### Taking the Pulse of Washington's EMS and Trauma Care Regions

Implementation of Washington's Regional Quality Assurance/Improvement Programs







#### History of Clinical QA/QI in

#### **Trauma Care**

- In 1976, an American College of Surgeons (ACS) task force on trauma delineated the resources, facilities and personnel that should be available for the treatment of seriously injured patients.
- The 1985 National Academy of Sciences (NAS) report, "injury in America: A Continuing Public Health Problem," determined personnel, training, and environmental causes that lead to deviations from standard trauma care.
- In 1987, a subcommittee of the American College of Emergency Physicians (ACEP) developed guidelines for trauma care systems.
- In 1989, for the first time the American College of Surgeons (ACS) published a set of trauma care guidelines. Since then, several updates came out.



## History of Clinical QA/QI in Washington's EMS and Trauma Care System

- The EMS/TC Act of 1990 mandated that QA/QI be an integral component of the system.
- In Oct 1994, the DOH released a guidance report for "Quality Management in Regional EMS and Trauma Systems.
- During 1995-1997, regional EMS and trauma QA/QI forums are established and adopted their first QA/QI plans.
- The QA/QI committees are autonomous entities lead by the highest level hospital in the region, separate from the regional EMS and Trauma Councils.



#### The regional QA/QI committees are NOT a sub-committee under the Regional Council; They are independent forums.

<b>Regional Council</b>	Regional QI
RCW 70.168.100	RCW 70.168.090
Operational Evaluation:	Clinical Evaluation:
<ul> <li>Identify current services and</li> </ul>	Clinical Care
resources	<ul> <li>Death review</li> </ul>
<ul> <li>Monitor need for services and</li> </ul>	<ul> <li>Case presentations</li> </ul>
resources (min/max numbers)	• Focused clinical review (ex. spleen
<ul> <li>Monitor regional operation</li> </ul>	injuries)
procedures (PCP's)	Clinical Process Review
<ul> <li>Establish and monitor regional</li> </ul>	• Patient flow (appropriateness of
standards (may be higher than state	transfers)
standards) such as response times	<ul> <li>Trauma team activation</li> </ul>
<ul> <li>Focus injury prevention efforts</li> </ul>	• ED LOS
	• Pre-hospital times, etc.
	Clinical Education
	Clinical Collaboration

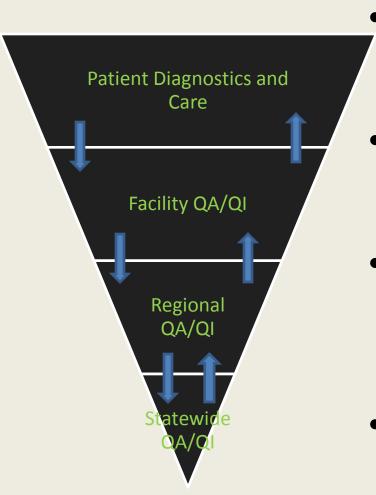


## Why do Clinical Quality Improvement/Assurance?

- To improve clinical care and lower trauma mortality and morbidity by:
  - Identifying the problems that are arising due to correctable factors.
  - Assuring that corrective action is taken to remedy these problems.
  - Assessing whether they have been successful in correcting the problem (Loop Closure).



## Is Regional QA/QI Different from Facility (Hospital) QA/QI?



- Patient Diagnostics evaluates baseline injuries and illnesses of patients undergoing care.
- Facility QA/QI evaluates patient outcomes and care components provided by different providers.
- Regional QA/QI evaluates how the regional system functions to determine continuing effectiveness in the management of patients.
- **Statewide QA/QI** evaluates overall patient outcomes and system performance in the state.

### How do Facility and Regional QA /QI Activities Relate to Each Other?

Beneral Outline

Focus

Methodology (Resources)

**Process** 

Outcome

7

Individual Patients and Providers

ACS Guidelines

Treatment Given and Response to Given Treatment

**Complications of Care** 

TRISS Analysis, Morbidity and Mortality Reviews of Individual Patients ional QI

**System Components** 

ACEP System Guidelines

System Access, Triage Protocols, Transport Times, Inter-hospital Transfers

Rates Measuring
Specific Morbidity and
Mortality Indicators



## Regional EMS and Trauma QA/QI Process in Washington State

- The EMS/TC Act of 1990 mandated that:
  - Within each region, level I, II, and III hospitals are responsible for establishing and participating in regional QA/QI programs.
  - All designated trauma services in the state shall deposit their trauma data in the state registry.



# Components of Regional Care Systems

- Prevention
- Pre-hospital/EMS Care
- Hospital-Based Emergency Care
- Hospital Care
- Post-Discharge Care



# Who Attends Regional QA/QI Meetings

- At least one member from each designated trauma service.
- An EMS provider and a member of the regional council.
- A member from outside of the region when there is joint designation.
- MPDs and all other providers and facilities providing trauma care must be invited.



# The EMS/TC Act of 1990 is Clear About the Confidentiality Requirements for the Regional QI/QA Activities

- The information collected, used, or shared for the regional QI/QA activities is strictly confidential for open and frank discussion of data.
- The information is not discoverable by subpoena.
- The statue requires attendees to sign confidentiality agreements at each meeting.

### Underlying Principles, Processes, and Operations Guiding Regional QA/QI Processes

- Independent forums are separate from the Regional Councils.
  - The regional QA/QI committees are NOT a sub-committee under the Regional Council.
- The statue is deliberately vague about internal operations of the regional QA/QI programs:
  - To empower regions to establish their own programs.
  - To address specific QA/QI needs in each region.
  - The template on the next slide is a summary of a variety of QI activities as observed in several regions with strong QA/QI programs.



#### A Typical Regional QA/QI Process at Work

- Provide brief reports of QI activities from EMS and each participating hospital
- Provide a brief report of regional and statewide QI activities
- Focused review of items of major concern/impact including system analysis using WTR and reviews of selected cases
- Develop consensus on regional QA/QI concerns
- Develop an action plan for the next steps
- Evaluate effectiveness of action plan results



## Document, Document, and Document

- Document all activities including recommendations for change or specific actions taken in:
  - Meeting agendas
  - Minutes
  - Regional QA/QI plans
  - Tracking tools to capture specific activities



#### Specific Regional QA/QI Activities Done During

The Last Year

General Outline

**Focus** 

Methodology (Resources)

**Process** 

Outcome

Reviews of WTR Data and Patient
Charts to Identify Issues of Major
Concern

Calculations of Risk-Adjusted Rates, Process Control Charts, and Case Reviews

Presentations on Trauma Care Process; Patient Flows; Pre-hospital, Hospital, Pediatric and Geriatric Care

Risk- Adjusted Mortality Comparisons



## Identifying QA/QI Issues of Major Concern

- Emerging trends or care issues (e.g., Elderly falls and geriatric trauma care)
- Patient care process issues (control charts using audit filters for patient care and transfer patterns)
- System outcomes (e.g., Risk-adjusted hospital mortality comparisons)



#### **Experiences of Regional QA/QI Chairs: Panel Forum**

- What regional QA/QI issues were identified
- How they tackled these problems
- Achievements and challenges