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ORIGINAL ARTICLE

Expanding the entry-level competencies for cytotechnology programs: Broadening horizons

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Introduction Faced with rapid changes in the cytopathology workplace, a number of expanded entry-level competencies (ELCs) were developed by the Cytotechnology Programs Review Committee with input from various communities of interest. The Resource Sub-Committee of the Cytotechnology Programs Review Committee was developed to assist the programs in finding appropriate resources to bring cytotechnology programs up to more modern standards of practice.

Materials and methods A survey was conducted asking program directors to rank their level of perceived need for each of the new ELCs. Interpretation of the relative need for these resources was based on a 4-tier system. If the program directors' felt they had or could obtain adequate resources, these 2 responses were given a lower weighting in the analysis. If the program was not already teaching the topic and did not have access to appropriate resources, the response was ranked as indicating a high level of need. An intermediate level of need was indicated by a perceived need to strengthen the resources for a topic currently being taught.

Results A 97% response rate was obtained on the survey and an evaluation of the ELCs, which indicated a high level of need that included telepathology, digital pathology, laboratory information systems, billing and coding, and triage of fine-needle aspiration specimens. Low levels of need were indicated for Health Insurance Portability and Accountability Act issues, proficiency testing, workload recording, obtaining clinical information, and fine-needle aspiration adequacy reporting. Other topics were ranked as intermediate in perceived need for resources.

Conclusions Efforts by the subcommittee are currently underway to provide these resources to improve the educational programs in cytotechnology.

Introduction

A great deal of time and energy has been expended in the last several years in analyzing the trends, market needs, and

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changing technologies that are expected to impact the training of entry-level cytotechnologists. Looking into the future is always fraught with uncertainty and potential hazard; however, this process has been ongoing for several years in a thorough manner through several events, venues, and presentations.[1-5] The American Society of Cytopathology (ASC) Cytotechnology Programs Review Committee (CPRC) has developed a number of new proposed entry-level competencies (ELCs) for the programs to implement. ELCs are the "minimum competencies that new cytotechnology graduates must be able to demonstrate upon entering the profession."[6,7] The programs "must demonstrate by comparison that the curriculum offered prepares students to meet the entry-level competencies specified in the latest edition of the Curriculum in Cytotechnology as developed by the Cytotechnology Programs Review Committee."[8]

To understand the basic framework of the process of accreditation, one must understand how the CPRC, the programs, and the accrediting agency interact to ensure excellence in the programs. First, the accrediting agency involved in cytotechnology program accreditation procedures is the Commission on Accreditation for Allied Health Education Programs (CAAHEP). This agency accredits more than 2000 programs in 24 allied health programs, including programs such as emergency medical technician—paramedic, surgical technology, and intraoperative neurophysiologic monitoring, as well as cytotechnology. CAAHEP sets accreditation standards for all programs in general terms (eg, equal opportunity, fair practices, requirements for stated competencies, personnel, resources). It also supervises the development of content-specific curricula, guided by the sponsoring organizations and what are known in CAAHEP terms as the committees on accreditation. The committee on accreditation for cytotechnology is the CPRC, and the sponsoring organizations include the ASC, the American Society for Clinical Pathology (ASCP), the American Society for Cytotechnology, and the College of American Pathologists. These 4 sponsoring organizations are the core professional societies representing the field of cytopathology and are the most impacted by the demand for new skills and knowledge in the field of cytotechnology.

The Policy and Procedure Manual of CAAHEP states that the ELCs are developed by the committees on accreditation (in our case, the CPRC), approved by the sponsoring organizations, and approved by CAAHEP with input from a variety of sources. The final approval process was completed October 23, 2013 and will be effective July 1, 2014. The institution sponsoring each program determines the remaining curricular details as follows per CAAHEP policy:

Curriculum—Given statements of the competencies to be attained by the students to qualify for graduation, the institution has the right:

a) To determine the format, sequence, duration, and methods of instruction for the curriculum. The institution has a responsibility to design a curriculum in a sequence and process, which is based upon a sound educational rationale and promotes efficient and effective learning, with major focus on problem-defining and problem-solving skills related to the profession.
b) To assign credits to courses and establish graduation requirements. The institution has a responsibility to avoid an inflation of course requirements and to avoid the assignment of excessive credit hours to required coursework.
c) To determine the academic credential to be awarded. The institution has a responsibility to insure that all of the above elements are included in a manner which adequately prepares graduates to meet the entry-level requirements for the profession.[9]

CAAHEP requires review of the ELCs at least every 2 years. They have been reviewed annually since the last revision, which occurred in 2005. Additionally, ELC surveys have been circulated to the program officials in 2009 as well as 2011. One of the tasks of the CPRC is to make sure that these ELCs are updated periodically and that they reflect the state of the art for our profession. Additionally, the cytotechnology "communities of interest," which include employers, graduates, students, pathologists, cytotechnologists, and the public at large must be surveyed at least every 5 years to obtain input into the revision process. Open hearings for this process are held and serve as a vehicle for input.

These ELCs have traditionally been firmly seated in cytodiagnosis, but they have also included other topics such as, eg, processing, staining, and quality control. After implementation of the additional ELCs in all of the programs, the graduates will have increased knowledge and skill sets as summarized in Table 1. These additional ELCs serve to raise the baseline of knowledge throughout the programs, modernize the profession, and prepare our graduates for the many changes that are occurring in cytopathology.

For example, if a number of cytopathologists have an expectation that their cytotechnologist would be able to attend a fine-needle aspiration (FNA) procedure, make slides, perform a rapid staining technique, quickly evaluate the material, and then either send images electronically to the pathologist for review or evaluate the material and decide if additional passes need to be done to properly diagnose the patient, then these skills should be taught in the programs.

To this end, the CPRC has met and developed a several year plan to implement a number of new topics into the required ELCs. These ELCs were recently presented to the cytotechnology community at large via a webinar by the chair of the CPRC, Donald Schnitzler, BS, CT(ASCP) on March 20, 2013.[5] Additionally, a survey was sent to the cytopathology communities of interest to gather feedback about both the content of the ELCs as well as the clarity of these competencies. That data has been reviewed and considered prior to sending the final revisions to the CAAHEP Standards Committee.