

High Quality Pitt-Crew CPR: Doing the Ordinary Extraordinarily Well



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BACKGROUND

*Quality of CPR performed after cardiac arrest strongly correlates with patient outcomes

* First responders in Pitt County, NC lack a field guide to help ensure high quality CPR is delivered

PROJECT AIM

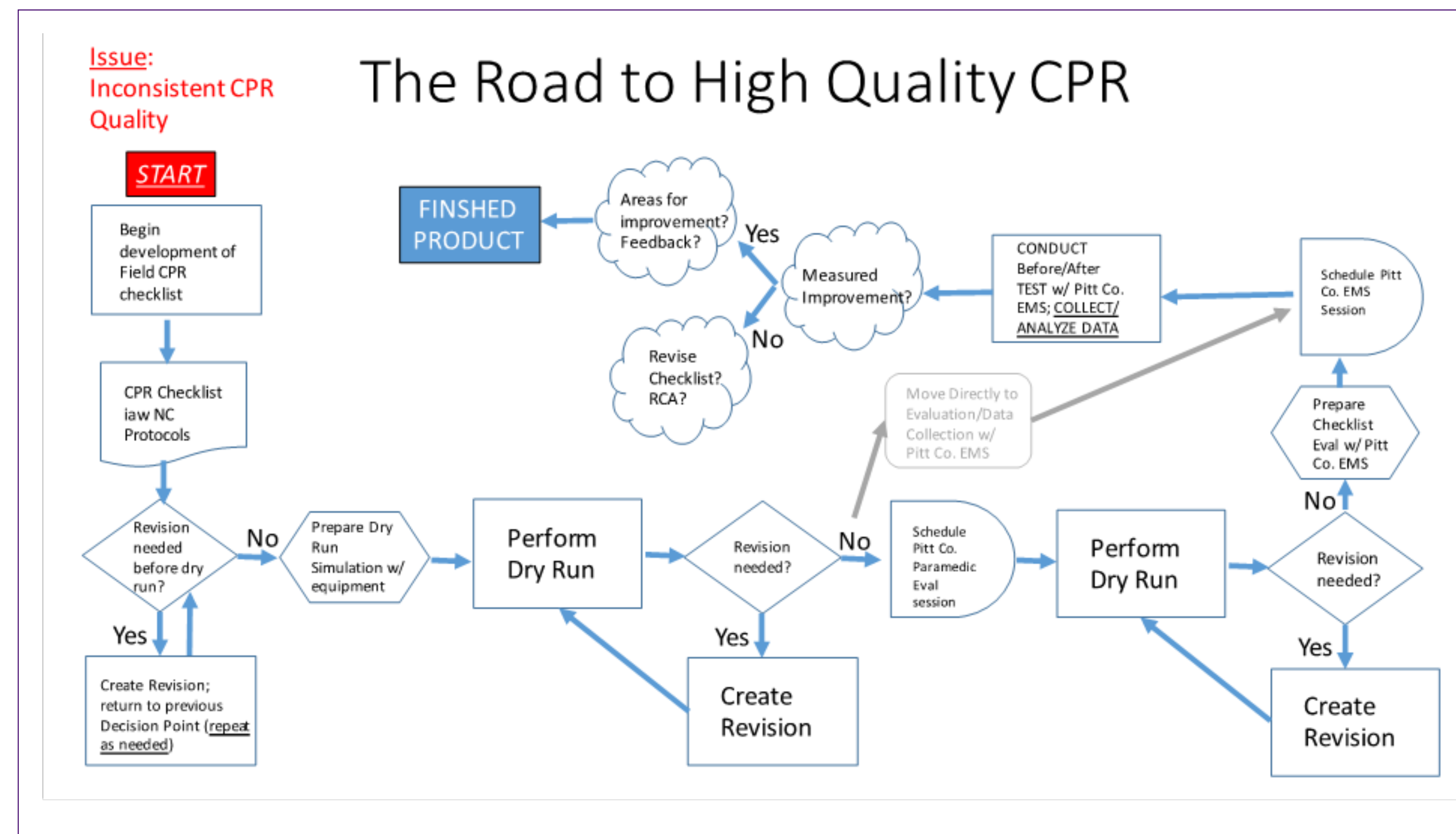
Global Aim: Improve field cardiac arrest mortality outcomes by 20% in Pitt County, NC within the first year of checklist implementation

Specific Aim: Train 100% of Pitt County, NC EMS first responders in using the approved Pitt County, NC Pit-Crew CPR checklist and create a sustainable training plan to allow new first responders to train and practice with the checklist

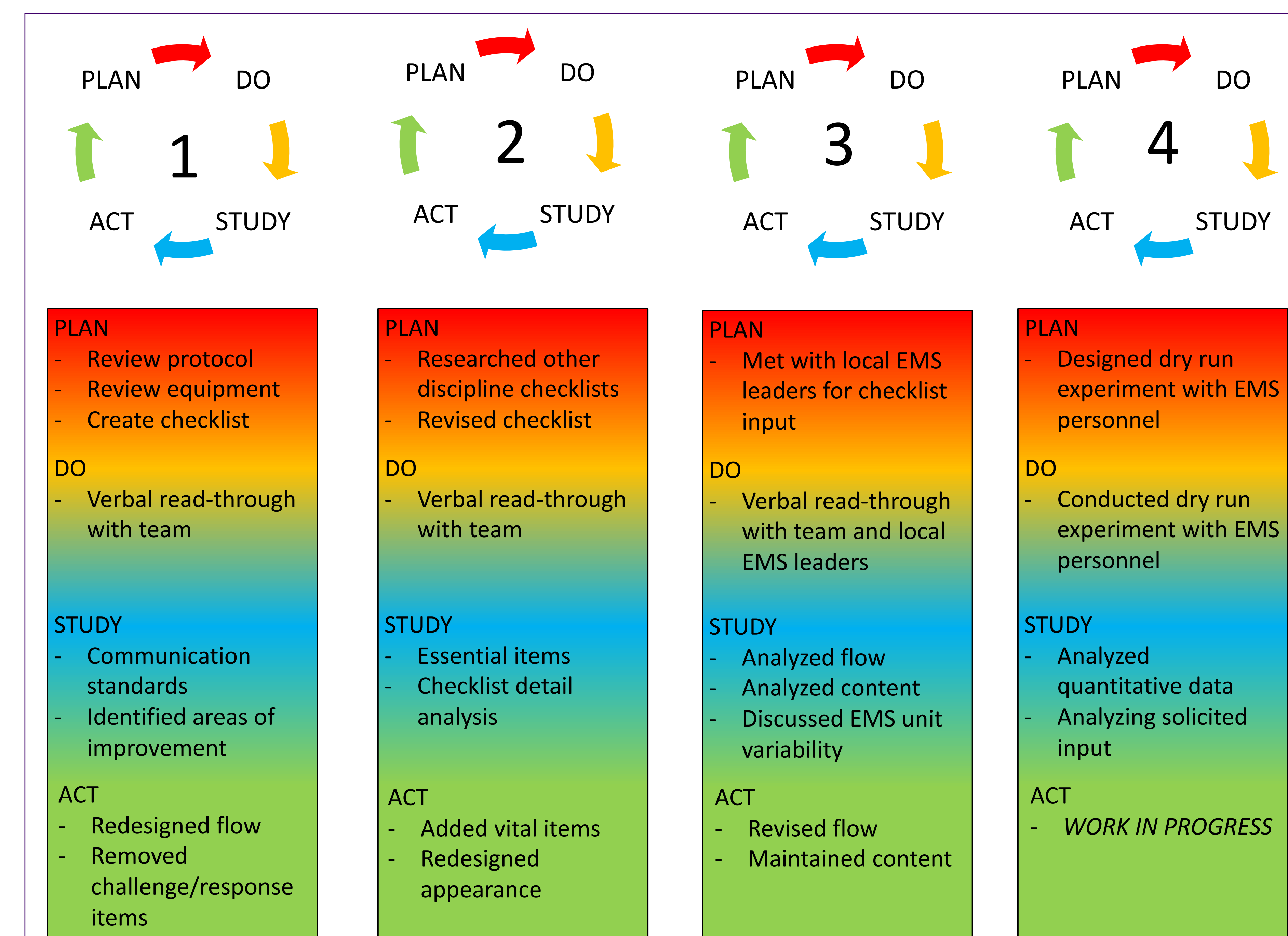
PROJECT DESIGN/STRATEGY

1. Research current state
 - A. What is currently being used?
 - B. What has been used if anything?
2. Research checklist possibilities
 1. Study checklist models
 2. Evaluate current protocols
3. Design checklist
 1. Focus on ease-of-use and vital information
 2. Several cycles of team feedback on drafts
4. Bring checklist to field for testing and feedback
 1. Evaluate checklist effectiveness
 2. Identify strengths/weaknesses
 3. Solicit feedback

PROJECT FLOW



CHANGES MADE



OUTCOMES

Time spent within correct CPR parameters

2018 Pitt County Performance Data

| Depth | Rate | Combined |
|-------|-------|----------|
| 36.1% | 55.2% | 21.8% |

Test Group Dry-Run **without** checklist*

| Depth | Rate | Combined |
|-------|-------|----------|
| 64.7% | 48.1% | 36.4% |

Test Group Dry-Run **with** checklist*

| Depth | Rate | Combined |
|-------|-------|----------|
| 70.8% | 72.6% | 54.5% |

* Identical test group given checklists/instruction in-between sessions

Checklist many areas including:

- Ventilation rate/volume
- EtCO2 monitoring
- Compressor switching

NEXT STEPS

1. Finalize formatting
2. Distribute to all Pitt County EMS units
3. Incorporate checklist into all Pitt County EMS units' response kits and training plans
4. Finalize and implement feedback tool for continuous checklist improvement

ACKNOWLEDGEMENTS

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