Pathology Informatics Essentials for Residents (PIER) At-A-Glance

PIER is a research-based instructional resource developed by the Association of Pathology Chairs (APC), the Association for Pathology Informatics (API), and the College of American Pathologists (CAP). PIER presents training topics, implementation strategies/tools and resource options for program directors and faculty to effectively provide informatics training to their residents and meet ACGME informatics milestone requirements.

PIER is intended to help residency programs provide a sufficient pipeline of residents properly trained in core informatics knowledge and skills required to practice pathology now and in the future. PIER is not designed for pathologists who seek to become pathology informaticians. PIER is also an effective resource for aspiring specialists to develop prerequisite pathology informatics knowledge and skills prior to advanced training or fellowships.

Developed by a large team of pathology informatics educators and experts, PIER offers program directors and faculty:

- An up-to-date and validated pathology informatics knowledge and skill set
- Flexible delivery options that can be adapted by program size, needs and level of faculty expertise
- Topic organizers, objectives, existing learning resource options, and practical clinical applications

Programs that adapt and execute PIER will provide residents with the pathology informatics knowledge and skills necessary to practice pathology, including:

- The collection, management, use and sharing of diagnostic and treatment information that enables the delivery of accurate and high quality healthcare, and optimal patient outcomes
- Ensuring that patient healthcare information is accessible to colleagues across the healthcare environments and at every step of patient care

PIER Scope and Sequence

PIER Essentials presents pathology informatics training topics organized into four groupings. PIER exposes residents to information technology in pathology as they participate in their pathology rotations and residency activities related to management, quality assurance and control, regulatory and accreditation issues, as well as daily flow of information into and out of the laboratory and the proper utilization of that information. The four PIER Essentials show how a resident can apply the Essentials sequence and build their pathology informatics competence over time.



PIER Map and Resident Assessment Tool

The PIER Map and Resident Assessment Tool provides three functions. First, it is a high-level map containing the topics, subtopics, outcome statements, and rationale for the four Essentials in one document. Second, it acts as a self-reporting assessment tool allowing you and your residents to monitor their progress towards the attainment of the PIER Essentials Outcomes. Third, the document can be used as a permanent record of the resident's completion of the PIER curriculum.

Resource Toolkit

The PIER Resource Toolkit provides the "how" of planning, implementing, and managing delivery of the four PIER Essentials. Users can add, customize and maintain their own tools and content in their Resource Toolkit electronic file. The Resource Toolkit is organized into four sections. Each section contains three key tools for program directors and residents:

- PIER Resource Library Identifies resources for teaching and alerts if a login or purchase is required so that
 programs directors or faculty can plan accordingly and have resources ready when training is scheduled to
 begin.
- **PIER Resource Options** Identifies the rationale, subtopic content, and outcome statements and includes a recommended set of expert resources and practical training exercises for each topic.
- Appendix A Includes setup information for PIER training exercises such as the exercise type (eg, hands-on, research, thought-provoking questions), correlation to outcome statements, setup instructions, informatic tools and resources, and proof of completion requirements.
- Appendix B Includes additional resources for those resident's wanting more in-depth learning materials.

The PIER Resource Toolkit is available to help program directors and residents make good GME pathology informatics training decisions, scaling PIER's topics and implementation to their own needs and circumstances.

PIER Implementation

Residency programs have their own philosophies, rotations, approaches, customs and preferences for how to educate and prepare residents for practice. When considering PIER, program directors and faculty are encouraged to begin by comparing their current pathology informatics training approach to PIER, and identifying the degree to which their current training approach is preparing residents adequately.

Using the results, program directors and faculty further consider PIER and its flexible delivery options, and identify how PIER can help the program increase pathology informatics training effectiveness. Decisions regarding degree of use and implementation sequencing are made based on the program's rotation schedule, available faculty expertise, delivery preferences, and program capacity. Program directors and faculty can implement the delivery options as proposed or customize them to suit their needs and preferences.

Program directors and faculty ultimately determine and are responsible for how their residents will meet the ACGME informatics milestone requirements and achieve the level of proficiency necessary to practice pathology, and are encouraged to let PIER help the program increase effectiveness and achieve success.

Questions?

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