



VRC VERIFICATION
REVIEW
CONSULTATION
for excellence in trauma centers

A **QUALITY PROGRAM**
of the AMERICAN COLLEGE
OF SURGEONS

Resources for Optimal Care of the Injured Patient

2022 Standards

Released March 2022

Revised December 2023

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ACS / AMERICAN COLLEGE
OF SURGEONS



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Dedication



Used with Permission. Source: Upstate University Hospital

William H. Marx, DO, FACS, was Professor of Surgery and Critical Care and Chief of the Division of Trauma and Acute Care Surgery at SUNY Upstate Medical University. He had a distinguished career in the US Army, rising to the rank of Lieutenant Colonel while serving on active duty from 1978 to 1989 and reserve duty from 1989 to 2001. He was deployed during Operation Desert Storm from 1991 to 1992.

Bill was an incredibly active member of the American College of Surgeons, serving on the Board of Governors and as Past-President of the New York Chapter. His engagement with the Committee on Trauma began in the Regional Committees, where he served as the New York State Chair followed by two terms as the Chief for Region 2. He began serving as a Verification, Review, and Consultation (VRC) Program reviewer in 2007 and was promoted to lead reviewer in 2012. Bill was appointed to the Central COT in 2014, where he made major contributions to the Quality Programs and served as Vice-Chair and Chair of the Verification Review Committee and as a member of the COT Executive Committee. As the VRC Chair, he took on a leading role and was instrumental in revising and developing the standards in this manual.

In addition to his work with the COT, Bill was a leader in the New York State trauma system. He served as Chair of the State Trauma Advisory Committee and was instrumental in the state's decision to adopt the ACS standards for trauma center verification.

We want to dedicate this work to Bill in recognition of his unwavering commitment to ensuring the optimal care for injured patients. All those who knew Bill appreciated his approach to building consensus while maintaining focus on the best interests of the injured patient. The trauma community has lost a servant leader, a mentor, and a friend, and his family has lost a wonderful husband and father.

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Important Notice about the Use of This Document

These standards are intended solely as qualification criteria for the Verification, Review, and Consultation (VRC) Program. They do not constitute a standard of care and are not intended to replace the medical judgment of the physician or health care professional in individual circumstances. “Standard,” as used in this manual, is defined as a “qualification for verification,” not “standard of care.”

In addition to verifying compliance with the standards as written in this manual, the Verification Review Committee may consider other factors not stated herein when reviewing a program for verification and reserves the right to withhold verification on this basis.

Confidentiality Requirements

The American College of Surgeons and the Committee on Trauma Verification Review Committee expect programs to follow local, state, and federal requirements related to patient privacy, risk management, and peer review in attempting to meet the standards outlined herein.

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Background

About the American College of Surgeons

The American College of Surgeons (ACS) is a scientific and educational organization of surgeons that was founded in 1913 to raise the standards of surgical practice and improve the quality of care for all surgical patients. The ACS is dedicated to the ethical and competent practice of surgery. The contributions of the ACS have significantly influenced surgical care and have established the ACS as an important advocate for all surgical patients. The ACS has more than 82,000 members and is the largest organization of surgeons in the world.

ACS Quality Programs are developed according to a four-part framework used to evaluate and improve quality of care, consisting of (1) program-specific standards, (2) infrastructure needed to deliver high-quality, high-value care, (3) use of high-quality data, and (4) accreditation/verification to ensure proper implementation of components one through three. This model has been shown to improve both care and outcomes in specialties such as cancer, trauma, and metabolic/bariatric surgery, as well as in other surgical disciplines.

About the Committee on Trauma

The Committee on Trauma (COT) was founded in 1922 by Charles L. Scudder, MD, FACS, and is the oldest standing committee of the ACS. The COT focuses on a multidisciplinary approach to the care of the injured patient and recognizes that trauma is a surgical disease requiring surgical leadership. The mission of the COT is to develop and implement programs that support injury prevention and ensure optimal patient outcomes across the continuum of care. These programs incorporate advocacy, education, trauma center and trauma system development, best practice dissemination, outcome assessment, and performance improvement (PI).

About the Verification, Review, and Consultation Program

The Verification, Review, and Consultation (VRC) Program is overseen by the Verification Review Committee, a subcommittee of the COT. The VRC Program is an important component of the COT's Trauma Quality Program, which also includes the Trauma Quality Improvement Program (TQIP) and Performance Improvement and Patient Safety (PIPS) Program. The COT first published criteria for the resources and personnel needed for optimal care of the trauma patient in 1976. Since 1987, the VRC Program has **verified** trauma centers that meet the standards—the presence of the resources, structures, and processes—outlined in *Resources for Optimal Care of the Injured Patient*. The **designation** of trauma centers is a regulatory process performed by authorized regional governmental or other agencies.

Foreword

This is the seventh edition of *Resources for Optimal Care of the Injured Patient* (hereafter referred to as the Resources Manual) published by the ACS COT. The Resources Manual outlines the standards required for trauma center verification by the VRC Program. The Resources Manual is used for the assessment of commitment, readiness, resources, policies, patient care, PI, and other relevant features of the trauma program.

The revision process of the Resources Manual has evolved over several years and has been deliberately inclusive, with input (through surveys and other means) from committed stakeholders such as trauma medical directors, trauma program managers, medical staff, hospital leadership, medical associations, state trauma leadership, and surgical specialties. Throughout the development of this edition, over 2,000 comments from stakeholders were used to

guide decisions related to the revisions of these standards. In addition, content-specific experts were assembled into criteria revision teams to revise the standards.

The goals of this revision process were to:

- Revise standards to ensure utility, relevance, and effectiveness
- Increase clarity and incorporate stakeholder feedback
- Ensure that standards support and advance optimal care for injured patients
- Align standards with all ACS Quality Programs' accreditation/verification processes

The standards manuals have the same layout across all ACS Quality Programs to ensure consistency for hospitals participating in multiple programs. Standards are organized based on the nine categories noted below, and each standard includes the following sections: **Definition and Requirements, Additional Information, Measures of Compliance, Resources, and References.**

Category	Description
1. Institutional Administrative Commitment	Resource allocation, commitment to patient safety, focus on continuous PI
2. Program Scope and Governance	Trauma center levels and the functions of trauma program leadership
3. Facilities and Equipment Resources	Required facilities and equipment for care of the injured patient
4. Personnel and Services	Availability of personnel and services
5. Patient Care: Expectations and Protocols	Use of comprehensive clinical pathways and practice guidelines
6. Data Surveillance and Systems	Collection and use of trauma registry data
7. Performance Improvement and Patient Safety (PIPS)	Problem identification, resolution, outcomes improvement, and assurances of patient safety
8. Education: Professional and Community Outreach	Programs designed to improve outcomes and prevent injury
9. Research	Research activities for Level I trauma centers

Overview of the Verification, Review, and Consultation Program

Levels of Trauma Care

The VRC Program's classification system for trauma centers is not intended as a ranking of medical care but instead represents the resources available to care for patients with differing needs—from the most complex multisystem trauma patient to those with mild or moderate single-system injuries. Each trauma center has an important role in its community and a critical function in the trauma system. The ACS COT expects trauma centers' commitment to quality care to be the same regardless of level. Trauma centers must adhere to the standards outlined in the Resources Manual based on their level of verification.

There are three levels of trauma center verification, each defined by specific standards. These standards denote the spectrum of care that must be available to the injured patient at the facility, along with other expectations related to research and educational contributions to advance the field and increase capacity. In most trauma systems, designated trauma centers of different levels coexist with other acute care facilities, which should also be formal members of the trauma system; these facilities assist in caring for patients whose injuries are less acute, provide data for research programs, and participate in PI.

In many areas, Level I trauma centers serve as the lead hospitals. In systems with lower population densities, Level II trauma centers may assume this role. In smaller communities and rural settings, Level III trauma centers often serve as the lead hospital.

Level I

Level I trauma centers must be capable of providing system leadership and comprehensive trauma care for all injuries. In its central role, a Level I trauma center must have adequate depth of resources and personnel. Most Level I trauma centers are university-based teaching hospitals due to the resources required for patient care, education, and research. In addition to providing acute trauma care, these centers have an important role in local trauma system development, regional disaster planning, increasing capacity, and advancing trauma care through research.

Level II

Level II trauma centers are expected to provide initial definitive trauma care for a wide range of injuries and injury severity and may take on additional responsibilities in the region related to education, system leadership, and disaster planning.

Level III

Level III trauma centers typically serve communities that may not have timely access to a Level I or II trauma center and fulfill a critical role in much of the United States by serving more remote and/or rural populations. Level III trauma centers provide definitive care to patients with mild to moderate injuries, allowing patients to be cared for closer to home. These centers also have processes in place for the prompt evaluation, initial management, and transfer of patients whose needs might exceed the resources available.

The Verification, Review, and Consultation Process

The VRC Program is designed to assist trauma centers in the evaluation and improvement of the trauma care they deliver and to provide objective, external review of institutional capabilities and performance. To this end, the trauma program is evaluated by a peer review team experienced in trauma care. The review team assesses commitment, readiness, resources, policies, patient care, PI, and other relevant features of the trauma program, as outlined in the Resources Manual.

To be found compliant with a VRC Standard, the program must be able to demonstrate compliance with the entire **Definition and Requirements** and **Measures of Compliance** sections for that standard. The **Measures of Compliance** section is intended to provide summary guidance on how compliance must be demonstrated but is not intended to stand alone or supersede the **Definition and Requirements**.

Reporting Period and Verification Cycle are terms used throughout the book. The Reporting Period is defined as the twelve (12) month period ending with the calendar month preceding three (3) months prior to the site visit date. For verified trauma centers, the Verification Cycle is defined as the thirty-six (36) month period preceding the expiration date of the current verification status.

ACS COT will provide a trauma center consultation, verification, or reverification site visit at the request of the hospital or state/emergency medical service (EMS) designating authority.

Consultation Site Visits

Trauma centers may consider a **consultation** site visit to prepare for the initial verification site visit. This consultation site visit is optional but strongly recommended. It will provide recommendations to educate and aid the trauma center in preparing for and attaining verification. A consultation site visit may also be beneficial to programs seeking to change their current verification level.

Verification/Reverification Site Visits

A **verification** site visit is for trauma centers seeking to be verified for the first time, to restore verification after a lapse in status, or to change their current verification level. During a verification site visit, reviewers will confirm whether the trauma center meets the standards outlined in the Resources Manual.

A **reverification** site visit is for ACS-verified programs that are planning to maintain their current verification level status. After successful verification, a program must undergo reverification every three years to maintain its verification status.

Site Visit Process

Trauma centers are required to submit an online application to request a site visit. Once the application is processed, the trauma center will receive access to the online prereview questionnaire (PRQ). The information provided by the trauma center in the PRQ allows the review team to have a clear understanding of the existing trauma care capabilities and the performance of the trauma program and medical staff before the review.

Additionally, programs may apply as **combined** facilities, wherein an adult trauma center and pediatric trauma center within the same building or campus undergo a single site visit.

A Level I pediatric trauma center and a Level I adult trauma center within the same hospital or campus may opt to undergo concurrent but separate site visits.

Review teams are composed of experts with substantial expertise in the areas of trauma care, trauma center operations, and trauma systems. A review team may include trauma surgeons, pediatric surgeons, nurses, and specialty physicians. The composition of a review team will vary depending on the type of site visit, hospital request, and/or state authority regulations.

The review encompasses all areas of the trauma center involved in trauma care. A typical site visit will include the following components:

- **Medical record review**—The review team will evaluate the care of trauma patients by reviewing medical records and evaluating the effectiveness of the center's PI program.
- **Risk-adjusted benchmark report review**—The trauma medical director (TMD) and review team will discuss specific efforts to address any issues arising from outcomes in one of the two most recent risk-adjusted benchmark reports (e.g., data drilldowns, PI projects).
- **Review of program documents**—The review team will examine supporting documentation such as call schedules, research, injury prevention efforts, and so forth utilized in providing care for trauma patients.
- **Review meeting**—The meeting is intended to include a discussion of the overall trauma program, clarification of the PRQ, specific concerns, unique features of the institution, discussion of the local trauma system, and clarification of the review process. It also provides an opportunity for the review team to highlight any program strengths to hospital administration. During this meeting, the review team will meet with the TMD, the trauma program manager (TPM), subspecialty liaisons, hospital and nursing administrators, the prehospital liaison, and the designating authority (if required). Other individuals may be invited if needed to clarify the PRQ and describe existing trauma center activities.
- **Hospital tour**—The tour will highlight all areas of the trauma center where trauma care is provided and will follow the path of a trauma patient through the facility. The review team will interview hospital staff and directors in those areas.

- **Exit interview**—The site visit concludes with an exit interview to share the preliminary findings of the review team with the trauma center leadership team. The review team will communicate the compliance with standards, strengths, opportunities for improvement, and recommendations they have identified. Final decisions regarding compliance with the standards will be made by the VRC Committee and may differ from the findings stated at the exit interview.

The review team will prepare a final report that supports the statements made at the exit interview. The VRC Program leadership will review the report, and the VRC Committee Chair and/or Vice-Chair will issue final approval. Trauma centers that are successfully verified will be added to the list of currently ACS-verified trauma centers on the VRC website (<https://www.facs.org/search/trauma-centers>).

Note that the information presented in this section is subject to change, as the site visit process is continually being improved. For additional details and the most up-to-date information, please refer to the VRC Program website.

Outcomes of Verification

Verification standards are divided into **Type I** and **Type II** standards. Type I standards are considered critical standards that directly impact patient care. The trauma program must be in compliance with all applicable standards at the time of the site visit. If noncompliance with any standard is identified, the trauma program must demonstrate compliance through a **Corrective Action Review** to achieve or extend verification. The type of Corrective Action Review will depend on the standard(s) in question and will be determined by the VRC Program leadership. Figures 1–3 outline the various visit results and verification outcomes.

Figure 1. Verification Visit Results and Outcomes

Visit Results	Verification Outcomes
Compliant with all standards	Verified, 3-year certificate
Noncompliant with up to 3 Type II standards	Verified, 1-year certificate
Noncompliant with any Type I standard OR Noncompliant with more than 3 Type II standards	Not verified

Figure 2. Pathways for Verification Outcomes

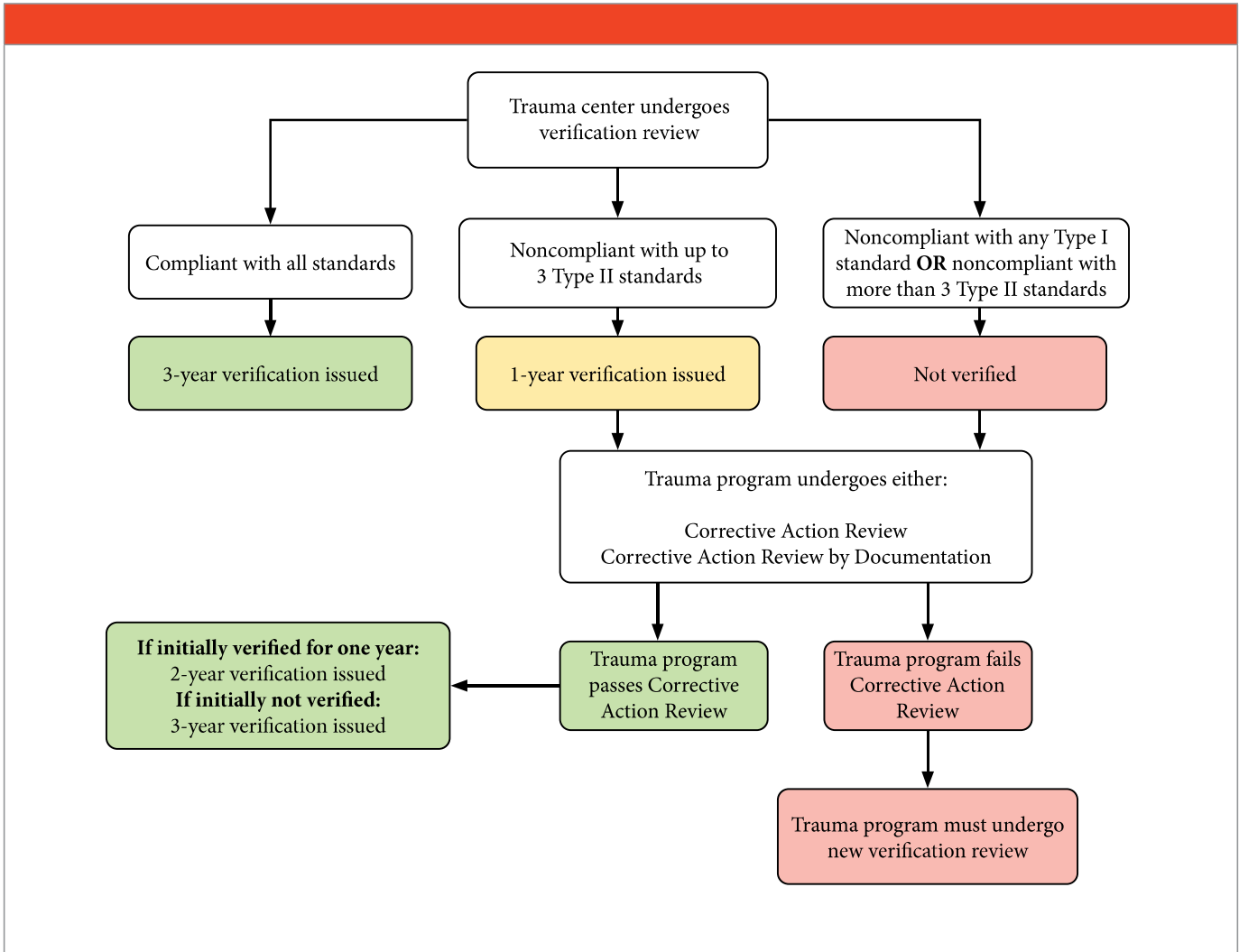
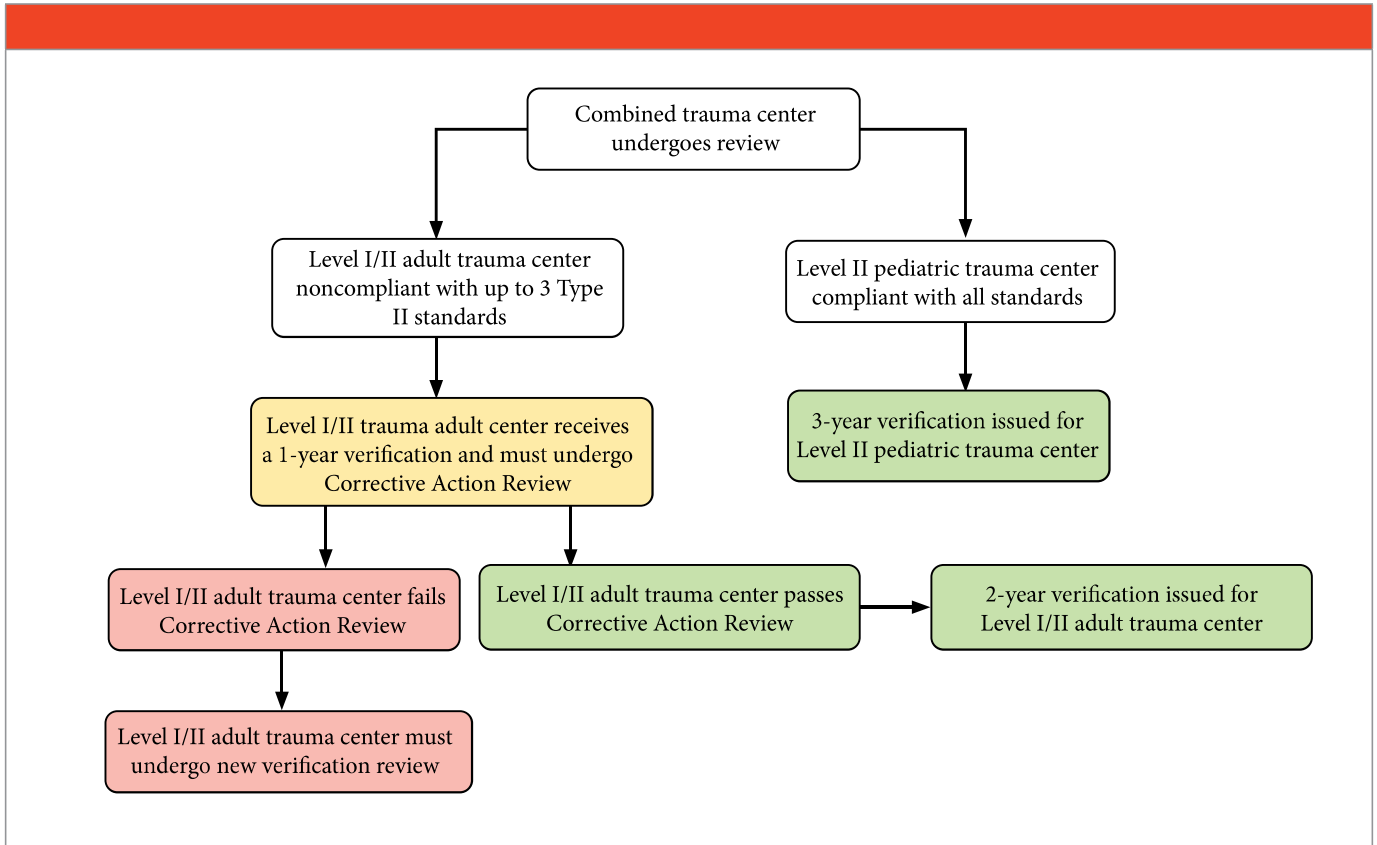


Figure 3. Example Pathways for Verification Outcomes for Combined Trauma Centers



Types of Corrective Action Reviews include:

- **Corrective Action Review**—A one-day review conducted by at least one member of the original review team in which the scope of review is narrowed to the corrective action implemented to resolve the previously identified noncompliant standard(s). This review type is most common with standards related to PI and, as such, requires medical record review.
- **Corrective Action Review by Documentation**—The trauma center will provide specific documentation requested by the VRC Program leadership within a predetermined time period. The original review team and VRC Chairs will review all submitted documentation. If the documentation satisfactorily resolves the noncompliant standard(s), verification will be extended.

Consistency in the Review Process

The ACS strives for consistency in the review process to ensure that it is equitable across trauma centers. The following steps ensure consistency of the review process:

1. A hospital PRQ allows the review team to have a preliminary understanding of the trauma care capability and performance of the hospital and medical staff before the review. This questionnaire is completed online by the trauma program and hospital staff.
2. An organized agenda is prepared for the review so that all site reviews are performed in an efficient and standardized manner.
3. All reviewers are approved and vetted by the COT and VRC. Reviewers are also provided online training courses to ensure that all facets of the review process are conducted appropriately.
4. Every site visit team has an assigned lead reviewer. These reviewers are experienced in trauma care and have been promoted to this position by the VRC.
5. All reviewers undergo routine performance appraisals, with feedback solicited from trauma center personnel, site review team members, report medical editors, and ACS staff.
6. The site visit report is written in a standardized format.

7. A final review is performed by the VRC Committee to ensure accurate interpretation of the findings, well-documented conclusions, and consistency and professionalism in the final report. Confidentiality of the entire review process ensures that the series of steps will be a constructive process in which a hospital can place its trust.
8. Finally, to ensure the quality and integrity of the VRC Program, the trauma center undergoing review will be asked to complete an extensive survey that includes the conduct of the review team and an overall assessment of the VRC Program.

