What Standards and guidelines does the ABCP set(expect/recommend) in perfusion practice?

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- 30 years
- AmSect
- AACP
- ABCP, former director, past president
- Journal manuscript editor
- AC-PE
- NYSTS-advisory panel
No ABCP “Recommended” Perfusion Practice Guidelines or Standards

- But, by virtue of the fact that there would be no ABCP if it had not been organized and run by Perfusionists that become “Directors”; we can assume that whomever is Director on the ABCP is using knowledge and guidelines based on their own practice.

- Many directors over “34” years have continually updated PRACTICES. eg: bubblers
  - This includes various protocols, procedures, applications, guidelines, etc.
ABCP “Credentialing Board”

- Peer recognition is responsible for the Quality Assurance.

- Supported by:
  - Certified Clinical Perfusionists (~3600)
  - Educational program directors (AC-PE)
  - Collaborating organizations (AACP, AmSect)
  - Others in perfusion community (States)
Standard

- Established norm with a formal document
  - Uniform methods
  - Processes and practices
  - Protocols

- Think about your own Perfusion Practice
  - ? all perfusionists use the same method
  - ? Does the department own P&P
Criterion: ABCP

☐ Likes to refer to criterion rather than standard.

☐ In fact:
  ■ Criterion means “a standard on which a judgment or decision may be based, and or a characterizing mark or trait.”
Protection of the Public

☐ Develop and maintain Quality Standards
  ■ Certification and Recertification

☐ Ethical Standards
  ■ Demonstrate compliance with existing rules.
  ■ ABCP may revoke, suspend, deny……
    ☐ Negligence, misrepresentation
    ☐ Felony, fraud, violence
  ■ May not use CCP
Established qualifications for examination

- Part 1- Perfusion Basic Science Examination  PBSE
  - Designed to test the examinees’ knowledge of basic science as it applies to clinical perfusion

- Part 2- Clinical Applications in Perfusion Examination  CAPE
  - Designed to measure the examinees’ understanding of the practice of clinical perfusion and application of knowledge
Procedures for Certification

- Applicant must have graduated from or be currently enrolled in, an accredited cardiovascular perfusion education program prior to the date of the exam.
  - Current official transcript
  - Satisfactory clinical competency statement
  - Documentation: 75 Clinical Perfusions
    - Student participated entirely
    - Student performed technical manipulation
    - INSTRUCTOR must be physically present
Clinical Competency is not determined by the ABCP examination process. (ABTS)

- Any examination primarily tests the ability to reason and factual knowledge acquired by the candidate.
- The limitations of examination alone to assess clinical competence are well recognized.
- Important part of the responsibility for determining clinical competence rests upon the director of each program.
- It is for this reason applicants must complete an accredited perfusion program to be considered for examination.
Procedures for Recertification

☐ All certified perfusionists must Recertify annually.

☐ Ensure that CCPs, through continuing education and clinical activity, continue to meet standards and possess current and adequate knowledge in the field.

■ Clinical activity (reported q year)
■ Professional activity (reported q third year)
Clinical Activity Requirement

☐ Minimum of (40)
clinical activities:

- 1. Bypass, Primary
- 2. Instructor
- 3. Veno-Venous Bypass
- 4. Pump Assisted and/Organ Perfusion
- 5. CPS

☐ Clinical activities:

- 7. VADs
- 8. Pump Stand by
- 9. Bypass, 1st Assistant

A maximum of 15 may be standby.
Commission on Accreditation of Allied Health Education Programs (CAAHEP)

- CAAHEP accredits programs upon the recommendation of the Accreditation Committee-Perfusion Education (AC-PE)
  - American Academy of Cardiovascular Perfusion
  - American Association For Thoracic Surgery
  - American Board Cardiovascular Perfusion
  - American Society of Extracorporeal Technology
  - Perfusion Program Directors’ Council
  - CAAHEP
Accreditation Committee-Perfusion Education (AC-PE)

☐ These STANDARDS are the minimum standards of quality used in accrediting programs that prepare individuals to enter the Perfusion profession.

I. Sponsorship:

☐ Institution recognized by the US Dept. of Education.

☐ Certificate program: hospital, branch of US armed forces.
STANDARDS

II. Program Goals

III. Resources
- Personnel
- Clinical Coordinator
- Medical Advisor
- Clinical Perfusion Faculty
- Curriculum (AC-PE) approved

IV. Student and Graduate Evaluation/Assessment

V. Fair Practices: Publications and disclosure
Reviewed and Modified Periodically

☑ Attainment and enhancement of knowledge, skills, and ethical conduct

- Support will emanate from design, implementation, and administration of the credentialing process.
- Support includes stimulation of innovative education activities.
- ABCP does NOT hold a Scope of Practice.
Standards and Guidelines: How are we going to change Perfusion Practices?

- Due to variability in perfusion practice among perfusionists in the United States may be a good reason for lack of a national consensus guideline? Standards of Practice.

- Once we establish “Standards”, the ABCP will recognize them through its Directors.
Focus for Perfusionists

- Besides: ICEBP
- AmSect
- AACP
- STATES
  - Perfusionists need to agree on minimum standards for practice.
  - There is a call from the Perfusion community for a Standard of Care.
Perf List........

☐ “Once again it is pointed out to us that we have no useful minimum or recommended rules for proper perfusion practice…”

☐ 2 per case, really? How do you justify that? I did not realize some states mandated that.

☐ Response time “30 min” to a written “standard of care”???????
I was just wondering if anybody out there keeps their pumps primed with crystalloid (when standing by for OpCabs), and if so- how long do you keep the circuit primed before tossing it? What is the impact on the membrane? What prime constituents do you consider "safe" for this modality? Is there any literature that demonstrates one way or the other regarding the safety/hazard potentials when leaving a circuit primed? Any institutional protocols or personal insight would be greatly appreciated.

- Yes, use within 36 hours WET!
- According to Stammers, et al, the longer primed, the more efficient.
- Clear fluid
- Many papers in the literature to support this practice.
- By 2009, every institution should have a protocol.
Professing Perfusion:
Characteristics of Outstanding Clinical Instructors

Thomas Carruthers wisely said that a teacher is one who makes himself progressively unnecessary: Teaching the next generation of perfusionists requires more than knowledge of operation of a heart lung machine (HLM). It also takes more than the book knowledge that is reiterated and subsequently regurgitated in each classroom session. Being an outstanding instructor requires not only patience, fortitude, knowledge, and explanation, but also the ability to inspire students to achieve the best possible care for each patient. At the end of the day, if a student is more focused on the patient’s outcome than his/her grade, the result of both will be exemplary. The formula for a great instructor begins with education of science as it pertains to perfusion, followed by a great respect for the possible pitfalls of cardiopulmonary bypass (CPB). Clinically speaking, operation-specific knowledge, continual personal improvement, and heightened awareness all play a role in developing the next generation. They are elements that not only demonstrate the essence of clinical education, but also the realization that students are learning to question accepted methods and explore options for continuous improvement of the HLM. In the beginning, training perfusionists to work the workings of the HLM, it is necessary to understand the basics of gas exchange, flows, tubing size, pressures, etc. The greatest clinical instructors combine this previously acquired book knowledge with continual question and answer sessions, never leaving prolonged stagnant moments: for a student is not progressing, they are most likely regressing. The greatest example of this is repetition. While most instructors expect their student to call back, the good instructor expects and asks the student over and over until the student can answer. These continuous question and answer sessions not only keep the student alert and ready, but repetition reinforces the knowledge for later use.

The dangers and pitfalls of CPB can never be underestimated or understated when instructing students clinically. Feeling overly "comfortable" in the operating room environment causes mistakes, whether it is during setup, on-bypass or after termination. This becomes a precarious subject, in that perfusionists-in-training need to be calm and collected during times of high stress, but teaching so the student never becomes overconfident will produce a more vigilant perfusionist. On this same note, teaching students to listen intently in the operating room environment and to continuously “scan the room” are both extremely beneficial practices, because realizing extenuating circumstances of the case, whether that includes cannulation, knowledge of aortic flaps or even number of grafts will facilitate the execution of better perfusion.

Finally, teaching a student to utilize the current equipment and techniques of perfusion simply is not enough. William Arthur Ward said, “The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires.” Once the senior student has finished didactic study, understands the principals of perfusion and executes the expected techniques flawlessly: Perfusion has advanced quickly in the past, but the future lies within the students. If they are taught to accept current technology and concepts as the only solution, the profession becomes stagnant. The student should be taught to become involved in every facet possible in order to achieve job security. Questioning and brainstorming new ideas is the only way to procure fresh ideas and consequently improve upon what already exists. This practice focuses students on the betterment of themselves and their occupation and steers them away from the pitfalls of perfusion mediocrity.

“It is time to teach the art of questioning accepted practices and standards.”
Evidence Based Medicine

☐ ICEBP- Board “Like the ABCP”
  ■ Mission: to improve continuously the delivery of care and outcomes for our patients.
  ☐ Registry
  ☐ Guidelines
  ☐ “work in progress”

☐ We should be collaborating use of safety measurements that we have now!!!!
Tools for safe delivery of care:
Daunting Task:

- Define goals of the project
- Participation in the creation of these guidelines, "ownership"
- Early involvement of the target audience
- Realistic Timelines: missed the boat!
- Final standardization: formal consensus of the technical experts, PERFUSIONISTS