

# Implementation of a statewide network scales addiction care for underserved populations

**Gabriela Castro MD, Lindsey Kennedy PharmD BCPS,  
Orrin Ware PhD MPH MSW, Robyn Jordan MD PhD**

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# Disclosures

☀ Presenter 1: Gabriela Castro MD

☀ No Disclosures

☀ Presenter 2: Orrin Ware PhD MPH MSW

☀ No Disclosures

☀ Presenter 3: Robyn Jordan MD PhD

☀ No Disclosures

Ⓜ Non-Presenting author: Lindsey Kennedy PharmD BCPS

Ⓜ No Disclosures

# Learning Objectives

- ☀ Describe the role of the **statewide network model** as a best practice to support expansion of treatment for opioid use disorder
- ☀ Summarize **key strategies** for successful implementation of a statewide network model for expansion of opioid use disorder treatment
- ☀ Discuss best practices for implementation in rural and medically **underserved settings**

# Defining Terms

For this presentation, “**Underserved Populations**” will refer to Black / African American and American Indian people.

**Buprenorphine products**  
(buprenorphine/naloxone, extended-release buprenorphine, and buprenorphine monoproduct) will be **referred to as buprenorphine.**

# NC STAR Network



# Overview

## Implementation

- Review implementation of a state-wide initiative
- Discuss key elements for successful implementation
- **Breakout Session: Build an implementation model**

## Improving Access

- Discuss barriers to access
- Review outcome data
- **Breakout Session: Improve access for underserved populations**

# IMPLEMENTATION



State the problem

UNC Addiction Medicine Program (AMP) was unable to accept new patients because the clinic was full with stable patients taking buprenorphine.

The UNC AMP needed a referral source for stable patients so that they could accept new patients.



# Hub and Spoke models offered a framework for a statewide initiative to expand treatment access

## Vermont

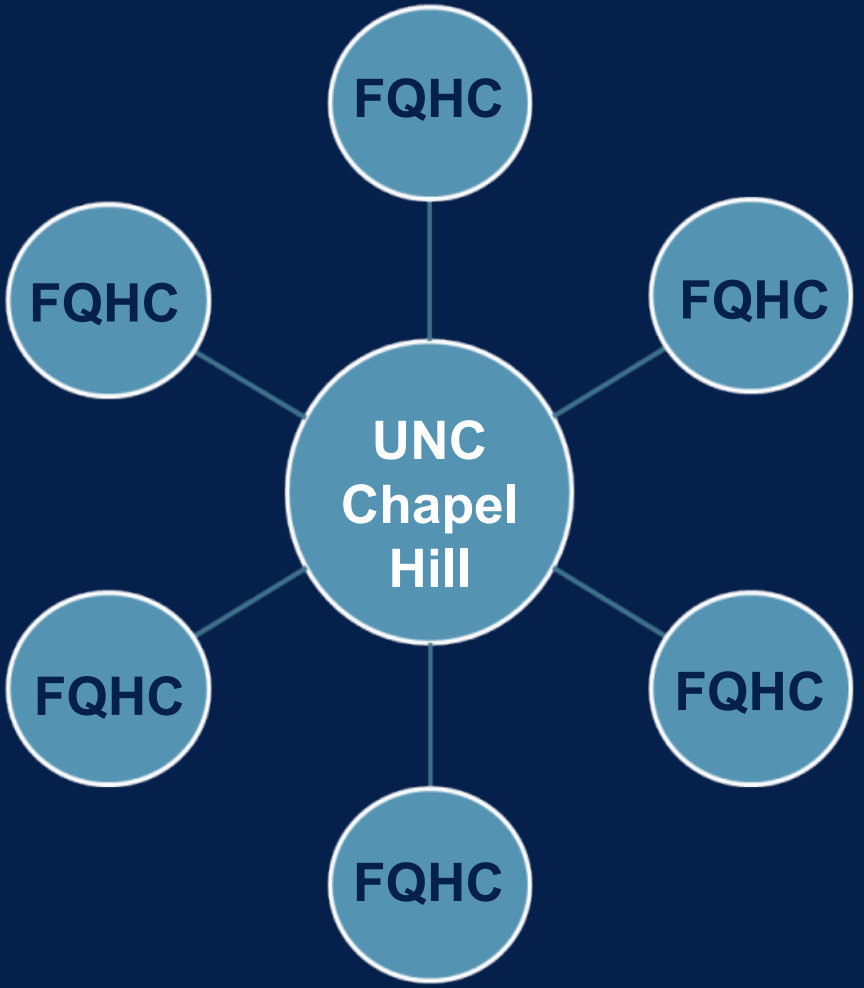
- 9 Hubs (OTPs) - complex care, TA
- 75 Spokes OBOTs, Integrated care
- Funding: Vermont Medicaid
- Impact: > 6000 patients in care

## California

- Adapted from Vermont model
- 17 active Hubs (OTPs)
- 174 Spokes (FQHCs/IHCs)
- Learning Collaboratives
- Focus on tribal communities
- Funding: State Opioid Response funds
- Impact: 35k new patients started MOUD

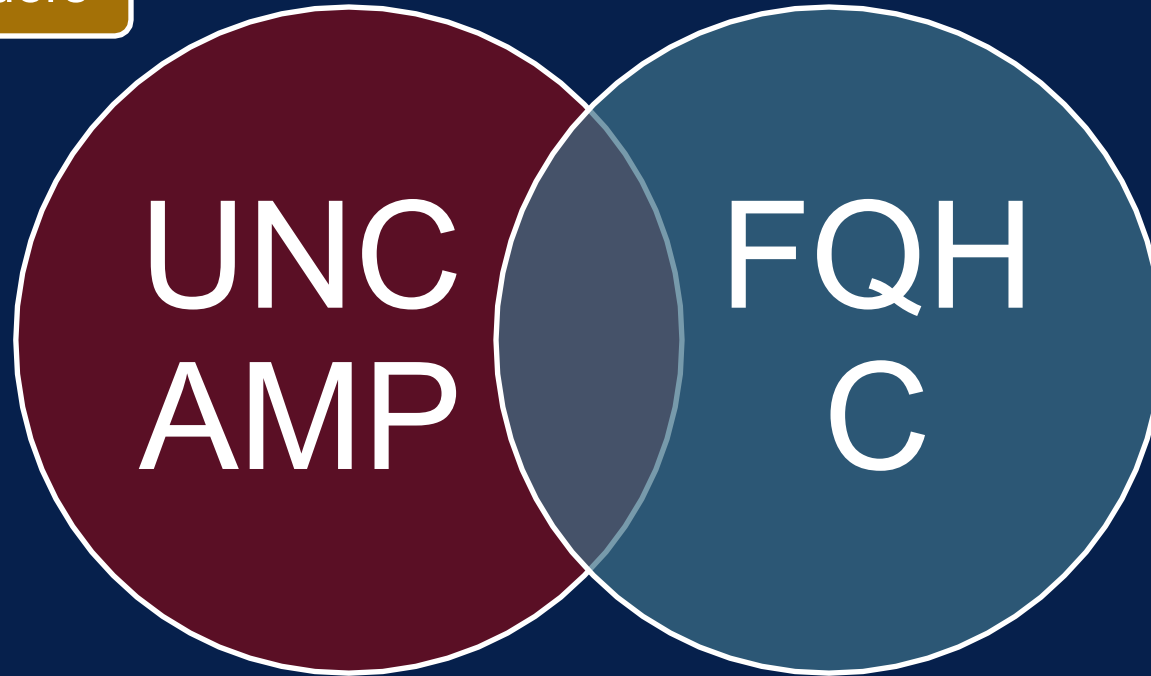
# UNC AMPs solution for Expanding Access

## Develop a Hub and Spoke model for North Carolina



UNC AMP created a Hub and Spoke network through partnership with Federally Qualified Health Centers (FQHCs)

Build relationships  
with stakeholders



1. Find your Key Stakeholder
2. Look for areas of alignment
3. Sometimes unlikely partnerships make the perfect pairing

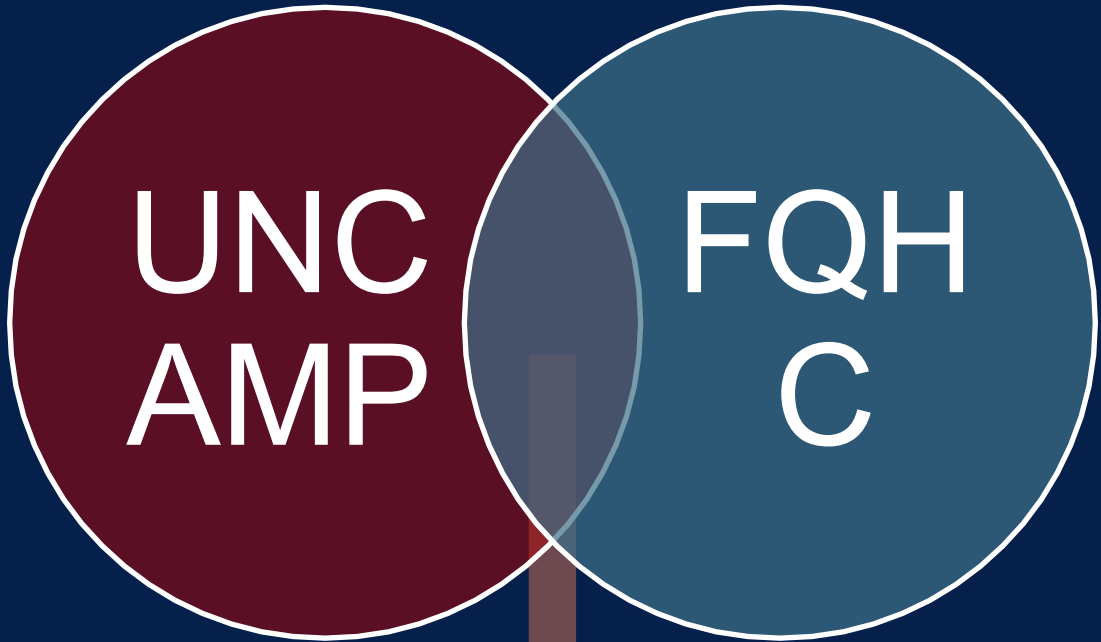


Clarify the stakeholder's needs

Referral source



Accept new patients



HRSA incentive to FQHCs for treating OUD

FQHCs lack infrastructure to take people early in treatment.

**ALIGNMENT**  
UNC AMP agrees to train FQHC providers and staff  
FQHC agrees to accept referrals from UNC AMP of stable patients

Understand the barriers

## BARRIERS

Funding



1<sup>st</sup> 2 years, no funding support

Training doesn't equate prescriptions



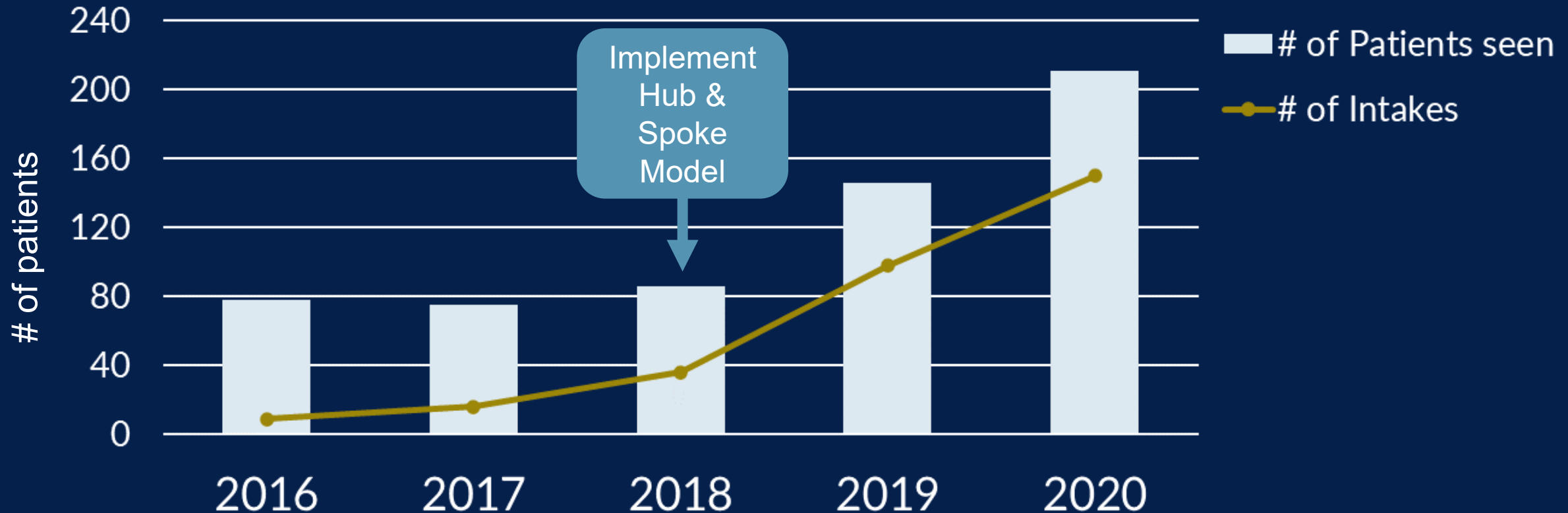
1:1 mentorship produced prescriptions

De-stabilization of referred patients



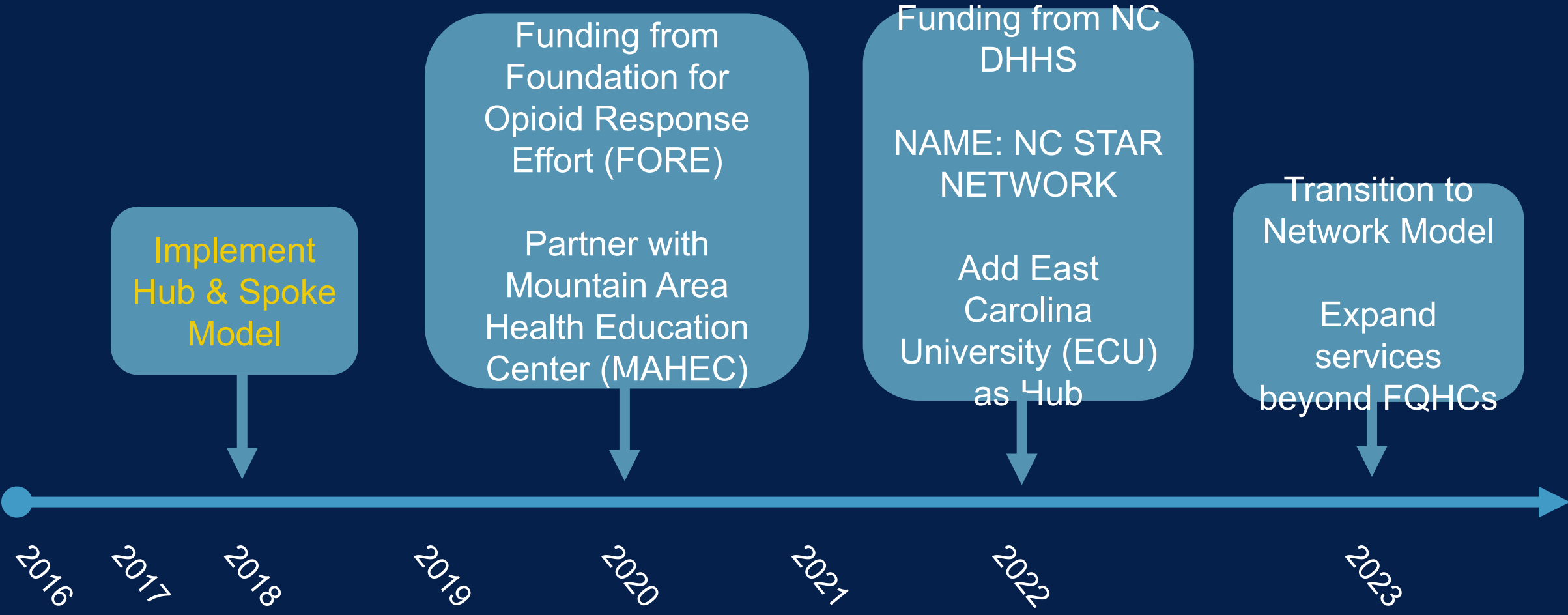
Agreement that FQHC could always refer patients back to UNC AMP

# IMPLEMENTATION OF A HUB & SPOKE MODEL RESULTED IN NEW PATIENT INTAKES



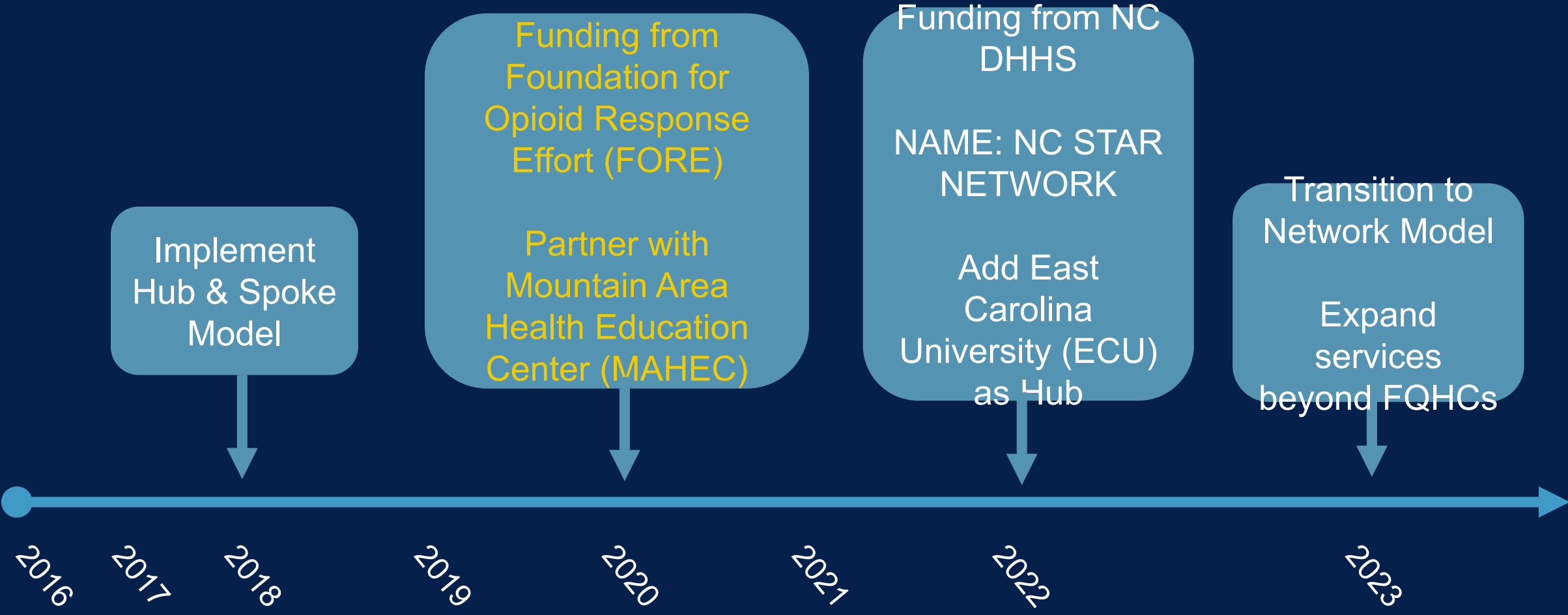
# Timeline of NC STAR Network

Review and respond to the data



# Timeline of NC STAR Network

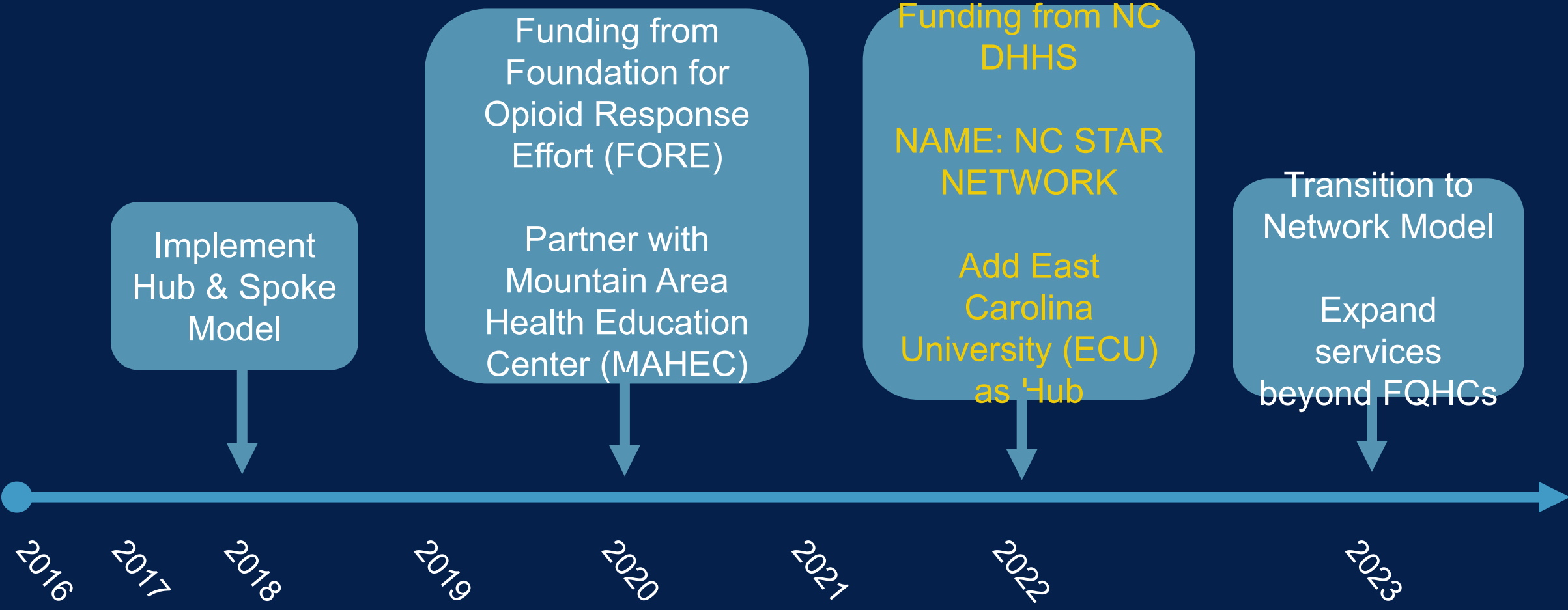
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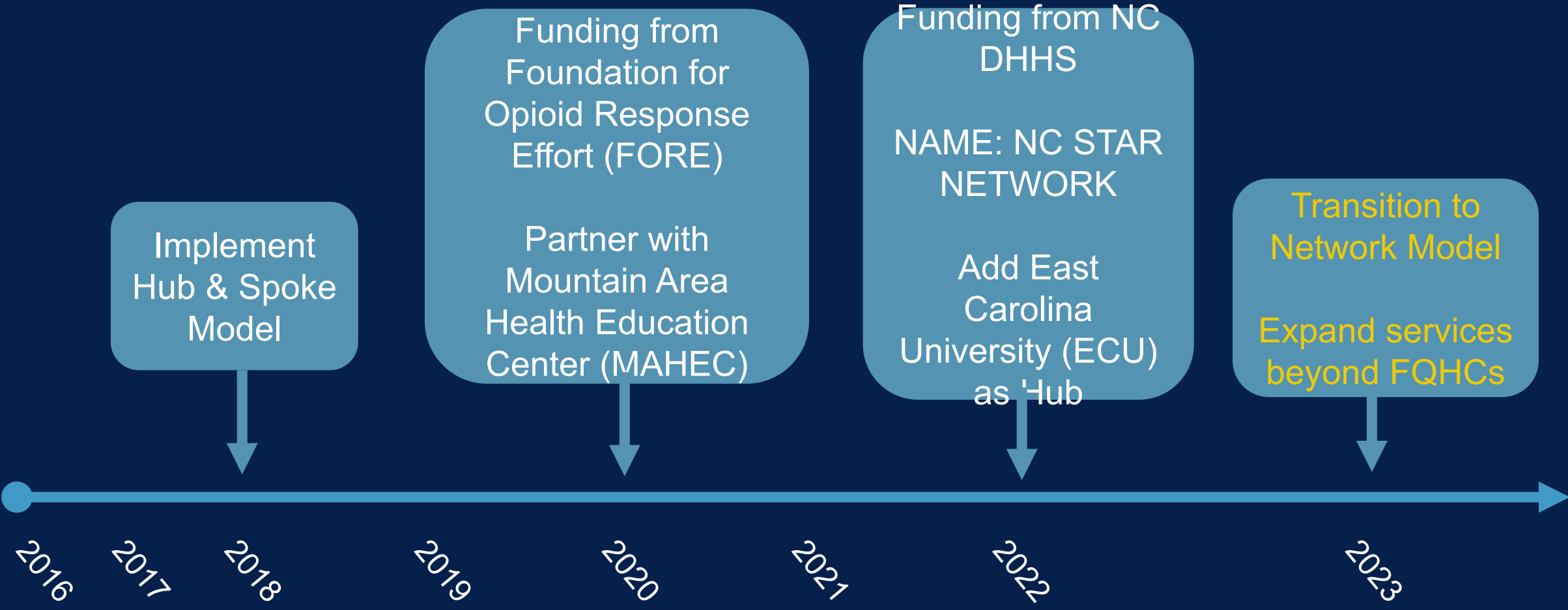
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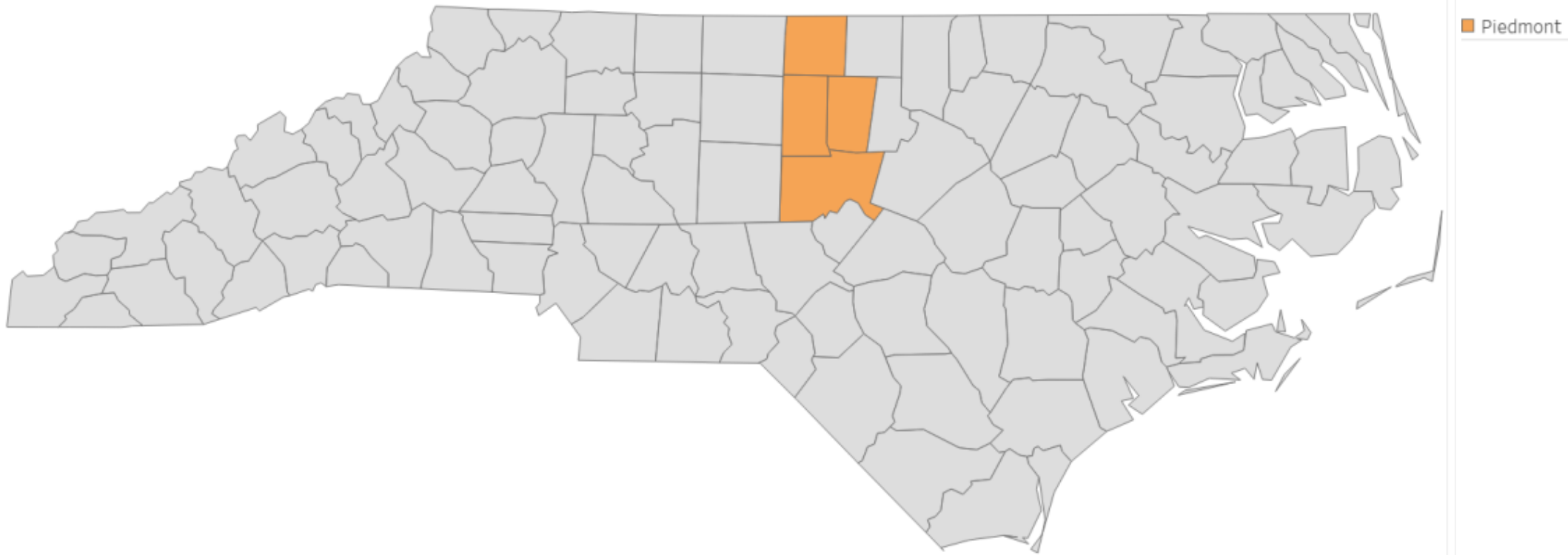
Review and respond to the data



Review and respond  
to the data

# NC STAR Network Progression

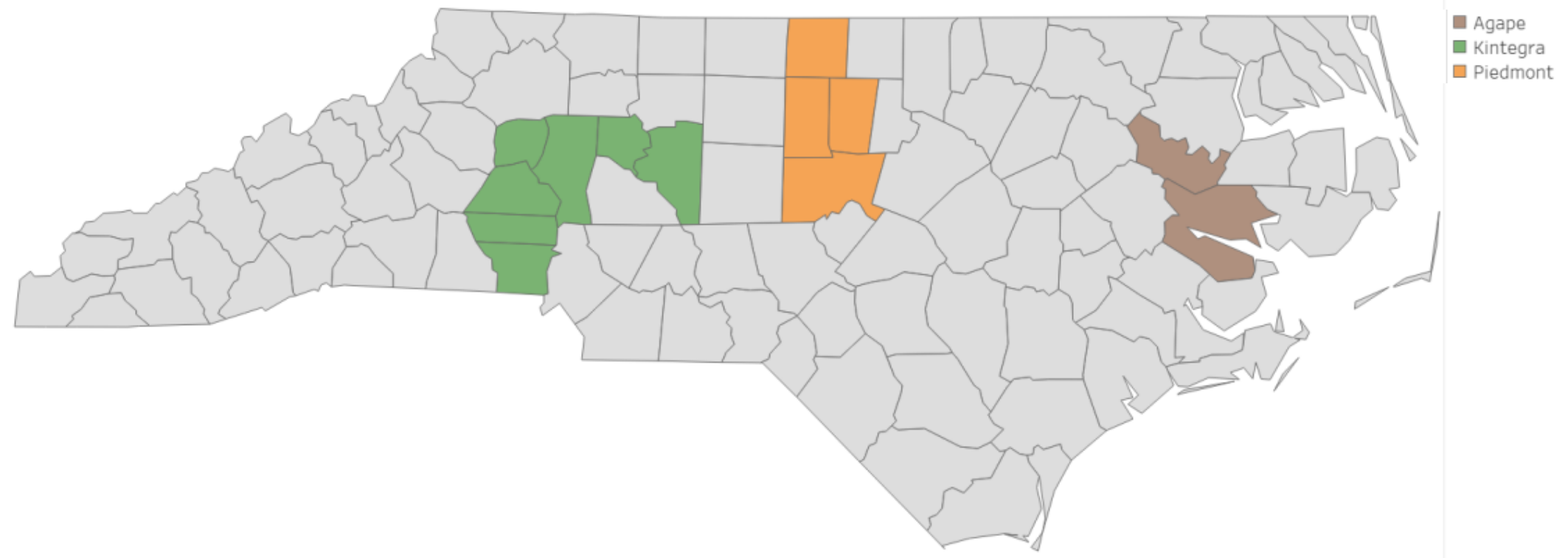
## County Map of FQHC's joining NC STAR Network



Review and respond to the data

# NC STAR Network Progression

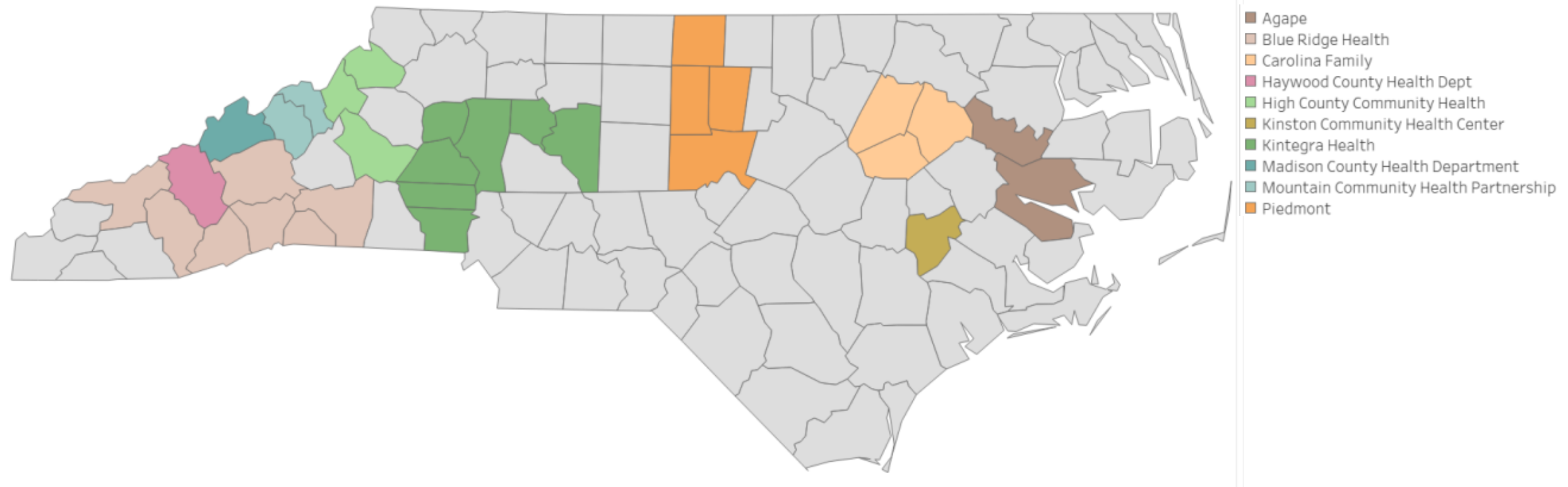
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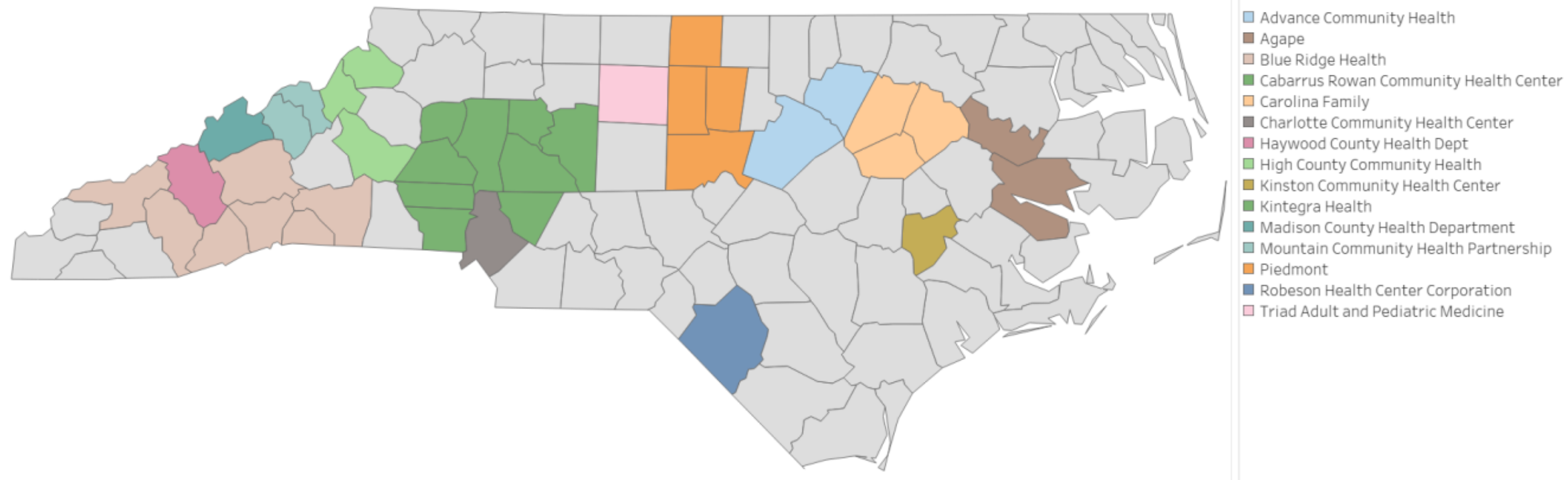
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Review and respond to the data

# NC STAR Network Progression

## County Map of FQHC's joining NC STAR Network



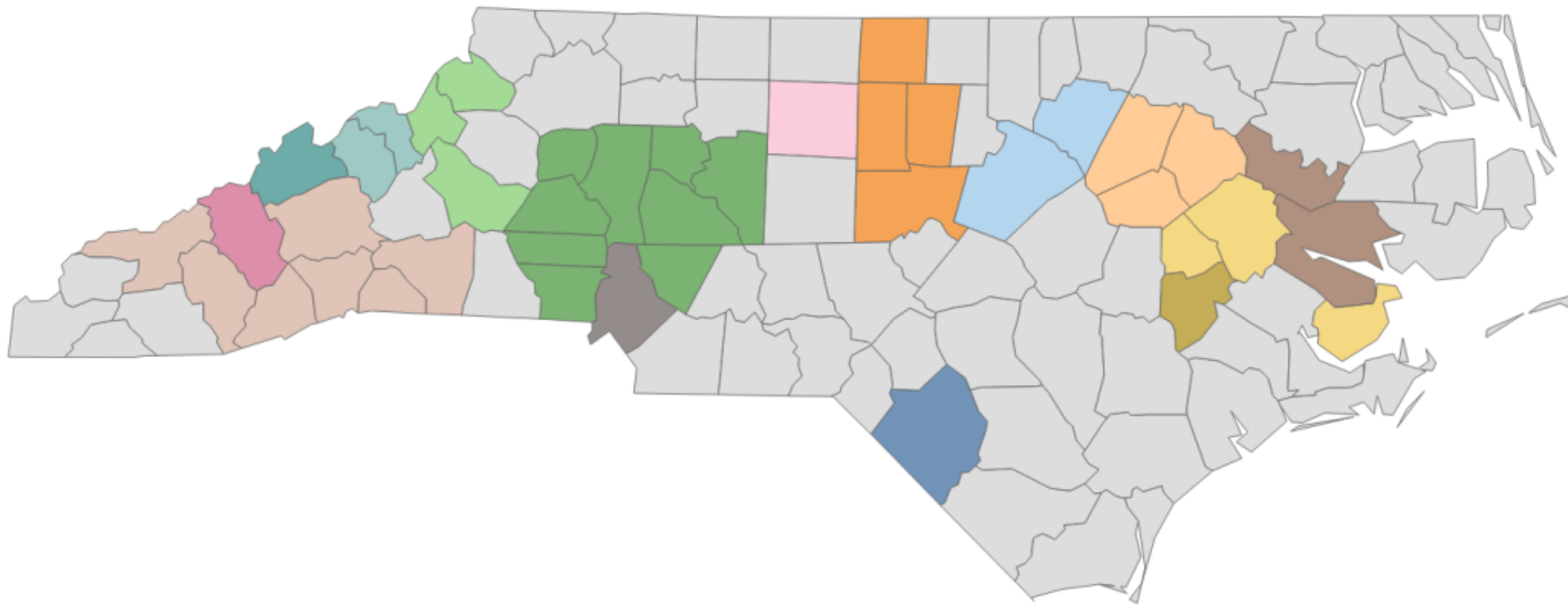
Funding from FORE; added MAHEC as Hub

2021

Review and respond to the data

# NC STAR Network Progression

## County Map of FQHC's joining NC STAR Network



- Advance Community Health
- Agape
- Blue Ridge Health
- Cabarrus Rowan Community Health Center
- Carolina Family
- Charlotte Community Health Center
- Greene County Health Care
- Haywood County Health Dept
- High County Community Health
- Kinston Community Health Center
- Kintegra Health
- Madison County Health Department
- Mountain Community Health Partnership
- Piedmont
- Robeson Health Center Corporation
- Triad Adult and Pediatric Medicine



Funding from NC DHHS, STAR Network is named, transition to a network model

2022

# NC STAR Network: an Evolving Process

## ORIGIN

- Grass-roots initiative
- Built from within an academic medical center
- Referral network extended into communities via health centers

## PARTNERS

- Primary care practices
- Opioid treatment programs
- Syringe service programs
- Hospital systems / Emergency departments
- Law enforcement
- Paramedic programs
- And any organization serving those with addiction





# NC STAR Network

## ACADEMIC CENTERS (aka – Hubs)

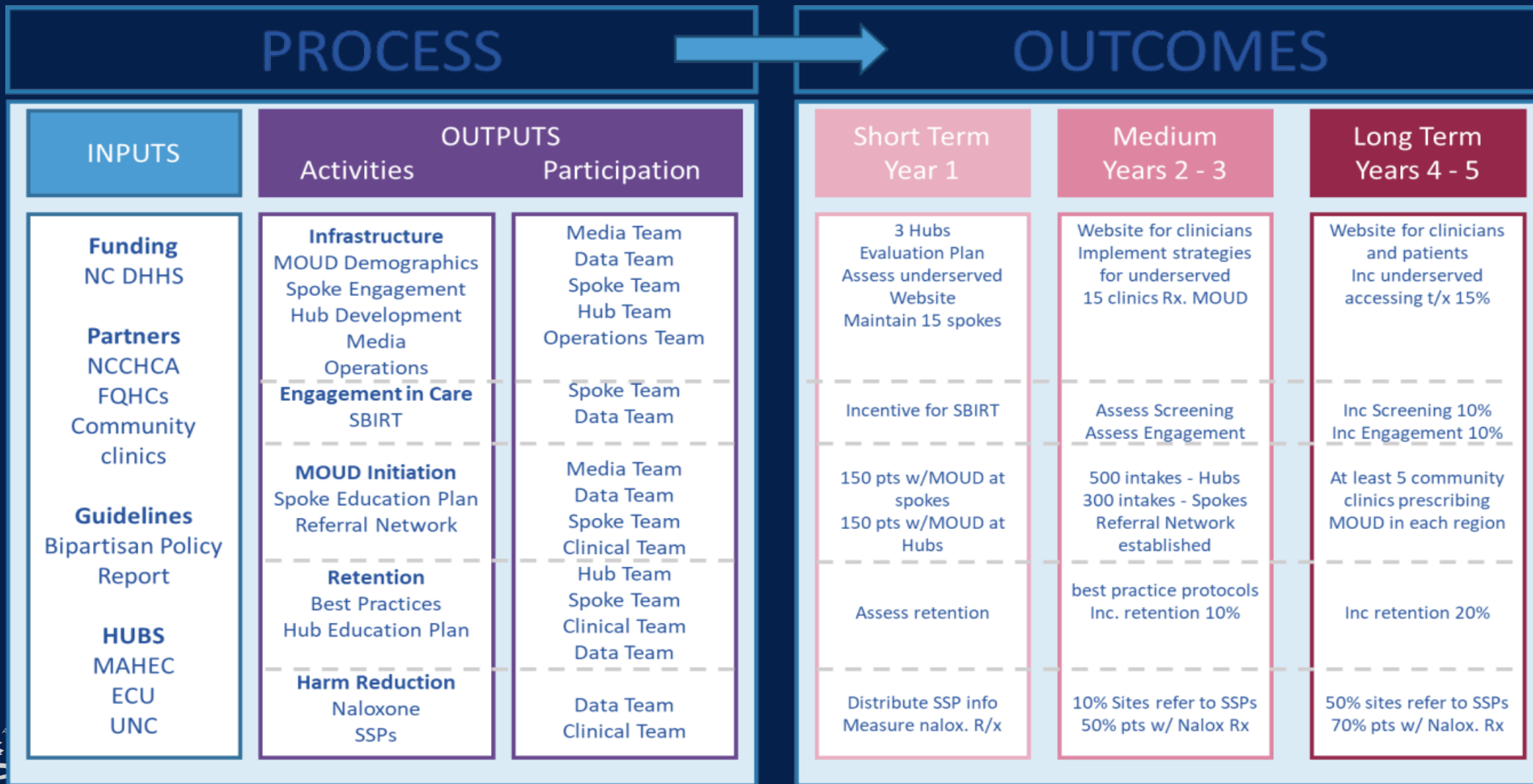
## SERVICES OFFERED

- Strategically located across the state
- Resource for addiction treatment, education, training and mentorship
- Platform for creating relationships across organizations in the Network

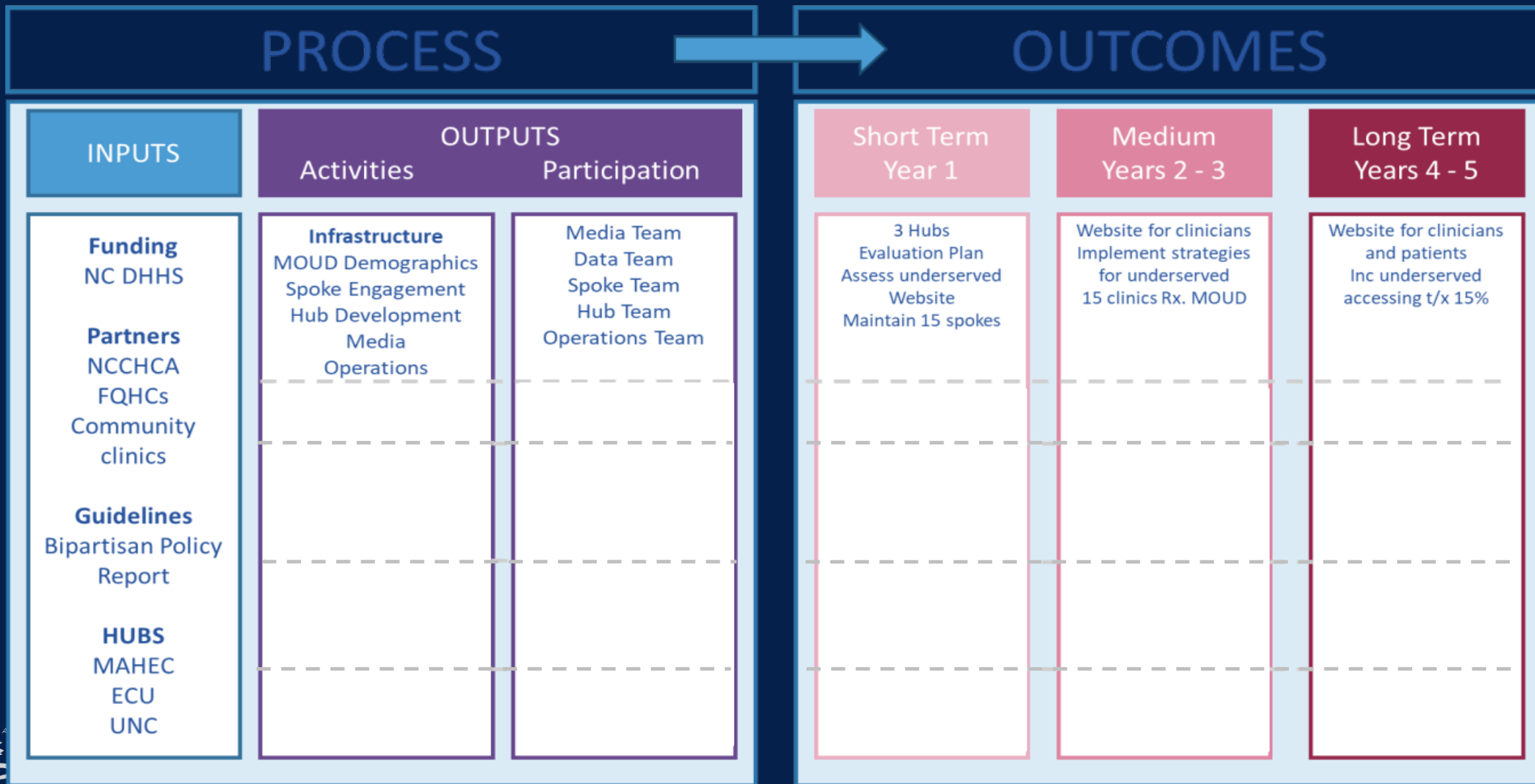
- Assessment and Engagement Plan
- 1:1 Mentorship
- Group Coaching
- Policy discussions
- Didactics with free CME
- Provider Forum
- Engagement with community partners and resources



# NC STAR Network Implementation



# NC STAR Network Implementation



# Breakout Session: 15 min

PROCESS



OUTCOMES

INPUTS

OUTPUTS

Activities

Participation

Short Term  
Year 1

Medium  
Years 2 - 3

Long Term  
Years 4 - 5

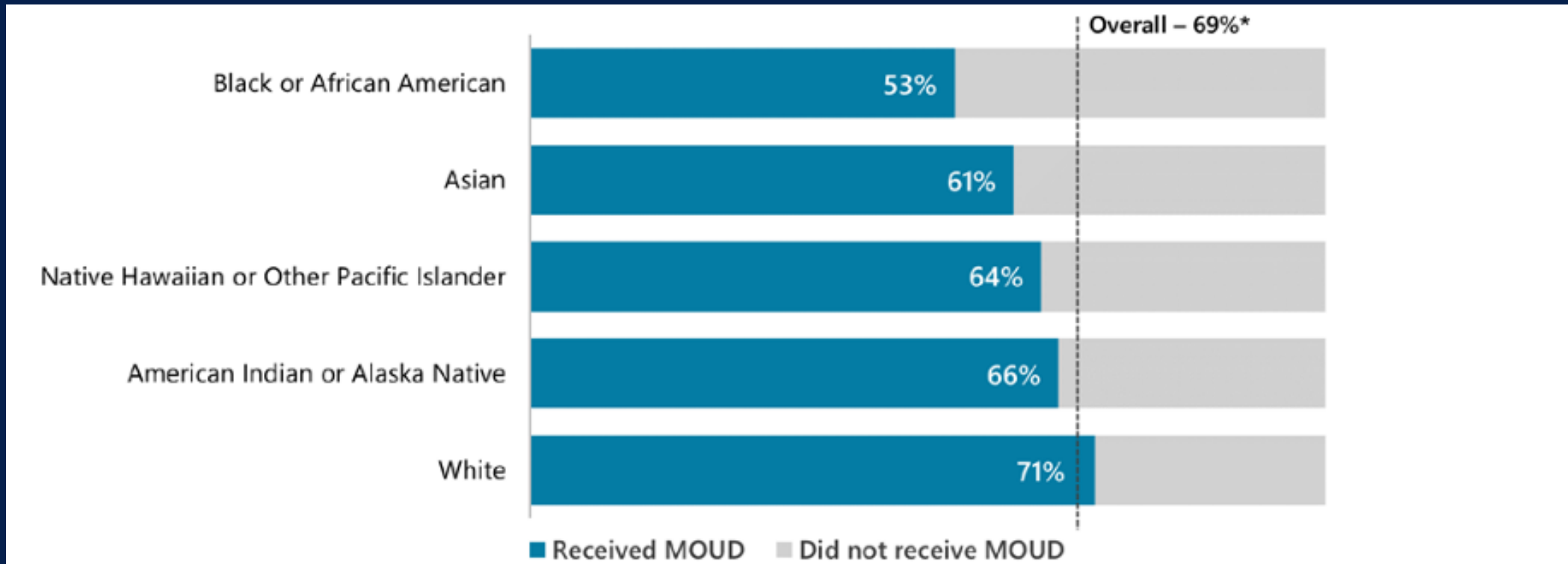
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## Improving Access

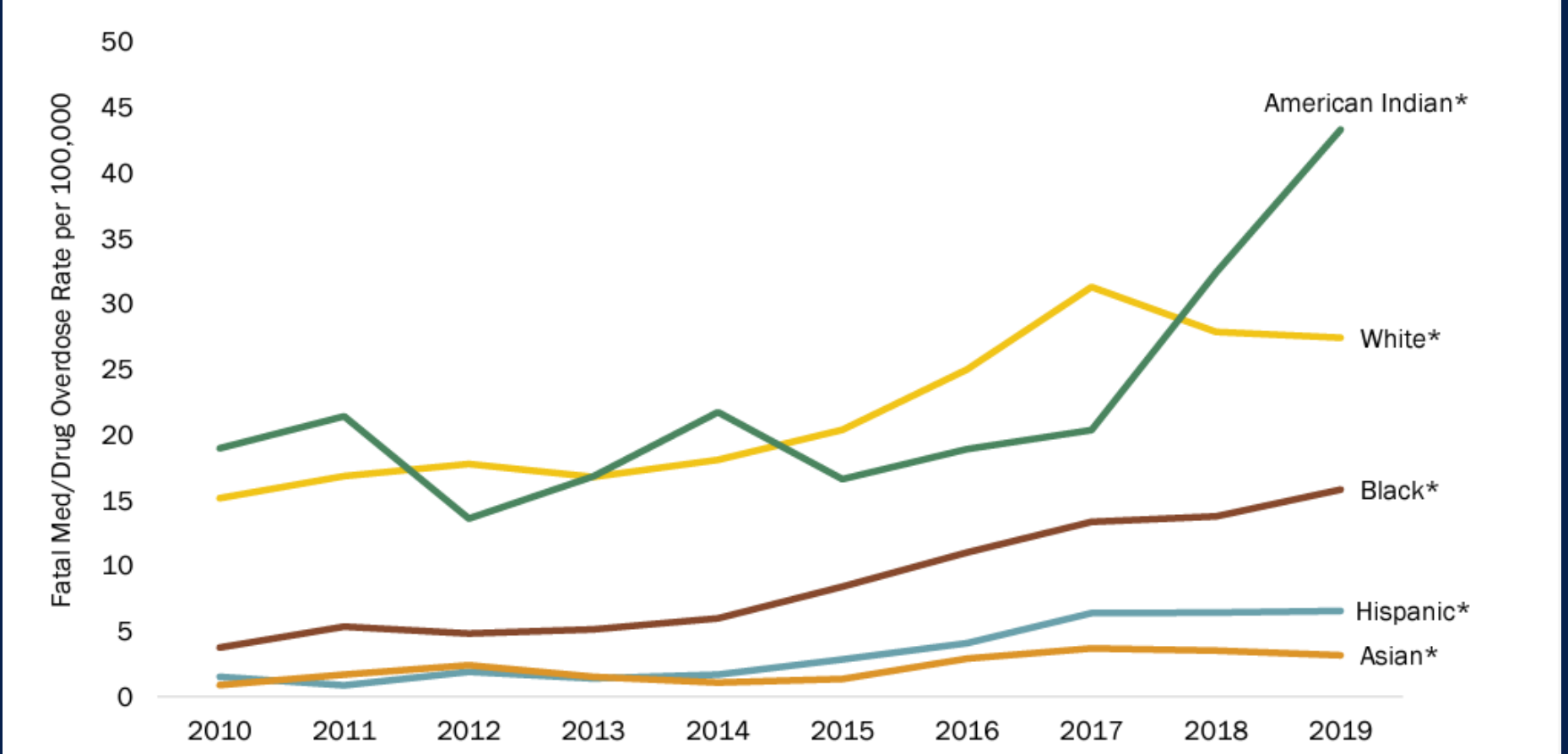
- Discuss barriers to access
- Review outcome data
- **Breakout Session: Improve access for underserved populations**

# Nationally, Black and American Indian people with OUD receive treatment at a lower rate than White people

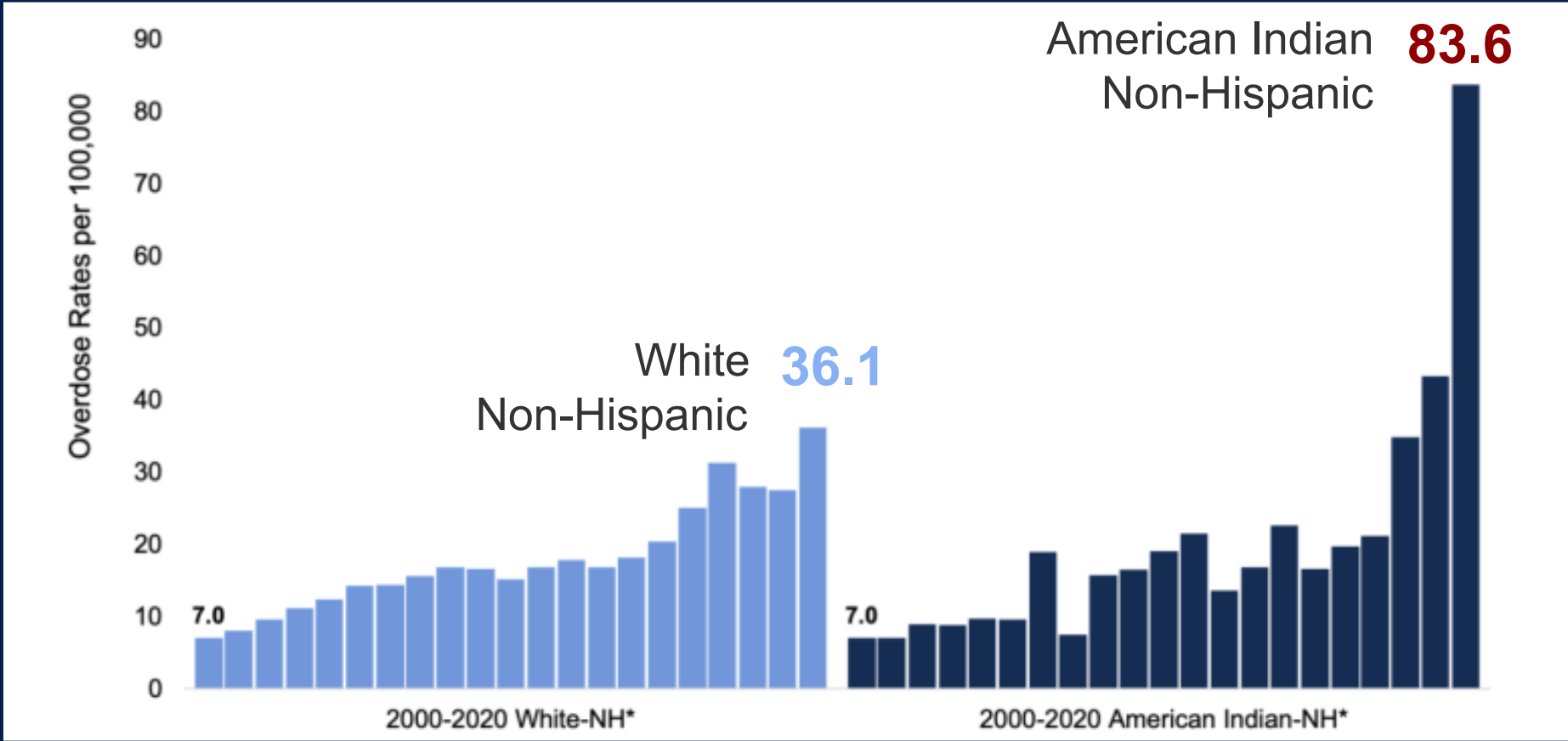


*Many Medicaid Enrollees with Opioid Use Disorder Were Treated with Medication; However, Disparities Present Concerns. HHS OIG 2023*

# Fatal overdose rates among Black and American Indian people in NC are increasing disproportionately



# American Indian people have the highest fatal overdose rate among NC residents





# NC STAR Network Increased MOUD Access

<b>Patient Characteristics</b>	<b>Academic Centers</b>		<b>Partner Sites</b>	
<b>Total number of patients</b>	1050		2880	
<b>Female</b>	544	52%	1308	45%
<b>Male</b>	506	48%	1322	46%
<b>White or Caucasion</b>	894	85%	2666	93%
<b>Black or African American</b>	37	4%	107	4%
<b>American Indian or Alaska Native</b>	17	2%	19	1%
<b>Unknown</b>	62	6%	42	1%



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# NC STAR Network Increased MOUD Access for Underserved Populations

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<b>Unknown</b>		

Partner site data was consistently available for Black / African American and American Indian people. Data for Hispanic and other minoritized people was not consistently reported.



# MOUD Access for Underserved Populations

	2023		
	MOUD population	Entire clinic population	Census Data
<b>Partner Site 1</b>			
Black or African American	3.0%	5.9%	5.8%
American Indian	2.0%	0.9%	1.4%
White	91.0%	70.3%	87.3%
<b>Partner Site 2</b>			
Black or African American	7.0%	28.8%	23.9%
American Indian	0.0%	0.7%	0.3%
White	93.0%	39.6%	62.7%
<b>Partner Site 3</b>			
Black or African American	4.0%	23.8%	15.8%
American Indian	0.0%	0.3%	0.3%
White	86.0%	52.6%	75.0%

Question:  
Do our partner sites effectively reach underserved populations?

# MOUD Access for Underserved Populations

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Data:  
Yes – underserved populations are represented or over-represented at partner sites

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However, Black and American Indian people are **under-represented** among patients receiving MOUD

# NC STAR Network's Response to Expanding Access to Underserved Populations

Build a partnership with an addiction program in Robeson County, a county with a large African American and Indigenous population

Open a dialogue with every partner to discuss the populations receiving MOUD

Implement a mobile clinic to provide addiction treatment to Robeson County, targeting African American and Indigenous populations

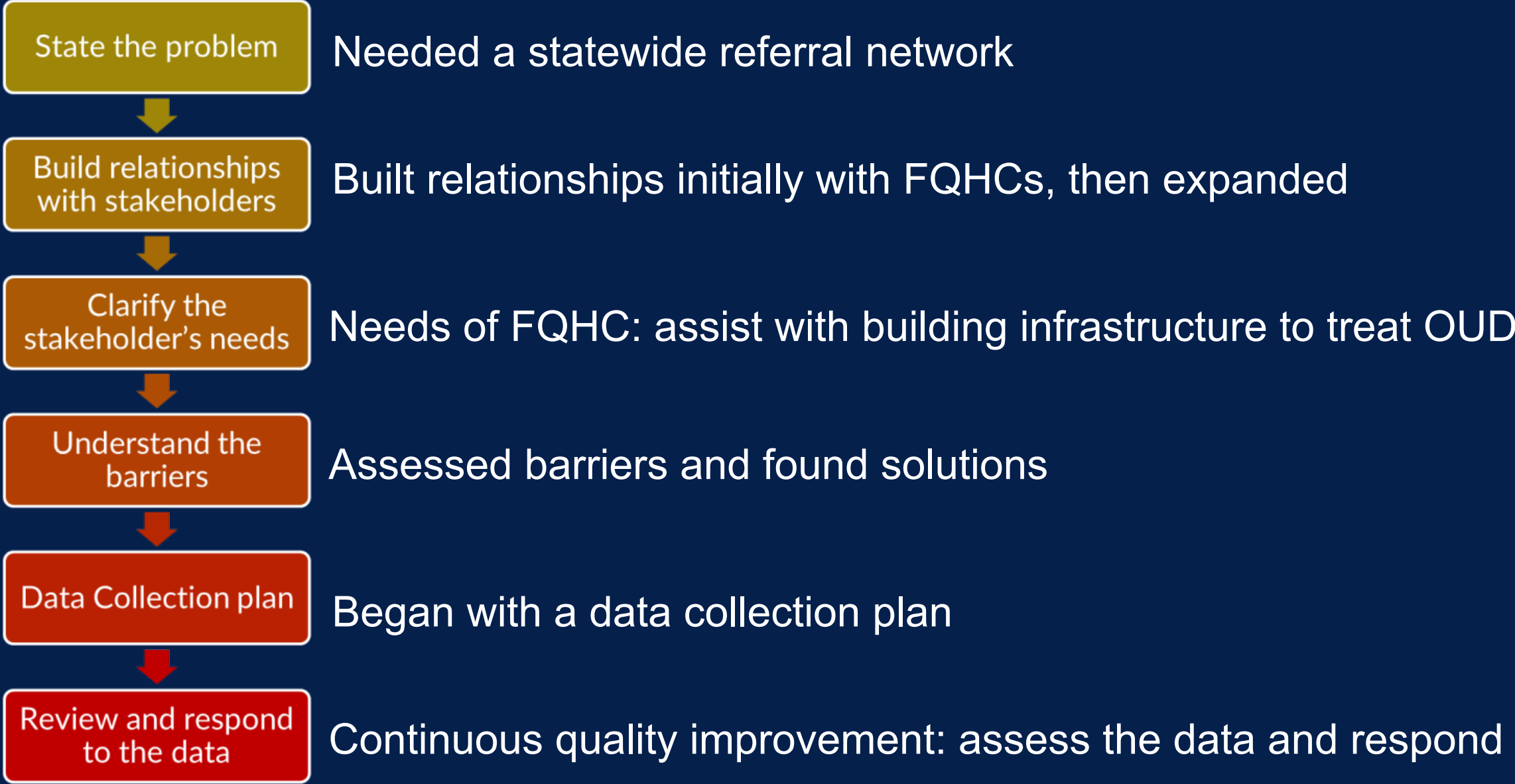


## Breakout Session: 15 min

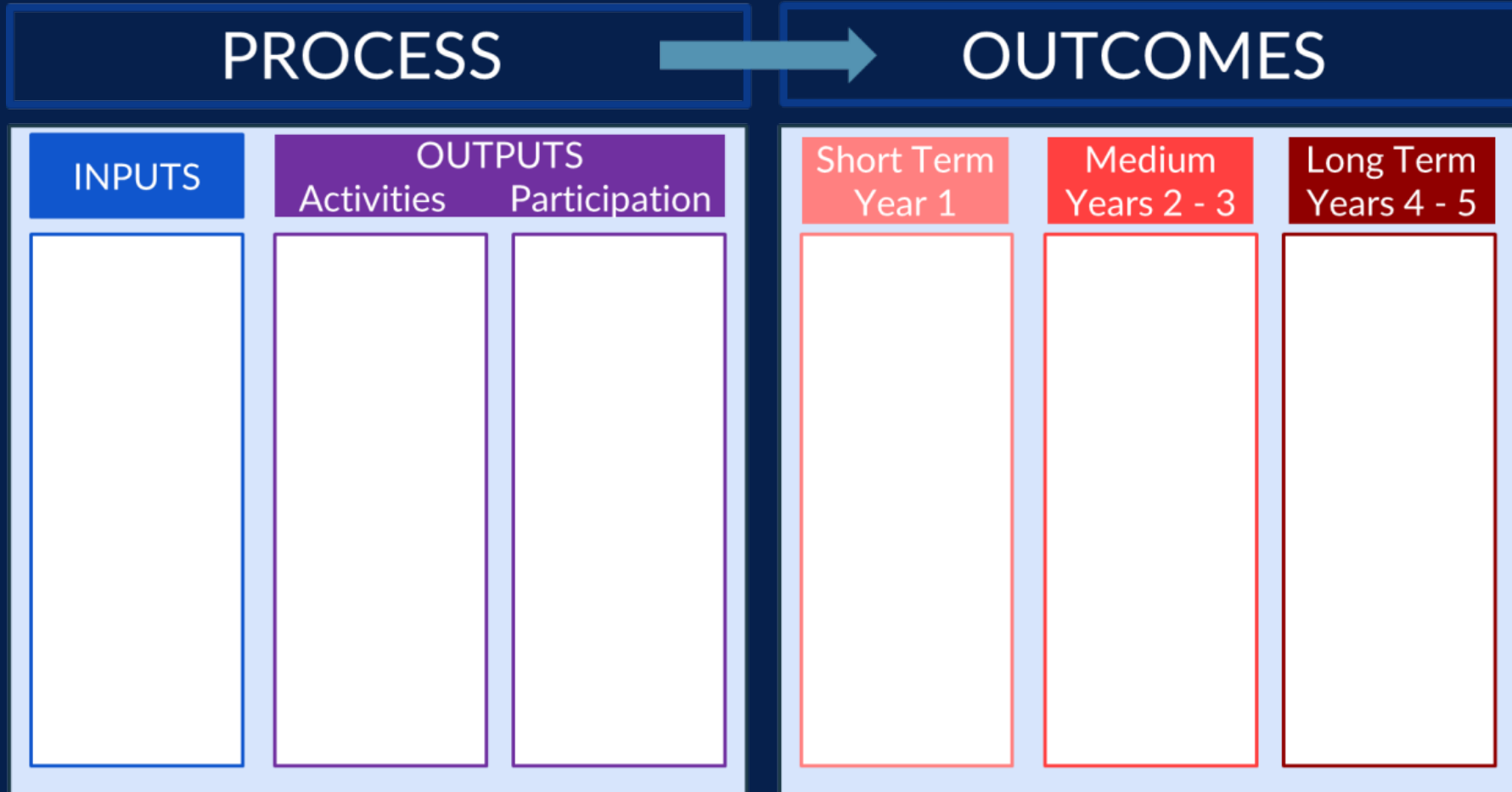
Discuss with your table members  
strategies for expanding access to  
underserved populations

# Report Out

# In Summary



# Take Home



Your implementation framework

# References

## Network Models

1. Brooklyn, J. R., & Sigmon, S. C. (2017). Vermont hub-and-spoke model of care for opioid use disorder: Development, implementation, and impact. *Journal of Addiction Medicine*, 11(4), 286–292. <https://doi.org/10.1097/adm.0000000000000310>
2. Miele, G. M., Caton, L., Freese, T. E., McGovern, M., Darfler, K., Antonini, V. P., Perez, M., & Rawson, R. (2020). Implementation of the hub and spoke model for opioid use disorders in California: Rationale, design and anticipated impact. *Journal of Substance Abuse Treatment*, 108, 20–25. <https://doi.org/10.1016/j.jsat.2019.07.013>
3. Rawson, R., Cousins, S. J., McCann, M., Pearce, R., & Van Donsel, A. (2019). Assessment of medication for opioid use disorder as delivered within the Vermont Hub and spoke system. *Journal of Substance Abuse Treatment*, 97, 84–90. <https://doi.org/10.1016/j.jsat.2018.11.003>

# References

## OUD Treatment disparities

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2. Hedegaard, H. (2021). *Urban–Rural Differences in Drug Overdose Death Rates, 1999–2019*. <https://doi.org/10.15620/cdc:102891>
3. Nedjat, S., Wang, Y., Eshtiaghi, K., & Fleming, M. (2024). Is there a disparity in medications for opioid use disorder based on race/ethnicity and gender? A systematic review and meta-analysis. *Research in Social and Administrative Pharmacy*, 20(3), 236–245. <https://doi.org/10.1016/j.sapharm.2023.12.001>
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# CONTACT US

NC STAR

<https://ncstarnetwork.org/>

Gabriela Castro MD

[Gabriela\\_Castro@med.unc.edu](mailto:Gabriela_Castro@med.unc.edu)

Lindsey Kennedy PharmD BCPS

[lindsey\\_kennedy@med.unc.edu](mailto:lindsey_kennedy@med.unc.edu)

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