



STANDARDS FOR ACCREDITATION

ASSOCIATE DEGREE, BACCALAUREATE AND GRADUATE CRITICAL CARE
TRANSPORT PROGRAMS, INCORPORATING FORMERLY ARTICULATED SUB-DEGREE
PROGRAMS

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Explanatory Guide to the Standards

These standards are adapted from the World Federation for Medical Education Basic Medical Education Standards for Quality Improvement published in 2015. This globally endorsed document, and others, have informed our understanding of fundamental principles and best practices in designing, maintaining, and enhancing critical care transport education programs. Standards are intended to guide critical care transport education program development and evaluation, facilitate diagnosis of strengths and weaknesses relating to the critical care transport education program, and to stimulate quality improvement. Each institution or regulator should review the relevant standards and develop a version of them that is appropriate to the local context. Not all standards may have application in every setting. A critical care transport program imbedded within an education institution may well receive a satisfactory overall evaluation and maintain accreditation (where appropriate) without necessarily meeting every standard and sub-standard.

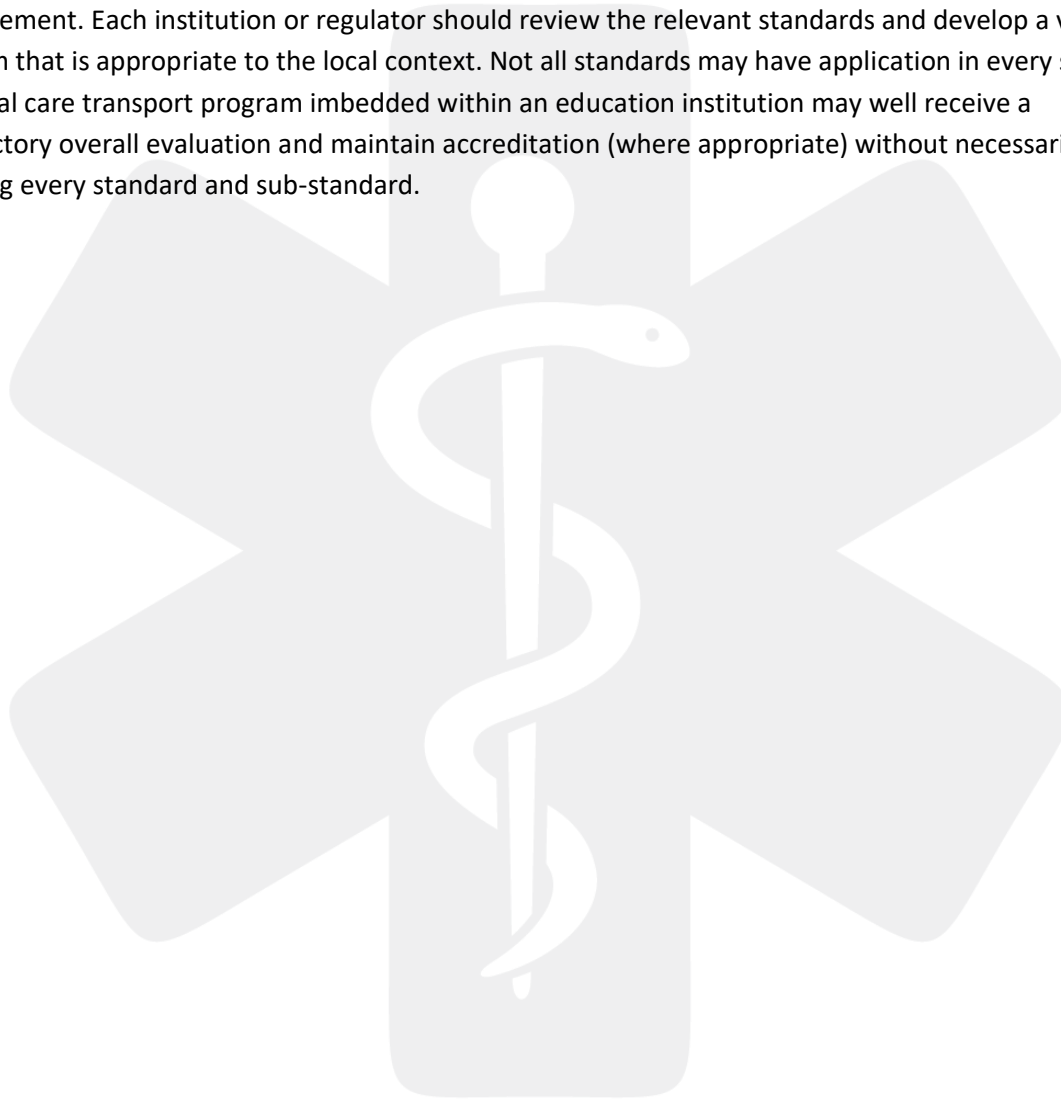


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Introduction

Global Critical Care Transport Higher Education Council™

The Global Critical Care Transport Higher Education Council (GCTPHEC)™ is a sub-set of the Global Paramedic Higher Education Council (GPHEC)™. GCTHEC is an autonomous accrediting agency that aims to contribute to improvements in community health. The GCTHEC serves as the primary review body for programs seeking initial or continuing accreditation for Critical Care Transport Education Programs.

GCTHEC was established in response to international expansion of critical care transport and the need to ensure consistency in standards of education and practice. There is a need to establish criteria and mechanisms for evaluation of these programs.

A central part of the GPHEC strategy is to develop global standards and guidelines for paramedic education, which are supportive of the institutions concerned, their educational programs, the paramedic profession, and the individual student and paramedic.

The GPHEC hopes that the operation of standards can promote discussion and stimulate development of consensus about objectives, will help education institutions to formulate essentials of their educational programs and to describe the fundamentals of paramedic education. Standards will broaden opportunities for educational research and development as well as foster discussion and cooperation across departmental and other boundaries.

The existence of standards will empower educators in their effort to bring about change and will serve to guide paramedic students' choices. For curriculum planners, acceptance of standards will save time and resources. Adoption of standards for evaluation will provide valuable information for providers of funds, politicians and society.

Fundamentals of Accreditation for Critical Care Transport Programs

Accreditation provides a non-governmental standards validation process conducted by members of post-secondary institutions and professional groups. Accreditation focuses on the quality of institutions of higher and professional education and on the quality of educational programs within institutions. Indirectly program accreditation will influence the competencies of graduates.

A global set of standards for critical care transport education is not to be equated with a universal core curriculum. However, consistent accreditation standards are indicated if educational institutions are to:

- Prepare critical care transport providers for the needs and expectations of society
- Cope with the explosion in medical scientific knowledge and technology
- Inculcate ability for life-long learning
- Ensure training in new information technologies
- Adjust critical care transport education to changing conditions in the health care delivery system

Standards are not an “either/or” matter, but a matter of specific conduct and intentional planning. Some schools might develop so unique a quality as to go beyond standards achieved by most education systems. Such qualities might, in the long run, serve as examples for new goal-settings in critical care transport education.

Standards must be clearly defined, be meaningful, appropriate, relevant, measurable, achievable and accepted by the users. They must have implications for practice, acknowledge diversity and foster adequate development. Evaluation based on generally accepted standards is an important incentive for improvement and for raising the

quality of paramedic education, both when reorientation and reform are pursued, and also when striving for continuous development.

Value of Global Standards

The global standards constitute a framework, serving as a yardstick against which those responsible for critical care transport education can evaluate their own activities and organisations. Globally accepted standards could be used as a basis for national and regional approval and accreditation of educational programs.

Desirable practices in educating the critical care transport provider, incorporating well-recognised and accepted principles of learning, together with the institutional conditions for educational activities, form the basis for global standards. Quality assurance of critical care transport education must emphasise the need for improvement and provide guidance for achieving it. This will avoid interpretation of standards as a levelling at a lower level of quality among institutions.

Placing critical care transport provider education on a basis of shared global standards will facilitate exchange of students and ease the acceptance of critical care transport providers in countries other than those in which they trained. In consequence, it will diminish the burden of judging the competencies of critical care providers who have been educated in schools in different countries.

Finally, low quality critical care transport programs can be improved by use of a system of evaluation and accreditation based on internationally accepted standards. This is likely to enhance the quality of health care, both nationally and internationally.

Premises for Standards in Critical Care Transport Education

Global standards for critical care transport education can be defined. These definitions take account of the variations in the content, structure, process and outcomes of critical care transport education among countries, due to differences in teaching traditions, culture, socio-economic conditions, the health and disease spectrum, and the different forms of health care delivery systems. Similar differences can also occur within individual countries. Nevertheless, the scientific basis of transport medicine and the necessity to base clinical practice on evidence is universal. The task of critical care transport education everywhere is the provision of high-quality health care.

These standards must be specified, modified or supplemented in accordance with regional, national and institutional needs and priorities. There is no benefit in fostering uniformity of educational programs and learning activities thereby jeopardising social accountability. Moreover, quality assurance of critical care transport training programs must give emphasis to improvement, and provide guidance for advancement, instead of simply advocating “fulfilment of standards” as the ultimate goal. It is the prerogative of any national accrediting body to determine the level that will be examined for recognition/accreditation.

Attention was given to the application of general guidelines in quality development of critical care transport education. Therefore, for global standards in critical care transport education to be generally accepted, the following premises are important:

- Only general aspects of critical care transport education and training should be covered
- Standards should be concerned with broad categories of process, structure, content outcomes/competencies, assessment and learning environment of critical care transport program’s education institution
- Standards should function as a lever for change and reform
- Standards are intended to set minimum global requirements and encourage quality development beyond the levels specified
- Standards should be formulated in such a way that they acknowledge regional and national differences in the educational programs, and allow for different local, national and regional profiles and developments, respecting reasonable autonomy of the education institution

- Compliance with standards must be a matter for each community, country or region
- Use of a common set of global standards does not imply or require equivalence of program content and outcomes of critical care transport education, but deviations should be clearly described and motivated
- Standards should acknowledge the dynamic nature of program development
- Standards should be formulated as a tool which authorities, organisations and institutions responsible for critical care transport education can use as a model for their own program development
- Standards should not be used to rank education programs
- Standards should be further developed through broad international discussion and consensus
- The value of the standards must be tested in evaluation studies in each region.
- Standards must be clearly defined, and be meaningful, appropriate, relevant, measurable, achievable and accepted by the users. They must have implications for practice, recognise diversity and foster adequate development
- Standards must be formulated in collaboration with stakeholders

Purpose and Use of Standards

The purpose of these standards is to:

- Guide program directors in their work of course design and management
- Offer prospective and current students a framework for judging the quality and qualities of the provision they are contemplating or experiencing
- Offer a framework for institutions and regulators in judging that provision

The issue of quality of critical care transport programs underpins these standards, as there is a clear need to establish criteria for practical and relevant evaluation and accreditation of critical care transport programs on a global basis. Best practices should be established to ensure that all programs maintain a minimum acceptable quality and that these best practices would provide an example of excellence to which all programs would strive .

The GCTHEC intends the standards to be used in at least five ways:

1. As a guide for new program designers
2. As a framework for local quality assurance and program evaluation
3. As a means for current students to judge their own programs
4. As a guide to help prospective students choose between programs
5. As a framework for regulators and accreditors.

The role of global standards is not to homogenise educational provision but to allow a rich diversity of contextually relevant programs that meet agreed standards for content, process and outcome. The hope is that these standards will liberate educational providers to be creative in their planning within the necessary quality parameters for an academic course.

Standards for Quality Improvement of Critical Care Transport Education

DEFINITIONS

In the standards document the term **critical care transport school** refers to the educational organization providing an educational program in critical care transport and is synonymous with paramedic faculty, paramedic college, paramedic academy or paramedic university. The critical care transport school should be part of, or affiliated to, a university or other institute of higher learning that confers degrees.

To be eligible for GPHEC accreditation in critical care transport, educational institutions offering sub-degree critical care transport programs are required to demonstrate that they have a formal articulation agreement with at least one accredited post-secondary institution authorized to award Baccalaureate degrees.

The GCTHEC recommends the following global standards in critical care transport education. The set of standards are structured according to **9 areas** with a total of **35 sub-areas**, being aware of the complex interaction and links between them.

AREAS are defined as broad components in the process, structure, content, outcomes/competencies, assessment and learning environment of critical care transport education and cover:

1. Mission and outcomes
2. Educational program
3. Assessment of students
4. Students
5. Academic staff/faculty
6. Educational resources
7. Program evaluation
8. Governance and administration
9. Continuous renewal

SUB-AREAS are defined as specific aspects of an area, corresponding to performance indicators.

STANDARDS are specified for each sub-area using two levels of attainment:

Basic standard. This means that the standard in principle must be met by every educational institution offering critical care transport programs and fulfillment demonstrated during evaluation of the institution.

Basic standards are expressed by a »must«.

Standard for quality development. This means that the standard is in accordance with international consensus about best practice for critical care transport programs and basic CCT education. Fulfillment of, or initiatives to fulfill, some or all such standards should be documented by the education institution. Fulfillment of these standards will vary with the stage of development of the education institution, available resources and educational policy, and other local conditions influencing relevance, priorities and possibilities. Even the most advanced programs might not comply with all standards for quality development.

Standards for quality development are expressed by a »should«.

THE STANDARDS

The GCTHEC standards for quality improvement of Critical Care Transport Program Education, comprising 67 basic standards, and 60 quality development standards, are presented in the following nine sections.

1. Mission and Outcomes

1.1. MISSION

Basic standards:

The critical care transport school **must**

- 1.1.1 state its mission, vision, and values.
- 1.1.2 make it known to its constituency and the health sector it serves.
- 1.1.3 in its mission, vision and values outline the aims and the educational strategy resulting in a critical care transport
 - 1.1.3.1 capable of undertaking the roles of critical care transport providers as defined by the health sector.
 - 1.1.3.2 committed to life-long learning.
- 1.1.4 consider that the mission encompasses the health needs of the community, the needs of the health care delivery system and other aspects of social accountability.

Quality development standards:

The critical care transport school **should** ensure that the mission encompasses

- 1.1.5 transport medicine research attainment.
- 1.1.6 aspects of global health.

1.2. INSTITUTIONAL AUTONOMY AND ACADEMIC FREEDOM

Basic standards:

The critical care transport school **must** have institutional autonomy to

- 1.2.1 formulate and implement policies for which its faculty/academic staff and administration are responsible, especially regarding
 - 1.2.1.1 design of the curriculum.
 - 1.2.1.2 have a documented needs assessment to determine education resource needs.
 - 1.2.1.3 use of the allocated resources necessary for implementation of the curriculum.
 - 1.2.1.4 have an academic advisory body comprised of stakeholders.

Quality development standards:

The critical care transport school **should** ensure academic freedom for its staff and students

- 1.2.2 in addressing the actual curriculum.
- 1.2.3 in exploring the use of new research results to illustrate specific subjects without expanding the curriculum.

1.3. EDUCATIONAL OUTCOMES

Basic standards:

The critical care transport school **must**

- 1.3.1 define the intended educational outcomes that students should exhibit upon graduation in relation to
 - 1.3.1.1 their achievement of a minimum level regarding knowledge, skills, and attitudes.
 - 1.3.1.2 their future roles in the health sector.
 - 1.3.1.3 their commitment to and skills in life-long learning.
 - 1.3.1.4 the health needs of the community, the needs of the health care delivery system and other aspects of social accountability.
- 1.3.2 ensure appropriate student conduct with respect to fellow students, faculty members, other health care personnel, patients and their relatives.
- 1.3.3 make the intended educational outcomes publicly known.

Quality development standards:

The critical care transport school **should**

- 1.3.4 specify intended outcomes of student engagement in critical care transport research.
- 1.3.5 draw attention to global health-related intended outcomes.

1.4 PARTICIPATION IN FORMULATION OF MISSION AND OUTCOMES

Basic standards:

The critical care transport school **must**

- 1.4.1 ensure that its principal stakeholders participate in formulating the mission and intended educational outcomes.

Quality development standards:

The critical care transport school **should**

- 1.4.2 ensure that the formulation of its mission and intended educational outcomes is based also on input from other stakeholders.

2. Educational Program

2.1 FRAMEWORK OF THE PROGRAM

Basic standards:

The critical care transport school **must**

- 2.1.1 define the overall curriculum.
- 2.1.2 use a curriculum and instructional/learning methods that stimulate, prepare and support students to take responsibility for their learning process.
- 2.1.3 ensure that the curriculum is delivered in accordance with principles of equality.

Quality development standards

The critical care transport school **should**

- 2.1.4 ensure that the curriculum prepares the students for life-long learning.
- 2.1.5 ensure that the curriculum is updated based on regional needs assessments and supported by evidence.

2.2 SCIENTIFIC METHOD

Basic standards:

The critical care transport school **must**

- 2.2.1 throughout the curriculum teach to a high standard of science-based instruction including:
 - 2.2.1.1 the principles of scientific method, including analytical and critical thinking.
 - 2.2.1.2 research methods.
 - 2.2.1.3 evidence-based practice.

Quality development standards

The critical care transport school **should**

- 2.2.2 in the curriculum include elements of original or advanced research.

2.3 BASIC BIOMEDICAL SCIENCES

Basic standards:

The critical care transport school **must**

- 2.3.1 in the curriculum identify and incorporate the contributions of the basic biomedical sciences to create understanding of
 - 2.3.1.1 scientific knowledge fundamental to acquiring and applying clinical medicine.
 - 2.3.1.2 concepts and methods fundamental to acquiring and applying clinical medicine.

Quality development standards

The critical care transport school **should**

- 2.3.2 in the curriculum adjust and modify the contributions of the biomedical sciences to the
 - 2.3.2.1 scientific, technological and clinical developments.
 - 2.3.2.2 current and anticipated needs of the society and the health care system.

2.4 BEHAVIOURAL AND SOCIAL SCIENCES, MEDICAL ETHICS AND JURISPRUDENCE

Basic standards:

The critical care transport school **must**

- 2.4.1 in the curriculum identify and incorporate the contributions of the:
 - 2.4.1.1 behavioral sciences.
 - 2.4.1.2 social sciences.
 - 2.4.1.3 health professional ethics.
 - 2.4.1.4 health jurisprudence.

Quality development standards

The paramedic school **should**

- 2.4.2 in the curriculum adjust and modify the contributions of the behavioral and social sciences as well as health professional ethics and health jurisprudence to
 - 2.4.2.1 scientific, technological and clinical developments.

- 2.4.2.2 current and anticipated needs of the society and the health care system.
- 2.4.2.3 changing demographics and cultural contexts.

2.5 CLINICAL SCIENCES AND SKILLS

Basic standards:

The critical care transport school **must**

- 2.5.1 in the curriculum identify and incorporate the contributions of the clinical sciences to ensure that students
 - 2.5.1.1 acquire sufficient knowledge and clinical and professional skills to attain and demonstrate competence.
 - 2.5.1.2 spend a reasonable part of the program in planned contact with patients in relevant clinical settings.
 - 2.5.1.3 experience health promotion and preventive healthcare for both the patient and providers.
- 2.5.2 specify the amount of time spent in training in relevant clinical disciplines.
- 2.5.3 organize clinical training with appropriate attention to patient safety.

Quality development standards

The critical care transport school **should**

- 2.5.4 in the curriculum adjust and modify the contributions of the clinical sciences to
 - 2.5.4.1 scientific, technological and clinical developments.
 - 2.5.4.2 current and anticipated needs of the society and the health care system.
- 2.5.5 ensure that every student has early patient contact, gradually including participation in patient care appropriate for their level of competency.
- 2.5.6 structure the different components of clinical skills training according to the student's competency.

2.6 PROGRAM STRUCTURE, COMPOSITION AND DURATION

Basic standards:

The critical care transport school **must**

- 2.6.1 describe the content, extent and sequencing of courses and other curricular elements to ensure appropriate coordination between basic biomedical, behavioral, social and clinical subjects.

Quality development standards

The critical care transport school **should** in the curriculum

- 2.6.2 ensure horizontal integration of associated sciences, disciplines and subjects.
- 2.6.3 ensure vertical integration of the clinical sciences with the basic biomedical and the behavioral and social sciences.
- 2.6.4 allow optional (elective) content and define the balance between the core and optional content as part of the program.

2.7 PROGRAM MANAGEMENT

Basic standards:

The critical care transport school **must**

- 2.7.1 have a curriculum committee, which, under the governance of the academic leadership, has the responsibility and authority for planning and implementing the curriculum to secure its intended educational outcomes. The curriculum committee uses feedback from stakeholders and needs assessments to form their curriculum planning. The curriculum has evidence of regular review.
- 2.7.2 ensure the curriculum committee has representation of staff and students/former students.
- 2.7.3 in its curriculum committee include representatives of other stakeholders.

Quality development standards

The critical care transport school **should**

- 2.7.4 through its curriculum committee plan and implement innovations in the curriculum.

2.8 LINKAGE WITH PARAMEDIC PRACTICE AND THE HEALTH SECTOR

Basic standards:

The critical care transport school **must**

- 2.8.1 ensure operational linkage between the educational program and the subsequent stages of education or practice after graduation.

Quality development standards

The critical care transport school **should**

- 2.8.2 ensure that the curriculum committee
 - 2.8.2.3 seeks input from the environment in which graduates will be expected to work and modifies the program accordingly.
 - 2.8.2.4 considers program modification in response to feedback and evidence-based gaps in the community and society.

3. Assessment of Students

3.1 ASSESSMENT METHODS

Basic standards:

The critical care transport school **must**

- 3.1.1 define, state and publish the principles, methods and practices used for assessment of its students, including the criteria for setting pass marks, grade boundaries and number of allowed retests.
- 3.1.2 ensure that assessments cover knowledge, skills and attitudes.
- 3.1.3 use a wide range of assessment methods and formats according to their “assessment utility.”
- 3.1.4 ensure that methods and results of assessments avoid conflicts of interest.
- 3.1.5 ensure that assessments are open to scrutiny by external expertise.
- 3.1.6 use a system of appeal of assessment results.

Quality development standards

The critical care transport school **should**

- 3.1.7 evaluate and document the reliability and validity of assessment methods.

- 3.1.8 incorporate new assessment methods where appropriate.
- 3.1.9 encourage the use of external examiners.

3.2 RELATION BETWEEN ASSESSMENT AND LEARNING

Basic standards:

The critical care transport school **must**

- 3.2.1 use assessment principles, methods and practices that
 - 3.2.1.1 are clearly compatible with intended educational outcomes and instructional methods.
 - 3.2.1.2 ensure that the intended educational outcomes are met by the students.
 - 3.2.1.3 promote student learning.
 - 3.2.1.4 provide an appropriate balance of formative and summative assessment to guide both learning and decisions about academic progress.

Quality development standards

The critical care transport school **should**

- 3.2.2 adjust the number and nature of examinations of curricular elements to encourage both acquisition of the knowledge base and integrated learning.
- 3.2.3 ensure timely, specific, constructive and fair feedback to students on basis of assessment results.

4. Students

4.1 ADMISSION POLICY AND SELECTION

Basic standards:

The critical care transport school **must**

- 4.1.1 formulate and implement an admission policy based on principles of objectivity, including a clear statement on the process of selection of students.
- 4.1.2 have a policy and implement a practice for admission of disabled students.
- 4.1.3 have a written policy and implement a practice addressing the transfer of students from other national or international programs and institutions.

Quality development standards

The critical care transport school **should**

- 4.1.4 state the relationship between selection and the mission of the school, the educational program and desired qualities of graduates.
- 4.1.5 periodically review the admission policy.
- 4.1.6 use a system for appeal of admission decisions.

4.2 STUDENT INTAKE

Basic standards:

The critical care transport school **must**

- 4.2.1 define the size of student intake and relate it to its capacity at all stages of the program.

Quality development standards

The critical care transport school **should**

- 4.2.2 periodically review and revise student intake in consultation with other stakeholders and regulate it to meet the health needs of the community and society.

4.3 STUDENT COUNSELLING AND SUPPORT

Basic standards:

The critical care transport school and/or the university **must**

- 4.3.1 have a system for academic counseling of its student population.
- 4.3.2 offer a program of student support, addressing social, financial and personal needs.
- 4.3.3 allocate resources for student support.
- 4.3.4 ensure confidentiality in relation to counseling and support.

Quality development standards

The critical care transport school **should**

- 4.3.5 provide academic counseling that
 - 4.3.5.1 is based on monitoring of student progress.
 - 4.3.5.2 includes career guidance and planning.

4.4 STUDENT REPRESENTATION

Basic standards:

The critical care transport school **must**

- 4.4.1 formulate and implement a policy on student representation and appropriate participation in
 - 4.4.1.1 mission statement development.
 - 4.4.1.2 design of the program.
 - 4.4.1.3 management of the program.
 - 4.4.1.4 evaluation of the program.
 - 4.4.1.5 other matters relevant to students.

Quality development standards

The critical care transport school **should**

- 4.4.2 encourage and facilitate student activities and student organizations.

5. Academic Staff/Faculty

5.1 RECRUITMENT AND SELECTION POLICY

Basic standards:

The critical care transport school **must**

- 5.1.1 formulate and implement a staff recruitment and selection policy which
 - 5.1.1.1 outlines the type, responsibilities and balance of the academic staff/faculty of the basic biomedical sciences, the behavioral and social sciences and the clinical sciences required to deliver the curriculum adequately, including the balance between paramedic and non-paramedic academic staff, the balance between full-time and part-time academic staff, and the balance between academic and non-academic staff.
 - 5.1.1.2 address criteria for scientific, educational and clinical merit, including the balance between teaching, research and service functions.

- 5.1.1.3 specify and monitor the responsibilities of its academic staff/faculty of the basic biomedical sciences, the behavioral and social sciences and the clinical sciences.

Quality development standards

The critical care transport school **should**

- 5.1.2 in its policy for staff recruitment and selection take into account criteria, such as
 - 5.1.2.1 relationship to its mission, including significant local issues.
 - 5.1.2.2 economic considerations.



5.2 STAFF ACTIVITY AND STAFF DEVELOPMENT

Basic standards:

The critical care transport school **must**

- 5.2.1 formulate and implement a staff activity and development policy which
 - 5.2.1.1 allows a balance of capacity between teaching, research and service functions.
 - 5.2.1.2 ensures recognition of meritorious academic activities, with appropriate emphasis on teaching, research and service qualifications.
 - 5.2.1.3 ensures that clinical service functions and research are used in teaching and learning.
 - 5.2.1.4 ensures sufficient knowledge by individual staff members of the total curriculum.
 - 5.2.1.5 include teacher training, development, support and appraisal.

Quality development standards

The critical care transport school **should**

- 5.2.2 take into account teacher student ratios relevant to the various curricular components.
- 5.2.3 design and implement a staff promotion policy.

6. Educational Resources

6.1 PHYSICAL FACILITIES

Basic standards:

The critical care transport school **must**

- 6.1.1 have sufficient physical facilities for staff and students to ensure that the curriculum can be delivered adequately.
- 6.1.2 ensure a learning environment, which is safe for staff, students, patients and their relatives.

Quality development standards

The critical care transport school **should**

- 6.1.3 improve the learning environment by regularly updating and modifying or extending the physical facilities to match developments in educational practices.

6.2 CLINICAL TRAINING RESOURCES

Basic standards:

The critical care transport school **must**

- 6.2.1 Make every reasonable effort to ensure necessary resources for giving the students adequate clinical experience, including sufficient
 - 6.2.1.1 number and categories of patients.
 - 6.2.1.2 clinical training facilities.
 - 6.2.1.3 supervision of their clinical practice.

Quality development standards

The critical care transport school **should**

- 6.2.2 evaluate, adapt and improve the facilities for clinical training to meet the needs of the population it serves.

6.3 INFORMATION TECHNOLOGY

Basic standards:

The critical care transport school **must**

- 6.3.1 formulate and implement a policy which addresses effective and ethical use and evaluation of appropriate information and communication technology.
- 6.3.2 ensure access to web-based or other electronic media.

Quality development standards

The critical care transport school **should**

- 6.3.3 enable teachers and students to use existing, and exploit appropriate new, information and communication technology for
 - 6.3.3.1 independent learning.
 - 6.3.3.2 accessing information.
 - 6.3.3.3 managing patients.
 - 6.3.3.4 working in health care delivery systems.
- 6.3.4 optimize student access to relevant patient data and health care information systems.

6.4 CRITICAL CARE TRANSPORT RESEARCH AND SCHOLARSHIP

Basic standards:

The critical care transport school **must**

- 6.4.1 use paramedicine research and scholarship as a basis for the educational curriculum.
- 6.4.2 formulate and implement a policy that fosters the relationship between paramedicine research and education.
- 6.4.3 describe the research facilities and priorities at the institution.

Quality development standards

The critical care transport school **should**

- 6.4.4 ensure that interaction between paramedicine research and education
 - 6.4.4.1 influences current teaching.
 - 6.4.4.2 encourages and prepares students to engage in paramedic research and development.
- 6.4.5 participate in academic or clinical research designed to add to the academic literature supporting the profession

6.5 EDUCATIONAL EXPERTISE

Basic standards:

The critical care transport school **must**

- 6.5.1 have access to educational expertise where required.
- 6.5.2 formulate and implement a policy on the use of educational expertise in
 - 6.5.2.1 curriculum development.
 - 6.5.2.2 development of teaching and assessment methods.

Quality development standards

The critical care transport school **should**

- 6.5.3 demonstrate evidence of the use of in-house or external educational expertise in staff development.
- 6.5.4 pay attention to current expertise in educational evaluation and in research in the discipline of paramedicine education.
- 6.5.5 allow staff to pursue educational research interest.

6.6 EDUCATIONAL EXCHANGES

Basic standards:

The paramedic school **must**

- 6.6.1 formulate and implement a policy for
 - 6.6.1.1 national and international collaboration with other educational institutions, including staff and student mobility.
 - 6.6.1.2 transfer of educational credits.

Quality development standards

The critical care transport school **should**

- 6.6.2 facilitate regional and international exchange of staff and students by providing appropriate resources.
- 6.6.3 ensure that exchange is purposefully organized, taking into account the needs of staff and students, and respecting ethical principles.

7. Program Evaluation

7.1 MECHANISMS FOR PROGRAM MONITORING AND EVALUATION

Basic standards:

The critical care transport school **must**

- 7.1.1 have a program of routine curriculum monitoring of processes and outcomes.
- 7.1.2 establish and apply a mechanism for program evaluation that
 - 7.1.2.1 addresses the curriculum and its main components.
 - 7.1.2.2 addresses student progress.
 - 7.1.2.3 identifies and addresses concerns.
- 7.1.3 ensure that relevant results of evaluation influence the curriculum.

Quality development standards

The critical care transport school **should**

- 7.1.4 periodically evaluate the program by comprehensively addressing
 - 7.1.4.1 the context of the educational process.
 - 7.1.4.2 the specific components of the curriculum.
 - 7.1.4.3 the long-term acquired outcomes.
 - 7.1.4.4 its social accountability.

7.2 TEACHER AND STUDENT FEEDBACK

Basic standards:

The critical care transport school **must**

- 7.2.1 systematically seek, analyze and respond to teacher and student feedback.

Quality development standards

The critical care transport school **should**

- 7.2.2 use feedback results for program development.

7.3 PERFORMANCE OF STUDENTS AND GRADUATES

Basic standards:

The critical care transport school **must**

- 7.3.1 analyze performance of cohorts of students and graduates in relation to
 - 7.3.1.1 mission and intended educational outcomes.
 - 7.3.1.2 curriculum.
 - 7.3.1.3 provision of resources.

Quality development standards

The critical care transport school **should**

- 7.3.2 analyze performance of cohorts of students and graduates in relation to student
 - 7.3.2.1 background and conditions.
 - 7.3.2.2 entrance qualifications.
- 7.3.3 use the analysis of student performance to provide feedback to the committees responsible for
 - 7.3.3.1 student selection.
 - 7.3.3.2 curriculum planning.
 - 7.3.3.3 student counseling.

7.4 INVOLVEMENT OF STAKEHOLDERS

Basic standards:

The critical care transport school **must**

- 7.4.1 involve principal stakeholders in its program monitoring and evaluation activities.

Quality development standards

The critical care transport school **should**

- 7.4.2 involve other stakeholders by
 - 7.4.2.1 allowing access to results of course and program evaluation.
 - 7.4.2.2 seeking their feedback on the performance of graduates.
 - 7.4.2.3 seeking their feedback on the curriculum.

8. Governance and Administration

8.1 GOVERNANCE

Basic standards:

The critical care transport school **must**

- 8.1.1 define its governance structures and functions including their relationships within the university.

Quality development standards

The critical care transport school **should**

- 8.1.2 in its governance structures set out the committee structure, and reflect representation from
 - 8.1.2.1 principal stakeholders.
 - 8.1.2.2 other stakeholders.
- 8.1.3 ensure transparency of the work of governance and its decisions.

8.2 ACADEMIC LEADERSHIP

Basic standards:

The critical care transport school **must**

- 8.2.1 describe the responsibilities of its academic leadership for definition and management of the paramedic educational program.

Quality development standards

The critical care transport school **should**

- 8.2.2 periodically evaluate its academic leadership in relation to achievement of its mission and intended educational outcomes.

8.3 EDUCATIONAL BUDGET AND RESOURCE ALLOCATION

Basic standards:

The critical care transport school **must**

- 8.3.1 have a clear line of responsibility and authority for resourcing the curriculum, including a dedicated educational budget.
- 8.3.2 allocate the resources necessary for the implementation of the curriculum and distribute the educational resources in relation to educational needs.

Quality development standards

The critical care transport school **should**

- 8.3.3 have autonomy to direct resources in an appropriate manner in order to achieve its intended educational outcomes.
- 8.3.4 in distribution of resources take into account the developments in paramedic sciences and the health needs of the society.

8.4 ADMINISTRATION AND MANAGEMENT

Basic standards:

The critical care transport school **must**

- 8.4.1 have an administrative and professional staff that is appropriate to
 - 8.4.1.1 support implementation of its educational program and related activities.
 - 8.4.1.2 ensure good management and resource deployment.

Quality development standards

The critical care transport school **should**

- 8.4.2 formulate and implement an internal program for quality assurance of the management including regular review.

8.5 INTERACTION WITH HEALTH SECTOR

Basic standards:

The critical care transport school **must**

- 8.5.1 have constructive interaction with the paramedicine and health related sectors of society and government.

Quality development standards

The critical care transport school **should**

- 8.5.2 formalize its collaborations, including engagement of staff and students, with partners in the paramedicine and health sectors.

9. Continuous Renewal

Basic standards:

The critical care transport school must as a dynamic and socially accountable institution

- 9.1.1 initiate procedures for regularly reviewing and updating the process, structure, content, outcomes/competencies, assessment and learning environment of the program.
- 9.1.2 rectify documented deficiencies.
- 9.1.3 allocate resources for continuous renewal.

Quality development standards

The critical care transport school **should**

- 9.1.4 base the process of renewal on prospective studies and analyses and on results of local evaluation and the paramedicine education literature.
- 9.1.5 ensure that the process of renewal and restructuring leads to the revision of its policies and practices in accordance with past experience, present activities and future perspectives.
- 9.1.6 address the following issues in its process of renewal:
 - 9.1.6.1 adaptation of mission statement to the scientific, socio-economic and cultural development of the society.
 - 9.1.6.2 modification of the intended educational outcomes of the graduating students in accordance with the documented needs of the environment they will enter - the modification might include clinical skills, public health training and involvement in patient care appropriate to the responsibilities encountered upon graduation.
 - 9.1.6.3 adaptation of the curriculum model and instructional methods to ensure that these are appropriate and relevant.
 - 9.1.6.4 adjustment of curricular elements and their relationships in keeping with developments in the basic biomedical, clinical, behavioral and social sciences, changes in the demographic profile and health/disease pattern of the population, and socioeconomic and cultural conditions - the adjustment would ensure that new relevant knowledge, concepts and methods are included, and outdated ones discarded.
 - 9.1.6.5 development of assessment principles, and the methods and the number of examinations according to changes in intended educational outcomes and instructional methods.
 - 9.1.6.6 adaptation of student recruitment policy, selection methods and student intake to changing expectations and circumstances, human resource needs, changes in the paramedicine education system and the requirements of the educational program.
 - 9.1.6.7 adaptation of academic staff recruitment and development policy according to changing needs.
 - 9.1.6.8 updating of educational resources according to changing needs, i.e. the student intake, size and profile of academic staff, and the educational program.
 - 9.1.6.9 refinement of the process of program monitoring and evaluation.
 - 9.1.6.10 development of the organizational structure and of governance and management to cope with changing circumstances and needs and, over time, accommodating the interests of the different groups of stakeholders.