Building a Statewide Telepsychiatry Network:
The NC Statewide Telepsychiatry Program (NC-STeP)

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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].
  - 66 million adults, when applied to the 2018 U.S. Census residential population estimate.[2]
- About 6 percent, or 1 in 17 (15.12 million), suffer from a serious mental illness.[1]
- Four of the ten leading causes of disability—major depression, bipolar disorder, schizophrenia, and obsessive-compulsive disorder—are mental illnesses.

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. https://www.census.gov/quickfacts/fact/table/US/PST045217. ACCESSED September 25, 2018.

Overview of National Behavioral Health Landscape

Behavioral Health Needs Are Growing

18% of adults have a mental illness

8% of adults have a substance abuse disorder

But only 50% receive treatment

68% with a mental health disorder also have 1 or more medical conditions

29% of adults with a chronic medical condition have a comorbid mental disorder

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North Carolina Behavioral Health Landscape

- Only 45.3% of adults with mental illness in North Carolina receive any form of treatment from either the public system or private providers. The remaining 54.7% receive no mental health treatment.[1]
- According to Mental Health America, North Carolina is ranked 33 out of the 50 states and Washington D.C. for providing access to mental health services.[2]

1. SAMHSA
2. Mental Health Resources in North Carolina. Accessed March 12, 2021 at: https://www.rtor.org/directory/mental-health-north-carolina/.

North Carolina Distribution of Psychiatrists and Mental Health Services at the County Level

- 31 out of 100 counties in NC have no psychiatrists
- 13 counties have no active behavioral health provider (BHP)
- According to federal guidelines, 94 counties in North Carolina qualify as Health Professional Shortage Areas

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

- In 2013, NC hospitals had 162,000 behavioral health emergency department visits.[1]
- In 2010, patients with mental illness made up about 10 percent of all emergency room visits in North Carolina, and people with mental health disorders were admitted to the hospital at twice the rate of those without.[2]

1. NC Hospital Association
2. Study by the Centers for Disease Control

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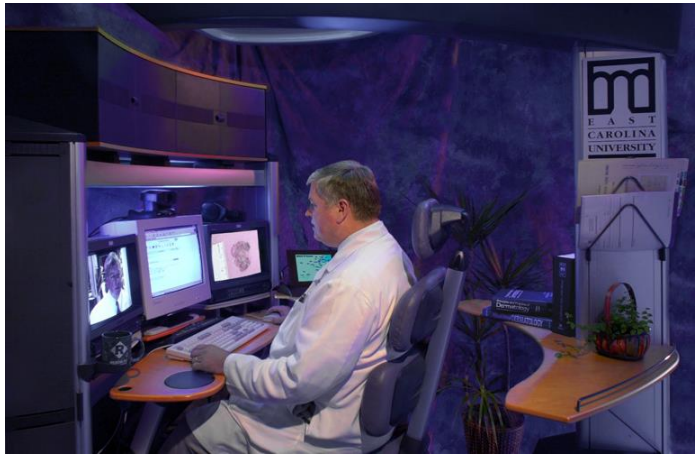
Telepsychiatry can offer help!

A growing body of literature now suggests that the use of telepsychiatry to provide mental health care has the potential to mitigate the workforce shortage that directly affects access to care, especially in remote and underserved areas.

- Telepsychiatry is *the delivery of 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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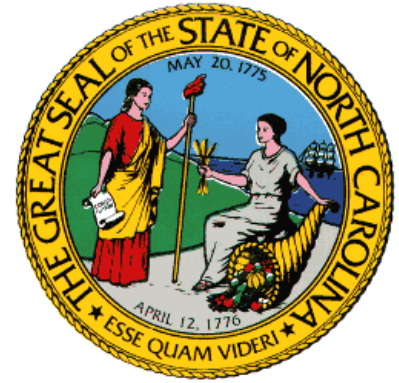
Developed in response to Session Law 2013-360.

- G.S. 143B-139, 4B
- Recodified as G.S. 143B-139.4B(a)(1b) by Session Laws 2018-44, s. 15.1, effective July 1, 2018



NC- STeP Vision

If an individual experiencing an acute behavioral health crisis enters an emergency department or community-based site, 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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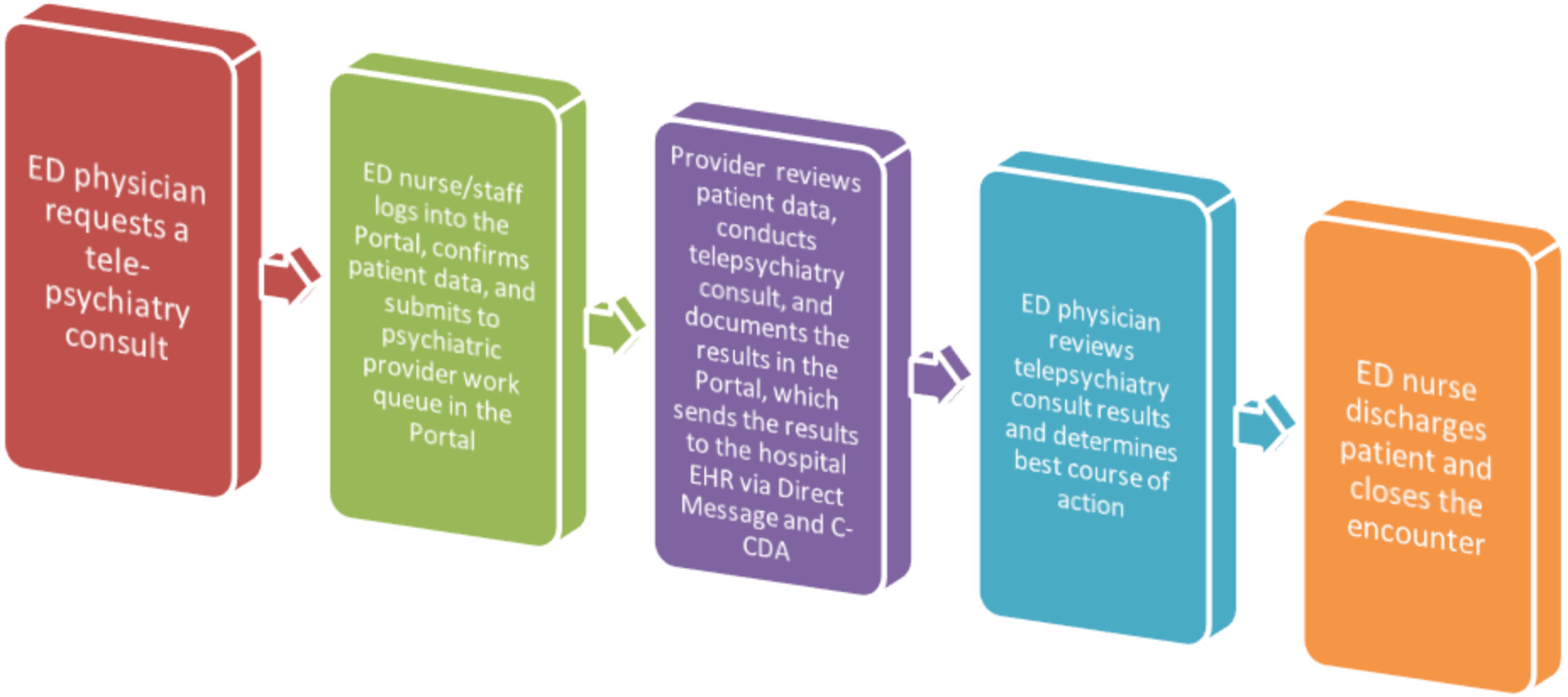
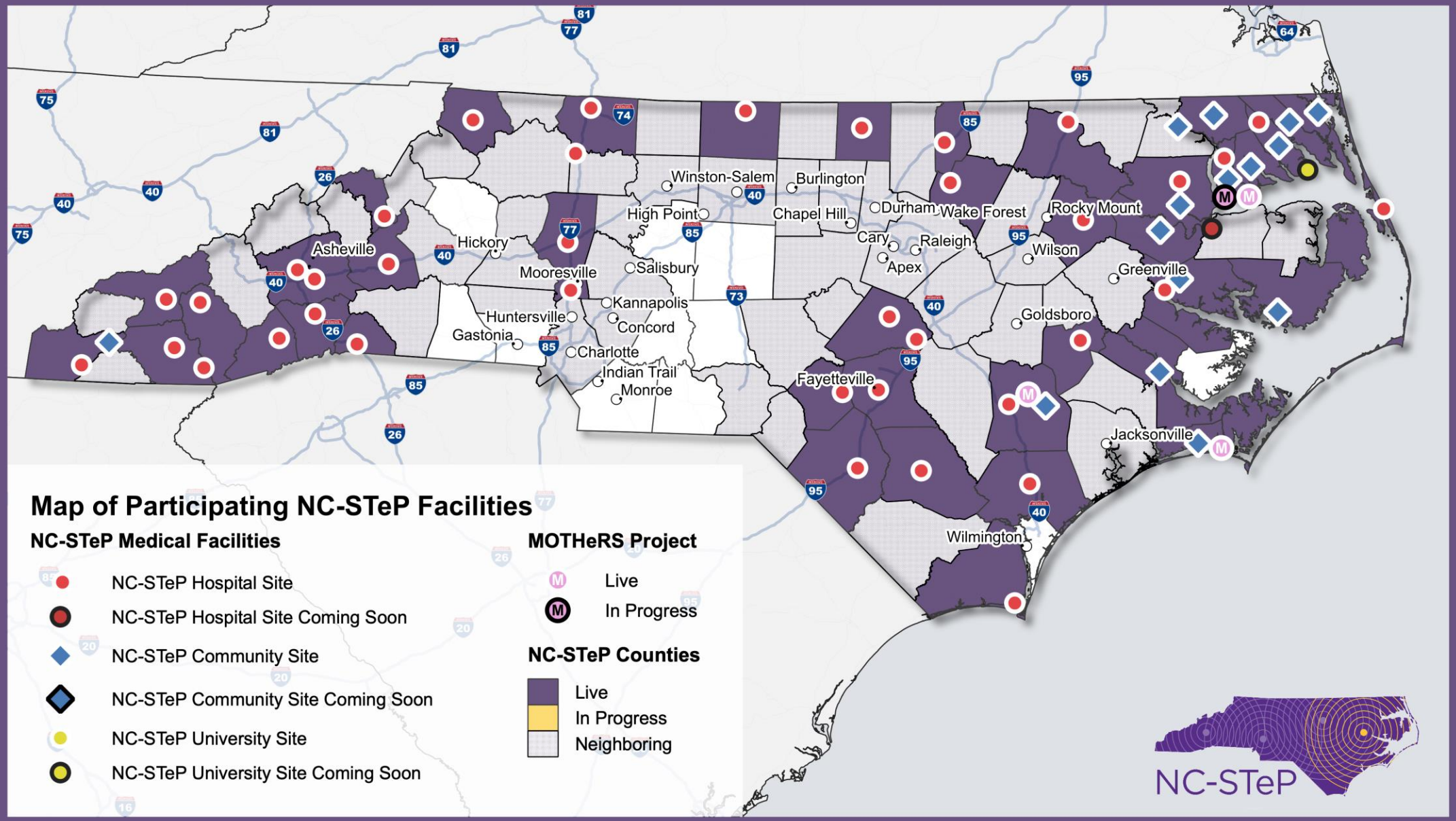
Workflow for the Portal



NC-STeP Status as of March 31, 2022



Behavioral Health Needs Are Growing

18% of adults have a mental illness

8% of adults have a substance abuse disorder

But only 50% receive treatment

Who Gets Treatment?

Wang et al., 2005

Issues of Capacity and Equity

- If psychiatrics providers saw everyone with active mental illness:

US: Urban

US: Rural

Who are the beneficiaries?

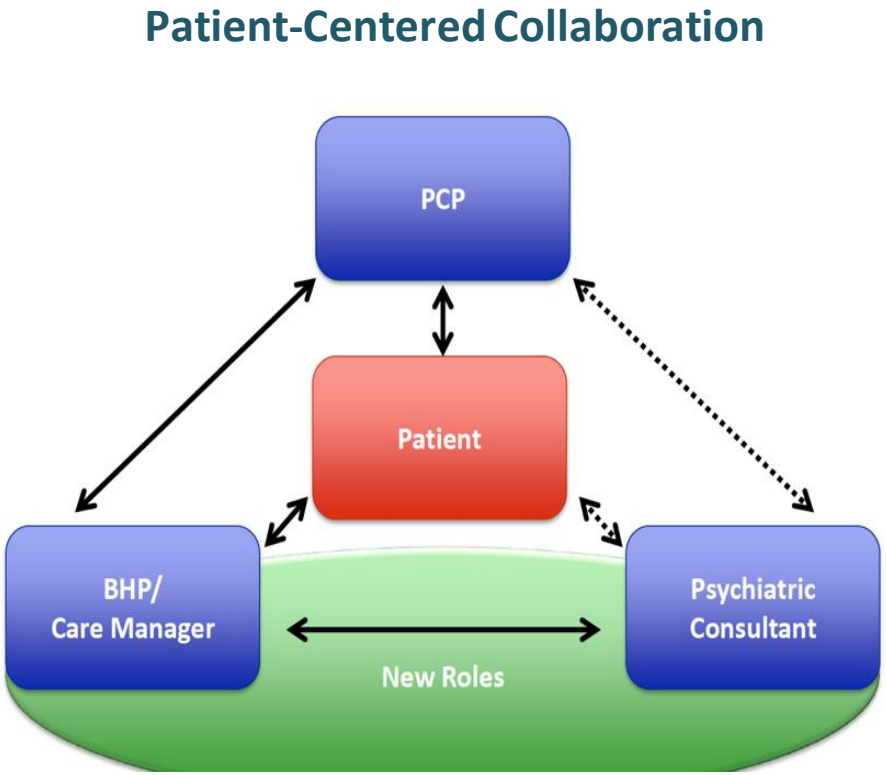
(Who should pay for it?)

Entity	Cost Savings
Patients and Families	Evidence-based care closer to home. Reduced distress/disability, functional improvement, quality of life, gainful employment, etc.
Communities	Better "citizenship", reduced homelessness, crime reduction, more self reliance, etc.
NC-Medicaid, MCOs, and other Third Party Payors	Projected cost savings from overturned IVC's. Cost savings from reduced recidivism
EDs	Reduced length of stay, improved throughput, reduced recidivism, assistance with medication management while in ED, etc.
Sheriff Department	Projected cost savings to Sheriff Department from overturned IVCs
Hospitals	Costs savings from increased throughput in the ED, reduced costs associated with psych consults, other benefits to EDs (as above), etc.

Next Steps:
Community-Based Demonstration Projects

- NC-STeP is well positioned to build community capacity by taking care of patients in primary care settings by embedding psychiatric providers in community-based settings, such as health department clinics, primary care clinics, and rural and federally qualified health centers, to meet a tremendous demand for their services.
- The model utilizes an integrated care model in which a behavioral health provider (BHP) or care manager is embedded in a primary care setting.
- Primary care providers and BHPs are linked, via telepsychiatry, to a clinical psychiatrist for case consultation and care planning.

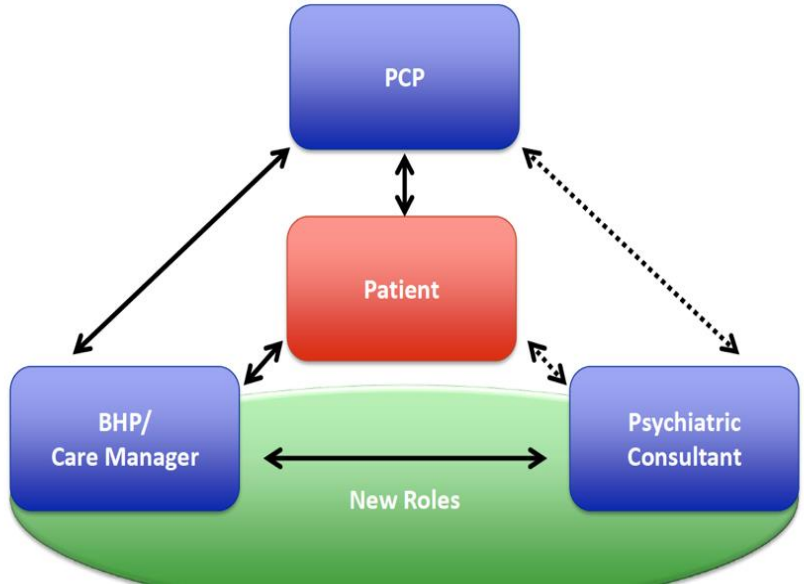
Next Steps:
Community-Based Demonstration Projects



- Provide evidence-based, out-patient mental health care to patients who currently lack access to this care.
- Embedded in a currently operational primary care clinic providing a multi-disciplinary approach to health maintenance.
- Utilizes an integrated/collaborative care model in which a behavioral health provider (BHP) or care manager is embedded in a primary care setting.
- BHP is linked, via telepsychiatry, to a clinical psychiatrist for case consultation and care planning.

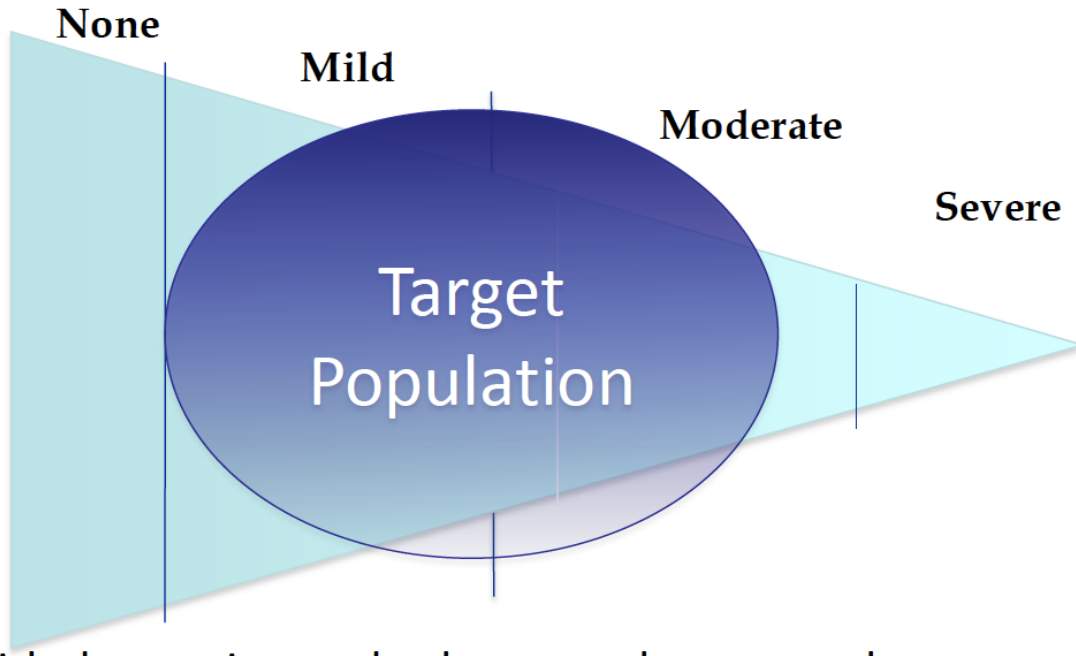
Key Principles

- Team-Based Care
- Primary care provider remains the driver and prescriber
- Patient-Centered Collaboration
- Its about expanding the limits of behavioral health care within primary care setting
- Measurement-Based Treatment to Target
- Evidence-Based Care



"SWEET" SPOT FOR THE COLLABORATIVE CARE MODEL

AMERICAN PSYCHIATRIC ASSOCIATION

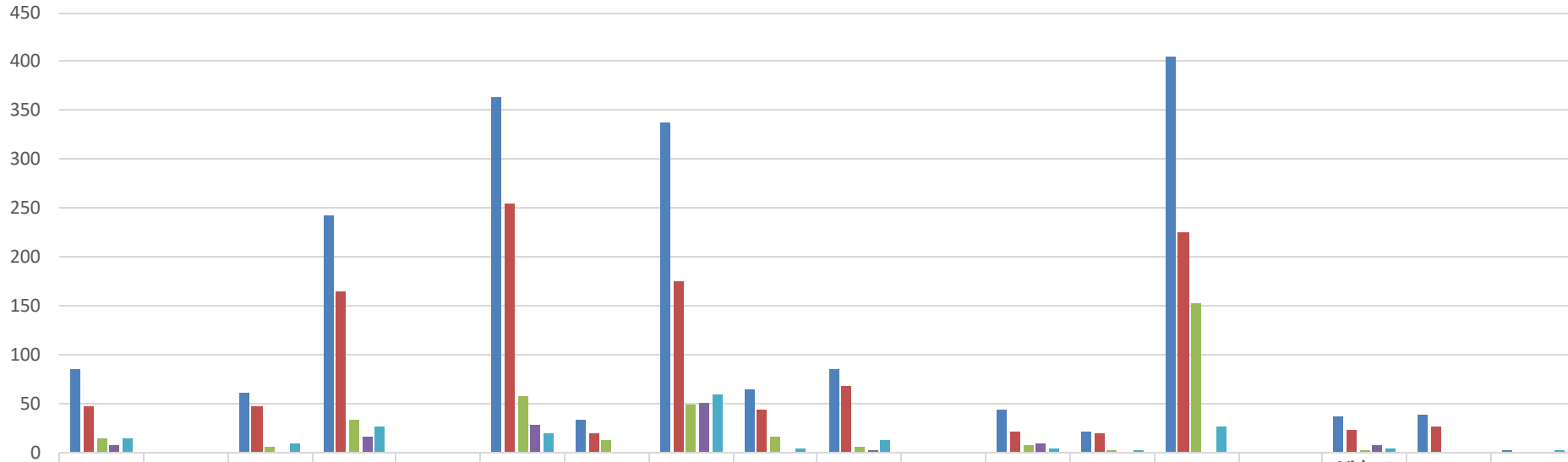


- Issues with depression and substance abuse must be pre-empted, rather than treated once advanced.
- Goal is to detect early and apply early interventions to prevent from getting more severe
- **It is not about replacing specialty behavioral health care, but it can help decompress some of it.**

ROLES OF PRIMARY CARE PROVIDER

- IDENTIFY individuals who need BH support and ENGAGE them in the treatment model
- Willing to prescribe medications for behavioral health
- Collaborate and consult with BHP and Psychiatric consultant to enhance BH Care
  - WARM HAND OFFS
- Utilize screening tools to track progress (e.g., PHQ-9)

NC-Step Appointments by Site
Appointments, Visit Kept, Rescheduled, Cancelled, No Show
January - March 2022



	Beaufort	Bertie	Camden	Carteret	Cherokee	Choco-winity	Chowan	Craven	Currituck	Duplin	Gates	Hyde	MTW	Pasquo-tank	Perqui-mans	Vidant Kenans ville	Vidant Edenton	Hertford
Total Apts	86		61	242		364	33	337	64	86		43	22	405		37	39	1
Apts Kept	48		47	165		255	20	176	44	68		22	19	226		23	26	
Apts Rescheduled	14		5	33		57	13	49	16	5		8	1	153		3		
Apts Cancelled	7			16		29		51		1		9				7		
Apts No Show	15		9	27		19		60	4	12		4	2	26		4		1

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NC-STeP Status as of March 31, 2022

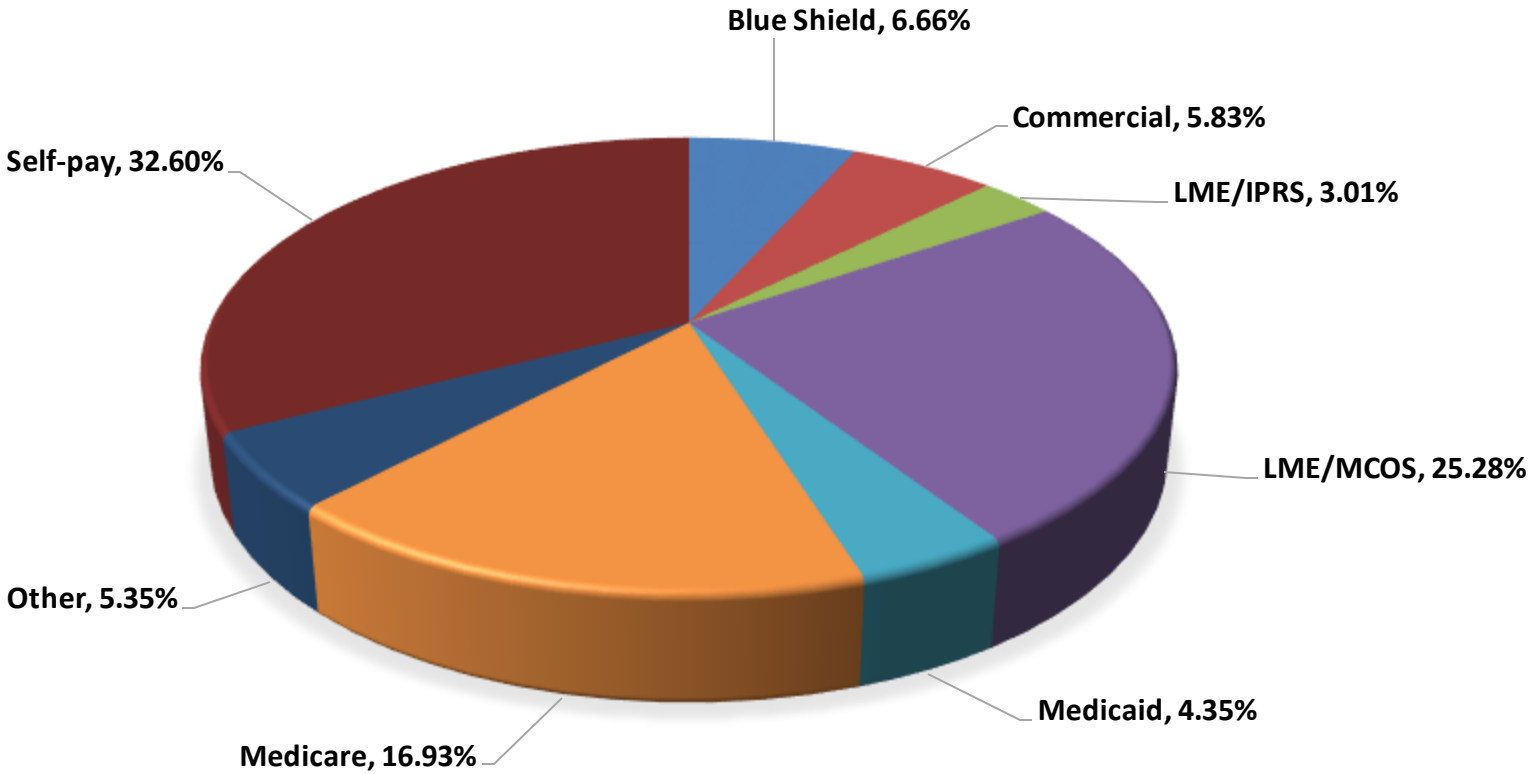
- 39 hospitals in the network. 38 live.
- 52,764 total psychiatry assessments since program inception
- 8,392 IVCs overturned
  - Cumulative return on investment = $45,316,800
    (savings from preventing unnecessary hospitalizations)
- Four Clinical Provider Hubs with 52 consultant providers
- Over 32% of the patients served had no insurance coverage

NC-STeP Status as of March 31, 2022

- 21 community-based sites.
- 11,440 total patient visits since program inception in October 2018.
  - 1,222 total patient visits with a psychiatrist
  - 10,218 total patient visits with a mid-level provider

NC-STeP Charge Mix - Project to Date

Service Dates: October 1, 2013 – December 31, 2021



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The Challenge

- The Covid-19 pandemic forced healthcare providers to rethink and quickly reinvent the delivery of care, particularly in rural settings.
- Fear of COVID-19 and the lack of definitive and timely information have caused many patients to be no-shows at clinic appointments, and, as a result, not receive the care they need.
- This has posed an especially critical issue for pregnant women and their newborns in the 29-county area that ECU) serves
- ECU, the safety net provider for 1.4 million people in eastern North Carolina, is the only source for high-risk prenatal care in the region.

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ECU BRODY SCHOOL OF MEDICINE MOTHeRS Project

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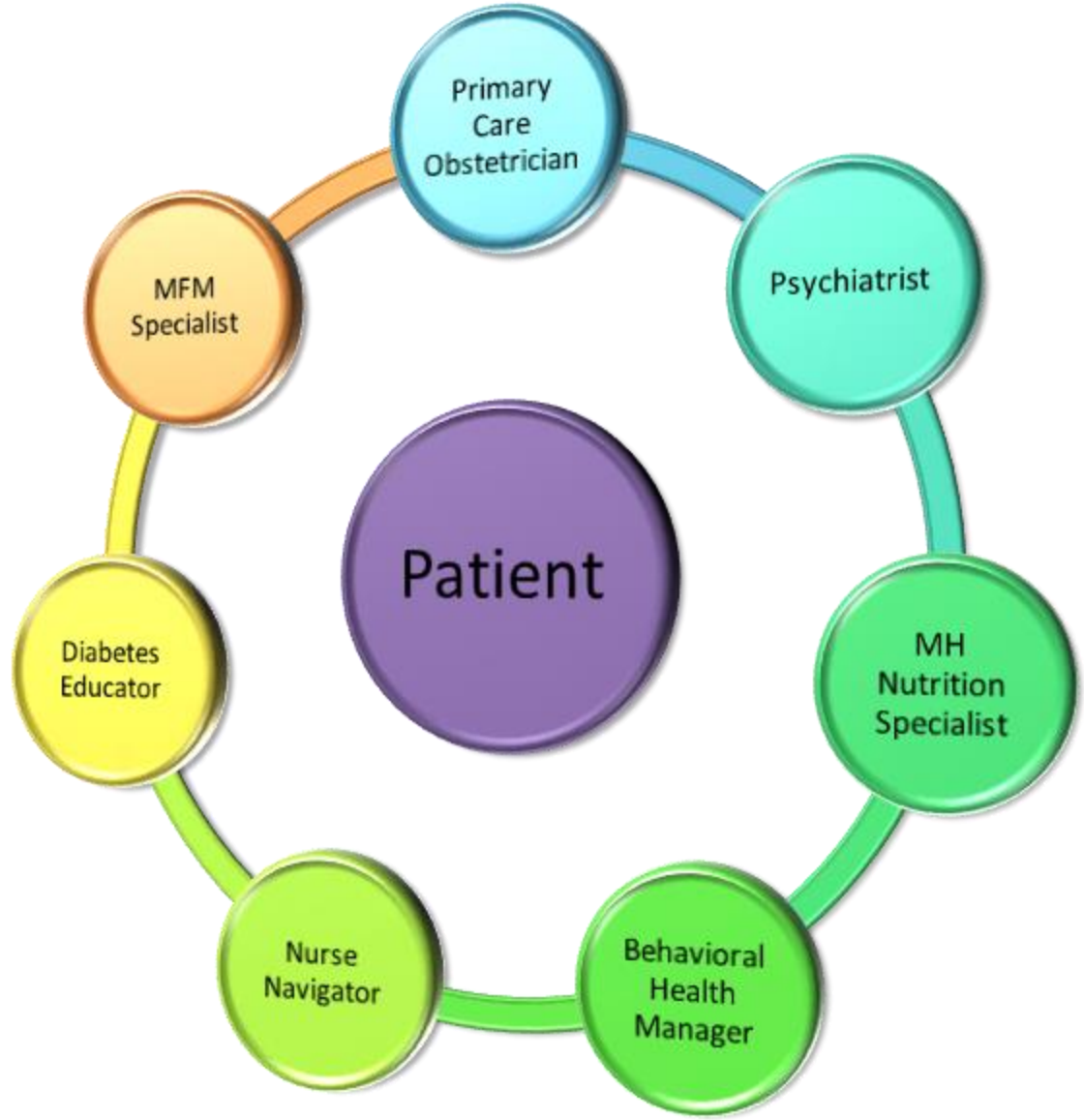
MOTHeRS Project

Maternal Outreach Through Telehealth for Rural Sites

- Team-Based Care
- Patient-Centered Collaboration
- Primary care provider remains the driver and prescriber
- It's about expanding the limits of care within primary care setting
- Measurement-Based Treatment
- Evidence-Based Care



Conclusions

- Telepsychiatry is a viable and reasonable option for providing psychiatric care to those who are currently underserved or who lack access to services.
- The current technology is adequate for most uses and continues to advance.
- NC-STeP is an established model that is nationally known for its work with the underserved communities.

Conclusions

- Telehealth can also help with the surge in mental health and substance use disorder patients that is occurring in the aftermath of the pandemic.
- The NC-STeP team-based approach to care has developed a scalable model that can be implemented at one site or statewide.
- This model is currently in use at 21 outpatient and 39 ED sites across North Carolina and can be expanded to other sites .

Conclusions

Question about telehealth that remain:

- Will reimbursement be the same?
- What mix of digital health vs. traditional will be the new norm?
- Do provider compensation models need to change?
- Will we need the same amount of brick-and-mortar clinic space?
- How to leverage new capabilities to address referral backlog and home-based care?

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Federal Office of Rural Health Policy

James B. Duke
THE DUKE ENDOWMENT

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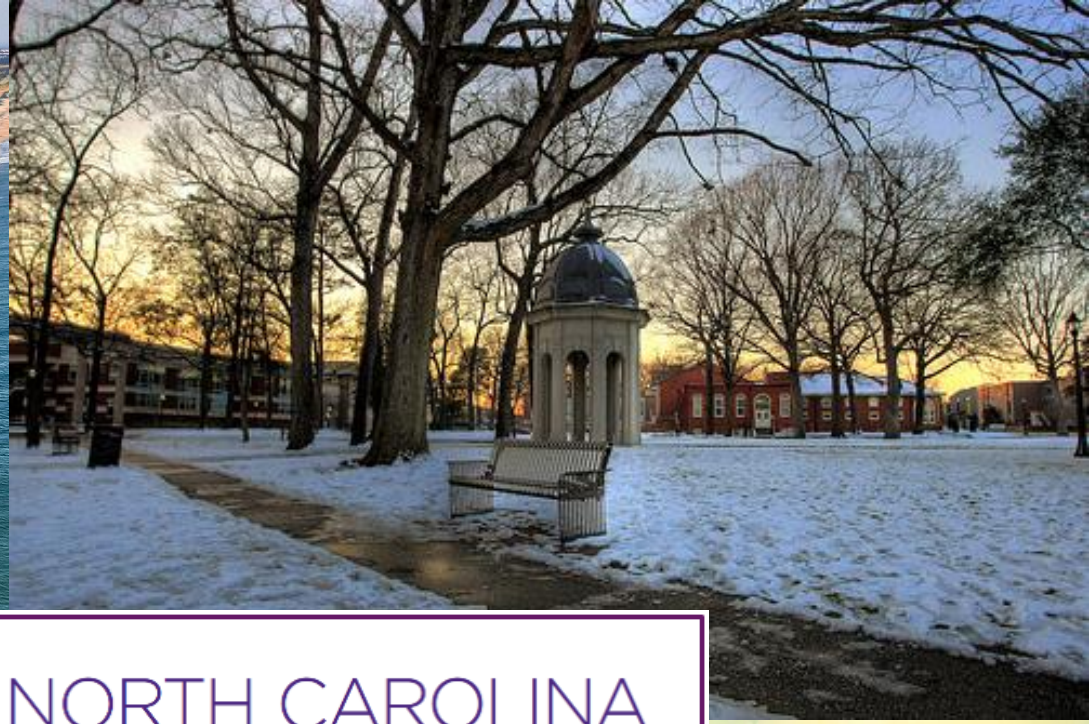

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