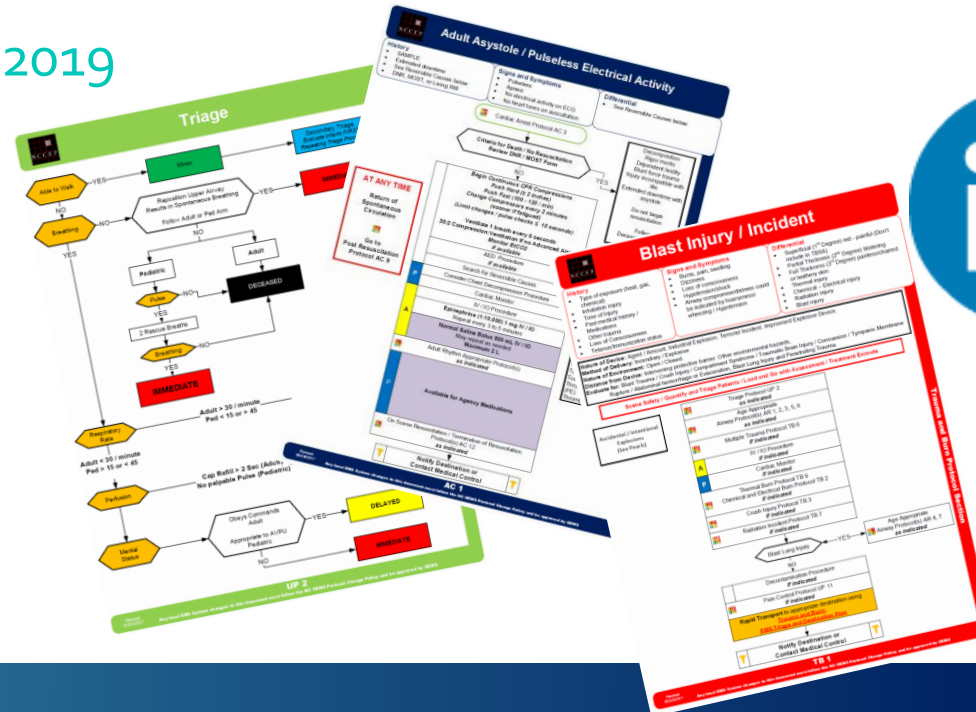
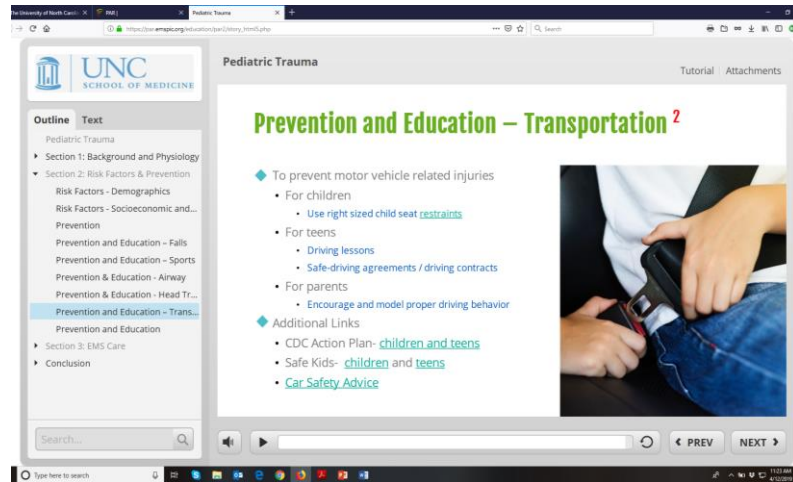




Pediatric Performance Measures:
Improving EMS Care for
Time-critical Illness and Injury

Project Goal

- ▶ Improve EMS care for children through the use of performance improvement feedback tools
 - Trauma
 - Respiratory Distress
 - Sepsis
- ▶ Audience: EMS Systems and their providers in North Carolina
- ▶ Timeframe: September 2016 - August 2019



Partners

- UNC School of Medicine
- State Advisory Panel
- NC Office of EMS
- ESO Solutions
- AHEConnect
- Eight NC EMS Systems
- NREMT

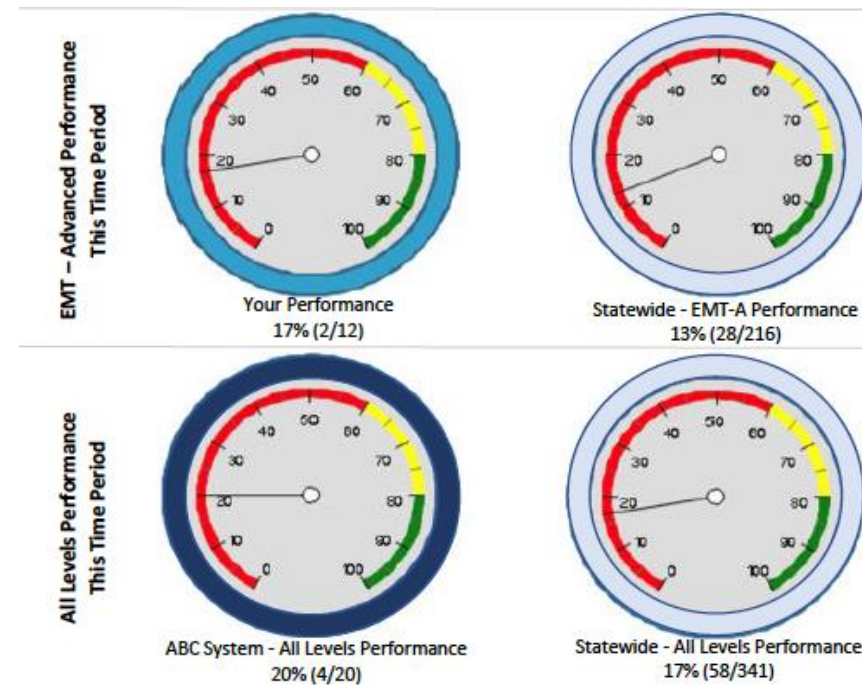
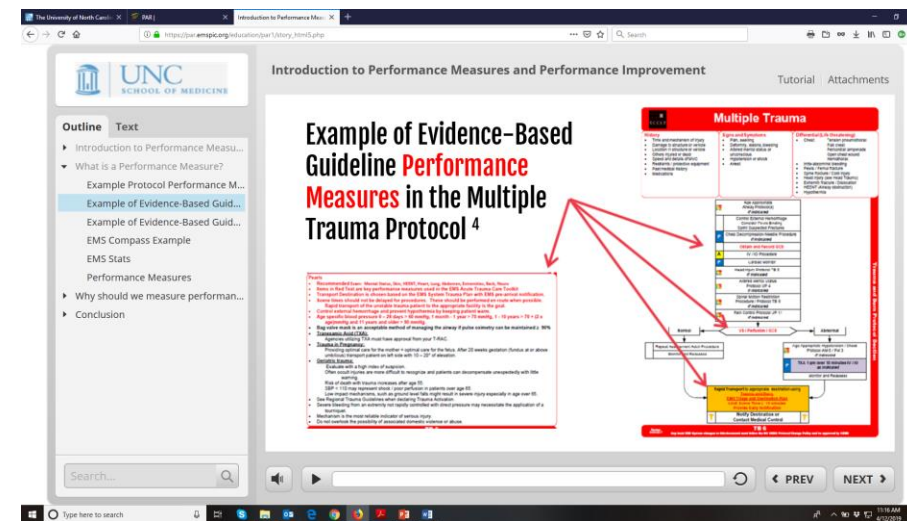


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Project Activities

- ▶ 2017 & 2019 State Advisory Panels
- ▶ Social media campaign
- ▶ Performance Adherence Reports
- ▶ Online educational courses
- ▶ Focus groups
- ▶ EMS provider change in performance



Deliverables to-date...

- ▶ State Advisory Panel
- ▶ PARs
- ▶ Education
- ▶ Social Media Campaign
 - ▶ Assessed national EMS use of social media
 - ▶ Facebook, Twitter, Instagram, LinkedIn
 - ▶ Regularly posting
 - ▶ Beginning to target providers with personalized messages to encourage PAR use



State Advisory Panel

➤ Members:

- NC Office of EMS staff, NCEMSC Program staff, EMS providers, EMS administrators, pediatric and EM physicians, a school nurse, a parent, and a teen

➤ Purpose:

- 2017
 - Shared goals, methods, & deliverables
 - Acquired feedback on online educational courses, PARs, social media campaign
- 2019
 - Shared progress to date & challenges
 - Discuss further recommendations and future direction



PAR Reports

➤ Identified 13 performance measures based on NC EMS protocols

- Protocols used:
- Multiple Trauma
- Trauma & Burn Destination Plan
- Suspected Sepsis
- Pediatric Asthma / Respiratory Distress
- Pediatric Airway
- Pediatric Allergic Reaction

Categories	Protocols Used	Subcategories	Measures (Outcomes)
Trauma	Multiple Trauma (TB6) Trauma and Burn Destination Plan		<ul style="list-style-type: none"> - Measure blood pressure, pulse, respiratory rate, & GCS - Transport to a trauma center (Level 1 or 2) - Limit Scene Time ≤ 10 minutes - Provide early notification to receiving center
Respiratory Complication	Pediatric Asthma / Respiratory Distress (AR7)	Respiratory Distress	<ul style="list-style-type: none"> - Measure pulse oximetry - Administer Albuterol
	Pediatric Airways (AR5)	Airway	<ul style="list-style-type: none"> - Measure capnography / capnometry
	Pediatric Allergic Reaction (PM1)	Severe Allergic Reaction	<ul style="list-style-type: none"> - Administration of epinephrine
Sepsis	Sepsis Protocol (UP15)		<ul style="list-style-type: none"> - Administration of fluid bolus - Notify receiving facility

PAR Reports

➤ Identified 13 performance measures based on NC EMS protocols

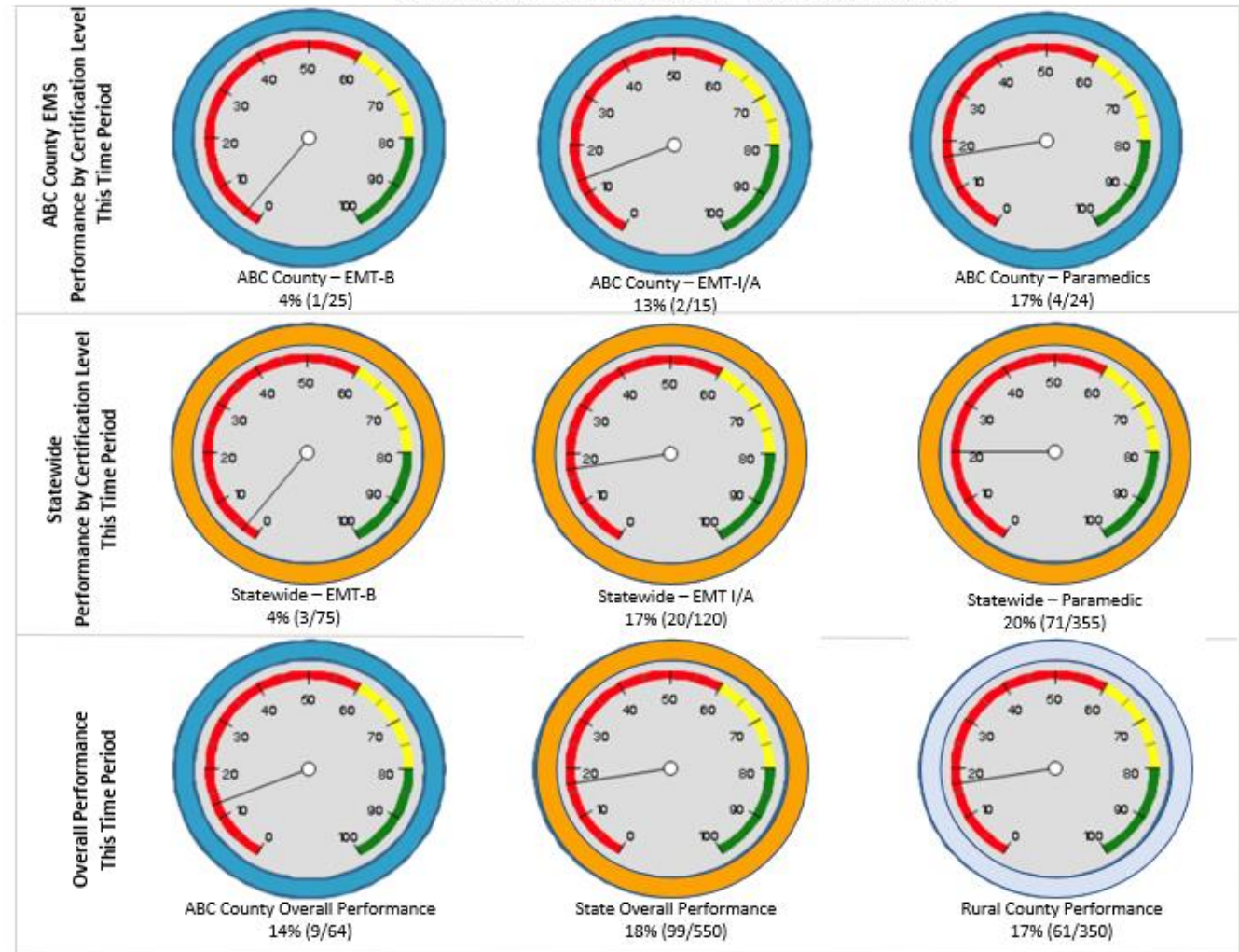
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PAR Reports

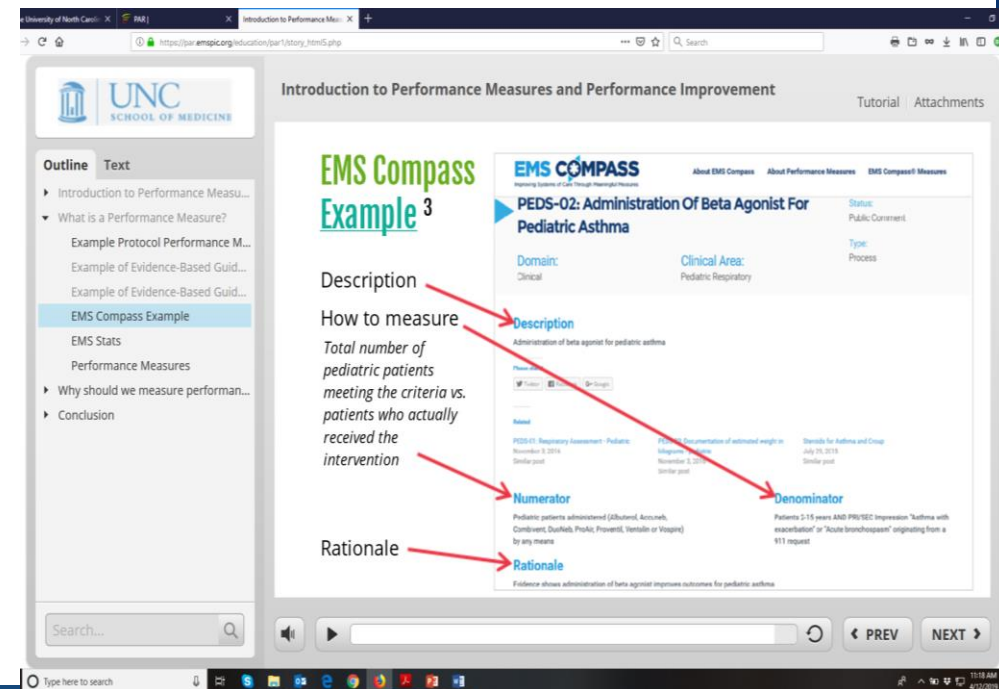
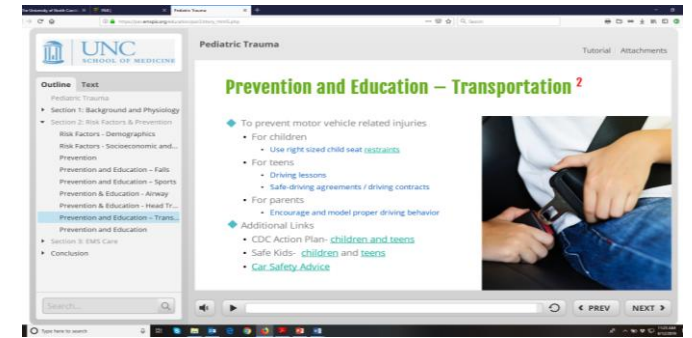
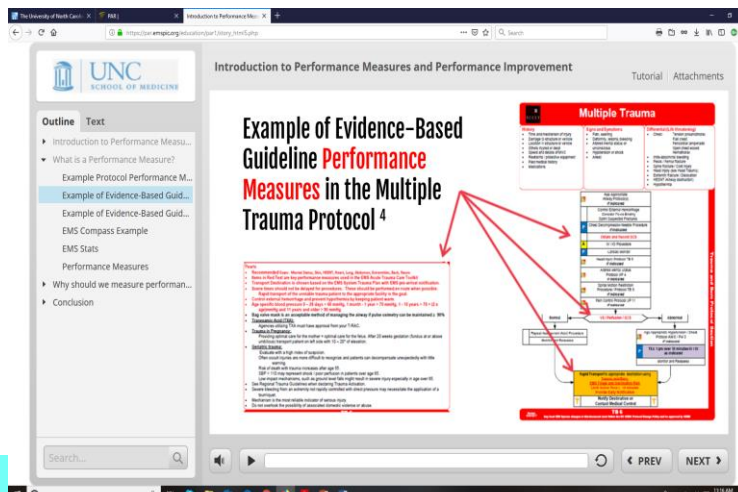
- ▶ Originally releasing 3 pediatric PARs
 - ▶ Developed 3 equivalent adult versions
- ▶ Provider & admin views
- ▶ Released early 2019
- ▶ Tracking any changes to EMS protocols

Pediatric Trauma PCR – Patients Taken to Trauma Center
ABC County EMS – Administrator View – October-December 2018



Education

- ▶ Originally releasing 5 courses, developed 4 and 1 user manual
- ▶ Introduction to Performance Measures & Performance Improvement
- ▶ Performance Adherence Reports for Respiratory Emergencies
- ▶ Performance Adherence Reports for Sepsis
- ▶ Performance Adherence Reports for Pediatric Trauma



Education

- ▶ Originally releasing 3 podcasts, developed 4 w/ another on the way!
- ▶ Episode 1: Pediatric Trauma
- ▶ Episode 2: Pediatric Upper Respiratory Distress
- ▶ Episode 3: Pediatric Lower Respiratory Distress
- ▶ Episode 4: Pediatric Head Trauma
- ▶ Episode 5: Pediatric Sepsis

Social Media Campaign

- ▶ Active presence on the following social media platforms:

- ▶ Facebook

- ▶ 199 followers; 322 posts

- ▶ Twitter

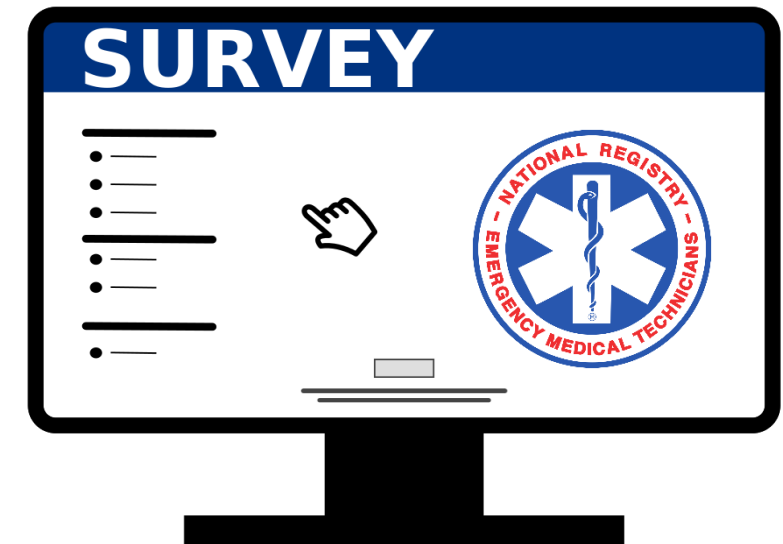
- ▶ 156 followers; 631 tweets

- ▶ Instagram

- ▶ 59 followers; 228 posts

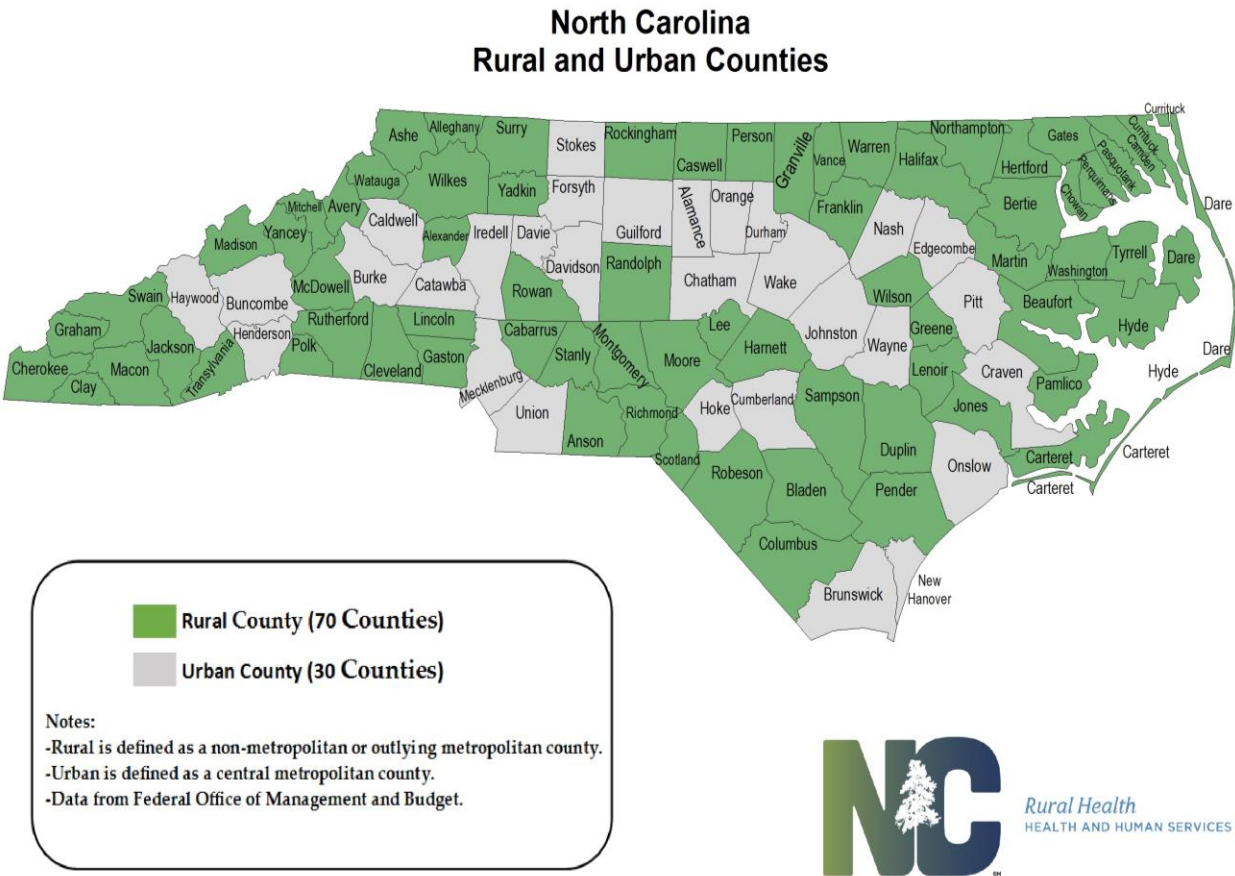
- ▶ LinkedIn

- ▶ 47 connections; 139 posts



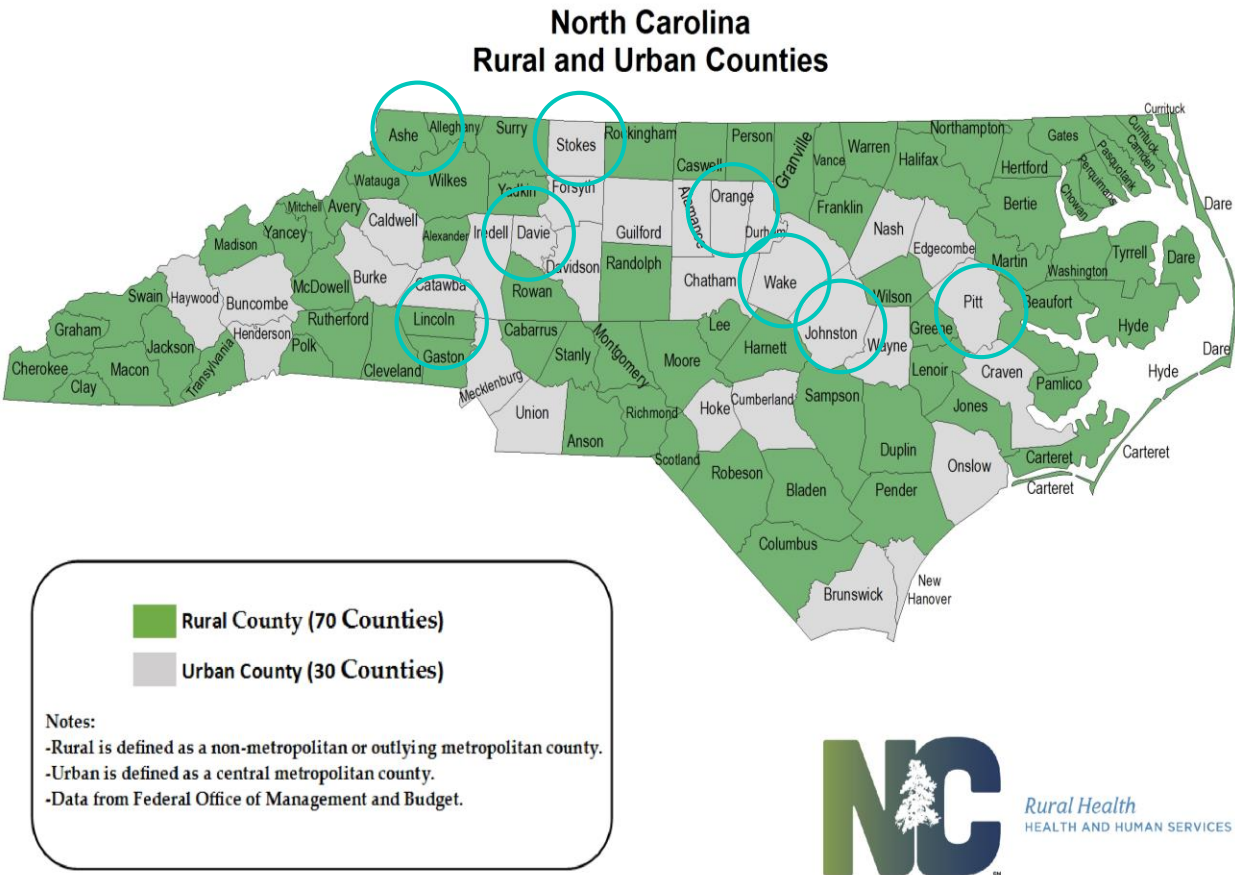
Enrolled counties

Urban	Rural
Johnston	Ashe
Orange	Davie
Pitt	Lincoln
Wake	Stokes



Enrolled counties

Urban	Rural
Johnston	Ashe
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Soon...

- ▶ Focus groups
 - ▶ Fall 2019
 - ▶ EMS providers and administrators
 - ▶ What do EMS and admin identify as useful, as barriers, and as necessities to performance improvement?
- ▶ Education and PAR access
 - ▶ How often are these accessed by providers and admin?
- ▶ EMS Provider Change in Behavior
 - ▶ NC EMS records



Future of the project



- ▶ Phase 2 – Pediatric Emergency Care Coordinator (PECC) Project
 - ▶ Develop a standard PECC position
 - ▶ Implement PECCs in 10 rural counties
 - ▶ Providing training, peer community support, online portal
 - ▶ Develop an alert system
 - ▶ More PARs
 - ▶ Focus on national performance measures
 - ▶ More education
 - ▶ Shorter, more focused on performance

Project Team Members



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