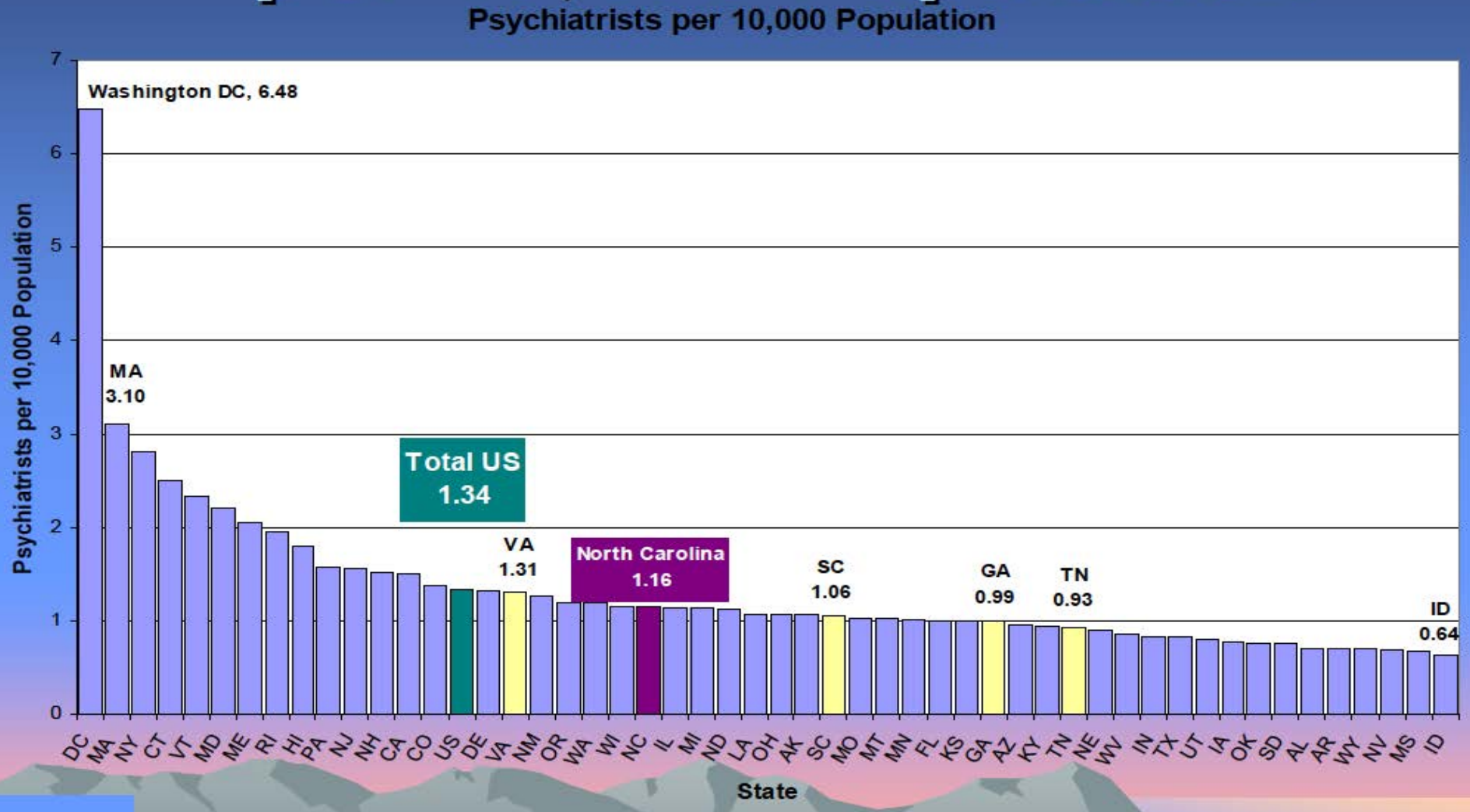
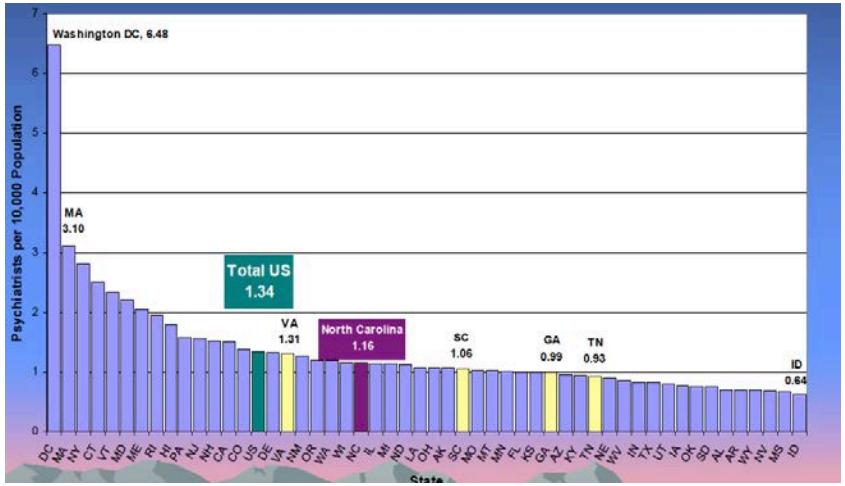
Psychiatrists per 10,000 Population



Source: AMA Masterfile; US Census Bureau (http://www.census.gov/popest/states/tables/NST-EST2005-01.xls, .

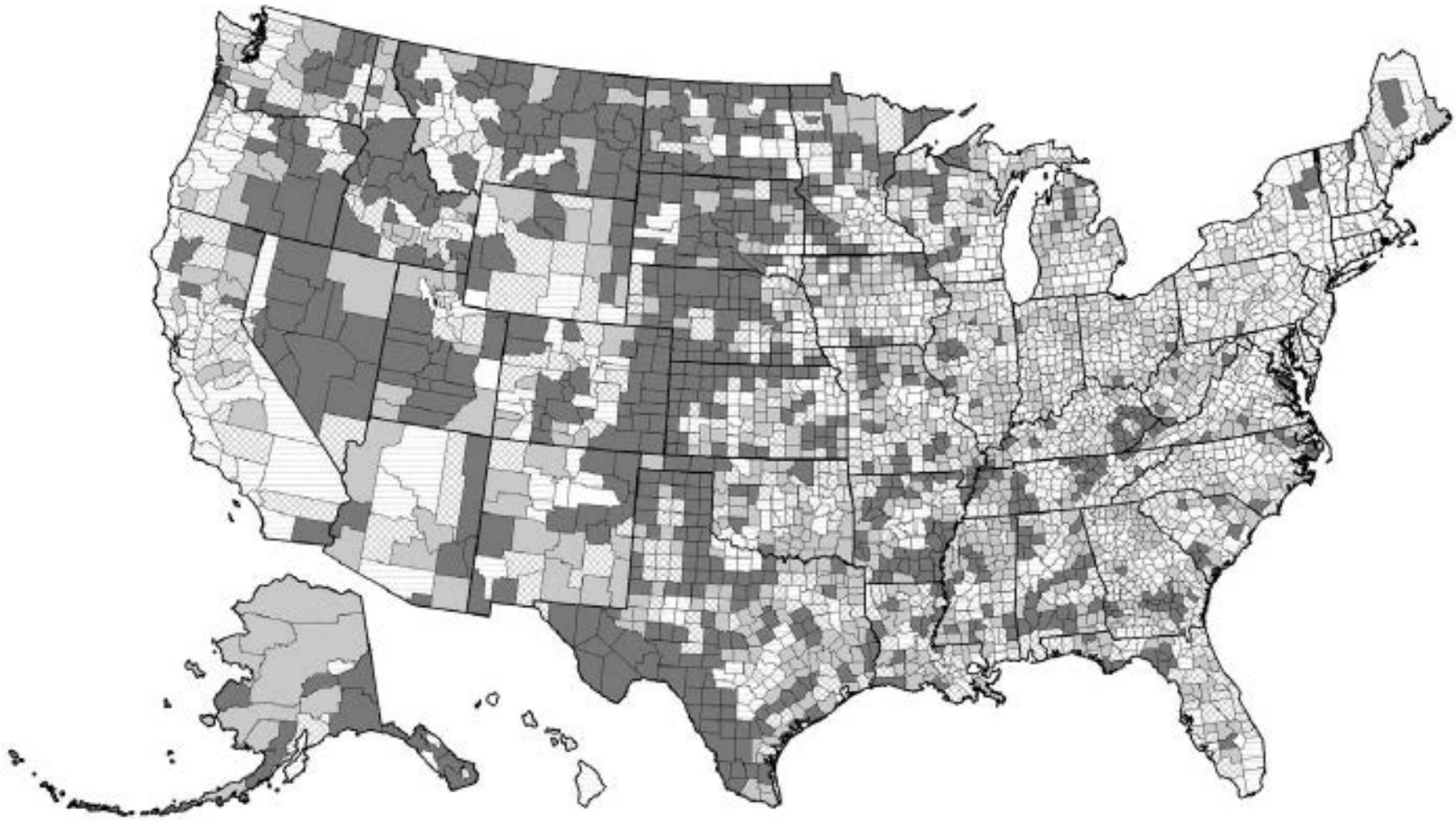
Distribution of psychiatrists statewide is such that many counties have a shortage

- 17 out of 100 counties in NC have no psychiatrists
- 58 out of 100 counties have a shortage of MH services
  - According to federal guidelines, 58 counties in North Carolina qualify as Health Professional Shortage Areas because of shortages of mental health providers to meet population needs.



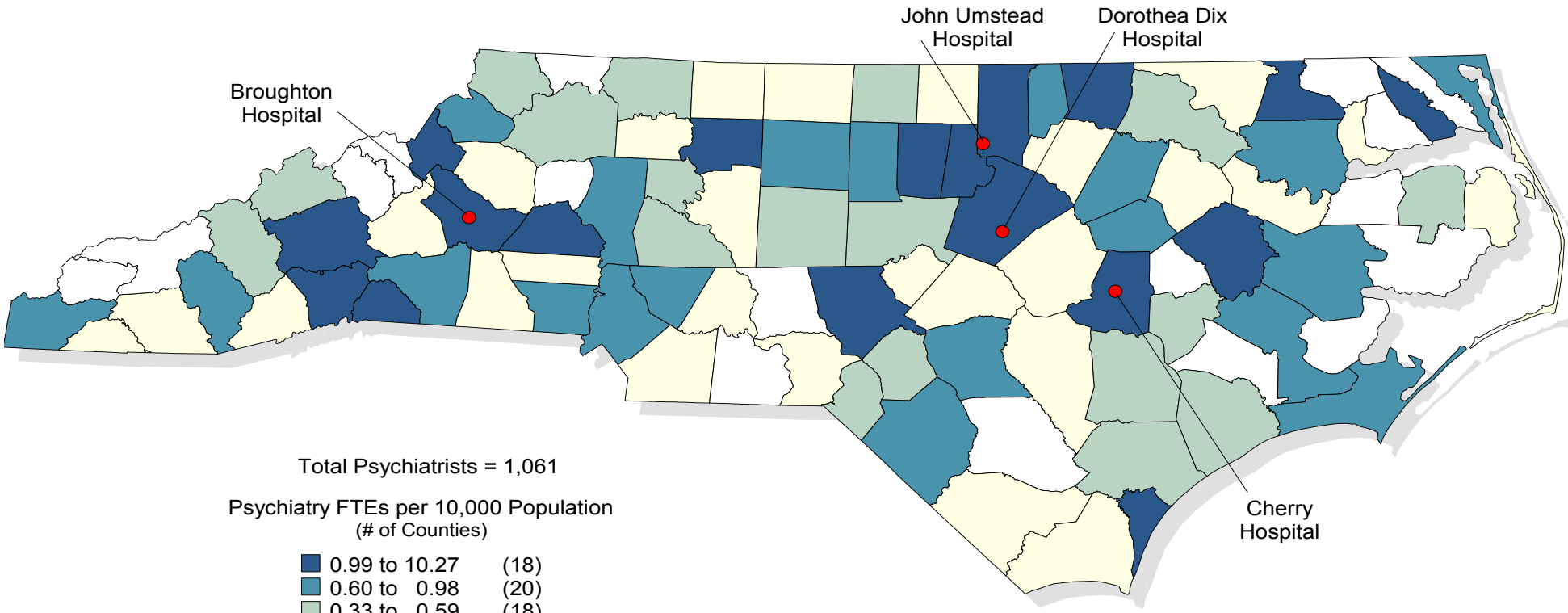
Unmet need for mental health professionals among counties with an overall shortage[a]

PSYCHIATRIC SERVICES October 2009 Vol. 60 No. 10 1323



Darker shades signify counties with a high percentage of unmet need

Psychiatrist Full-Time Equivalents per 10,000 Population
North Carolina, 2004



Source: LINC, 2005; North Carolina Health Professions Data System, with data derived from the North Carolina Medical Board, 2004; NC DHHS, MHDDSAS, 2005.

Produced by: North Carolina Health Professions Data System,Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

*Psychiatrists include active (or unknown activity status), instate,nonfederal, non-resident-in-training physicians who indicate a primary specialty of psychiatry, child psychiatry, psychoanalysis, psychosomatic med, addiction/chemical dependency, forensic psychiatry, or geriatric psychiatry, and secondary specialties in child psychiatry and forensic psychiatry.

Where can you go if you do not have access to community-based behavioral health care?

In recent years North Carolina has seen high emergency department admissions related to behavioral health issues and extended lengths of stays (LOS), ranging from long hours to multiple days[1].

1) Akland, G. & Akland, A. (2010). State psychiatric hospital admission delays in North Carolina. Retrieved from http://naminc.org/nn/publications/namiwakerpt.pdf. (Accessed October 2, 2014)

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The majority of NC Emergency Departments do not have access to a full-time psychiatrist

- Currently, there are 108 hospitals with either single ED's, or in some cases, multiple site ED's across the state with varying degrees of psychiatric coverage.

- The majority of ED's do not have access to a full-time psychiatrist.

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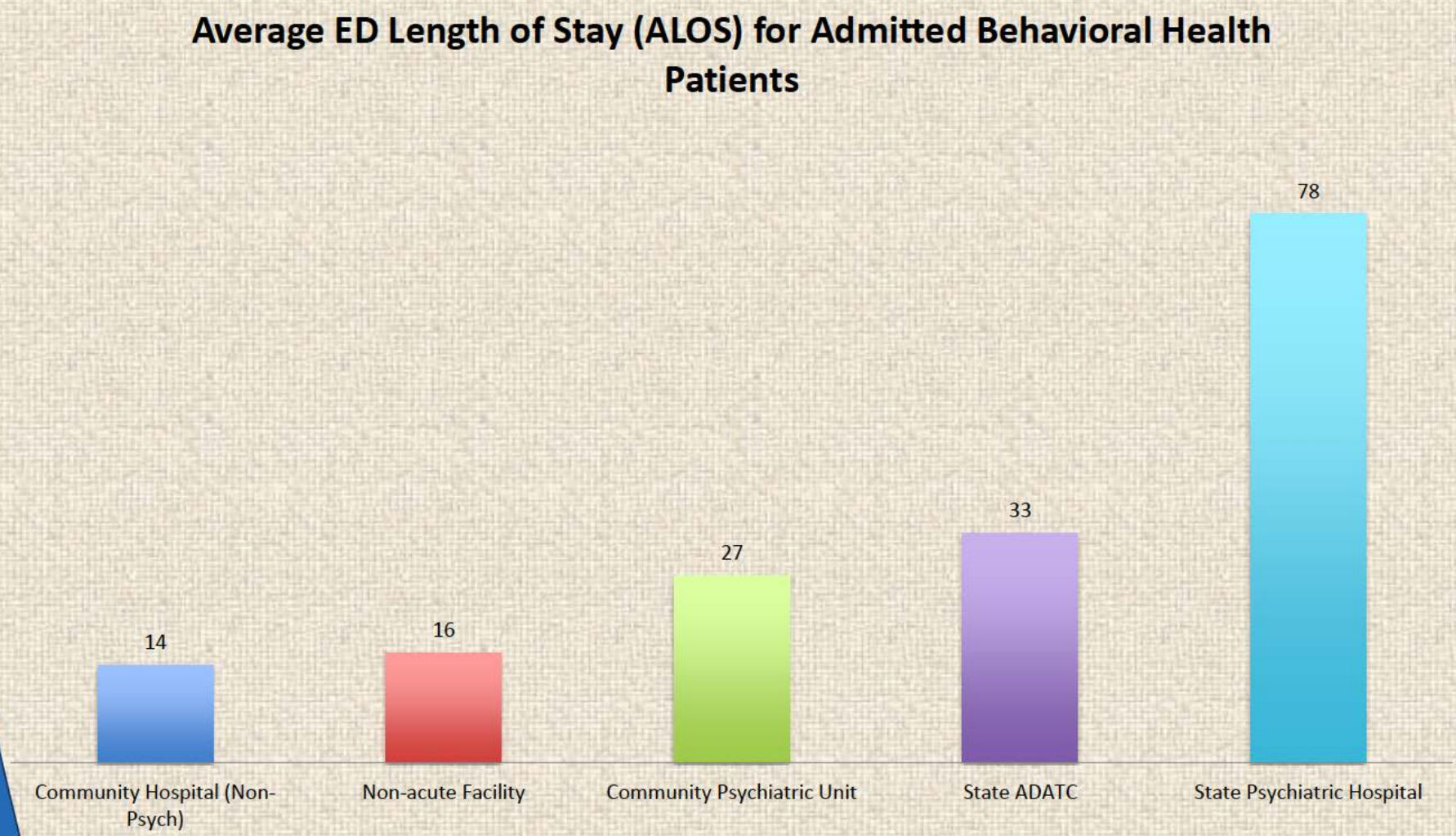
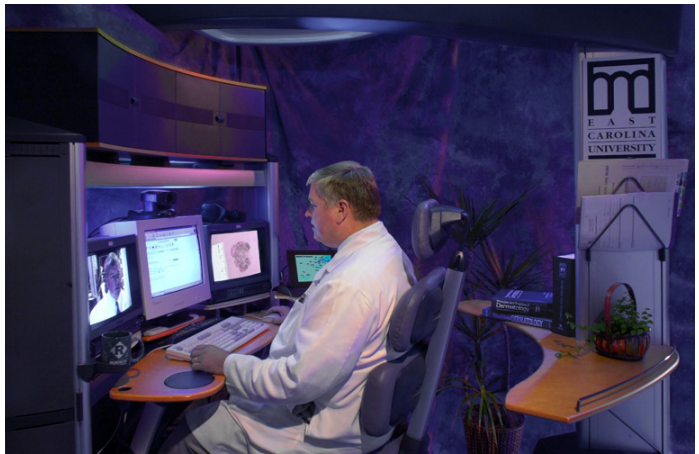
How Long Does It Take to Place BH Patients From NC Hospital EDs?



Source: NCHA ED Tracker. 2012 Data.

Telepsychiatry can offer help!

Telepsychiatry is defined in the statute as *the delivery of acute mental health or substance abuse care, including diagnosis or treatment, by means of two-way real-time interactive audio and video by a consulting provider at a consultant site to an individual patient at a referring site.*



Demonstrated Benefits of Telepsychiatry

(Saeed SA, Diamond J, Bloch RM. (2011)

- ↑ access to mental health services
- ↓ geographic health disparities
- ↑ consumer convenience
- ↓ professional isolation
- ↑ recruiting and retaining MH professionals in underserved
- Improved consumer compliance.
- Improved education of mental health professionals.
- Improved coordination of care across mental health system.
- Reduction of stigma associated with receiving mental health services.

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GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2013

SESSION LAW 2013-360
SENATE BILL 402

ESTABLISH STATEWIDE TELEPSYCHIATRY PROGRAM

SECTION 12A.2B.(a) By no later than August 15, 2013, the Office of Rural Health and Community Care of the Department of Health and Human Services shall develop and submit to the Senate Appropriations Committee on Health and Human Services, the House Appropriations Subcommittee on Health and Human Services, the Joint Legislative Oversight Committee on Health and Human Services, and the Fiscal Research Division a plan to implement a statewide telepsychiatry program to be administered by East Carolina University Center for Telepsychiatry and e-Behavioral Health (ECU Center for Telepsychiatry) pursuant to a contract between the Department and ECU Center for Telepsychiatry. The plan shall be substantially similar to the Albemarle Hospital Foundation telepsychiatry project currently operating in 14 hospitals in eastern North Carolina and shall allow all hospitals licensed to operate in the State under Chapter 131E or Chapter 122C of the General Statutes to participate in the telepsychiatry program, either as a consultant site or as a referring site. As used in this section, the terms "consultant site" and "referring site" are as defined in G.S. 143B-139.4B(a).

NC- STeP Vision

If an individual experiencing an acute behavioral health crisis enters an emergency department, s/he will receive timely specialized psychiatric treatment through the statewide network in coordination with available and appropriate clinically relevant community resources.

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NC-STeP Status as of October 2014

- 50 hospitals in network
  - 37 hospitals currently live (24 reporting during the period)
  - 13 additional hospitals scheduled to go live in October 2014, contracts executed in equipment already in place.
- Five Clinical Providers' Hubs
    - Coastal Carolina Neuropsychiatry
    - Cone Health
    - Novant
    - Monarch
    - Mission

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Program Timeline Required by the Legislative Plan
January – March 2014

Timeline	Result
Contracts with the remaining 9 hospitals on the AHF wait list are executed.	**Contracts executed with 10 hospitals - Novant (4) and Cone Health (6)**
6 hospitals from the wait list "Go Live" with telepsychiatry (total in network = 24).	**4 went live (Nash, Lenoir, Cape Fear and Cape Fear Valley Bladen – (22 in network)**
14 new hospitals secured to participate in the network (i.e. contracts, provider credentialing initiated, equipment ordered).	**14 new referral sites secured.**
ECU submits first quarterly performance report to ORHCC.	**Completed**
Contracts with 3 to 5 new providers secured.	**6 new hospital contracts under negotiations, 1 new Provider contract executed (Cape Fear)**
Apply for Duke Endowment funding.	**Application submitted**
Year 2 budget prepared.	**Completed**

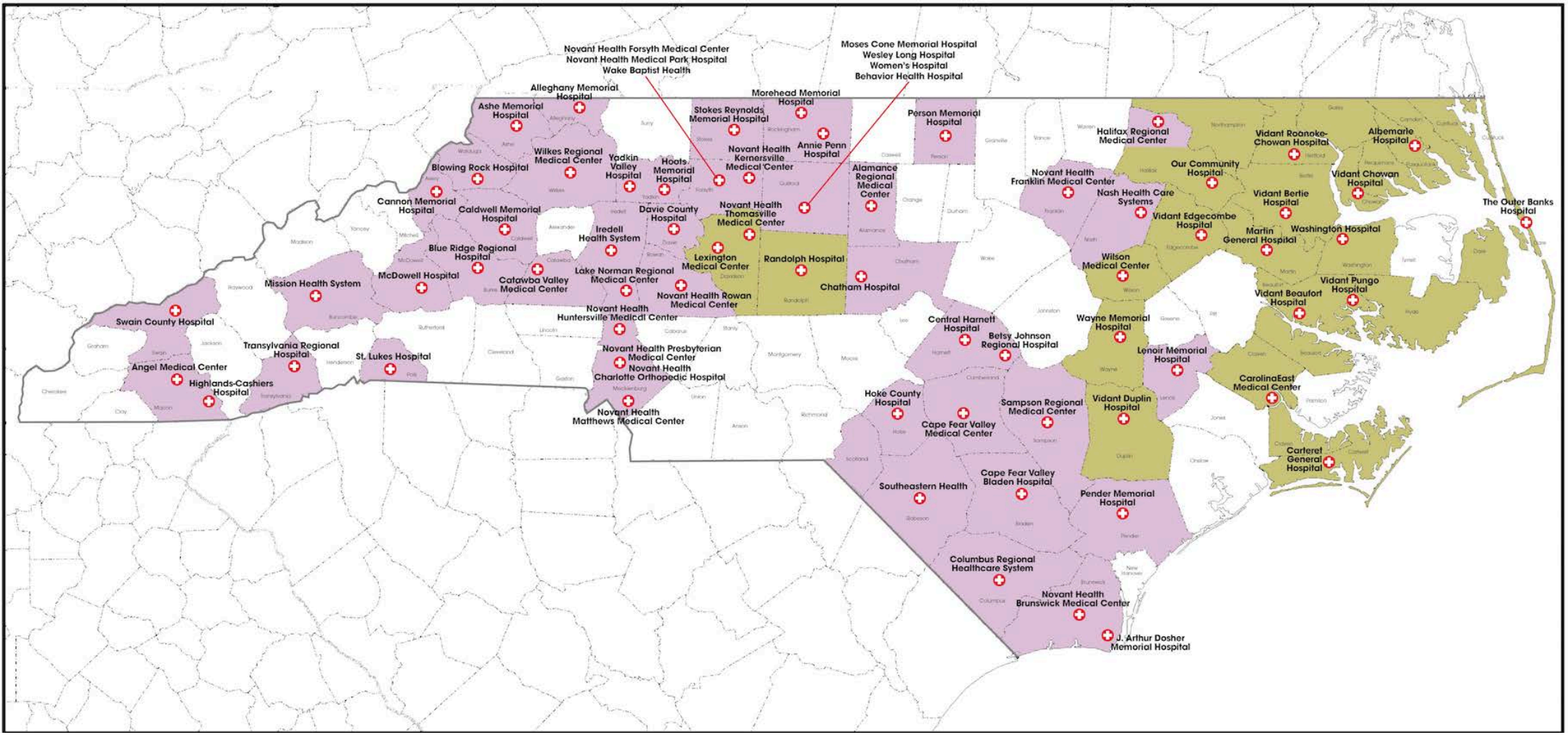
Program Timeline Required by the Legislative Plan
April – June 2014

Timeline	Result
Seven hospitals "Go Live" (total in network = 31).	**8 went live – 30 in network (2 delayed to second week of August)**
14 additional referral sites recruited to participate in the network (i.e. contracts, provider credentialing initiated, equipment ordered).	**16 new referral sites recruited to participate.**
ECU submits quarterly performance report and financial statements to DHHS Office of Rural Health and Community Care.	**Completed**
Contracts with three to five new referral sites secured.	**19 hospital contracts under negotiations, and Contracts with 4 additional Provider sites executed (Novant, Mission, Cone Health, and Monarch)**
Duke Endowment funds awarded (to be determined).	**Grant awarded**

Program Timeline Required by the Legislative Plan
July – September 2014

Timeline	Result
Seven referral sites "Go Live" (total in network= 38).	**50 hospitals in network (37 hospital live as of October 7. Another 13 hospitals scheduled to go live by the end of the month, contracts executed and equipment already in place**
ECU submits quarterly performance report and financial statements to DHHS Office of Rural Health and Community Care.	**Completed**
ECU submits annual performance report and financial statements of ECU Center for Telepsychiatry to DHHS Office of Rural Health and Community Care.	**Will be submitted by the end of October. Drafts already presented and discussed.**
Contracts with three to five new referral sites secured	**11 additional referral sites in contract negotiations**

NC-STeP Status - October 2013



Hospitals with NC-STeP Live

Hospitals with NC-STeP in the Process of Going Live

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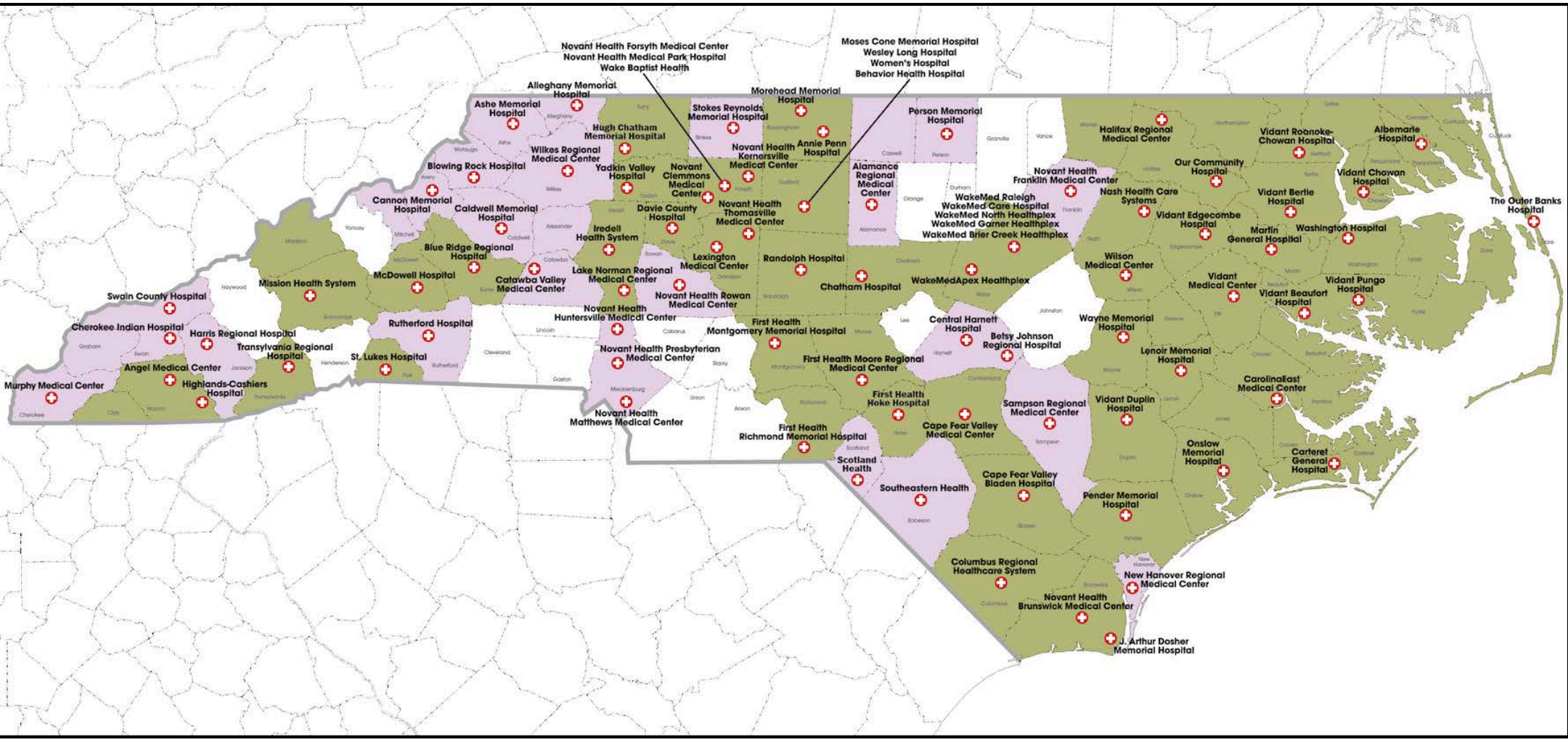
NC-STeP Status - October 2014



Hospitals with NC-STeP Live

Hospitals with NC-STeP in the Process of Going Live

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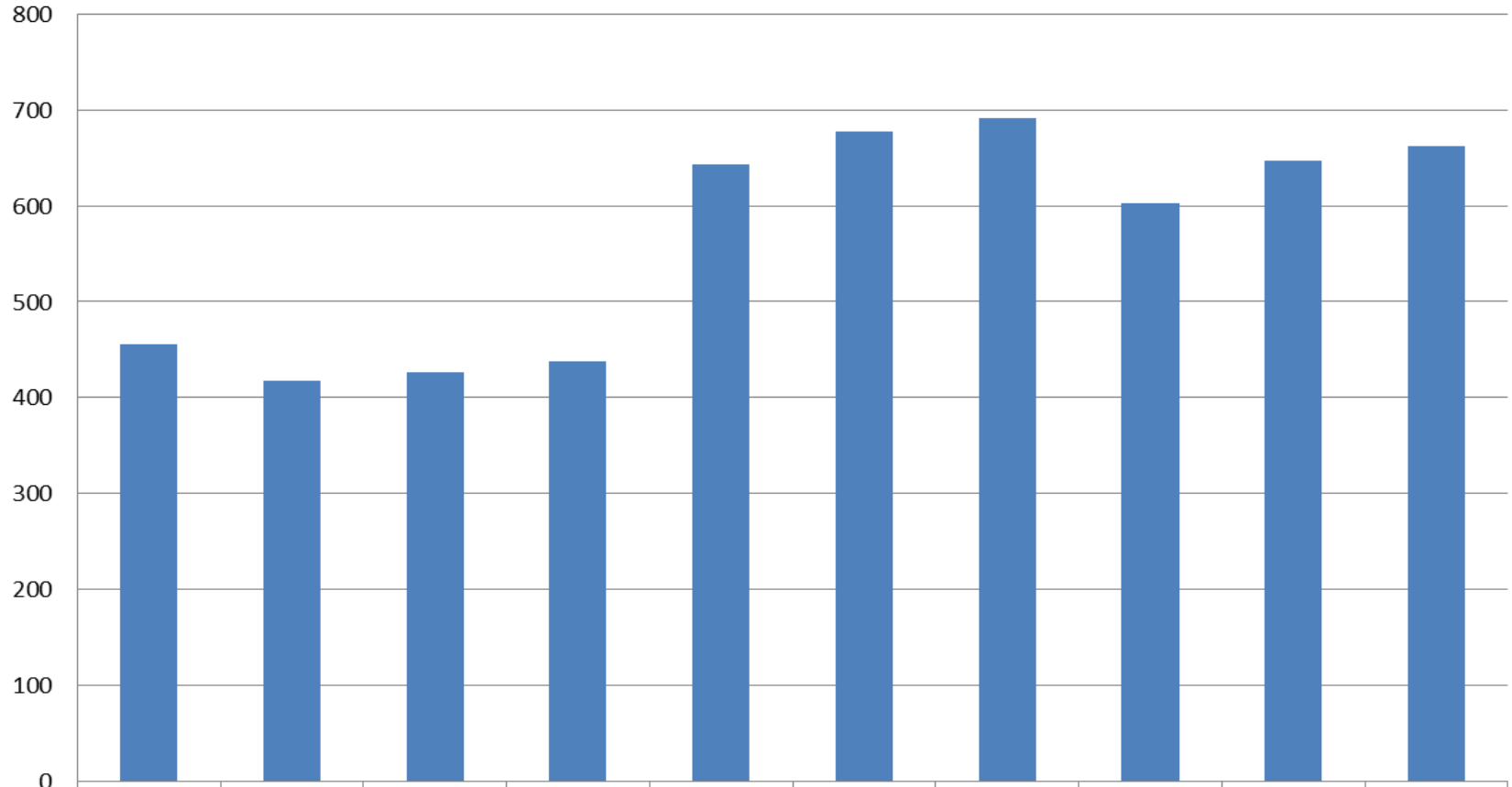
NC STeP Number of Total Assessments Billed by Month (November 2013 - August 2014)



	November	December	January	February	March	April	May	June	July	August
Number of Total Assessments Billed	456	418	427	438	643	678	692	603	647	662

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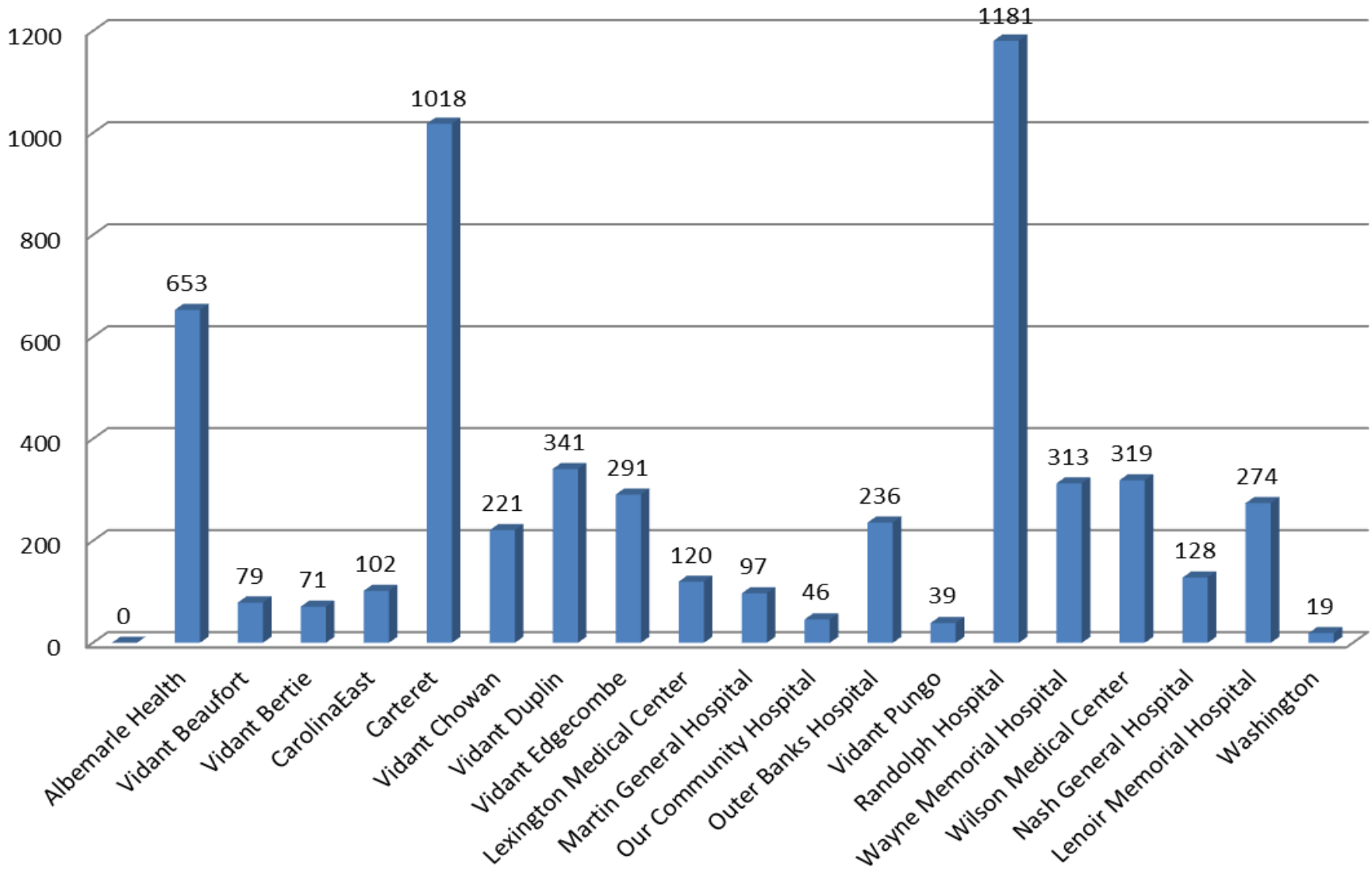
NC STeP Total Assessments by Hospital for 10 Month Period



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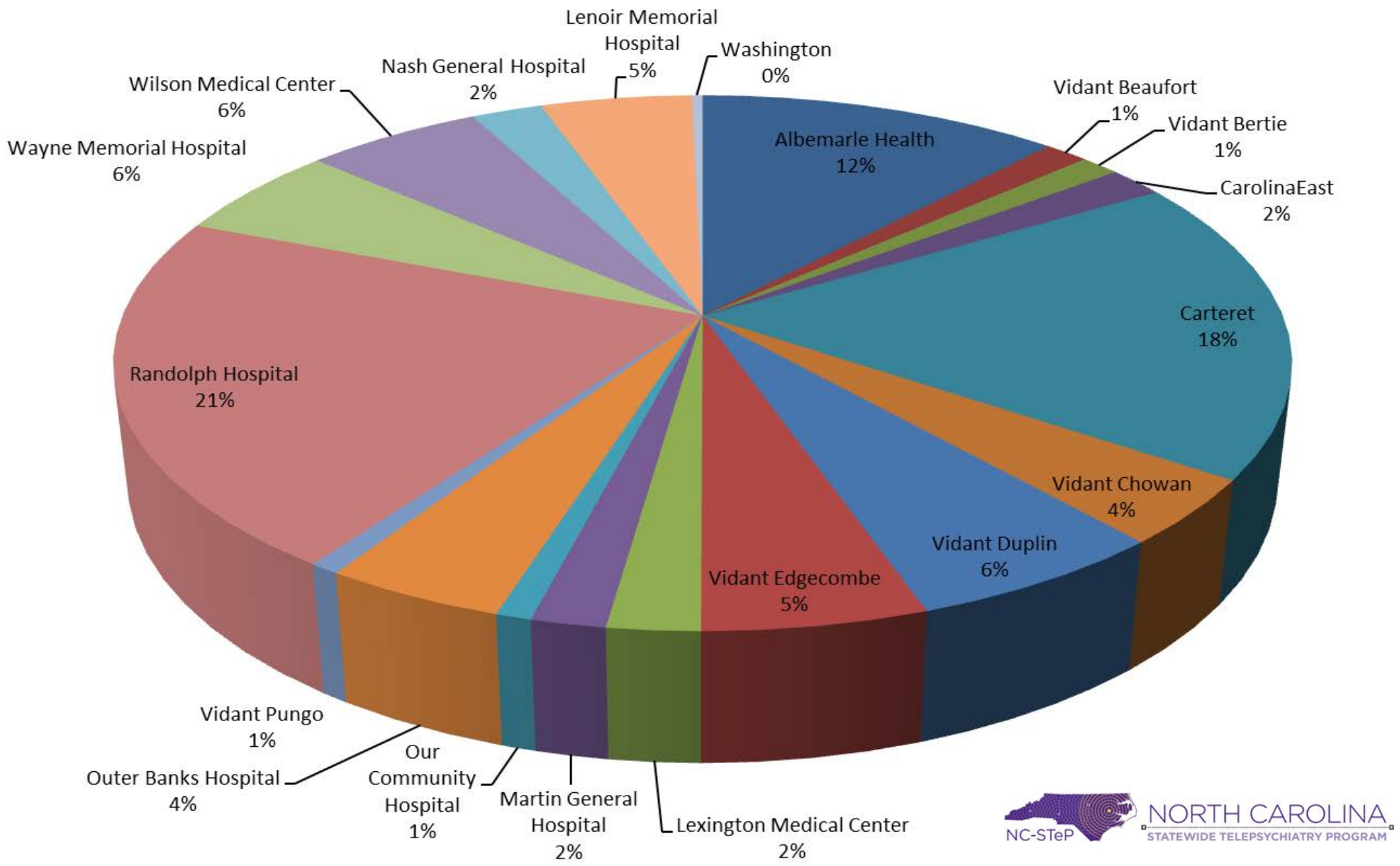
NC STeP Assessments by Hospital over 10 Months



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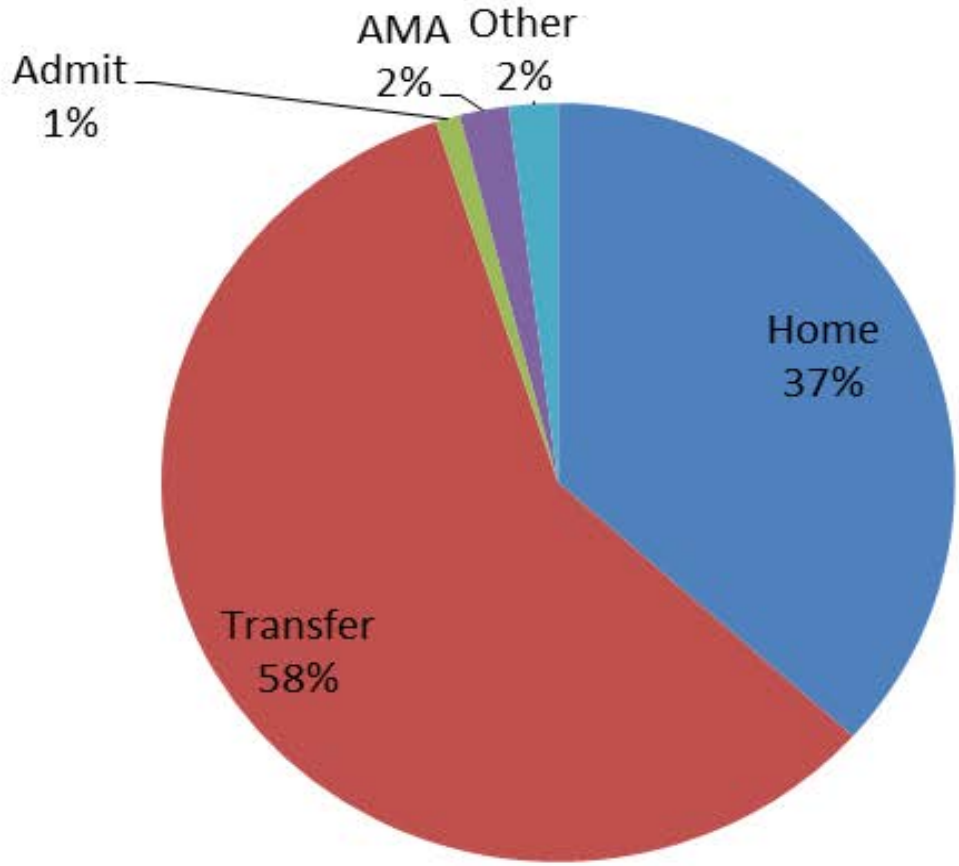
NC STeP Patients over 10 Months
Percent by Discharge Disposition



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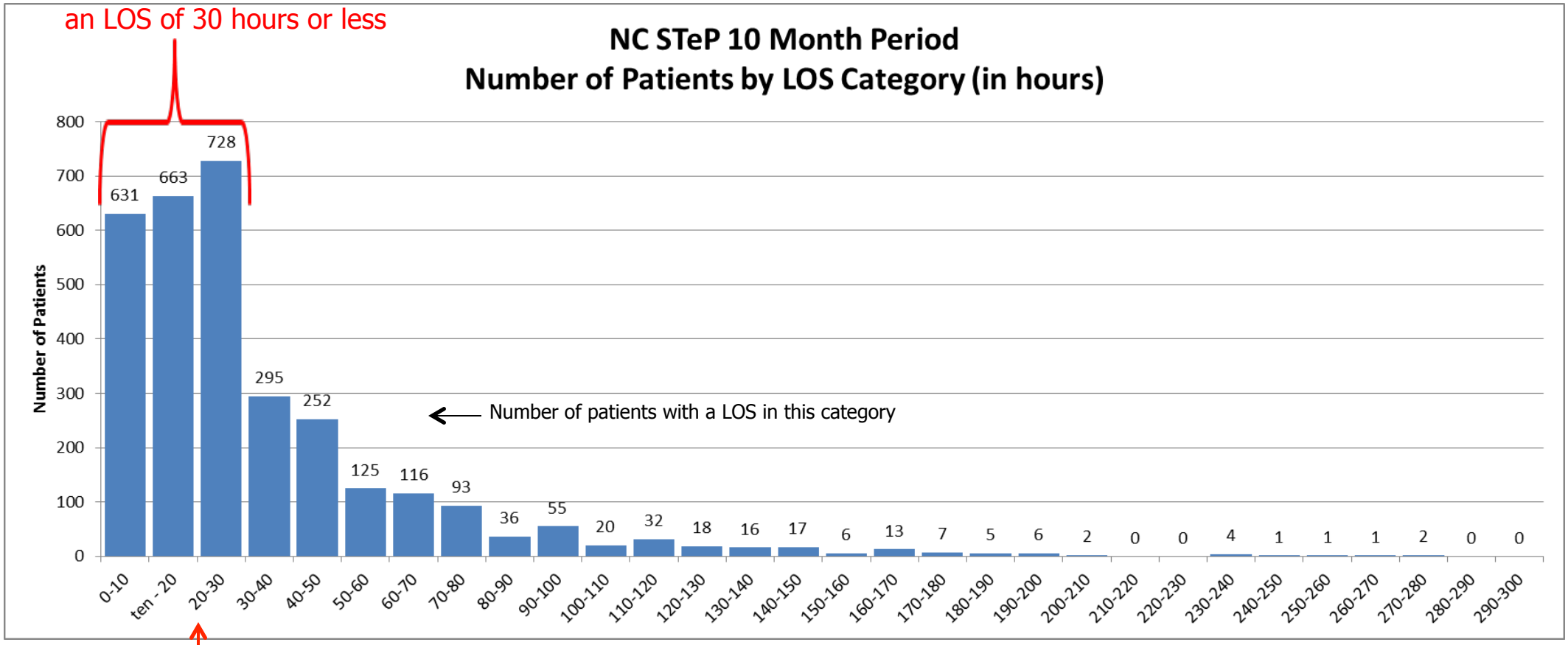
64% percent of patients had an LOS of 30 hours or less



Median Length of Stay for 10 Month Period = 23.1 Hours

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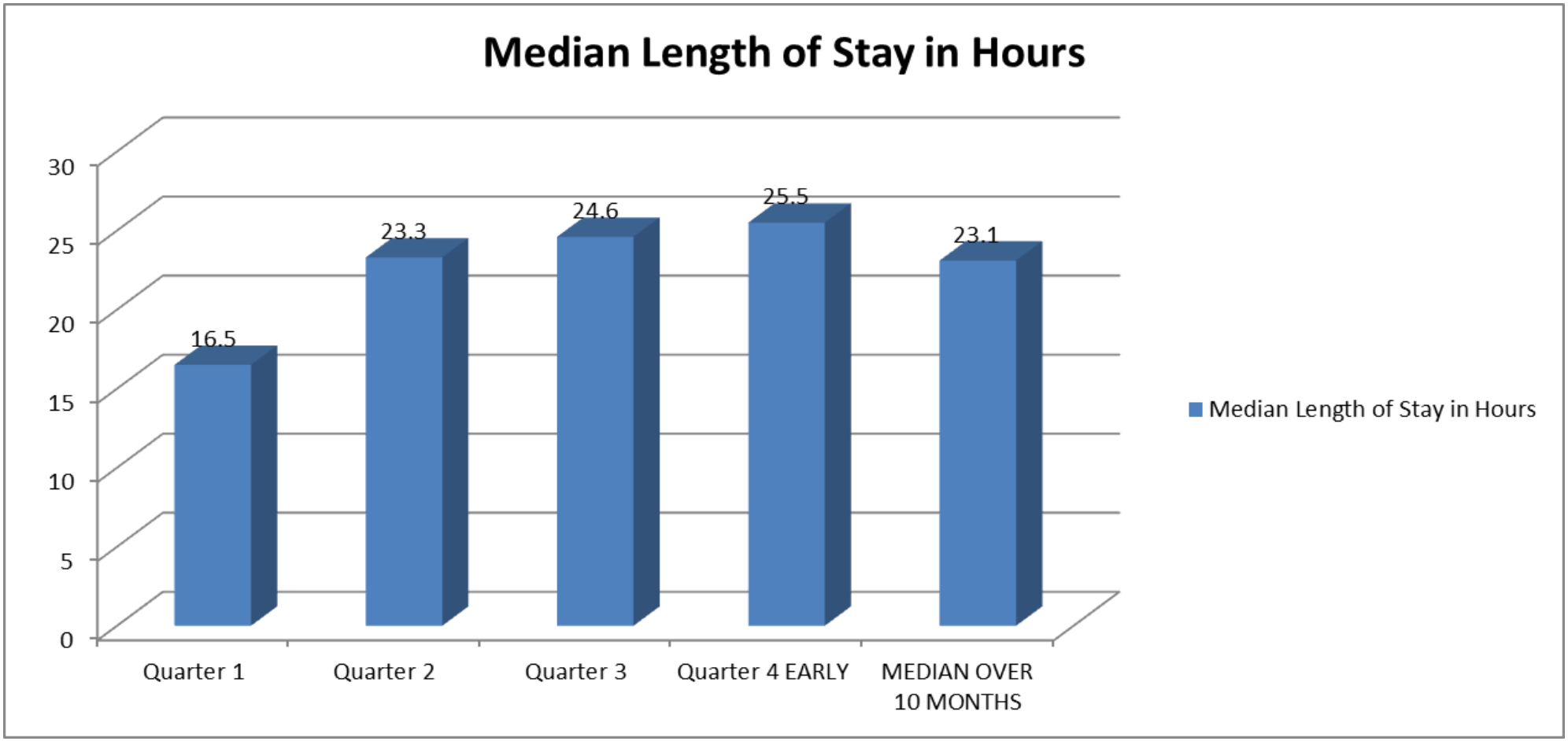

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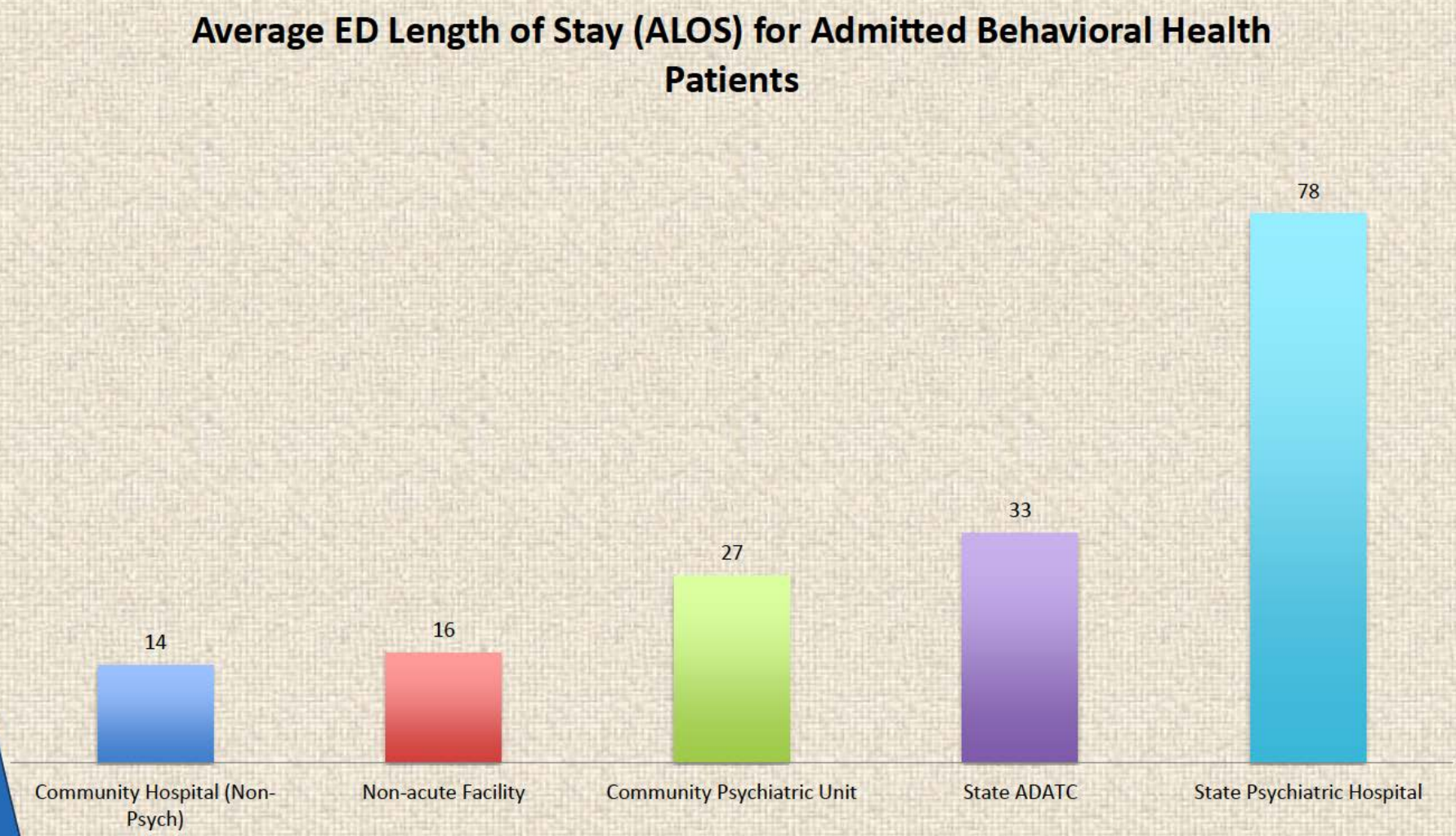
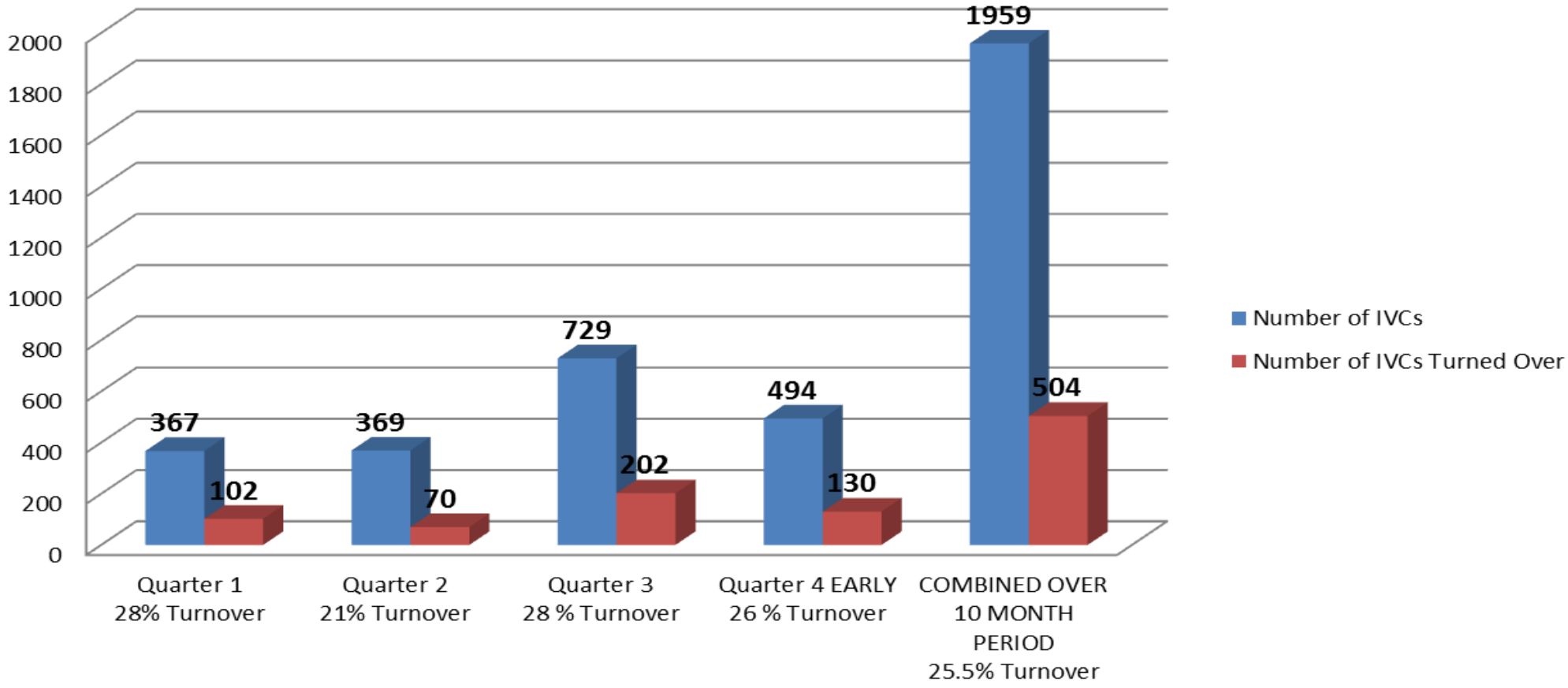
How Long Does It Take to Place BH Patients From NC Hospital EDs?



Source: NCHA ED Tracker. 2012 Data.

NC STeP: Number of IVCs by Quarter and for 10 Month Period for Participating Hospitals



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Program Outcomes Summary

- NC-STeP is either ahead of schedule or on time with all of the legislatively defined timelines.
- 37 hospitals live (24 hospitals reporting during the period).
- 13 additional hospitals scheduled to go live in October 2014, contracts executed in equipment already in place.
- Over 6000 encounters since November 2013
- The median length of stay for all ED patients who received telepsychiatry services during this quarter was 23.1 hours

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Program Outcomes Summary

- 1959 ED patients who received telepsychiatry services had an IVC in place during their ED stay.
  - 504 (25.5%) of these patients did not have an IVC at discharge.
- Of the ED patients who received telepsychiatry services, 37% were discharged to home. 58% were discharged to another facility.
  - This was an average; the percent varied quite a bit across different hospitals.

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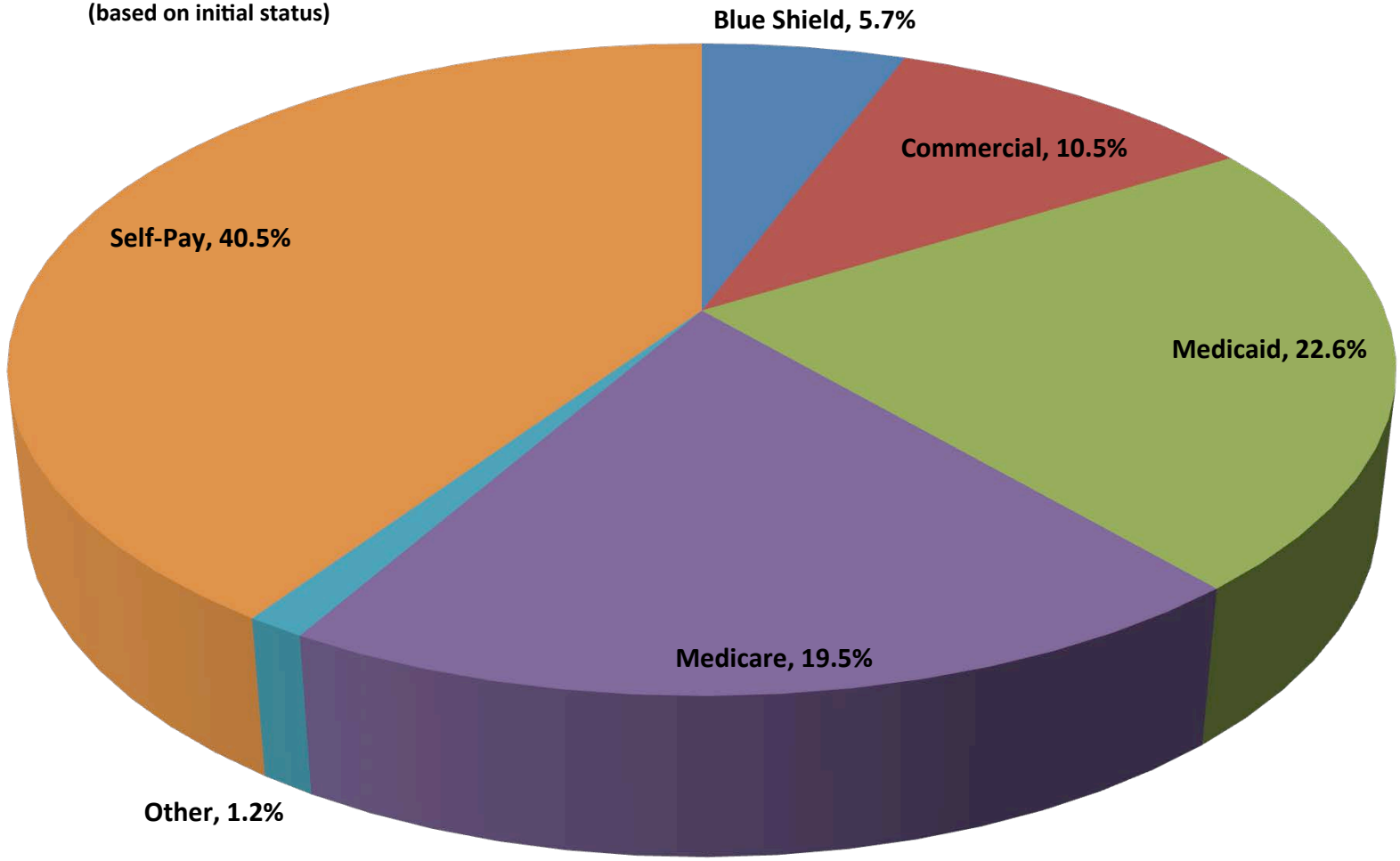
FY 2014
NCSTeP - Payor Mix
(based on initial status)



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If you are a business and

40% of the people who purchased your product did not pay you anything?

AND

Another 40% paid you below your cost

Can you sustain your business?

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Draft

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SUSTAINABILITY BUDGET
September 2014

	FY 2014 ACTUAL	FY 2015 - BUDGET	FY 2016 - BUDGET	FY 2017 - BUDGET
	TOTAL	TOTAL	TOTAL	TOTAL
REVENUE				
Duke Endowment Grant	-	725,000	625,000	-
DHHS Contract	595,743	3,404,257	-	-
Hospital Subscription Fees	89,920	605,786	775,111	775,111
Hospital Placement Fees	23,553	78,040	-	-
FFS Reimbursement	71,555	1,111,301	1,094,989	1,094,989
(1) Indigent Cost Recovery	60,000	499,160	-	-
TOTAL REVENUE	840,771	6,423,545	2,495,099	1,870,099
EXPENSE				
Salaries	84,223	192,976	192,976	192,976
Benefits	20,572	47,424	47,424	47,424
ORHCC Admin Support	-	-	-	-
Staff Development	-	-	-	-
Equipment Purchase	130,435	974,472	5,000	5,000
Travel	9,491	26,450	10,000	10,000
WEB Portal HIE	-	1,513,668	290,000	290,000
Billing , Contracts, Credent.	104,747	304,958	385,523	385,523
Implement & Mgmt.	221,311	380,000	215,000	200,000
Professional Medical Svcs	332,040	1,524,125	1,923,326	1,923,326
Placement Services	57,936	75,000	-	-
Provider Support Services	54,865	468,331	521,000	510,000
Indigent care	-	499,160	-	-
Office space	-	15,000	15,000	15,000
Knowledge Creation & Dist.	-	200,000	200,000	-
TOTAL EXPENSE	1,015,620	6,221,564	3,805,249	3,579,249
NET	(174,849)	247,980	(1,310,149)	(1,709,149)

(1) indigent care projected by FY: FY2015 @ 32% = $522,965; FY 2016 @ 47% = $971,027; FY 2017 @ 47% = $971,027

Administrative cost includes project direction & administration; patient claims management; credentialing; hospital & provider contract management including related legal, risk, compliance, billing and A/R, and MCO contract modifications.

Admin. % Total	42%	15%	22%	23%

Who are the beneficiaries?
(Who should pay for it?)

Entity	Cost Savings
Patients and Families	How to quantify reduced distress/disability, functional improvement, quality of life, gainful employment, etc.
Communities	How to quantify better "citizenship", reduced homelessness, crime reduction, more self reliance, etc.
NC-Medicaid + "Indigent Care" (? MCOs)	NC State projected cost savings from over turned IVC's for self-pay and Medicaid =$4,441,239 Cost savings from reduced recidivism = ?
Third Party Payors	Projected cost savings from overturned IVC's = $1,133,261 Cost savings from reduced recidivism + ?
Sheriff Department	Projected cost savings to Sheriff Department from overturned IVCs= $535,404
Hospitals	Costs savings from increased throughput in the ED.
Clinical Providers?	Providers getting paid 90% of Medicaid!

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COST / BENEFIT ANALYSIS
September 2014

	FY 2014 ACTUAL	FY 2015 BUDGET	FY 2016 BUDGET	FY 2017 BUDGET
Total Encounters & IVC's				
Total encounters	4,374	18,323	23,344	23,344
Total IVC's	1,341	5,618	7,157	7,157
% IVC's overturned	26%	26%	26%	26%
Payor Mix				
Self-pay & M'caid %	63.17%	63.17%	63.17%	63.17%
Commercial & Blue Shield %	16.12%	16.12%	16.12%	16.12%
Other %	1.19%	1.19%	1.19%	1.19%
Medicare %	19.52%	19.52%	19.52%	19.52%
Average Hospital Cost per IVC				
(1) Average cost per inpatient day	$ 762	$ 762	$ 762	$ 762
(2) LOS per IVC inpatient stay	5.0	5.0	5.0	5.0
Average hospital inpatient cost per IVC	$ 3,808	$ 3,808	$ 3,808	$ 3,808
Hospitalization Savings From Overturned IVC's				
Self-pay & Medicaid %	832,160	3,485,976	4,441,239	4,441,239
Commercial & Blue Shield	212,340	889,509	1,133,261	1,133,261
Other	15,706	65,794	83,824	83,824
Medicare	257,189	1,077,383	1,372,618	1,372,618
Savings from IVC's overtutned	1,317,395	5,518,662	7,030,941	7,030,941
Sheriff Dept Savings From Overturned IVC's				
(3) Sheriff cost per IVC $ 289.94				
Sheriff dept. savings from IVC's overturned	$ 100,319	$ 420,244	$ 535,404	$ 535,404
Return On Investment				
Sustainability funding required			$ (1,310,149)	$ (1,709,149)
Net savings to delivery system			6,256,196	5,857,196

(1) Average cost based on: 2013 DHHS Study Exploring the Cost and Feasibility of A New Psychiatric Facility $600; Medicaid per diem $1,196; LME/MCO prevailing rate $500; IPRS 3 way bed rate rate $750.

(2) Per NCHA 2012

(3) Sheriff depts. savings based on 2012 legislative oversight presentation. Pasquotank County data used as proxy.

Proposed Sustainability Model

Revenue Source	Amount
Revenue from Receipts	$1,094,989
Hospitals • Pay for increased throughput through subscription fees	$775,111
State of North Carolina • MCOs pay for indigent care • Medicaid pays from the savings from the overturned IVCs and reduced recidivism	$1,709,149
Total Funding	**$3,579,249**
Total Expense	**$3,579,249**

Opportunities

- While telepsychiatry makes it possible to transcend geographical boundaries and utilize workforce nationally, even globally, we'll never be successful in resolving NC workforce shortages if our MH workforce was located outside our geographical boundaries.
- We must build capacity for caring for these patients in our communities.
  - Creating collaborative linkages across continuums of care
- NC-STeP can be expanded to taking care of patients in community-based settings.

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Opportunities

- NC-STeP is positioned well to create collaborative linkages and develop innovative models of mental health care:
  - EDs and Hospitals
  - Communities-based mental health providers
  - Primary Care Providers
  - FQHCs and Public Health Clinics
  - Others
- NC-STeP web portal, accessible by participating providers, as a central point for coordinated care.
- Evidence-based practices to make recovery possible.

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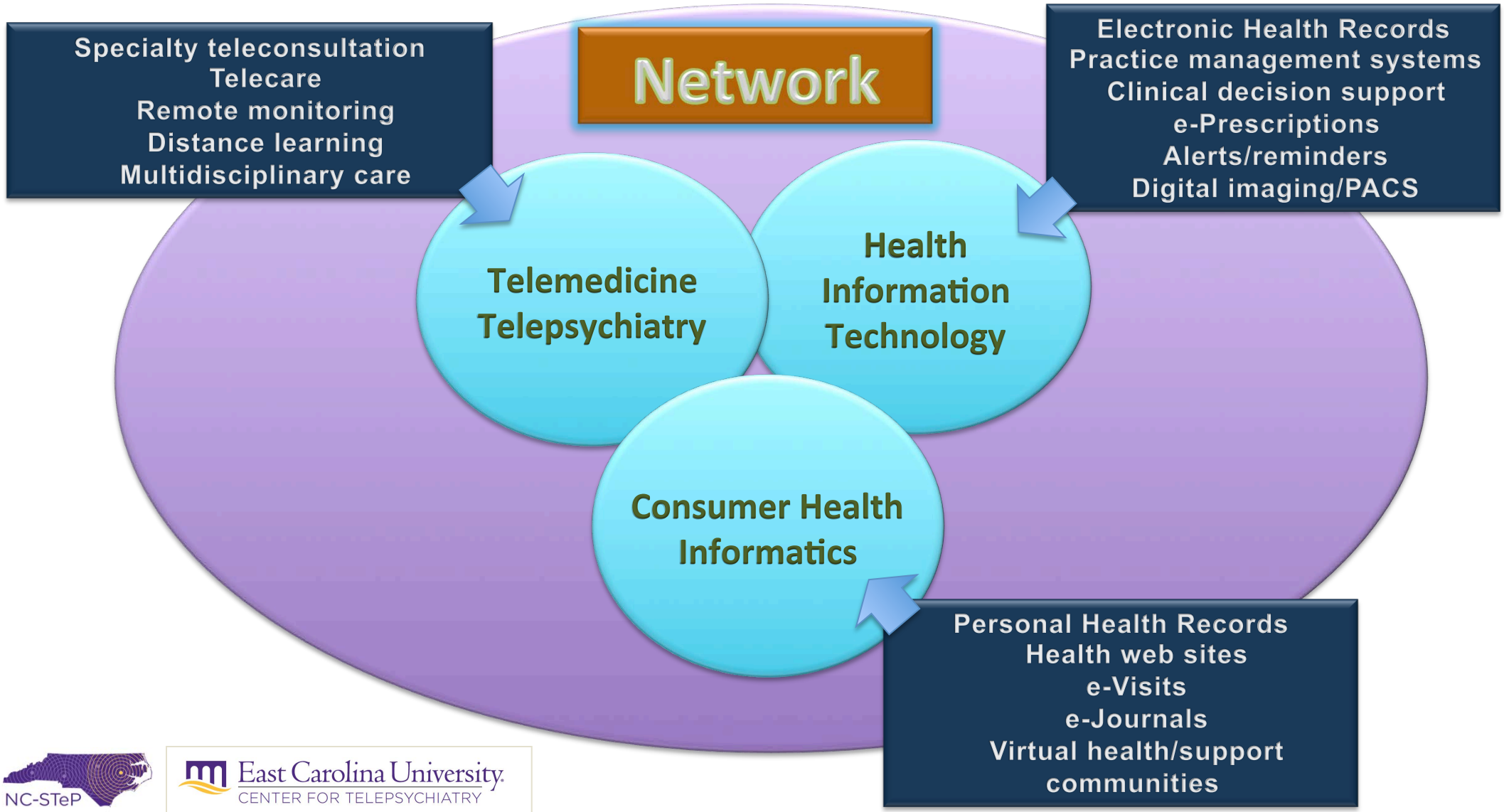
Opportunities

- The current program is not funded for seizing the opportunities to build capacity by:
  - taking care of patients in community-based settings.
  - creating collaborative linkages across continuums of care
- NC-STeP has the capability, and workable models, to expand to the community-based settings, if funded.

Connected Health



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Joint Legislative Oversight Committee on Health and Human Services October 14, 2014