



# From Plains to Peaks: Implementing a Regional QI Process for EMS Agencies in Eastern Colorado

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## Background

- QI/QA processes in EMS agencies are implemented with the expectation that they will provide opportunities for learning and professional growth to pre-hospital healthcare providers.
- They are also a great source for feedback for medical directors and state EMS boards who write protocols for pre-hospital care, define the scope of practice for pre-hospital professionals, and adjust educational curricula to reflect state and local needs.
- *Plains to Peaks Regional Emergency Medical and Trauma Advisory Council (RETAC)* is a regional organization encompassing 44 EMS and Fire agencies located in 5 counties: Teller, Lincoln, Kit Carson, El Paso, and Cheyenne.
  - The agencies vary in size from large privately-owned stand-alone ambulance systems, city-based systems, hospital-based systems, and small, volunteer-based rural systems.
  - The personnel reviewing cases, the selection criteria, the process for feedback and follow-up vary by agency.
  - Aggregate data is rarely collected and followed across agencies or shared or regional level.

## Innovation Objectives

- Medical directors as well the leadership of these agencies sought to create a QI model that:
  - Can be scaled to fit their size and needs of various agencies in the regional
  - Provides individual agencies with valuable regional level data to guide their educational programs and resource allocation.

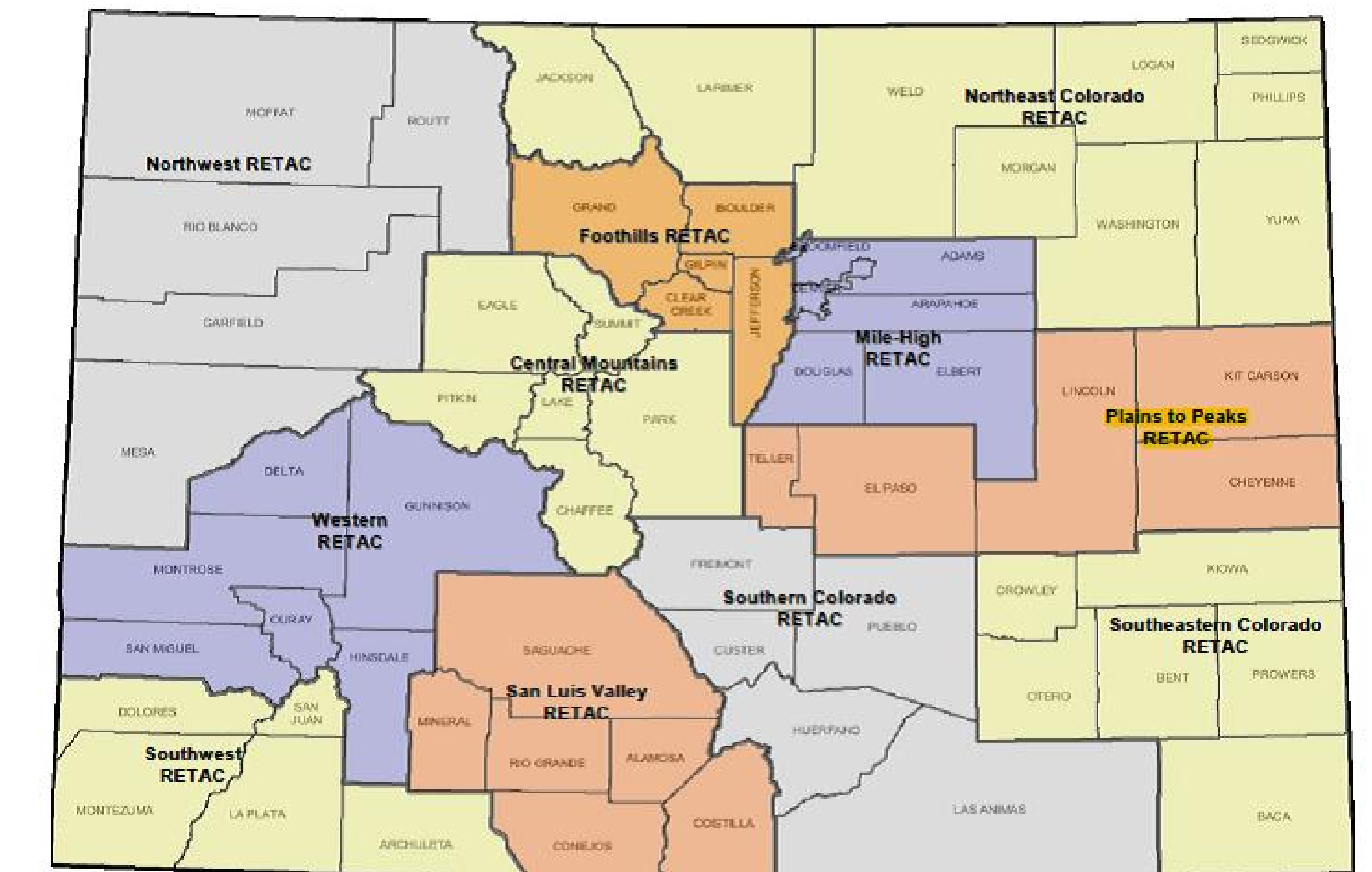
## Program Description

- Standardized QI forms for Basic Life Support (BLS) cases were created in Microsoft Teams: Respiratory, Chest Pain, Behavioral/Psych, Trauma, and Patient Refusal.
  - The questions and format were reviewed with medical directors for the counties 5 counties involved, and the EMS Directors, Fire Chiefs, and QI personnel of each agency within the 5 counties.
- The forms are used for case review process and filled out by trained QI personnel in each agency according to the agency's case review criteria.
- Data is hosted and aggregated by RETAC and released to each agency quarterly

## Program Evaluation

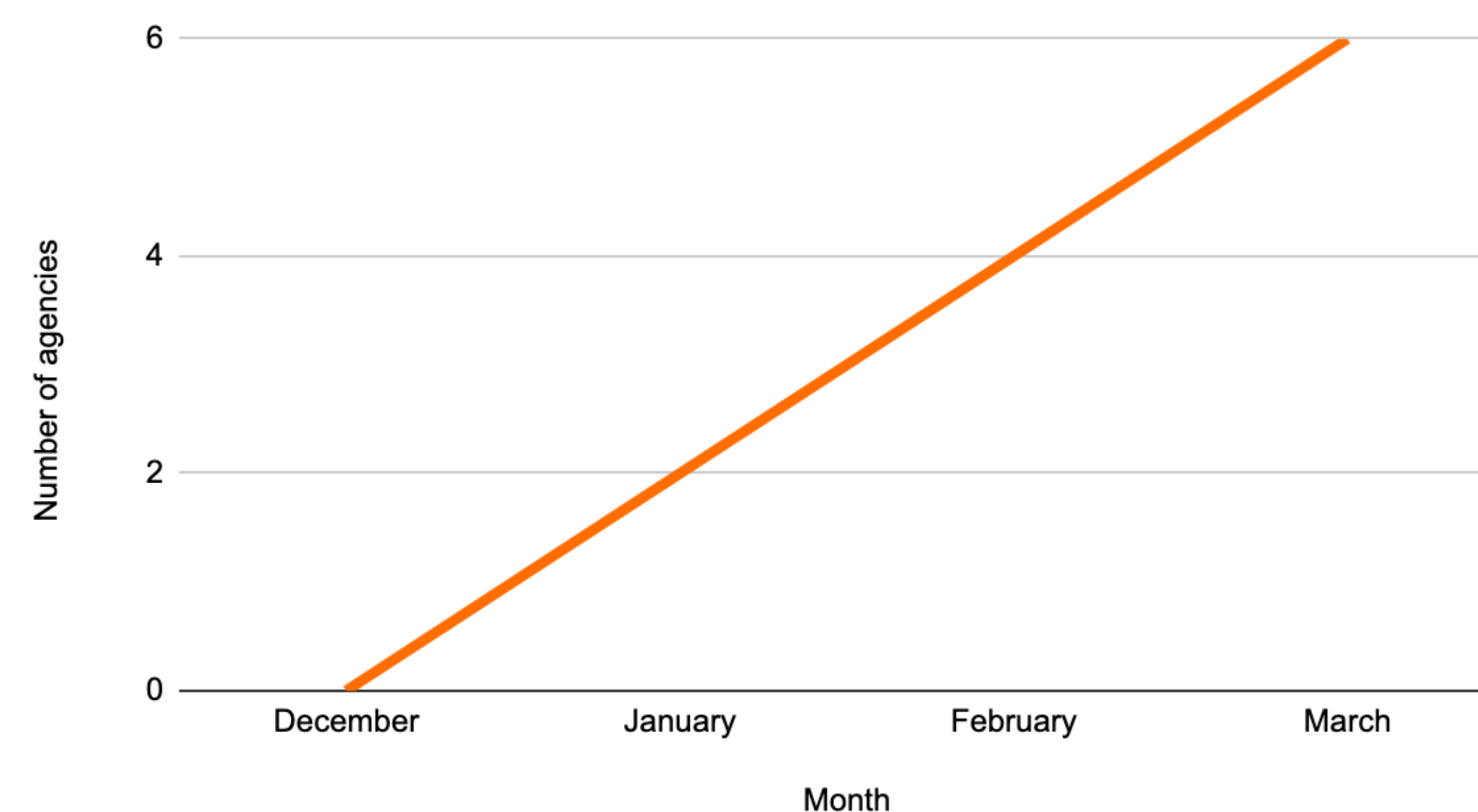
### Concerns from Project Stakeholders

- Using QI results as an internal metric, not for direct comparison to neighboring agencies
- Forms need to be intuitive and concise
- Each question on QI form must serve a specific purpose
- Who will fill out these forms?
- Why use a new QI system when an agency already has one in place?
- Need time to implement the new forms
- What's the reason for creating new forms?

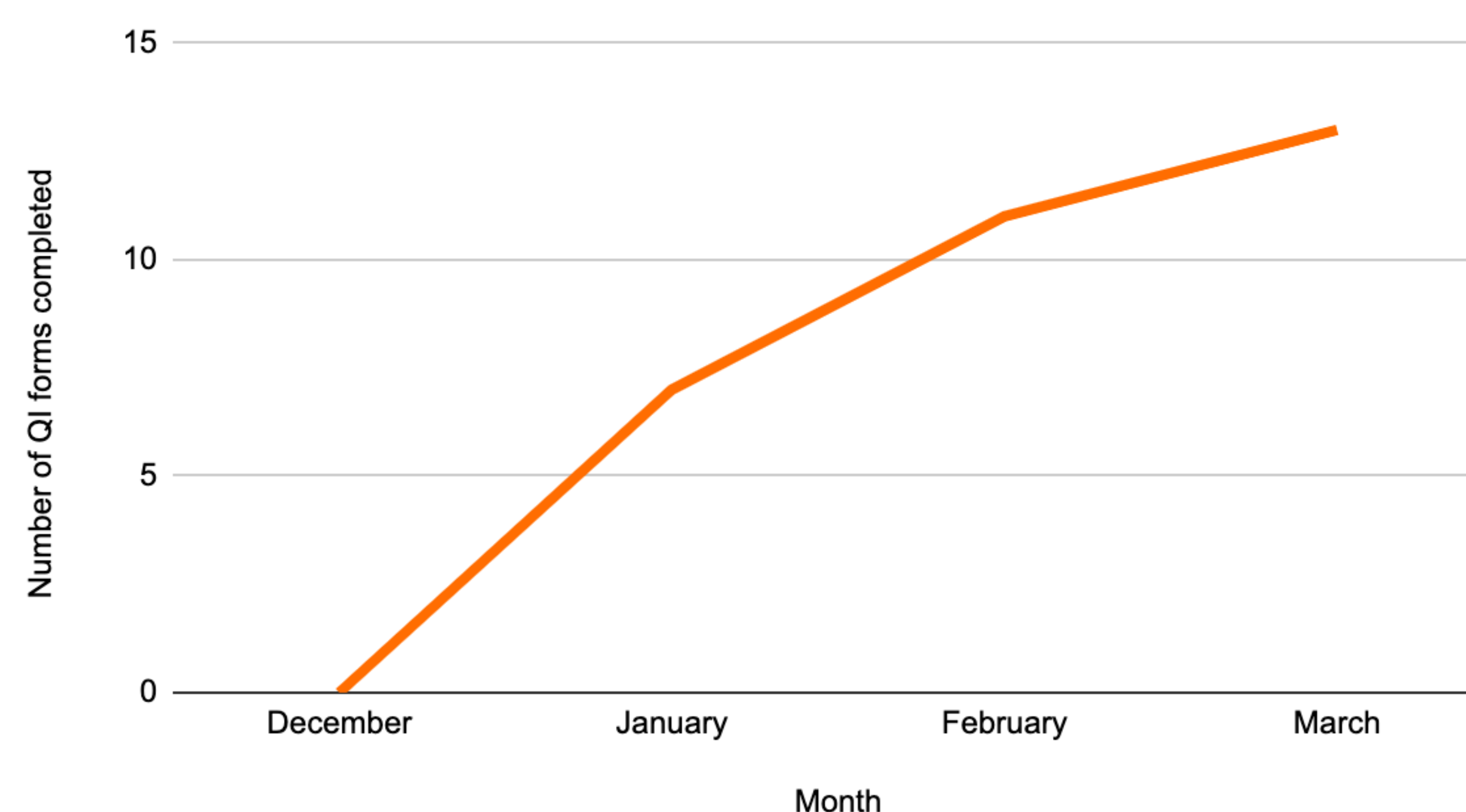


Regional Emergency Medical and Trauma Advisory Councils

### Number of agencies that used new QI forms by month



### Number of QI forms filled out per month



## Discussion

- Over the course of four months, a total of 6 agencies have started to use the forms consistently in their QI process. These agencies are providing valuable information on how to improve streamline the process for other agencies.
- Other agencies have expressed interest and are looking for feedback on how to integrate the process into their existing QI process.
- Based on feedback, we are looking into developing additional BLS forms to cover other type of cases: e.g. Endocrine, Cardiac Arrest.
- Next stage involves creating corresponding Advanced Life Support forms to review cases at A-EMT and Paramedic level.
- Agencies are interested in coordinating care reviews to improve comparisons across the region.

## Conclusions

- A uniform QI process provides benefits to large as well as small EMS agencies across the region. Among them, is easy implementation, clear guidelines, ability to compare across the region and coordinate efforts in improving quality of care in pre-hospital settings.

## Reference

1. Colorado Department of Public Health and Environment. Emergency Medical Services. 6 CCR 1015-3, 2018.