Meeting of the Minds: A CQI Colloquium

Tammi McConnell, RN – EMS Program Manager
Vicki Sweet, RN – EMS CQI Liaison
Laurent Repass, EMT-P – EMS Coordinator
Sam Stratton, MD – EMS Medical Director
Mind your Ps and Qs: Quality Improvement, Quality Assurance & Performance Improvement

Understanding the differences and how to use the information to improve care

Vicki Sweet, RN, MSN, CEN, FAEN
CQI Liaison, Orange County EMS
So what is a “colloquium”, anyway?

- An academic seminar
- An informal meeting for exchange of views
- ... it was a way to incorporate the letters CQI into our title
Goals for CQI:

- Create and environment of continued improvement
- Help agencies and individuals to look at the way they deliver care and services
- Identify root causes of problems in our systems
- Implement processes to mitigate errors

- ... AND innovate systems to make improvements in care delivery!
Terminology:

- **QC**: quality control
- **QA**: quality assurance or assessment
- **QI**: quality improvement
- **PI**: performance improvement

So what’s the difference???
Quality Control (QC)

- Putting routine checks in place to ensure that your service will be safe and effective.

- Routinely documented, usually a checklist.

- A task that is generally easily shared among staff; all have a role to play in making day-to-day work safe.

- Examples: defib checks, routine preventive maintenance, checking for outdates.
Quality Assurance (QA)

- Determines where we are in relation to where we want to be

- Compares measured performance to a predetermined benchmark or threshold

- Examples: documentation review; procedure compliance; clinical studies (stroke CT times, STEMI D2B times, scene times, etc.)
Quality & Performance Improvement

- Using data to make changes for the better
- Setting specific goals and *making changes to achieve those goals*
  - They rely on measuring progress routinely
- Examples: Looking current clinical trends to develop new treatment guidelines; using QA data to determine specific areas to improve clinical outcomes
Example of using QA data to create a QI project:

- 2009 study of 570 pts w/non-traumatic chest pain
- Metrics separately:
  - VS - 99%
  - 12-lead - 92%
  - Lung sounds 73%
  - Document risk factors - 73%
  - ASA - 62%

- “Bundling” them together:
  - Overall compliance - 39%
    - ASA was withheld for younger pts

- Conclusion: “The care received by the majority of pts with non-traumatic CP is incomplete, and that there is great inconsistency in the way CP pts are treated.”

- Plan: Evidence-based education on outcomes through “bundling” of interventions

In a nutshell...

- **Quality Assurance** demonstrates that a set of requirements or criteria are met.

- **Quality Improvement** refers to making things better.

- **Continuous Quality Improvement** includes ongoing or repeated improvements in the process or system.
What is required for an EMS Provider CQI plan?

According to regulations, these elements should be addressed in your plan:

- Personnel
- Equipment & Supplies
- Documentation
- Clinical care and patient outcomes
- Skills maintenance and competency
- Transportation and facilities
- Public education and prevention
- Risk management

Reference: Title 22, Division 9, Chapter 12, Article 2, Section 100402
So how do we do that?

- It is OK to start with just the basics
  - Examples: EMT recerts, chart reviews, etc.

- EMSA website has a sample template
- OC EMS has two sample templates, available upon request

- Here are some suggestions to get you started...
One simple method as a basis...

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?
Common Components of a CQI Plan

- **Retrospective review → Example: PCR Audits**
  - Designed to identify potential or known problems and prevent their recurrence
  - Audit for agency success as well as individual provider

- **Concurrent Review → Example: Field Care Audits**
  - Designed to identify problems or potential problems during patient care

- **Prospective Review → Example: Networking with peers for new ideas and trends**
  - Prevent potential problems OR
  - Improve care BEFORE the call
  - Education based on new trends and treatment
  - Identifying areas for improvement based on current literature
Department Performance

Even though we are looking at the same data:

- You decide how you and your staff will measure performance
  - Do some good, old fashioned brainstorming

- You decide what processes need improvement and how to improve them
  - Create a “culture of safety” and improvement through teamwork and transparency

- You determine your direction using data and collaboration
Data Collection

• Define what you are collecting
  • So that everyone is clear
    • Describe in quantifiable terms what you will measure & how to measure it consistently
    • If there are exclusions, explain these

• Know why you are collecting the data
  • What will you do with it once you have it?

• What level of detail do you think you will need to get to the root of the issue?

• How much data will you look at?
Making Data Meaningful

- Data, graphs, and reports can speak volumes
- They are tools to show progress over time
- They help your team stay focused to continue in the right direction
  - CQI isn't just one person doing audits!
- Post progress for your team members to see
Data Pitfalls – Watch out!

- Data collection and how it is done – be consistent
- Inaccurate measuring, or not getting the right criteria
- Temptation to manipulate/exclude to get what you want
- Poor choice of collection period
- Lost data (Save, save, save…)
EMS Core Measures

- Developed through grant funding to evaluate system performance
- EMSA will be collecting “sets” of data
  - Trauma Care
  - ACS Care
  - Cardiac Arrest
  - Stroke care
  - Respiratory Care
  - Pediatric EMS
  - Pain Assessment and Intervention
  - Skill Performance
  - Response and Transport
  - Public Education: CPR

You may use these to help build your plan...
Sample Core Measures

- **ACS-2**: 12-lead EKG performance
  - A process measure that looks at the number of patients with a provider impression of chest pain/discomfort who have a 12-lead EKG performed

- **CAR-2**: Out-of-hospital arrests who have a return of spontaneous circulation (ROSC) in the field
  - A process measure collecting a % of cardiac arrest patients who have ROSC in the field
Tips for Success: Getting started

- Align your project with local or departmental education and training goals

- *Start small* and as you get better, expand your measures

- Network with your peers and find out what works for them or what barriers they have overcome
  - Don’t re-invent the wheel!! Borrowing is good!
Tips for Success: Creating a “just culture”

- A balance between the “bad apple” and the “blame-free” concepts
- Assume that mistakes will happen
- **Focus less on the “who” and more on the “how”**
- Look at the system and build in safety
  - Checklists, procedures
- Understand and mitigate “complacency drift”
  - Support the reporting of “no harm, no foul” events
- Know when it is no longer a system issue and more of a “risk behavior” issue which requires counseling
Tips for Success: Sustainment

- Keep after it - it benefits the patients, the agency as a whole and the individuals you work with
- Involve your staff, those who are “in the trenches”
  - They probably have great ideas
  - You might learn how things are really being done
  - They’ll be more likely to support the plan and the positive changes that will come
Tips for Success: Celebrate!!

- Celebrate your success (no matter how small)
  - Reward yourself and your staff

- CQI isn’t always about finding errors or figuring out who did it!

- CQI is about making a difference for the people we serve!!
“To improve is to change; to succeed is to change often.”

Winston Churchill