Colorado Department of Public Health and Environment
Emergency Medical and Trauma Services

Standardized (Regional) Needs Assessment Project

Central Mountains
Regional Emergency Medical and Trauma Advisory Council (CMRETAC)

Final Report

A report from:

The Abaris Group
Walnut Creek, CA

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Colorado Department of Public Health and Environment
Emergency Medical and Trauma Services

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Central Mountains RETAC

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Executive Summary

The Abaris Group conducted a needs assessment of the Central Mountains Regional Emergency and Trauma Advisory Council's (CMRETAC) Emergency Medical and Trauma Services (EMTS) system beginning in May 2009 and concluding in June 2009. The assessment included on-site visits and interviews with the CMRETAC stakeholders, the use of two surveys; the standardized Benchmarks, Indicators, and Scoring (BIS) survey instrument and a problem ranking survey. The comments from the on-site assessments and town hall were formatted into a Strengths, Weaknesses, Opportunities and Threats (SWOT) format and the data from the two surveys was entered into several spreadsheets for analysis. This report contains the results of the needs assessment and recommendations for the CMRETAC's consideration to enhance the EMTS system in Central Mountains.

Twenty CMRETAC EMTS stakeholder agencies participated in the assessment process, including representation from ambulance services, fire departments, hospitals, trauma centers, clinics, and emergency management agencies. Eleven BIS surveys were returned and 10 problem ranking surveys were completed. The data from the surveys was incorporated into several spreadsheets for analysis, including average scores, frequency, and proportion for each question or issue.

The CMRETAC has good participation and cooperation between board members and stakeholder agencies. This will provide the foundation to implement the opportunities and recommendations provided in this report. Some of the major recommendations are a regional medical direction program, consolidated and contiguous disaster planning, formalized injury prevention programs that can be replicated by any agency, coordinated regional training to minimize duplication of efforts, and utilizing existing EMTS data to implement regional CQI programs.

The BIS survey instrument revealed high scores in the areas of integration of health services, legislation and regulation, system finance, and clinical care. Lower scores were indicated for EMTS research, mass casualty, prevention, and information systems.

Per the problem ranking survey, the most challenging issues are the administrative support and medical direction involvement. The least challenging issues included billing/accounts receivable.

The recommendations for the CMRETAC include both short-term and long-term activities. The CMRETAC members should review and prioritize them for the region. Inclusion of these activities into the 2009 biennial plan is highly suggested.

Background and Project Overview

In September 2008, the EMTS Section within the Health Facilities and Emergency Services Division of the Colorado Department of Public Health and Environment (CDPHE) notified The Abaris Group of its intent to award to the firm a contract to conduct comprehensive assessments of the EMTS systems of 11 Regional Emergency medical and Trauma Advisory Councils (RETACs) of Colorado over the next three fiscal years, anticipating three or four assessments may be completed each fiscal year. Colorado Revised Statute (CRS), 25-3.5-704 (2) (c) (II) (F), requires "The identification of regional EMTS needs through the use of a needs-assessment instrument developed by the department; except that the use of such instrument shall be subject to approval by the counties and city and counties included in a RETAC." The EMTS Section, in partnership with Colorado's RETACs, established a task force to address a Standardized, regional Needs Assessment Project (SNAP). The goal of this project is to support each of Colorado's RETACs in completing an assessment process as required by statute, but, more importantly, to assess local and regional EMTS in a way that provides consistent results that can be the basis for future development of biennial plans that addresses those needs and accurately identify the policies and resources necessary to meet the future system requirements.

In 2006, the Western RETAC completed a comprehensive assessment that was funded through a grant from the Department of Local Affairs (DOLA). A requirement of the DOLA grant was that all assessment tools, products and processes of the Western RETAC model would be made available to the RETACs across the state of Colorado for possible standardization and replication. The SNAP Task Force reviewed the Western RETAC model which used on-site assessments of the RETAC stakeholders, a problem ranking survey, and an assessment instrument that included BIS sections based on the 15 trauma/EMS components identified within the Colorado Administrative Code. The SNAP Task Force modified the BIS assessment instrument to measure Colorado's EMTS system development from a RETAC perspective. (For more information on the BIS instrument, read the WRETAC final report available on the EMTS website.)

In collaboration with staff from EMTS and the SNAP Task Force, three RETACs were identified for the first-year assessment. The selected RETACs included:

- Southern Colorado RETAC
- Central Mountains RETAC
- San Luis Valley RETAC

The award of this contract was delayed until mid-January 2009 and The Abaris Group was able to start work on this project in April 2009.

Methodology

The methods utilized for the CMRETAC assessment consisted of the following:

- Review of documents – Several CMRETAC documents related to the EMTS systems in Colorado, including relevant CRS, 2007 biennial plan, agency profiles, meeting minutes, website, and the budget were reviewed.
- Development of RETAC specific questions – The BIS instrument is designed to accommodate one question specific to the RETAC in each of the 15 Colorado trauma/EMS components. CMRETAC specific questions were provided to The Abaris Group for inclusion on the BIS instrument.
- Attend CMRETAC Meeting – The Abaris Group attended the CMRETAC meeting prior to the on-site assessments, presented an overview of the SNAP, and introduced the BIS instrument and problem ranking survey to the CMRETAC Board members.
- Distribution of BIS and Problem Ranking Survey – The BIS instrument and problem ranking survey were provided to the CMRETAC stakeholders via email, its website, and in person.
- On-site Assessments – In collaboration with the CMRETAC coordinator, The Abaris Group met with a sampling of the CMRETAC stakeholders. A SWOT analysis of the CMRETAC was performed with the information provided by the CMRETAC's stakeholders.
- Tabulation and Analysis of BIS and Problem Ranking Survey – The returned, completed BIS data and problem ranking surveys were entered into a database. The BIS scoring and problem rankings were analyzed.
- Conclusions and Recommendations – Based on the data from the on-site assessments as well as the BIS and problem ranking survey, conclusions and recommendations for CMRETAC system improvements were identified.
- Draft Report – A draft report with conclusions and recommendations was submitted to the CMRETAC for confirmation of factual data.
- Presentation of the Final Report – The final report will be presented to the CMRETAC Board.

Overview of the CMRETAC

The CMRETAC consists of six counties; Chaffee, Eagle, Lake, Park, Pitkin, and Summit. The CMRETAC Board of Directors is composed of six directors, one from each county and a paid, full-time coordinator. The board has a president, vice-president, and a secretary/treasurer. CMRETAC meetings are held the second Thursday every month to two months. The CMRETAC meetings are well attended by the board members and stakeholders.

The CMRETAC coordinator acts as a liaison between the RETAC and various state entities, including the CDPHE and State Emergency Medical and Trauma Services Advisory Council (SEMTAC), other RETACs as well as other agencies or organizations that affect the concerns and decisions of the CMRETAC.

The CMRETAC EMTS system consists of 28 primary agencies consisting of:

- 13 transport agencies

- 6 dispatch centers
- 3 Level III trauma centers/hospitals
- 2 Level IV trauma centers/hospitals
- 2 Level V trauma centers/clinics
- 2 hospitals

Other agencies include first responders, fire departments, law enforcement, public health, and emergency management. Staffing of CMRETAC EMTS agencies includes either paid and volunteer personnel or a combination of the two.

CMRETAC On-site Activities

The Abaris Group attended the CMRETAC meeting on May 14, 2009. At that meeting, an overview of the SNAP was provided and the BIS and problem ranking survey were introduced to the board members and stakeholders in attendance.

On-site assessments were conducted on May 14 – 15. The assessments consisted of traveling to a sampling of the above agencies/organizations' primary place of business or a mutually agreed upon location and interviewing one or more representatives. Participants were asked questions regarding their organization and the CMRETAC, including a SWOT analysis of both. The results are included in this report.

The following agencies/organizations participated in the site visits:

- Breckenridge Medical Clinic
- Chaffee County EMS
- CMRETAC (President, Treasurer, and Coordinator)
- Eagle County Ambulance District
- Heart of the Rockies Regional Medical Center
- Red, White, & Blue Fire Protection District
- South Park Ambulance District
- St. Anthony Keystone Medical Clinic
- St. Anthony Summit Medical Center
- St. Vincent Hospital and EMS District
- Summit County Ambulance Service
- Vail Valley Medical Center

A Town Hall meeting was conducted on June 11, 2009. A SWOT analysis methodology was used to stimulate discussions. Notes were taken during the meeting and are summarized in this report. Similarly, those stakeholders that were unavailable to meet during the site visit or the town hall, were interviewed by phone and comments incorporated into the report.

Representatives from the following agencies/organizations were in attendance at the Town Hall meeting:

- Aspen Ambulance District
- Aspen Valley Hospital
- Basalt & Rural Fire Protection District
- Breckenridge Medical Clinic
- Breckenridge Ski Patrol
- Burning Mountain Fire Department
- CDPHE
- Chaffee County EMS
- CMRETAC (President, Treasurer, and Coordinator)
- Eagle County Ambulance District
- Heart of the Rockies Regional Medical Center
- Red, White, & Blue Fire Protection District
- Snowmass-Wildcat Fire Protection District
- St. Anthony Keystone Medical Clinic
- St. Anthony Summit Medical Center
- St. Vincent Hospital and EMS District
- Summit County Ambulance Service
- Ute Pass Ambulance District
- Vail Valley Medical Center
- Western Eagle County Ambulance District

Some stakeholders were unable to meet in person or at the Town Hall. Phone interviews were conducted to ensure representation in the report:

- Pitkin County Emergency Management
- Park County Emergency Management
- Summit County Emergency Management

On-site SWOT Analysis

There were on-site interviews with representatives of 12 CMRETAC EMTS agencies/organizations. There were 20 CMRETAC EMTS agencies/organizations represented at the Town Hall meeting and another 3 through phone interviews. Overall, either through individual interviews or by attending the Town Hall, input was received from 23 CMRETAC EMTS agencies and organizations. The comments from the interviews and Town Hall meeting were organized into the following format and are summarized below:

Strengths

- CMRETAC Board – Tenure, experience, consistency, and diversity of board members
- Networking – The very existence of the RETAC promotes an informal network for EMS and hospital providers to share information with one another with no one seeing it as competition
- Injury Prevention – Conducted as semi-regional programs, especially between hospitals and clinics, with a strong emphasis on helmet use in all activities
- Trauma Data – All trauma centers, even Level IV/Vs, report their registry data electronically
- Medical Clinics – The clinics at the ski mountains are operated at a Level IV trauma center standard; Colorado refers to them as Level V as they are not open year-round
- Mutual Aid – The CMRETAC system providers are all committed to and provide mutual aid whenever it is necessary
- Dispatch – Many counties have consolidated dispatch centers that centralize 9-1-1 call processing and resource management
- Service Areas – CMRETAC has no gaps in service in its region
- Ambulance Tax District - South Park Ambulance District is an excellent example of a well-funded, rural EMS service providing ALS level care; other agencies could utilize South Park's model to improve their own situations
- Hospital Inter-facility – The region has done an excellent job of allowing paramedics to transport patients to Denver or Colorado Springs hospitals without requiring a hospital nurse to accompany the patient
- Trauma Nurse Meetings – The trauma nurse coordinators meet regularly to discuss their programs and share ideas; Level V actively participate in trauma peer review for cases they transferred

Weaknesses

- Geography – Significant isolation challenges between agencies due to extreme mountain terrain and super-rural region
- Medical Direction – There are currently multiple medical directors covering the first responder and ambulance providers with little coordination
- Radio Communications – Not all agencies are using the same radio frequencies and cannot communicate during a major incident or mutual aid request

- All Hazards Region – The CMRETAC is different than the All Hazards region, but have overlapping priorities, grant opportunities, and demands on stakeholder participation with each organization sometimes creating a duplication of efforts
- Polarized Diversity – Three of the counties are very well financed and the remaining three struggle to meet their needs
- Air Transportation – EMS helicopters are often grounded due to poor weather causing significant delays in reaching Level I and II trauma centers as well as STEMI Receiving Centers; CDPHE implemented a rotation system for air providers, yet some helicopters cannot reach the CMRETAC hospitals due to altitude causing delays in patient care
- EMS Data – At one time, all ambulance providers used the same software; that vendor left the industry and the result is a conglomeration of different systems that cannot produce comparable data
- Training – Current approach is segmented by agency or county, leading to duplication of classes
- Fire Departments – Unless they transport, not usually represented at CMRETAC meetings

Opportunities

- Medical Direction – Regional medical direction, possibly underneath a regional medical coordinator, to standardize protocols and ensure clinical oversight (look at SCRETAC for a successful model)
- Bi-Annual Plan Implementation – Ensure all action items are developed and tracked through regular review at regional meetings to prevent items from being overlooked
- Pre-made Projects – Consider creating and posting online successful projects that can be easily reproduced by other agencies, such as injury prevention
- Data Driven Quality Improvement – Develop a program to define goals and objectives, track patient care, and produce effective policies and protocols; the CMRETAC should attempt to obtain its EMTS data that the state is already collecting
- Radio Communications – All pre-hospital and hospital providers should be using a standard radio system, such as 800Mhz
- Air Transportation – Request an exemption from current CDPHE policy of rotating helicopter providers due to high altitude requirements that only certain providers can achieve
- Regional Events – The CMRETAC experiences a significant number of special events that cross multiple agency and county borders; a coordinated approach should be utilized to streamline the process, provide uniform communication, and ensure all agencies are notified of the events
- Trauma Data – Existing trauma registry software needs to be upgraded for enhanced reporting capabilities; $6,000/center
- Trainer Networking – Invite training coordinators to one or two CMRETAC meetings annually to improve networking and sharing of programs and ideas
- Regional Training – Develop regional training calendar for all agencies to consolidate and not overlap training; possibly posted/coordinated by CMRETAC
- Patient Tracking – Implement a system to track EMS patients into the hospital(s) and through to discharge for better outcome data that can drive future EMS protocols

- County Funding – Instead of providing a set amount (e.g. $15,000) to each county annually, have the county apply for the funds and allow CMRETAC to evaluate the application to ensure it is for EMTS needs
- Meeting Locations – Rotate meetings throughout the various counties and have each "host" agency provide a short presentation on its history and services

Threats

- Training – Nurse and paramedic training are only available in Eagle County requiring significant travel and commitment (Southern CMRETAC often uses training classes in the Southern Colorado RETAC); EMT certification is not as challenging; recertification and continuing education are available locally
- Recruitment & Retention – Significant concerns for Park, Chafee & Lake counties as well as resort/seasonal communities
- MCI Planning – All counties and agencies have different Multi-Casualty Incident (MCI) plans that will cause problems during a disaster
- Hospital Inter-facility – CDPHE severely limits what medications paramedics can transport between hospitals; serious challenge with rural and critical access hospitals that don't have a nurse to send with the ambulance (i.e. what works in Denver Metro is not applicable in CMRETAC)
- Authority – RETAC has no statutory power to direct or enforce EMS guidelines and policies
- Succession – Some concern about what would happen if two or more counties left the CMRETAC and it dissolved
- Funding – Current economic environment will limit growth of services and effectiveness, especially in poorer counties

Benchmarks, Indicators, and Scoring (BIS) Instrument – Results, Analysis, and Recommendations

This section of the report contains the analysis of the BIS instrument including both the agency/facility scores and the system (CMRETAC) scores. There were a total of 11 completed BIS surveys returned – 4 hospital providers, 4 pre-hospital providers, 2 emergency managers, and 1 respondent did not fill in the demographic information. One hospital provider did not answer any of the systems questions, but did respond to the agency and RETAC questions and so those scores were included in the analysis. The remaining 10 respondents who did score the systems questions more frequently responded with a zero, indicating they "don't know." There also appeared to be relatively equal scoring across provider types for both the agency and system scores. Overall, the respondents most frequently rated the survey items with scores of four or five, but there were also some occasions when opinions were highly divided.

Integration of Health Services

The majority of participants felt that both their agency and system participated in a regional committee that meets regularly, but disagreed as to the extent and the multi-disciplinary composition of the group. Respondents also indicated that their agencies' communication to stakeholders is articulated in the system plan, but that no policies were written and that they only periodically review system integration.

The majority of respondents felt that the system has policies and procedures in place to communicate changes with stakeholders, but was fairly divided over the review of its activities. Over one-quarter of respondents felt that the system had a plan, but no method to measure the progress.

Participants were also divided regarding the CMRETAC's activities, with 27.3 percent claiming that there is an informal/sporadic integration process, 27.3 percent claiming that there is a multidisciplinary reactionary group, and 27.3 percent claiming that a multidisciplinary group regularly reviews system plans and continuously improves efforts.

Recommendations

- Encourage participation of law enforcement, dispatch centers, public health, and fire departments
- Establish standing or ad-hoc committees under the CMRETAC for each of the underrepresented disciplines to address their specific issues in relation to the overall CMRETAC
- Create a method to measure the CMRETAC activities and clearly communicate the review and results to the CMRETAC stakeholders

EMTS Research

The vast majority of respondents claimed that neither their agency nor system participated in research or had a policy regarding research efforts. However, there were still 36.4 percent who believed that their agency and system at least had policies that allow participation in research. Between one-quarter and one-third of respondents stated that they had no knowledge of the system's policies or participation in

research efforts. Lastly, one-third of participants had no knowledge of the RETAC's efforts, while one-quarter stated that the RETAC was not involved.

Recommendations

- Determine areas of interest and topics for system research
- Establish a data collection committee regarding system research topics
- Encourage system stakeholders to participate in system research
- Collaborate with hospitals and educational institutions to conduct system research in areas of mutual interest
- Publish and share the results of system research with stakeholders

Legislation and Regulation

Participants overall scored their agency and system's legal and regulatory compliance with high marks. Almost all, 81.8 percent, stated that their agency demonstrates full compliance and maintains proper documentation. Furthermore, 45.5 percent believed that their agency regularly surpasses legal/regulatory requirements and has regular third-party reviews its operations. Notably, 45.5 percent also felt that their agency was in full compliance and did not necessarily surpass expectations.

Most respondents claimed that their system is mostly or completely in compliance with laws/regulations and that their decision-making and operations typically meet or exceed expectations. Fewer respondents agreed regarding third-party reviews of their systems operations and over one-quarter were unaware of any system operation reviews.

A majority, 81.8 percent, was convinced that the CMRETAC regularly reviews and updates its policies to ensure compliance, but did not believe that the CMRETAC regularly arranged for third-party reviews.

Recommendations

- Review current bylaws and ensure the board of directors is in compliance or amend as appropriate
- Develop a mechanism to communicate to system stakeholders the CMRETAC's compliance to laws and regulations
- Arrange for an expert, third-party review of its plan, policies, and conduct that ensure compliance with all laws, rules, bylaws, and contracts, possibly through the CDPHE EMTS Section

System Finance

A resounding majority stated that their agency finance data and planning was more than adequate. Approximately 54.5 percent stated that their financial data was collected and analyzed, but not benchmarked, while 27.3 percent felt that the data was benchmarked. Almost all, 81.8

percent, stated that reports and budgets are approved by the governing body and progress against the budget is regularly monitored. Also, 54.5 percent stated that planning was conducted, priorities were identified, linked to the budget, and revenue sources were identified. Another third did not feel that revenue sources were identified or allocated.

Many respondents did not know of the system's financial plans or operations; when they did, they most often responded similarly to their agency financial operations. More than one-third felt that the budget process was thorough and regularly reviewed; more than one-quarter thought that planning and priorities were linked to the budget and revenue sources were identified.

Almost two-thirds of respondents stated that the CMRETAC involves staff in the annual budget and provides regular performance monitoring.

Recommendations

- Develop a benchmarking tool through a standard template that agencies can use to collect financial and operational data, including the cost to provide services, appropriate charges, collection, and reimbursement data
- Provide the CMRETAC financial data, including the annual operating budget and monitoring reports to system stakeholders on a regular basis

Human Resources

In regards to the agencies, 54.5 percent stated that there were regular recruiting programs and retention policies, while 36.4 percent stated their recruiting program was more proactive. Almost three-quarters of respondents claimed that the staff is frequently involved in feedback mechanisms and that management responds appropriately to the results. A majority also felt that there was low turnover and that they were adequately staffed, but did not maintain a pool of candidates.

Most participants could not respond to the system's human resource conditions; however, those that did claimed that the staff recruitment, retention, and feedback procedures were adequate.

Respondents appeared divided for the CMRETAC, with 27.3 percent stating that it had a capable staff, but is not viewed as a resource, while another 27.3 percent thought that the CMRETAC was a good resource for assistance.

Recommendations

- Ensure CMRETAC is seen as a resource by all stakeholders through focused communication messages and methods that best match the intended recipients

Education Systems

Most respondents stated that their agencies' education and training programs were at least adequate for their needs. More than half stated that there are ongoing educational needs based on data. Individuals were split, 45.5 percent, regarding the initial and continuing education, where some felt that it was competency-based and fit best practices, while others did not believe it had reached that goal. One-third of respondents stated that there were only monthly continuing education and annual competency evaluations, but that it does not drive education methods.

Similar to previous questions, many respondents did not know of the system's activities regarding education and training. Of those who did know, most stated that there was a structure in place that provided comprehensive education that met the standard of care.

Almost half, 45.5 percent, of the respondents claimed that the CMRETAC does not assess or evaluate regional education programs.

Recommendations

- Continue the development of the regional education and continuing education system
- Develop or formalize a standardized competency evaluation process

Public Access

The respondent opinions were somewhat mixed regarding public access in their agencies, where 63.6 percent felt there was a comprehensive communications plan with emerging technologies. Yet, 45.5 percent stated that there was merely an informal process for addressing the needs of the public. More than half of the respondents stated that there were adequate accommodations for special populations.

The majority of respondents had no knowledge of their system's public access activities; although, 36.4 percent responded that the system had a comprehensive communications plan.

Many respondents, 36.4 percent, claimed that the CMRETAC had no involvement in the communications planning, while 45.5 felt that the CMRETAC at least helped to coordinate public access efforts.

Recommendations

- Share system's communications plan with stakeholders and support individual agency plan development
- Ensure agency and system communications plans are comprehensive and contiguous with each other

Evaluation

In regards to the agencies, the majority of respondents claimed that there are computer systems for data and performance monitoring and that patient care data is collected for both internal and state use. The involvement of the medical community in evaluations was split with 36.4 percent stating that the agency has an integrated process improvement program, while 27.3 percent felt that there was no medical community involvement.

Individuals reported that their system has a computer system in place, but disagreed as to the inclusion of assessment tools. Over one-third stated that their system at least collects patient care data for statewide and internal use. Most respondents also reported that they were either in the process of or, already have in place, collaborations with the medical community on quality improvement efforts. Respondents disagreed whether the CMRETAC was partially involved in system oversight or whether they acted as a leader in evaluation efforts.

Recommendations

- Ensure the medical community is integrated into agency evaluations
- Determine what data is currently collected that can also be used to evaluate the system
- Develop a list of data components useful for system evaluation
- Develop a research and evaluation agenda with service providers, hospitals, trauma centers, and the medical community
- Develop a process improvement program to improve clinical and administrative services

Communications System

The majority of respondents appear pleased with the communications systems of their agencies, with 63.6 percent stating that there is a comprehensive plan with full integration with other agencies. Approximately 45.5 percent claimed that there are comprehensive needs assessments regarding procurement of equipment. Also, 27.3 percent said that the system has been evaluated in a multi-agency process, while a slightly greater number of respondents, 36.4 percent, felt that the agency had a rigorously tested system with annual drills.

Between 36 and 45 percent of respondents did not know of the system's efforts regarding communications systems. The few that did know were divided as to the extent of their involvement.

Similarly, respondents were divided on the RETAC's involvement in communications systems, with equal proportions reporting "don't know," "plan addresses at least half of the issues," or "plan addresses all issues, but half or less are support."

Recommendations

- Ensure regional communications plan is fully integrated
- Incorporate the communications system components in annual drills and exercises to test reliability and interoperability

- Develop a system for documenting communications system problems and failures

Medical Direction

Almost three-quarters of respondents stated that the agency medical director has a written job description, but no specific authority, and yet has implemented protocols and quality improvement programs. The remaining respondents felt that the medical director did have formal responsibilities and duties. Most respondents also felt that there were effective multi-agency protocols with proper feedback mechanisms for improvement. While most stated that there was comprehensive medical oversight with review processes, others felt that there was not adequate review or a multidisciplinary approach.

Again, most respondents were unaware of the system's activities. A few had claimed that the system has adequate medical director involvement and that there is multidisciplinary development of protocols with medical oversight.

Over half of the respondents stated that the CMRETAC does not provide technical, training, or other assistance regarding medical direction to the local agencies.

Recommendations

- Develop a system/regional medical director coordinator position and identify a funding source to pay for it
- Survey stakeholder agencies regarding their needs for medical direction
- Consolidate the many individual agency and county protocols into a standardized set for CMRETAC

Clinical Care

The majority of respondents reported that the agency clinical care systems were well-defined, comprehensive, systematically reviewed, and involved a data-driven quality improvement program.

Respondents were more divided regarding the system's involvement in each of the three items, although most were positive and indicated at least adequate protocols and involvement.

More than half of the respondents stated that the CMRETAC is currently in the process of establishing a protocol and CQI plan.

Recommendations

- Finalize the regional CQI plan
- Develop a standardized, uniform clinical documentation format or template in conjunction with regional medical coordination

Mass Casualty

The majority of respondents claimed that their agency and system have disaster system plans and cooperate in drills; however, in the case of agencies, 45.5 percent thought that the training and exercises were haphazard and siloed. Respondents mostly could not comment on the system's involvement in training and exercises. There was also disagreement regarding the frequency of drills and the extent of system review.

The RETAC reportedly only provided limited assistance in disaster planning efforts.

Recommendations

- Collect agency disaster plans and review the level of system support required for each
- Create a regional mass casualty plan in conjunction with each county's emergency managers
- Conduct regional exercises and drills based on the regional plan at least annually
- Develop an evaluation process for mass casualty exercises and drills
- Identify necessary supplies and equipment for mass casualty incidents; develop inventory, strategic placement locations, and monitoring procedures

Public Education

Respondents appear equally divided across all items regarding both agency and system public education efforts. The scoring was relatively balanced, except that for agency involvement, slightly more respondents agreed that there were no public education plans, routine contact with the public, or community support.

The respondents were equally divided regarding the CMRETAC's involvement in public education efforts, with slightly more individuals stating that it was not involved.

Recommendations

- Establish a public education committee to formalize an annual regional education plan with clear objectives
- Ensure that all stakeholders have the opportunity to participate in the regional education plan and activities
- CMRETAC should assume a supportive and coordinating role in the provision of public education through collaboration with the agencies
- Develop an annual, continuous public education campaign to promote awareness of the EMTS system, including the promotion of wellness and prevention
- Explore funding sources, including pooling of funds to support the regional public education campaign
- Develop "off-the-shelf" public education programs that individual agencies can implement

Prevention

While there was some discrepancy regarding the extent of the agencies' injury/illness prevention plans, many reported that the review systems were comprehensive and assist with improvement efforts. Many respondents did not know of any system efforts, but those that did were relatively divided as well. The CMRETAC involvement was similarly split, but a little over one-third stated that the CMRETAC has begun sharing injury/illness data.

Recommendations

- Establish an injury/illness prevention committee
- Collect data from all stakeholders and review for trends to be addressed
- Develop a coordinated comprehensive regional injury/illness prevention program

Information Systems

Respondents were mostly divided among both agency and system efforts in information systems. For agencies, most determined that the information system was robust and integrated and is sometimes used for review and oversight. There was less agreement regarding the implementation of performance and compliance measures in the system.

Most respondents could not comment on the system's involvement in information systems and those that did comment were evenly divided on each of the items. Lastly, most stated that the RETAC utilizes one or more data sources to monitor regional performance and provide feedback.

Recommendations

- Formalize the monitoring of regional performance, related feedback, and communicate with the stakeholders regularly
- Establish an information systems committee to determine what data is of interest and its availability
- Identify the key performance indicators necessary to monitor and evaluate the system
- Integrate pre-hospital, hospital, and trauma data to assess the quality of the regional EMTS system
- Use the integrated information to drive policy and protocol decisions within the CQI plan
- Provide feedback to management and providers on a regular basis

Problem Ranking Survey – Results and Analysis

The problem ranking survey asked respondents to rank ten listed issues from most challenging (1) to least challenging (10) for their specific agency or facility. The ten issues listed on the survey were:

- Administrative Support
- Aging Building/Equipment
- Cooperation with Other Agencies
- Medical Director Involvement
- Retention of Personnel
- Agency Funding/Financial Viability
- Billing/Accounts Receivable
- Initial/Continuing Education
- Recruitment of New Personnel
- Support from RETAC

There were only 10 respondents to this survey, 3 of which either did not complete or did not properly fill in their survey responses. One survey respondent did not indicate their provider type, but since the respondent filled in the survey correctly the results were included in the analysis. Therefore, only seven survey responses were utilized for the analysis. Although the low response rate affects the quantitative significance of the results, qualitative evaluations can still be utilized. Of the respondents, the majority stated that both administrative support and medical director involvement were the most challenging items. The reported least challenging item was billing/accounts receivable. Lastly, there does not appear to be congruence in the ranking among provider types.

Table A below summarizes the responses by agency/organization type.

Table A

Issue	1	2*	3	4	5	6	7	8	9	10
Administrative Support	na	10	10	6	7	8	1	1	1	9
Agency Funding/Financial Viability	na	10	8	7	8	9	7	8	3	2
Aging Building/Equipment	na	10	9	9	4	1	2	6	5	3
Billing/Accounts Receivable	na	10	7	10	na	10	5	7	2	10
Cooperation with Other Agencies	na	10	6	4	3	5	6	na	7	4
Initial/Continuing Education	na	10	1	2	5	3	4	na	4	6
Medical Director Involvement	na	10	5	1	1	4	3	na	10	1
Recruitment of New Personnel	na	6	4	8	9	7	9	na	6	8
Retention of Personnel	na	6	2	5	2	2	8	na	9	7
Support from RETAC	na	9	3	3	6	6	10	na	8	5
Hospital Providers	Pre-Hospital Providers				Emergency Management				Unknown	

* Survey not filled out correctly, na = not applicable

Table B lists the frequency of each issue by rank.

Table B

CMRETAC Problem Ranking Frequency of Each Issue by Rank										
	Frequency by Rank									
Issue	1	2	3	4	5	6	7	8	9	10
Administrative Support	3	0	0	0	0	1	1	1	1	1
Agency Funding/Financial Viability	0	1	1	0	0	0	2	3	1	0
Aging Building/Equipment	1	1	1	1	1	1	0	0	2	0
Billing/Accounts Receivable	0	1	0	0	1	0	2	0	0	3
Cooperation with Other Agencies	0	0	1	2	1	2	1	0	0	0
Initial/Continuing Education	1	1	1	2	1	1	0	0	0	0
Medical Director Involvement	3	0	1	1	1	0	0	0	0	1
Recruitment of New Personnel	0	0	0	1	0	1	1	2	2	0
Retention of Personnel	0	3	0	0	1	0	1	1	1	0
Support from RETAC	0	0	2	0	1	2	0	1	0	1

Table C lists the proportion of issue by rank.

Table C

CMRETAC Problem Ranking Proportion of Each Issue by Rank										
	Proportion by Rank									
Issue	1	2	3	4	5	6	7	8	9	10
Administrative Support	18.8%	0.0%	0.0%	0.0%	0.0%	6.3%	6.3%	6.3%	6.3%	6.3%
Agency Funding/Financial Viability	0.0%	6.3%	6.3%	0.0%	0.0%	0.0%	12.5%	18.8%	6.3%	0.0%
Aging Building/Equipment	6.3%	6.3%	6.3%	6.3%	6.3%	6.3%	0.0%	0.0%	12.5%	0.0%
Billing/Accounts Receivable	0.0%	6.3%	0.0%	0.0%	6.3%	0.0%	12.5%	0.0%	0.0%	18.8%
Cooperation with Other Agencies	0.0%	0.0%	6.3%	12.5%	6.3%	12.5%	6.3%	0.0%	0.0%	0.0%
Initial/Continuing Education	6.3%	6.3%	6.3%	12.5%	6.3%	6.3%	0.0%	0.0%	0.0%	0.0%
Medical Director Involvement	18.8%	0.0%	6.3%	6.3%	6.3%	0.0%	0.0%	0.0%	0.0%	6.3%
Recruitment of New Personnel	0.0%	0.0%	0.0%	6.3%	0.0%	6.3%	6.3%	12.5%	12.5%	0.0%
Retention of Personnel	0.0%	18.8%	0.0%	0.0%	6.3%	0.0%	6.3%	6.3%	6.3%	0.0%
Support from RETAC	0.0%	0.0%	12.5%	0.0%	6.3%	12.5%	0.0%	6.3%	0.0%	6.3%

Conclusion

The CMRETAC has adequate representation from the six counties it represents with board members that are engaged and cooperate well together. The CMRETAC president and coordinator both provide the leadership necessary to improve the EMTS system in the Central Mountains Region. The 2007 biennial plan addresses some of the needs of the CMRETAC and new priorities are currently being incorporated into the 2009 version to reflect the progress it has made in reaching its goals. The major report recommendations that should be considered at a minimum include regional medical direction and standardized protocol algorithms, consolidated disaster planning, regional training opportunities to mitigate duplication, and the use of existing EMTS data to drive CQI and other initiatives.

The BIS survey instrument revealed high scores in the areas of integration of health services, legislation and regulation, system finance, and clinical care. Lower scores were indicated for EMTS research, public access, medical direction, mass casualty, public education, prevention, and information systems.

The Problem Ranking Survey indicated that the two biggest challenges are administrative support and medical director involvement. The least challenging issue is billing/accounts receivable.

The recommendations for the CMRETAC include both short-term and long-term activities. The board members should review and prioritize the recommendations for the region. Inclusion of these recommendations into the biennial plan is highly recommended.

Central Mountains Regional Emergency Medical and Trauma Advisory Council
Standardized (Regional) Needs Assessment Project
Benchmarks, Indicators and Scoring (BIS)

The Colorado Department of Health and Environment Emergency Medical and Trauma Services (EMTS) Division has contracted with The Abaris Group to conduct a needs assessment of each Regional Emergency Medical and Trauma Advisory Council (RETAC) areas. This assessment will consist of on-site visits with EMTS agencies and individuals, town hall meetings and analysis of an anonymous survey completed by EMTS stakeholders. The results of the assessment will be presented to the local RETAC and the Colorado EMTS Division. Your local RETAC Coordinator will be actively involved in the assessment process.

The survey below is referred to as Benchmarks, Indicators and Scoring, or "BIS." We are asking for your input by completing the BIS prior to a meeting that will be held in your community during the on-site phase of the assessment. We also hope you will be able to attend the meeting held in your community where we will review and discuss results of the BIS scoring and provide a "town hall" like forum where you can help us understand issues and challenges facing your agency, your community and your region.

To assist us in this task we have developed Indicators and Scoring that relate to the 15 components contained in the Colorado EMTS Plan. Those components are:

1. Integration of Health Services
2. EMTS Research
3. Legislation and Regulations
4. System Finance
5. Human Resources
6. Education Systems
7. Public Access
8. Communications Systems
9. Medical Direction
10. Clinical Care
11. Mass Casualty
12. Public Education
13. Prevention
14. Information Systems
15. Evaluation

For each of the 15 "Benchmarks" there are 4 indicators that relate to Structure, Process, Outcome and the RETAC. These indicators are described as follows:

1. Structure – legislation; rules or regulations; bylaws or charter; policies and procedures or authority
2. Process – Is there a process in place to implement requirements or expectations contained in the structure indicator? If so, does the process reflect the requirements or expectations contained in the structure?
3. Outcome – Are there tools in place to measure the effectiveness of the process (e.g. data collection)? Are measurements or evaluations ongoing? Is data used to drive improvements?
4. These are Regional Emergency Medical and Trauma Council (RETAC) indicators and measure or create expectations for the RETACs that support either local EMTS agencies within the RETAC or that drive statewide improvements through RETAC representation on state advisory bodies.

For each of these indicators, we ask that you mark or circle the score that most closely reflects your knowledge of or opinion of the progress toward or compliance with each indicator. As you read through the scoring, you will see that each score, from 1 – 5 describes a rank in system development. **Remember, you are ranking your own organization within the Regional Emergency Medical and Trauma system.** If you are a rural system with limited resources you may rank low in score. This does not mean you are a "bad" system. It simply reflects the reality of your resources, be they human or mechanical. If you do not have sufficient information to mark a score, mark or circle "0" = I don't know.

Please note: **In each scoring box there are boxes for 2 separate scores.** In the box marked "**Agency/Facility Score**," please score your agency or organization. In the box marked "**System Score"** please score the overall Regional Emergency Medical and Trauma System as you perceive it. In many cases, the two scores will be different. For example, you may score your agency higher or lower in disaster response capabilities than you score the overall system in your area.

During the meeting to be held in your community we will combine your score with those of your peers and other stakeholders to arrive at a consensus score. Your agency or system can use this consensus score to help drive performance improvement plans and activities. This assessment tool can be used 1, 2 or 3 years in the future to assist you in determining the growth in your system over time and to show your accomplishments in system improvement.

Please take a few minutes to complete the BIS prior to your community meeting. **Please bring the completed BIS with you to the meeting. If you cannot attend the meeting, please give the completed BIS to a colleague or supervisor so your opinion can be counted.**

If you have any questions regarding this assessment or the BIS, contact your local RETAC Coordinator, **Melody Mesmer** at 303-252-0159, or by email at melody@cmretac.org or **Ken Riddle**, The Abaris Group, at 702-287-6546, or by email at kriddle@abarisgroup.com.

Central Mountains Regional Emergency Medical and Trauma Advisory Council
Standardized (Regional) Needs Assessment Project
Benchmarks, Indicators and Scoring (BIS)

Demographical Information: (Indicate provider type and check all that apply below the provider type selected.)

__ **Pre-Hospital Provider**
__ Volunteer __ Paid
__ BLS __ ALS
__ Fire/Rescue
__ Ambulance
__ Other

__ **Hospital Provider**
__ Trauma Center Level
__ MD
__ RN
__ Administration

__ **Other Provider**
__ Law Enforcement
__ Dispatch/Communications
__ Emergency Management
__ Public Health
__ Elected Official
__ Other

Note: The word "system" in this survey is defined as the local RETAC comprised of multiple counties.

Emergency Medical and Trauma System Component (EMTS): Integration of Health Services	
1. All disciplines that influence patient care within the system work together within their regional communities as a whole to assure integration and coordination of patient care.	
Structure Indicator	*Scoring*
1.1 Your agency/facility participates in multidisciplinary planning within your regional system.	0. Don't Know 1. There is no evidence of partnerships, alliances, or working together to integrate the system. 2. There have been limited attempts to organize local groups, but to date no ongoing regional system committees meet regularly to design or implement a regional system. 3. Our agency/facility participates in a regional committee/group that meets regularly to develop and implement a comprehensive system plan. 4. Our agency/facility either brings together or participates in, a multidisciplinary EMTS group that is developing, implementing, and maintaining a comprehensive system plan. 5. Our agency/facility has brought together or participated in a stakeholder group to assist with, the development and implementation of the EMTS system, through a multidisciplinary committee. Multiple stakeholders from various disciplines are routinely recruited to participate in system operational issues and refinement depending on expertise needed (e.g., public health, public safety) and as part of a comprehensive system planning process.

Agency/Facility Score	System Score

Emergency Medical and Trauma System Component (EMTS): Integration of Health Services	
Process Indicator	*Scoring*
1. 2 There is a clearly defined process to communicate and notify all stakeholders regarding planning efforts or changes that may affect patient care or the delivery of patient care within your region.	0. Don't Know 1. There is no defined process for communicating important issues and planning efforts that affect patient care. 2. There is an unwritten/informal process that is used when convenient, although not regularly or consistently utilized. 3. The process for communication and notification to all stakeholders regarding planning and proposed changes in the delivery of patient care is articulated within the system plan, although it has not been fully implemented. Policies are not written. 4. The process for communication and notification to all stakeholders regarding changes in patient care is contained within and guided by the system plan. There are current policies and procedures in place to notify our stakeholders regarding possible changes in patient care issues. 5. There is a clearly defined written process for notification of all stakeholders regarding changes in patient care that impact the agency/facility. The process is stated in the system plan and incorporated into the policy and procedures for the service provider. Stakeholders are actively engaged in issues affecting patient care to resolve issues and to improve the program and its integration within other health care and public safety efforts in the community and the region. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Integration of Health Services	
Outcome Indicator	*Scoring*
1.3 Your agency/facility has clearly stated goals and objectives to assure effective care of patients within the system. These goals and objectives contain all disciplines and there is a system in place to measure progress.	0. Don't Know 1. There is no plan with goals and objectives pertaining to system integration. 2. There is a plan in place for system integration, but no method to measure progress. 3. Our agency/facility leadership periodically reviews its activities related to system integration without input from various stakeholders. 4. A multidisciplinary group/committee is in place that reacts to issues that demonstrate a lack of appropriate system integration, e.g. did one agency's/facility's protocols affect another's? 5. A multidisciplinary group/committee regularly reviews our agency's/facility's progress towards the goals and objectives pertaining to system integration at the local and regional level and assists in the continuous refinement of those efforts. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS)Component: Integration of Health Services	
RETAC Indicator	*Scoring*
1.4 The RETAC conducts or coordinates activities to improve patient care through collaborative efforts among health related agencies, facilities and organizations within the region. The RETAC encourages groups involved in Emergency Medical and Trauma System (EMTS) to work with other entities (e.g. health related, state, local and private agencies and institutions) to share expertise, to evaluate and make recommendations, and mutually address and solve problems within the region.	0. Don't Know 1. There is no process to measure progress towards goals and objectives pertaining to regional EMTS integration. 2. There is an informal or sporadic process that reacts to concerns regarding lack of integration with other health care and public safety assets. 3. RETAC leadership and staff periodically reviews its activities related to system integration without input from various stakeholders. 4. The multidisciplinary RETAC stakeholders group reacts to issues that demonstrate a lack of appropriate system integration, e.g. a patient is not transported to the appropriate health care facility based on previously adopted protocols. 5. The multidisciplinary RETAC stakeholders group regularly reviews the RETAC's system wide plan and progress towards the goals and objectives pertaining to system integration at the sub-regional, regional and state level and assists in the continuous refinement of those efforts. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Research	
2. All disciplines participate in and contribute to research efforts that increase the evidence upon which the system design is based.	
Structure Indicator	*Scoring*
2.1 Your agency/facility and stakeholders group has sufficient policies to conduct and participate in system research efforts. Note: In this context, research is defined as a "systematic process of inquiry, using the scientific method, aimed at discovering, interpreting and revising facts." (as differentiated from Evaluation)	0. Don't Know 1. Our agency/facility does not conduct or participate in research efforts as no policy exists. 2. Our agency/facility does not conduct or participate in research efforts even though policies permit participation. 3. Our agency/facility has policies that allow contribution of data to research efforts. 4. Our agency/facility conduct research in collaboration with physicians and research centers to increase the evidence upon which system design, patient care and specific interventions are based. 5. Our agency/facility policies promote system research in collaboration with physicians and research centers. The data are used to analyze and improve system design, patient care and specific interventions. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS)Component: Research	
Process Indicator	*Scoring*
2.2 Your agency/facility and/or stakeholders group cooperate to conduct and participate in system research efforts. Research efforts may include collaboration with social scientists, economists, health services researchers, epidemiologists, operations researchers, and other clinical scientists.	0. Don't Know 1. Our agency/facility does not conduct research. 2. Our agency/facility conducts limited local research but does not cooperate on research projects of broader scope. 3. Our agency/facility participates in or conducts cooperative research. 4. Our agency/facility supports (e.g. through upgrades in computer technology or dedicating staff time) research as the basis for clinical and operational practices, and some providers become active participants in the research process. 5. Our agency/facility is actively involved in conducting cooperative research that involves internal and external stakeholders and research centers or qualified scientists. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Research	
Outcome Indicator	*Scoring*
2.3 Your agency/facility is integrated with external stakeholders in creating, applying and publishing research projects.	0. Don't Know 1. Our agency/facility does not contribute to research projects. 2. Our agency/facility contributes to research projects. 3. Our agency/facility contributes to, evaluate and apply appropriate research results. 4. The efforts of system professionals, delivery systems, academic centers and public policy makers are organized to support and apply research. 5. The efforts of system professionals, delivery systems, academic centers and public policy makers are organized to support, implement evidence-based practices and publish the results of research in peer reviewed journals. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Research	
RETAC Indicator	*Scoring*
2.4 The RETAC leads or coordinates efforts to determine the effectiveness and efficiency of the Emergency Medical and Trauma System (EMTS) through research. A continuous and comprehensive effort is initiated and sustained to validate current Emergency Medical and Trauma System (EMTS) practices in an effort to improve patient care, determine the appropriate allocation of resources to prevent injury, illness, death and disability.	0. Don't Know 1. The RETAC is not involved in research planning or activities. 2. The RETAC plan makes research a future priority. 3. The RETAC has implemented a research plan that identifies and disseminates existing research findings. 4. The RETAC identifies, coordinates, implements and disseminates research efforts and results. 5. The RETAC is a research implementation catalyst by delivering technical assistance that produces research methodology content training to system participants. As a result of this technical assistance, a cadre of agency investigators works in partnership with hospitals, academic centers, policy makers, public health departments, funding sources and others as appropriate, to identify, coordinate, implement and disseminate research. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Legislation & Regulation	
3. All disciplines are in compliance with all applicable federal, state, and local laws, rules, ordinances, contracts, and/or bylaws.	
Structure Indicator	*Scoring*
3.1 Your agency/facility is in full compliance with all applicable laws, rules, ordinances, contracts, etc. that govern all aspects of their operation and maintain current copies of all relevant policies and required licenses, certifications, insurance policies, etc.	0. Don't Know 1. There is no evidence that our agency is aware of applicable laws, rules, ordinances, and contracts that govern our operation or maintains any required documentation. 2. Our agency/facility can demonstrate that it is aware of applicable laws, rules, ordinances and contracts that govern our operation but we only maintains documentation of some of the specific requirements (e.g. vehicles properly licensed, inspected, and insured) 3. Our agency/facility has committed in writing to compliance with all applicable laws, rules, ordinances and contracts, but it only maintains documentation of some of the specific requirements. 4. Our agency/facility can demonstrate compliance with most applicable laws, rules, ordinances and contracts that govern our operation and maintains documentation of most (> 50%) of the specific requirements. 5 Our agency/facility demonstrates full compliance with all applicable laws, rules, ordinances and contracts that govern our operation and our agency maintains documentation of all specific requirements. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Legislation & Regulation	
Process Indicator	*Scoring*
3.2 Your agency/facility makes decisions and operates based upon internal policies, and the applicable laws, rules, ordinances and contracts that govern operations.	0. Don't Know 1. The decision-making and operations of our agency/facility are routinely not in compliance with applicable policies, laws, rules, ordinances, and contracts. 2. The decision-making and operations of our agency/facility are sometimes not in compliance with applicable policies, laws, rules, ordinances, and contracts. 3. The decision-making and operations of our agency/facility are generally in compliance with applicable policies, laws, rules, ordinances and contracts. 4. The decision-making and operations of our agency/facility are in compliance with applicable policies, laws, rules, ordinances, and contracts. If an area of non-compliance is identified, immediate corrective action is taken. 5. The decision-making and operations of our agency/facility demonstrate that it regularly surpasses the requirements and expectations of applicable policies, laws, rules, ordinances, and contracts. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Legislation & Regulation	
Outcome Indicator	*Scoring*
3.3 Your agency/facility is reviewed periodically by objective, third-party experts, reviewers, or regulators to ensure that it functions in compliance with all applicable policies, laws, rules, ordinances, and contracts that govern its operation.	0. Don't Know 1. Our agency/facility has never had an objective external review. 2. Our agency/facility has had episodic, objective external reviews of a limited number of specific operational areas (e.g. financial audit or equipment inspection). 3. Our agency/facility has had regular objective external reviews of a limited number of operational components that include compliance with some applicable policies, laws, rules, ordinances, and contracts. 4. Our agency/facility has regular objective external reviews of a wide range of operational areas to ensure compliance with applicable policies, laws, rules, ordinances, and contracts. These reviews are then tied into timely quality improvement activities to help ensure corrective action whenever required. 5. Our agency/facility has regular objective external reviews of all operational areas to ensure compliance with all applicable policies, laws, rules, ordinances, and contracts. Such reviews have led to agency/service accreditation and re-accreditation from an independent third party such as the Joint Commission, Commission on the Accreditation of Ambulance Services or the Commission on the Accreditation of Air Medical Transport Systems. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Legislation & Regulation	
RETAC Indicator	*Scoring*
3. 4 The RETAC has developed its biennial plan according to Chapter Four of Colorado State Rules Pertaining to the Statewide Emergency Medical and Trauma Care System, and reviews its plan, policies and operations at least annually to ensure it is in compliance with its plan and state rules.	0. Don't Know 1. The RETAC does not review its plan, policies and conduct to ensure compliance with applicable laws, rules, by-laws, and contracts, 2. The RETAC sporadically reviews its plan, policies and conduct to ensure compliance. 3. The RETAC regularly reviews its plan, policies and conduct to ensure compliance with applicable laws, rules, by-laws, and contracts. 4. The RETAC regularly reviews its plan, policies and conduct to ensure compliance with applicable laws, rules, by-laws, and contracts and has a clearly defined process with time-frame expectations to ensure corrective action as needed. 5. The RETAC periodically arranges for an expert, third-party review of its plan, policies, and conduct to ensure compliance with all laws, rules, by-laws, and contracts. All findings from such a review are used as a basis for quality improvements and timely corrective actions as necessary. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: System Finance	
4. All disciplines are financially stable organizations with approved budgets that are aligned with the Regional EMTS plan and priorities.	
Structure Indicator	*Scoring*
4.1 Cost, charge, collection and reimbursement data are projected and collected; are compared to (benchmarked) against industry data; and, are used in strategic and budget planning.	0. Don't Know 1. Cost, charge, collection and reimbursement data are not collected. 2. Cost, charge, collection and reimbursement data are collected. 3. Cost, charge, collection and reimbursement data are collected and analyzed by internal or external finance experts. 4. Cost, charge, collection and reimbursement data are collected and analyzed by internal or external finance experts e.g. CPA, but are not benchmarked against industry data. 5. Cost, charge, collection and reimbursement data are collected and analyzed by internal or external finance experts and are benchmarked against industry data. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: System Finance	
Process Indicator	*Scoring*
4.2 Budgets are approved and based on historic and projected cost, charge, collection, reimbursement and public/private support data.	0. Don't Know 1. There is no data that can be accessed for budgetary planning purposes. 2. Data is collected but reports are not routinely generated that can be used for budget planning. 3. Data is collected and reports generated, but there is no formal budget planning process. 4. Data is collected, reports generated and there is an expense budget process, but it is not linked to revenue. 5. Data is collected, reports generated, and revenue and expense budgets are produced and approved by the governing body. Progress against budget projections is monitored throughout the budget cycle. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: System Finance	
Outcome Indicator	*Scoring*
4.3 Financial resources exist that support the planning, implementation and ongoing management of the administrative and clinical care components of your agency/facility.	0. Don't Know 1. Administrative, management and clinical care planning is not conducted. 2. Administrative, management and clinical care planning is conducted, but priorities are not identified. 3. Administrative, management and clinical care planning is conducted and priorities are identified, but are not linked to the budget process. 4. Administrative, management and clinical care planning is conducted, priorities are identified and linked to the expense budget, but revenue sources are not identified or allocated. 5. Administrative, management and clinical care planning is conducted, priorities are identified and linked to the expense budget, and revenue sources are identified and allocated. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: System Finance	
RETAC Indicator	*Scoring*
4.4 The RETAC board adopts an annual operating budget and monitors financial performance compared to the budget at least quarterly.	0. Don't Know 1. The RETAC submits an operating budget to the state but does not monitor performance compared to the budget. 2. The RETAC submits an operating budget annually for board approval and monitors financial performance annually. 3. The RETAC submits an operating budget annually for board approval and monitors performance at least twice a year. 4. The RETAC submits an operating budget annually for board approval and monitors financial performance compared to the budget at least quarterly. 5. The RETAC involves RETAC staff and leadership in development of an annual operating budget and provides detailed quarterly and annual monitoring of performance compared to the budget **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Human Resources	
5. All disciplines have sufficient capacity and ability to recruit, train, support, and maintain adequate numbers and an appropriate mix of volunteer and/or paid personnel consistent with its written plan and commensurate with identified needs within the community.	
Structure Indicator	*Scoring*
5.1 Your agency/facility has personnel recruitment and retention policies and programs to maintain adequate numbers of trained and licensed personnel (paid and/or volunteer) to meet performance standards for level of care and response times. **Formal personnel policies are reviewed regularly by your agency/facility governing authority and clearly identify expectations and responsibilities for both the agency and staff.**	0. Don't Know 1. Our agency/facility has no formal or ongoing policies or programs for the recruitment and retention of personnel. There are no personnel policies identifying the expectations and responsibilities of the agency or its staff. 2. Our agency/facility periodically organizes a program to recruit new staff on an as-needed basis. There are no personnel policies identifying the expectations and responsibilities of the agency or its staff. 3. Our agency/facility periodically organizes a program to recruit new staff on an as-needed basis. Personnel policies are informal or although written are not reviewed regularly. 4. Our agency/facility has a regular program to recruit new staff as needed and also has an ongoing program to retain current staff through formal process and providing supportive and improved incentives as appropriate. Personnel policies are written, reviewed, and updated regularly. 5. Our agency/facility maintains optimal staffing levels through a pro-active recruitment and retention program that provide benefits and incentives to help ensure staff satisfaction and stability. Personnel policies are written, regularly reviewed, clearly communicated and fairly applied. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS)Component: Human Resources	
Process Indicator	*Scoring*
5.2 Standardized feedback processes reflect that personnel understand applicable policies and procedures and demonstrate awareness of accessibility to required and advanced training, leadership opportunities, and stress management services as needed.	0. Don't Know 1. There are no regular opportunities for staff feedback. 2. Feedback is informally requested from staff on a limited and/or episodic basis with no commitment towards utilizing the results for positive change. 3. Staff is invited to provide feedback on a regular basis, but it is limited to specific issues identified by management and there is no expectation for a response from management. 4. Staff is invited to provide feedback/input on a wide variety of topics, including working conditions, personnel policies, training needs, etc. There is no expectation for a response from management 5. Staff is regularly surveyed and/or invited to provide feedback/input on a regular basis on a wide variety of topics. Management commits itself to acknowledging the feedback/input and explaining its responses and decisions as appropriate. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Human Resources	
Outcome Indicator	*Scoring*
5.3 Your agency/facility is fully staffed. All personnel understand policies and their job duties/ responsibilities. Staff indicates that they have input into operational decisions, and have reasonable access to needed equipment, supplies, training, and support.	0. Don't Know 1. Our agency/facility is constantly under-staffed and excessive turnover is an ongoing problem. 2. Our agency/facility is periodically under-staffed due to turnover. 3. Our agency/facility is usually able to maintain an adequate staff to perform the mission, but turnover and recruitment of new personnel is a challenge. 4. Our agency/facility has low turnover and is able to recruit personnel as needed to fill any gaps. Personnel indicate that they are satisfied with working conditions and personnel policies. 5. Our agency/facility maintains a pool of candidates to fill any vacancies in a timely manner. The staff indicates high satisfaction with their working conditions, input into decision-making, and access to equipment, training, and supportive services. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS)Component: Human Resources	
RETAC Indicator	*Scoring*
5.4 Its stakeholders and organizational members view the RETAC as a source of technical assistance and support to improve Emergency Medical and Trauma System (EMTS) related human services capability and functioning within the region through policy development, medical, technical and leadership training, and facilitating access to supportive services like critical incident stress management. Provider recruitment and retention challenges identified in RETAC assessments are prioritized accordingly in the biennial plan.	0. Don't Know 1. The RETAC experiences high stakeholder turnover and staff instability. The RETAC is not viewed as a resource to improve and enhance agency-related human services in the region. 2. The RETAC has a capable and stable staff, but is not viewed by its stakeholders and organizational members as a resource to improve and enhance agency-related human services in the region. 3. The RETAC provides some support to stakeholders and member organizations regarding staffing challenges, personnel policies, and access to needed agency-related training. 4. The RETAC is viewed as a key resource for technical assistance and support with human resources matters and as a source of training opportunities by its stakeholders and organizational members. 5. The RETAC is highly skilled in human resources matters and regularly provides related technical assistance and support to stakeholders and organizational members. The RETAC provides, facilitates, and supports a wide range of technical, medical, leadership and personal growth/wellness training opportunities. The RETAC ensures access to CISM services as needed. **RETAC Score**

Emergency Medical and Trauma System (EMTS)Component: Education Systems	
6. All disciplines provide appropriate, competency based education programs to assure a competent work force.	
Structure Indicator	*Scoring*
6.1 Your agency/facility has written educational requirements and a structure in place to provide education and maintenance of clinical skills consistent with state and national levels of training.	0. Don't know 1. Our agency/facility has no written policy regarding education and continuing education requirements. 2. Our agency/facility has written policies regarding minimum education requirements but has no structure in place to support those policies. 3. Our agency/facility has written policies regarding minimum education and requirements and has a structure in place to provide some education and skill maintenance for its employees. 4. Our agency/facility has a structure in place to provide the educational needs of its employees. 5. Our agency/facility bases its education and continuing education programs on local data as well as national standards and evidence. There is a process in place to provide for the on-going educational needs of the employees. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Education Systems	
Process Indicator	*Scoring*
6.2 Your agency/facility provides initial and continuing education programs with competency testing, consistent with state and national recognized levels of care.	0. Don't know 1. Our agency/facility provides no initial or continuing education to its employees. 2. Our agency/facility provides some initial and continuing education for its employees. 3. Our agency/facility provides for a program of initial and continuing education to its employees 4. Our agency/facility provides a comprehensive program of initial and continuing education for its employees consistent with state and nationally recognized levels of care. 5. The agency provides for competency-based initial and continuing education consistent with state and nationally recognized levels of care. Continued competency is assured by periodic testing. Training programs are based on current best practices and are supported by distance learning resources. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Education Systems	
Outcome Indicator	*Scoring*
6.3 Your agency/facility measures the effectiveness of its continuing education program by evaluating competency on a regular basis and bases continuing education and remedial education on structured performance improvement processes.	0. Don't know 1. There is no evaluation or measurement of the adequacy or effectiveness of initial or ongoing education programs. 2. Clinical or field procedural problems are occasionally addressed in continuing education programs. There is no regular, consistent evaluation of competency. 3. Monthly continuing education is provided and individual competency is measured at least annually. 4. Monthly continuing education is provided based on regular competency evaluations. Quality improvement information is available but does not drive continuing education methods or content. 5. There is a regular, consistent measure of competency. Continuing education programs are integrated with competency assurance and driven by service quality improvement programs with input from the service provider medical director. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Education Systems	
RETAC Indicator	*Scoring*
6.4 The RETAC assesses the quality and accessibility of education and training for all providers within the Emergency Medical and Trauma System (EMTS) and documents efforts to coordinate and evaluate programs to ensure they meet the needs of the Emergency Medical and Trauma System (EMTS).	0. Don't know 1. The RETAC does not assess or evaluate education programs within the region 2. The RETAC assesses the availability of education programs within the region. 3. The RETAC assesses the availability and quality of education programs within the region. 4. The RETAC provides some coordination to ensure education programs meet the needs of the EMTS system. 5. The RETAC provides coordination with local, regional and state education resources to ensure education programs meet the needs of the EMTS system. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Public Access	
7. The public has reliable, robust and redundant access to a system that can dispatch appropriate resources promptly and accurately to the location of the patient and provide potential lifesaving services prior to their arrival. Access should be universally available regardless of incident location, socio-economic status, age, or special need and an integral part of the Regional EMTS plan.	
Structure Indicator	*Scoring*
7.1 There is a universal access number for citizens to access the system, with dispatch of appropriate medical resources in accordance with a written plan. The dispatch system utilizes Enhanced-9-1-1 and Wireless-9-1-1 technologies and provide pre-arrival medical instructions to callers **The universal access number is part of a central communications system and plan that ensures bidirectional communication, inter-facility dialogue, and disaster communications among all system participants.**	0. Don't Know 1. There is no 911 system in place. 2. There is a 911 system in place but it does not offer emergency medical dispatch. 3. There is a 911 system in place that also offers emergency medical dispatch. 4. The agency has adopted a communications plan that was developed with multiple stakeholder groups, and endorsed by those agencies, including emergency medical dispatch. However, the integration of Enhanced-911, Wireless-911 and other emerging technologies are not included. 5. A comprehensive communications plan has been developed, and adopted in conjunction with stakeholder groups, including emergency medical dispatch. It also includes the integration of Enhanced-911, Wireless-911 and other emerging technologies. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Public Access	
Process Indicator	*Scoring*
7.2 An assessment of the needs of the general public and their ability to access the system has been conducted and the results integrated into the system plan.	0. Don't Know 1. There is no routine or planned contact with the general public. 2. Contact with the public is addressed when system failures occur. 3. Information has been informally gathered from the general public. However, no formal process is in place to address their needs. 4. The general public has been formally asked about the ability to access the system however changes have not been made to the system or to the systems plan. 5. General public needs have been identified and integrated into a plan and changes are routinely made to increase the public's ability to access the system in a timely manner. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Public Access	
Outcome Indicator	*Scoring*
7.3 Our community's special populations (e.g., language, socially disadvantaged, migrant/transient, remote, rural, and others) have access to the system.	0. Don't Know 1. There has been no consideration of the needs of special populations to access patient care within the system. 2. The system and stakeholders are beginning to consider the needs of special populations. 3. The system has identified the special populations that may require special accommodations to access the system. 4. The system has accommodations for special populations that allow them to effectively access the system. 5. The system has accommodated the needs of special populations that allow them to effectively access the system. Routine monitoring, review, and reporting of these populations are incorporated into the evaluation of system effectiveness. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Public Access	
RETAC Indicator	*Scoring*
7.4 The RETAC supports the development of efficient public service access points and emergency medical dispatch throughout the region through programs involving collaboration, resource sharing and technical support. Additionally, it supports policy change at state and national levels to ensure that goals pertaining to timely and efficient dispatch across the entire region can be achieved.	0. Don't Know 1. The RETAC is not involved in regional communications planning. 2. The RETAC is a stakeholder in regional efforts to develop efficient and effective communications and dispatch models. 3. The RETAC coordinates efforts to dispatch resources and emergency providers to assure that appropriate and timely care is provided for medical emergencies within the region. 4. A regional communications plan, including citizen access and emergency medical dispatch is in place but is not formally monitored or evaluated. 5. A regional communications plan, including citizen access and emergency medical dispatch is in place and is evaluated and revised at least annually. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Communications Systems	
8**. All disciplines are able to transmit and receive electronic voice and data signals between its own agency assets, between the agency and other community stakeholders, and between the agency and regional/state response partners.**	
Structure Indicator	*Scoring*
8.1 Your agency/facility has worked with local/regional stakeholders to develop and adopt a communications plan to enhance all voice and electronic data transmissions at all levels to improve the delivery of emergency services	0. Don't Know 1. There is no system communications plan, and one is not in progress. 2. Draft elements of a formal communication plan are in place but not formalized o are under development. 3. Our agency/facility has adopted a system communications plan. However, the plan has not been endorsed by multiple stakeholder organizations. 4. Our agency/facility has adopted a communications plan that was developed with multiple stakeholder groups, and endorsed by those agencies. However, issues of integration and inter-operability have not been fully resolved. 5. A comprehensive system communications plan has been developed, and adopted in conjunction with stakeholder groups and includes full integration and interoperability between communications assets of all agency, health care, public safety and public health assets at local, sub-regional, regional and state levels. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Communications Systems	
Process Indicator	*Scoring*
8.2 Your agency/facility's purchases and configurations of communications equipment are coordinated to standardize the equipment at the local, regional and state level.	0. Don't Know 1. Needs assessments are not conducted prior to communications equipment upgrades. 2. Needs assessments are conducted and procurement needs identified but are not coordinated with other agencies, jurisdictions, or disciplines. 3. Needs assessments are conducted and procurement needs are coordinated with other agencies, jurisdictions, and disciplines. However, the results are not used to guide investment in communications infrastructure improvement. 4. Needs assessments are conducted and procurement needs are coordinated with other agencies, jurisdictions, and disciplines. 5. Comprehensive system communications needs assessments are conducted, procurement needs are coordinated and the results are used to guide investment in communications infrastructure improvement at community, sub-regional, regional and state levels. This has resulted in efficiencies and economies across the EMTS communications system. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Communications Systems	
Outcome Indicator	*Scoring*
8.3 The communications system is routinely evaluated and tested to ensure its reliability, redundancy and interoperability during routine applications.	0. Don't Know 1. The communications system is not evaluated for its reliability, or redundancy. 2. The communications system has been evaluated at a local level and issues of reliability within the agency have been addressed within the system's primary service response area. 3. The communications system has been evaluated at a local level through a multi-agency process and issues of reliability have been addressed by all agencies within the system's primary service response area. 4. The communications system has been evaluated at a regional level through a multi-agency process and issues of reliability have been addressed by all agencies within the system's primary service and mutual aid response areas. 5. The local, regional and state communications system are rigorously tested at least annually in drills, simulations and real events (routine and multi-agency) and issues involving reliability, redundancy and interoperability have been addressed. Back-up systems have also been fully exercised. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Communications Systems	
RETAC Indicator	*Scoring*
8.4 The RETAC plan includes a description of regional communications issues as outlined in the regional communications plan.	0. Don't Know 1. Plan does not address communication issues. 2. Plan addresses at least half of the issues. 3. Plan addresses all issues, but no strategies are implemented. 4. Plan addresses all issues, but half or less are supported. 5. Plan addresses all issues, and they are all supported by the RETAC. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Medical Direction	
9. Your facility/agency has a physician medical director that has received medical director training, been recognized by the state and is actively involved in Regional EMTS issues including triage, treatment, and transport, dispatch, quality improvement, education and training.	
Structure Indicator	*Scoring*
9.1 Your agency/facility medical director has clear-cut responsibility and the authority to adopt protocols, implement a quality improvement process, and to restrict the practice of providers within the system to assure medical appropriateness within the system.	0. Don't Know 1. There is no agency/facility medical director. 2. There is an agency/facility medical director with a written job description; however, the individual has no specific time allocated for these tasks. 3. There is an agency/facility medical director with a written job description and whose specific authorities and responsibilities are formally granted. 4. There is an agency/facility medical director with a written job description, but with no specific authority. The system medical director has adopted protocols, has implemented a quality improvement program, and is taking steps to improve the medical appropriateness of the system. . 5. There is an agency/facility medical director with a written job description who has authorities and responsibilities that are formally granted. There is written evidence that the facility/agency medical director has, consistently used their formal authority to adopted protocols, implemented a quality improvement program and to fully integrate the facility/agency into the health care system **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Medical Direction	
Process Indicator	*Scoring*
9.2 Your agency/facility medical director is actively involved with the development, implementation, and ongoing evaluation of protocols to assure they are congruent with other agencies/providers. These protocols include, but are not limited to, which resources to dispatch (ALS vs. BLS), air-ground coordination, triage, and early notification of the medical care facility, pre-arrival instructions, treatment, transport and other procedures necessary to ensure the optimal care of ill and injured patients.	0. Don't Know 1. There are no protocols. 2. Protocols have been adopted, but they are in conflict with the other agencies/providers resources. 3. Protocols have been adopted and are not in conflict with other agencies/providers resources, but there has been no effort to coordinate the use of protocols between the agency and the other agencies/providers within the system. 4. Protocols have been developed in close coordination with the other agencies/providers within the system and are congruent with the local resources. 5. Protocols have been developed in close coordination with other agencies/providers within the system and are congruent with the local resources. There are established procedures to involve the appropriate dispatch, public safety and other critical stakeholder personnel and their supervisors in quality improvement and there is a "feedback link" to change protocols or to update education when appropriate. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Medical Direction	
Outcome Indicator	*Scoring*
9.3 The retrospective medical oversight of your agency/facility protocols, including but not limited to, triage, communication, treatment, and transport is accomplished in a timely manner and is closely coordinated with the established quality improvement processes within the local healthcare system.	0. Don't Know 1. There is no retrospective medical oversight procedure for communication, treatment, and transport protocols. 2. There is occasional retrospective medical oversight procedure of protocols, but it is neither regular nor timely and is often as a result of a reported breach in those protocols. 3. There is timely retrospective medical oversight procedure for protocols by the quality improvement processes of the agency/facility. 4. There is timely retrospective medical oversight of protocols that is coordinated with partners within the local healthcare system. 5. There is timely retrospective medical oversight of protocols through the system that includes a multidisciplinary review coordinated with partners in the local healthcare system. There is evidence this procedure is being regularly used to monitor system performance and to make system improvements. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Medical Direction	
RETAC Indicator	*Scoring*
9.4 The RETAC assists with appropriate local physician medical direction by providing technical assistance, training and other resources to local Emergency Medical and Trauma System (EMTS) agencies.	0. Don't Know 1. The RETAC does not provide technical assistance, training or other resources to local agencies. 2. The RETAC provides technical assistance to establish or improve local medical direction when requested. 3. The RETAC monitors the provision of medical direction and provides technical assistance when necessary. 4. The RETAC provides technical assistance when necessary and makes medical direction courses and other resources available on a regularly scheduled basis throughout the region. 5. The RETAC monitors the quality of medical direction in local agencies and facilities and supports consistency of medical direction throughout the region by providing medical directors' courses and other resources **System Score**

Emergency Medical and Trauma System (EMTS) Component: Clinical Care	
10. All disciplines are integrated into a resource-efficient, inclusive network that meets required standards and that provides optimal care for all patients.	
Structure Indicator	*Scoring*
10.1 Your agency/facility has a clearly defined plan that outlines roles and responsibilities of agency/facility personnel. Evidence based written patient care protocols and guidelines are maintained and updated.	0. Don't Know 1. Our agency/facility has no plan that outlines roles and responsibilities of personnel. No written patient care protocols exist. 2. Our agency/facility has a plan that outlines roles and responsibilities of personnel, but no written patient care protocols and guidelines exist. 3. Our agency/facility has a plan and patient care protocols exist but are not reviewed and updated regularly. 4. Our agency/facility plan clearly defines the roles and responsibilities of agency/facility personnel and emergency department personnel in treatment facilities for trauma patients. Written protocols and prehospital care guidelines exist and are reviewed and updated at regularly. 5. Our agency/facility plan clearly defines the roles and responsibilities of agency/facility personnel and emergency department personnel in treatment facilities for both trauma and medical patients. The plan is reviewed and updated at least annually. Evidence based written treatment protocols and care guidelines exist for personnel. Critical patient protocols are jointly practiced by prehospital and hospital personnel. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Clinical Care	
Process Indicator	*Scoring*
10.2 Clinical care is documented in a manner that enables your agency/facility to provide information to be used for system wide quality monitoring and performance improvement.	0. Don't Know 1. Clinical care is documented but documentation is not reviewed for local or regional quality monitoring or performance improvement. 2. Clinical care is documented and limited review is done at the local level. 3. Clinical care documentation is systematically reviewed at the agency/facility level but is not available electronically for quality monitoring and performance improvement. 4. Clinical care documentation is systematically reviewed at the local/regional and system level and procedures exist to utilize care data to drive performance improvement 5. Clinical care is systematically reviewed by the agency/facility Medical Director at the agency/facility level and is documented in a manner that enables agency and system-wide data from other health care and public safety agencies to be used for quality monitoring and performance improvement. Oversight of the performance improvement process is done through the agency/facility Medical Director. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Clinical Care	
Outcome Indicator	*Scoring*
10.3 Patient outcomes and quality of care are monitored. Deficiencies are recognized and corrective action is implemented.	0. Don't Know 1. There is no procedure for our agency/facility and local hospital to monitor patient outcome and prehospital quality of care. 2. Our agency/facility maintains a quality of care system including patient outcomes, but they do not regularly monitor these outcomes, or quality of care, nor do they regularly review findings together. 3. An ongoing agency/facility quality improvement program is in place to monitor and assure that quality of care is consistent with adopted protocols. 4. Our agency/facility quality improvement program monitors patient outcomes, and uses these data in an ongoing quality improvement program, and benchmarks outcomes against regional or statewide standards. 5. Our agency/facility quality improvement program monitors patient outcomes, and uses these data in an ongoing quality improvement/performance improvement program. Deficiencies in meeting the local standards are recorded, and corrective action plans are instituted. Results of comparisons with State or national norms are regularly documented, along with an explanation for significant variations from these norms, and a written plan to reduce unacceptable variations. There is a process for confidentiality of findings and recommendations of performance improvement (PI) activities. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Clinical Care	
RETAC Indicator	*Scoring*
10.4 The RETAC establish continuing quality improvement (CQI) plans with goals, system monitoring protocols, and periodically assess the quality of their emergency medical and trauma system. The regional CQI plan is utilized in evaluating the effectiveness of the regional EMTS systems.	0. Don't Know 1. The RETAC is not involved in quality assessment or protocol monitoring. 2. The RETAC has identified regional CQI as a goal but has not established a CQI plan. 3. The RETAC is in the process of establishing a protocol monitoring and CQI plan but the plan is not implemented. 4. The RETAC has implemented a protocol monitoring and CQI plan but has not reported results. 5. The RETAC has implemented a protocol monitoring and CQI plan and uses data from the plan to drive quality improvement throughout the region. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Mass Casualty	
11. All disciplines are integrated with, and complementary to, the comprehensive mass casualty plan for natural disasters and manmade disasters, including an all-hazards approach to disaster planning and operations.	
Structure Indicator	*Scoring*
11.1 Your agency/facility has an operational plan and has established an ongoing cooperative working relationship with other stakeholders.	0. Don't Know 1. There is no agency/facility plan and no system for integration between disciplines. 2. There have been discussions between the agency/facility and the disaster system, but no inclusive formal plans have been developed. 3. Formal plans for our agency/facility and other disaster services systems integration are in development. Working relationships have been formed and cooperation is evident. 4. There are plans in place to ensure that our agency/facility and the disaster system are integrated and operational. Disaster exercises and drills have the cooperation and participation. 5. Our agency/facility system and the disaster system plans are integrated and operational. Routine working relationships are present with cooperation and sharing of information to improve system readiness for "all-hazard" multiple patient events.

Agency/Facility Score	System Score

Emergency Medical and Trauma System (EMTS) Component: Mass Casualty	
Process Indicator	*Scoring*
11.2 Our disaster training and exercises routinely include situations involving an all hazards approach, that test expanded response capabilities and surge capacity that are consistent on a regional basis.	0. Don't Know 1. Disaster training and exercise is not a routine part of the system. 2. Disaster training and exercises are conducted haphazardly by our agency/facility alone without other stakeholders involvement. 3. Disaster training and exercises are conducted regularly and include agency/facility response capabilities to all hazards. 4. Our agency/facility, Emergency Management, trauma partners, public safety and public health stakeholders have begun training and exercises in an all-hazards approach to disaster situations. 5. Exercises and training in all-hazards disaster situations are regularly conducted and include testing of agency/facility surge capacity. These exercises include agencies, trauma, public safety and public health stakeholders. Debriefing sessions occur after each drill or event.

Agency/Facility Score	System Score

Emergency Medical and Trauma System (EMTS) Component: Mass Casualty	
Outcome Indicator	*Scoring*
11.3 There are formal mechanisms to activate our response to all-hazard events in accordance with regional disaster response plans that are consistent with system resources and capabilities.	0. Don't Know 1. No feedback or after action process results from various all-hazards exercises or events. 2. Our agency/facility conducts our own after action quality improvement processes, in isolation, following each exercise or event; there is no system-wide evaluation. 3. There are sporadic, informal, non-documented "debriefings" involving multiple agencies following each exercise or event. Results of these activities do not necessarily translate to improvement processes. 4. A system-wide "debriefing" occurs following each exercise or event. Reports are written but often do not lead to improvement processes. 5. A formal system-wide analysis of after action reports and performance improvement process is in place and implemented at the conclusion of each all-hazard exercise or response. The results of the process result in improvements in the plans, targeted training and/or corrective actions. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Mass Casualty	
RETAC Indicator	*Scoring*
11.4 The RETAC provides technical assistance and serves as a resource to facilitate the integration of emergency medical and trauma services with other local, state, and federal agency disaster plans.	0. Don't know 1. The RETAC is not involved in providing any technical assistance or facilitation relating to disaster planning. 2. The RETAC provides technical assistance only upon request. 3. The RETAC participates in local and regional disaster planning but provides only limited assistance or facilitation. 4. The RETAC participates in local and regional disaster planning and provides technical assistance and facilitation to RETAC member agencies 5. The RETAC takes a leadership role in local, regional and statewide disaster planning. RETAC staff and leadership provide technical assistances and facilitation with local, state and federal planning efforts. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Public Education	
12. The agency/facility informs and educates the local constituencies and policy makers to foster collaboration and cooperation for the enhancement of Regional Emergency Medical and Trauma Services as a whole.	
Structure Indicator	*Scoring*
12.1 Your agency/facility has a public information and education program that heightens public awareness of the preventability of injury and/or illness.	0. Don't know 1. Our agency/facility has no program/plan that provides information and education that heightens public awareness or injury and/or illness prevention and control. 2. Our agency/facility has a public awareness and injury/illness prevention program but linkages between programs and implementation of specific objectives is sporadic. 3. Our agency/facility has a public awareness and injury/illness prevention program. Linkages between programs and implementation occur regularly, but are not measured 4. Our agency/facility has a public awareness and injury/illness prevention program. Linkages between programs and implementation occur regularly. We are just beginning to gather data to measure outcomes. 5. Our agency/facility has a public awareness and injury/illness prevention program. Public information and education plan is being implemented in accordance with the timelines. Data concerning the effectiveness of the strategies are used to modify the plan and programs. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Public Education	
Process Indicator	*Scoring*
12.2 An assessment of the needs of the general public concerning Emergency Medical and Trauma Care information has been conducted.	0. Don't know 1. There is no routine or planned contact with the general public. 2. Plans are in place to provide information to the general public in response to a particular acute illness or traumatic event. 3. The general public has been formally asked about what types of information would be helpful in understanding and supporting agency/facility issues. 4. General public information resources have been developed, based on the stated needs of the general public themselves, and general public representatives are included in agency/facility informational events. 5. In addition to routine contact, the general public is involved in various oversight activities such as local and regional advisory councils. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Public Education	
Outcome Indicator	*Scoring*
12.3 Your local agency/facility seeks and receives strong public support.	0. Don't know. 1. Our local agency/facility has not been able to generate community and political support for systems improvements, e.g. increased mill levies. 2. There has been sporadic community and political support of agency/facility needs, e.g. one time budget requests for new equipment. 3. There is an ongoing, but inadequate level of funding and community/political support for our agency/facility. 4. Our agency/facility has strong support from the community and political constituency that includes an ongoing budget that is adequate to meet the routine operating costs of the system. 5. Our agency/facility has strong support from the community and political constituency that includes not only an ongoing budget, but support for improvements and expansion. This support could be manifested by special assessments, one-time budget requests in addition to ongoing budgets, fund-raising campaigns widely supported by the community, etc. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Public Education	
RETAC Indicator	*Scoring*
12.4 The RETAC plan includes regional education efforts to promote and raise awareness of EMTS agencies and organizations and to promote wellness and prevention within the region.	0. Don't know 1. The RETAC is not currently involved in public education efforts. 2. The RETAC plan contains a public education component but there are no activities related to this component. 3. The RETAC is involved with others in public education about EMTS systems. 4. The RETAC plan drives activities that promote and raise awareness of the EMTS system within the region. 5. The RETAC is taking a leadership role in promoting the EMTS system and in promoting wellness and prevention within the region. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Injury/Illness Prevention	
13. All disciplines actively support community wellness and prevention activities.	
Structure Indicator	*Scoring*
13.1 A written injury/ illness prevention plan is developed and coordinated with other agencies/facilities. The injury/illness program is data driven, and targeted programs are developed based on high injury/illness risk areas. Specific goals with measurable objectives are incorporated into the injury/illness prevention plan.	0. Don't know 1. There is no written plan for a coordinated injury/illness prevention program. 2. There are multiple injury and/or illness prevention programs that may conflict or overlap with each others with no coordination within the region. 3. There is a local written plan for a coordinated regional injury/illness prevention program that is linked to the agency/facility plan and that has goals and measurable objectives. 4. The regional injury/illness prevention program is being implemented and will include established timelines. 5. A regional injury/illness prevention program is being implemented in accordance with the timelines; data concerning the effectiveness of the plan are collected and are used to validate, evaluate, and modify the plan. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Injury/Illness Prevention	
Process Indicator	*Scoring*
13.2 Injury/illness prevention programs use our agency/facility information to develop intervention strategies.	0. Don't know 1. There is no evidence to suggest that our agency/facility data are used to determine injury/illness prevention strategies. 2. There is some evidence that our agency/facility data is available for injury/illness prevention program strategies, but its use is limited and sporadic. 3. Our agency/facility data is routinely provided to the injury/illness prevention programs. The usefulness of the reports has not been measured, and prevention stakeholders are just beginning to use our agency/facility data for programmatic strategies and decision-making. 4. Our agency/facility reports on the status of illness/injury and injury mechanisms are routinely available to prevention stakeholders and are used routinely to realign prevention programs to target the greatest need. 5. A well-integrated agency/facility data system exists. Evidence is available to demonstrate how prevention stakeholders routinely use the information to identify program needs, to develop strategies on program priorities, and to set annual goals for injury/illness prevention. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Injury/Illness Prevention	
Outcome Indicator	*Scoring*
13.3 The effect or impact of injury and/or illness prevention programs is evaluated as part of a system performance improvement process.	0. Don't know 1. There is no effort to review the activities of our agency/facility in prevention efforts. 2. There is no routine evaluation of prevention activities accruing within this jurisdiction. 3. Our agency/facility does internal monitoring and evaluations of our efforts in prevention activities. 4. Our agency/facility participates with other key stakeholders in our region in evaluating prevention intervention activities. The programs are regularly assessed for effectiveness. 5. Our agency/facility along with other key stakeholders routinely uses data to implement prevention programs and to communicate prevention efforts through periodic reports. Evaluation processes are institutionalized and used to enhance future prevention activities on a regional level. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Injury/Illness Prevention	
RETAC Indicator	*Scoring*
13.4 The region-wide Emergency Medical and Trauma System (EMTS) and the public health system have established linkages including programs with an emphasis on population-based public health surveillance, and evaluation for acute injury/illness prevention. Regional prevention efforts include pediatric injury prevention.	0. Don't know 1. There is no evidence that demonstrates program linkages, a working relationship, or the sharing of data between public health and the EMTS. Population-based public health surveillance for acute or chronic traumatic injury and illness has not been integrated with the RETAC. 2. There is little population-based public health surveillance shared with the EMTS, and program linkages are rare. Routine public health status reports are available for review by the RETAC and its constituent agencies. 3. The EMTS and the public health system have begun sharing public health surveillance data for acute and chronic illness and injury. Program linkages are in the discussion stage. 4. The EMTS has begun to link with the public health system, and the process of sharing public health surveillance data is evolving. Routine dialogue is occurring between programs. 5. The EMTS and the public health system are integrated. Routine reporting, programmatic participation, and system plans are fully vested. Operational integration is routine, and measurable progress can be demonstrated. (Demonstrated integration and linkage could include such activities as rapid response and notification in disasters, integrated data systems, communication cross-operability, and regular epidemiology report generation.) **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Information Systems	
14. There is an information system within the EMTS that can evaluate system performance, track provider skills, and formulate policies based on the analysis of collected data.	
Structure Indicator	*Scoring*
14.1 Your agency/facility participates in a system data collection and information data sharing network, collects pertinent data from providers on each episode of care, and uses data for system improvements.	0. Don't know 1. There is no routine collection of data or data collection system used by our agency/facility. 2. There is a minimal data set collected but it cannot be shared with other entities nor used for system improvements. 3. There is a data collection system, and some users access the information for system improvement activities. The use of the data is random and unfocused. 4. A regional data collection system is in place and used routinely by providers. The integration and use by other stakeholders is not completed. 5. There is a robust information system that is integrated with other databases. Our agencies/facilities input data into the data collection system on each episode of care. The data are used to analyze system performance and to make adjustments in education, training or policy as applicable. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Information Systems	
Process Indicator	*Scoring*
14.2 An information system is available for routine Emergency Medical and Trauma System and public health surveillance. It can be accessed by individual users as well as management for system oversight.	0. Don't know 1. There is no information system in place within our agency/facility. 2. There is an information system in place but it is not used by our agency/facility. 3. There is an information system in place but its use is sporadic; some system oversight is done using the information system that is in place. 4. The information system is in place and is integrated with other databases. It is used in some instances to review system performance but regular reports and system oversight using the information system has not been fully accomplished. 5. There is a fully integrated information system that routinely and regularly reports on individual and system performance. The system is used to make regular reports to management, and for establishing policy changes. Individual agencies/facilities can access the database and produce reports. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Information Systems	
Outcome Indicator	*Scoring*
14.3 An information system is used to assess system and provider performance, measure compliance with standards/rules and to allocate resources to areas of greatest need or acquire new resources as necessary.	0. Don't know 1. There is no information system such as the one described in use within our agency/facility. 2. Our agency/facility information system is limited in scope and the data is generally used for billing purposes. 3. Our agency/facility information system is sometimes used to review system issues or individual performance. 4. Our agency/facility information system is used by some providers to review system performance and compliance with applicable standards. The use of the data system is usually associated with an unusual occurrence rather than the routine course of system oversight, although efforts to make the system more accessible are in process. 5. There is a comprehensive information system that is used to assess system performance, measure compliance with applicable standards and allocate resources. Our agency/facility integrates the information system with other data bases to assist in routine analysis of system performance. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Information Systems	
RETAC Indicator	*Scoring*
14.4 The RETAC utilizes data from local agencies and state data collection programs as well as periodic regional assessments as a tool to monitor the regional EMTS system. Information from all sources is integrated in a manner that drives regional continuous quality improvement efforts.	0. Don't know 1. The RETAC does not currently utilize objective data to drive regional quality improvement. 2. The RETAC has access to state trauma register and EMS agency information but does not use the information to drive regional quality improvement. 3. The RETAC utilizes one or more data sources to monitor regional performance and provides feedback and assistance to local agencies 4. There is a formal QI program that utilizes one or more data sources to measure targeted RETAC performance. 5. The RETAC regularly integrates trauma register, EMS information system, regional assessment and other data to assess the quality of its emergency medical and trauma system. The regional CQI system drives system wide performance improvement. **RETAC Score**

Emergency Medical and Trauma System (EMTS) Component: Evaluation	
15. All disciplines use its management information system to facilitate on-going assessment and assurance of system performance and outcomes and provide a basis for continuously improving the Regional Emergency Medical and Trauma System.	
Structure Indicator	*Scoring*
15.1 Our agency/facility has computer based analytical tools for monitoring system performance Note: In this context, Evaluation is defined as "Utilization of system data to effect continuous quality or performance improvement.	0. Don't know 1. There is (are) no computer(s) to analyze or monitor system performance. 2. There is a basic computer program that collects the minimum state required data. 3. A computer system is in place and is used by providers to collect patient care information. Data is submitted to the state on the required submission schedule; however analytical tools are not used for system monitoring. 4. A computer system is in place and analytical tools are in use to assess system performance. 5. An upgraded and technically advanced computer system and analytical tool set is available for system monitoring and individual performance review. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Evaluation	
Process Indicator	*Scoring*
15.2 Your agency/facility collects and evaluates patient care data within the system and has a mechanism to evaluate identified trends and outliers.	0. Don't Know 1. Our agency/facility is not collecting patient care information for each episode of care. 2. Our agency/facility collects patient care information to use for internal decision making and billing. 3. Our agency/facility collects patient care data and provides the minimum data set to an approved statewide database. 4. Our agency/facility collects patient care data and provides the data to an approved statewide database as well as uses the data for its own internal monitoring. 5. Our agency/facility participates in a comprehensive data collection system that is integrated into the hospital system. Routine evaluation and assessment of system performance and administrative services is completed and shared with stakeholders. A comprehensive process improvement (PI) system is in place. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Evaluation	
Outcome Indicator	*Scoring*
15.3 Your agency/facility engages the medical community in assessing and evaluating patient care. These assessments are coordinated into quality care efforts. Findings from other quality improvement efforts are translated into improved service.	0. Don't Know 1. Our agency/facility has no relationship with the medical community to assist in evaluating system service delivery and quality of care. 2. Our agency/facility is engaged in projects but the medical community is not active in these efforts. 3. Our agency/facility is working with the medical community to develop a plan for assessing and evaluating system services and participating in research opportunities. 4. Our agency/facility participates with the medical community in evaluating system service to improve service delivery and patient care. 5. Our agency/facility has a process improvement (PI) program integrated in the medical community in system service delivery and patient care. Data is translated into routine reports for assessing performance, measuring compliance and conducting research all in an effort to improve services both clinically and administratively. **Agency/Facility Score** | **System Score**

Emergency Medical and Trauma System (EMTS) Component: Evaluation	
RETAC Indicator	*Scoring*
15.4 The RETAC is a leader within its jurisdiction in the evaluation and research of Emergency Medical and Trauma System (EMTS) activities, services and system oversight.	0. Don't Know 1. The RETAC does not serve as a leader of system activities within the area of jurisdiction. 2. The RETAC is beginning a dialogue with the service providers and hospitals on regional evaluation and research needed to evaluate and improve services and patient care. 3. The RETAC engages some providers and hospitals in system oversight and evaluation but it is not across the entire region. 4. The RETAC serves as a leader in system activities and has begun a research and evaluation agenda with service providers, hospitals and the medical community. 5. The RETAC serves as a leader in EMTS and is instrumental in working with providers, hospitals and other stakeholders in conducting research, evaluating service delivery and providing oversight to the region. **RETAC Score**

Please printout, complete survey form and bring completed survey form to your RETAC Town Hall Meeting or return to Melody Mesmer or Bill Bullard.

Central Mountains Regional Emergency Medical and Trauma Advisory Council
Standardized (Regional) Needs Assessment Project
Problem Ranking Survey

Demographical Information: (Indicate provider type and check all that apply below the provider type selected.)

__ **Pre-Hospital Provider**
__ Volunteer __ Paid
__ BLS __ ALS
__ Fire/Rescue
__ Ambulance
__ Other

__ **Hospital Provider**
__ Trauma Center Level
__ MD
__ RN
__ Administration

__ **Other Provider**
__ Law Enforcement
__ Dispatch/Communications
__ Emergency Management
__ Public Health
__ Elected Official
__ Other

- Please rank the following ten listed issues from 1 (most challenging) to 10 (least challenging)
- Note: Use each value (1 through 10) only once

____ **Agency Funding/Financial Viability**

Comments:

____ **Recruitment of New Personnel**

Comments:

____ **Retention of Personnel**

Comments:

____ **Aging Building/Equipment**

Comments:

____ **Initial/Continuing Education**

Comments:

____ **Billing/Accounts Receivable**

Comments:

____ **Medical Director Involvement**

Comments:

____ **Support form RETAC**

Comments:

____ **Administrative Support**

Comments:

____ **Cooperation with Other Agencies**

Comments:

- **Please send this to: Bill Bullard, bbullard@abarisgroup.com or fax to 707-922-0211**

ABARIS GROUP
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