The CSTR Exam: How to Prepare & What to Expect

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After the completion of this presentation, participants will be able to answer the following questions:

- What is the CSTR credential?
- Am I eligible to take the CSTR exam?
- What does it cost to take the CSTR exam?
- How do I register to take the CSTR exam?
- What can I do to prepare for the CSTR exam?
- What can I expect to be on the CSTR exam?
- How can I maintain my CSTR credential?

The CSTR Credential

- Certified Specialist in Trauma Registries
  - A trauma registry and data expert
  - Credentialed through the Registrar Certifying Board of the American Trauma Society
  - Board certification in trauma registry is highly valued
  - Awarded to candidates who pass the CSTR Certification Exam
  - Credential must be re-certified every 4 years by continuing education or re-examination

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Eligibility

- Guidelines only!
- Not required, but highly recommended!
  - A bachelors degree (B.A., B.S., or equivalent)
  - At least 2-3 years of full-time or the equivalent (4,000 hours) experience in trauma registry practice.

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Fees

- $275 ATS Members
- $350 Non-Members

***These fees include a non-refundable administrative fee of $50.00. ATS membership must be current to be eligible for the reduced fee.

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The Application Process

- Must register on ATS Website
- Answer all “Required” questions
- You may leave “Optional” questions blank
- Enter payment information
- Electronically sign application
  - The name you enter on your Application must match exactly the name shown on your current government-issued photo ID
- Submit!

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Scheduling the Exam

- Expect a test eligibility letter within 2-4 weeks from the ATS
- Follow the instructions on this letter
  - Find a testing center as close to your location as possible
    - Locations can be found on the Comira website
  - Contact Comira to schedule your exam
- You only have 90 days from the “Date of Authorization” to schedule and take the exam!

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Test Day!

- Take your **Eligibility to Test letter** to the exam center!!!
- Take valid government-issued photo ID
- Arrive at least 15 minutes early
- **Nothing** allowed in testing room!
  - Pencil and paper provided by proctor is allowed
- Test is **250** multiple choice questions
- You have **4** hours to complete the exam
- Results are provided immediately after submission of the exam

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Re-Examination

- You can sit for the exam times per year max
- A new application and fee is required for each re-examination
- Recommendation to wait at least **1** month between testing attempts

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Maintaining the CSTR Credential

- A minimum of 32 contact hours in the areas of (I) Data Management, (II) Conditions of Injuries, (III) Coding and Scoring Concepts, and (IV) Registry Issues
  - 4 years
  - Minimum of eight (8) CE’s completed during the 12 months prior to recertification
  - Each successful completion of a college credit counts as 10 CE hours

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Maintaining the CSTR Credential

- Notification is provided 8 weeks prior to deadline instructing you to complete the recertification application
- ATS must receive application 30 days prior to your certification expiration date
- Fees
  - $100 ATS Members
  - $165 non-ATS member
- Audit possible
- more than 6 months past the certification expiration, must retake exam

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Content

- DATA MANAGEMENT 40%
- CONDITIONS OF INJURY 25%
- CODING AND SCORING CONCEPTS 30%
- REGISTRY ISSUES 5%

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Preparation

- ATS Trauma Registry Course
- ATS Online Practice Exam
  - $65 ATS Members
  - $85 non-ATS Members
- Study Guide
- Flash Cards
- Quizlet
- AIS Coding Guidelines
- ICD-9 Coding Guidelines
- NTDS Data Dictionary
- The “Orange Book”
- Scores Packet (PTSF Website)
- Anatomy and Physiology
The Specifics – Data Management

• The definition of a “Trauma Patient” (Green Book and Orange Book)
• NTDB Patient Inclusion Criteria
  – Note that state can be different
  – Memorize ICD-9 Code Range
• Abstraction
  – Concurrent
  – Retrospective
  – Hybrid

The Specifics – Data Management Continued

• Reporting
  – Can you run a basic report?
  – What information do you need to run a report?
• Graphs
  – Bar
  – Pie
  – Line
  – Other
  • Control Charts, Dashboards, scattergrams, Pareto Chart
The Specifics – Data Management Continued

• Basic Performance Improvement Concepts
  – PIPS
  – Loop Closure
  – Benchmarking
• Statistics
  – Calculations
    • Mean, Median, Mode, etc.

The Specifics – Conditions of Injury

• **ANATOMY AND PHYSIOLOGY**
  – Get Specific!
    • Bones
    • Muscles
    • Organs
    • Joints
    • Veins
    • Nerves (cranial)
The Specifics – Conditions of Injury Continued

• Testing
  – Radiology
    • X-Rays/Plain Films
    • Ultrasound
      – FAST
    • MRI
    • Others
      – Diagnostic Peritoneal Lavage (DPL), PET Scan
  • Interventional Radiography
    – Arteriography, Angiography

The Specifics – Conditions of Injury Continued

  – Laboratory
    • Toxicology
    • Chemistry
    • Hematology
    • Arterial Blood Gases (ABG)
    • Urinalysis

• Interventions
  – Airway Management
    • Endotracheal tubes
    • Laryngeal Mask Airway (LMA)
The Specifics – Conditions of Injury Continued

– Fluid Administration
  • Crystalloids
    – Normal Saline, Lactated Ringers
  • Blood Products
    – PRBC, FFP, platelets

• More Anatomy!!
  – Specific types of injuries to various body regions
  – Procedures related to injuries in various body regions

The Specifics – Coding and Scoring Concepts

• ICD-9 or ICD-10?
  – E-codes
  – Location of Injury Codes

• Scoring Principles
  – AIS
  – GCS
  – Trauma Score
  – Revised Trauma Score (Triage and Evaluation)
### The Specifics – Coding and Scoring Concepts

**Continued**

- Injury Severity Score
- New Injury Severity Score
- TRISS
- M Score
- Z Score
- W Score

### The Specifics – Registry Issues

- Data Validation
- Inter-Rater Reliability
- Confidentiality
- The Trauma Registrars Role
- Registry Operations
Example Question 1

The following is an example of what type of graph?

a. Bar  
b. Line  
c. Dashboard  
d. Fishbone

Example Question 2

What spinal vertebrae is considered the Atlas?

a. C1  
b. C2  
c. L1  
d. L2
Example Question 3
What bone is considered the heel bone?

a. Talus  
b. Cuboid  
c. Calcaneus  
d. Navicular

Example Question 4
How many liters of blood are in the human body?

a. 2  
b. 5  
c. 7  
d. 10
Example Question 5

Otorrhea is bleeding from what body structure?

a. Eye  
b. Mouth  
c. Nose  
d. Ear

Example Question 6

Which cranial nerve is responsible for smell?

a. I  
b. II  
c. III  
d. IV
Example Question 7

What is the ICD-9-CM location of injury code for a patient that is injured on the street or highway?

a. E849.2  
b. E849.4  
c. E849.5  
d. E849.7

Example Question 8

What is the range of the Glasgow Coma Score (GCS)?

a. 0-15  
b. 1-15  
c. 3-15  
d. 1-75
Example Question 9

What component does **not** compose part of the Trauma Score (TS)?

- a. GCS
- b. SBP
- c. Respiratory Effort
- d. Pupillary Response

Example Question 10

Which score is based on the ISS compared to the Major Trauma Outcome Study (MTOS)?

- a. M
- b. Z
- c. W
- d. TRISS
Important Links!

• American Trauma Society CSTR Webpage
    • Registration
    • General Information
    • Handbook
• CSTR Practice Exam

Thank You!

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