

# Pathology Milestones

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## Introduction

A foundation of the Next Accreditation System is the use of educational outcomes to assess and provide feedback on residents' progress in important areas of physician competence. A key element is the educational Milestones for each specialty.

## Milestone Development History

In the spring of 2011, an 18-member Milestone Working Group was selected to work on Milestone development. Membership included the chair, past chair, vice chair, and members of the residency review committee (RRC) for pathology; the past executive vice president, the chief executive officer, and trustees of the American Board of Pathology; a pathology department chair, program directors, a resident, and a fellow; the executive director of the RRC for pathology; and Accreditation Council for Graduate Medical Education (ACGME) staff. After establishing the purpose, vision, and timeline for the project, the committee sent a request for potential Pathology Milestones to members of the Program Directors Section (PRODS) of the Association of Pathology Chairs (APC) Listserv. Suggestions were also taken at the 2011 APC/PRODS summer meeting. Thomas J. Nasca, MD, MACP, presented an overview of the Next Accreditation System and the Milestones to pathology chairs and program directors, and the chairs of the Milestone working groups for urology and ophthalmology shared their experience with the program directors, which provided valuable insight on what worked and warned of pitfalls to avoid, followed by a breakout session in which small groups discussed Milestones for cognitive anatomic pathology (AP), procedural anatomic pathology, and cognitive and procedural clinical pathology (CP). Suggestions from the breakout groups were used to develop prototype Milestones for the first Pathology Milestone meeting October 27–28, 2011. The Pathology Milestone Working Group members also reviewed documents developed by the internal medicine and pediatrics Milestones working groups before the first meeting.

Pathology residency training is very diverse, including AP only, CP only, or AP/CP. Because of the nonlinear nature of training (integrated AP and CP versus 2 years of AP followed by 2 years of CP) and the great variability in curriculum among programs, the Pathology Milestone levels are based on cognitive and procedural skills that the resident must demonstrate competence in by the conclusion of training, the attitude and skills of the learner, and the nature of supervision as defined by the Common Program Requirements, rather than time-dependent Milestones.

The product of the second meeting of the Pathology Milestone Working Group, held in January 2012, was presented to pathology program directors at the spring PRODS meeting in March. Input from that meeting was incorporated into the working draft Milestones at the third meeting of the group in April 2012. Additional specialty input was received when the Milestones were presented at the American Board of Pathology's Cooperating Societies meeting in May 2012. The Cooperating Societies provided suggestions for additional modifications, and the next version of the Milestones was sent out on the PRODS Listserv with an online survey. The results of the survey were presented at the 2012 APC/PRODS summer meeting. At the fourth Milestone Working Group meeting in October 2012, the final draft Milestones was completed, and it underwent alpha testing by 4 programs, from November 2012 to January 2013, and subsequent beta testing by 12 additional programs. The alpha test site program directors discussed their experience at the spring PRODS meeting, and the beta test site program directors answered questions in a panel discussion at the summer PRODS meeting. Input from alpha and beta test programs was used to create the final version of the Pathology Milestones in August 2013.

## General Features of the Specialty Milestones

The Pathology Milestones encompass 27 individual Milestones. Of those, 21 apply to both AP/CP, 5 apply to AP, and 1 Milestone applies to CP. The AP/CP residents will be assessed on all 27 Milestones, a straight AP resident will be assessed on 26 Milestones, and a straight CP resident will be assessed on 22 Milestones. The complete set of 27 includes 7 patient care, 3 medical knowledge, 2 interper-

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DOI: <http://dx.doi.org/10.4300/JGME-06-0151-10>

sonal and communication skills (ICS), 2 practice-based learning and improvement (PBLI), 7 systems-based practice (SBP), and 6 professionalism Milestones. For the professionalism Milestones, the working group took a generic Milestone document developed by a group of experts and modified it to fit pathology. Specialty-specific Milestones were developed for ICS, PBLI, and SBP.

### Envisioned Practical Use in Evaluating Residents

The Pathology Milestones provide numerous cognitive and procedural Milestones, for which faculty members or qualified supervisors can visually verify that a resident has achieved competence. For the first time, residents, faculty members, qualified supervisors, and program directors have nationally published Milestones to document the acquisition of cognitive and procedural competencies by residents by the end of their training. The Milestones can be used by faculty and educators to point out areas in which a resident needs or would benefit from added training and development. Because every resident is expected to achieve competency in each Milestone, documentation by the faculty members and the Clinical Competency Committee (CCC) enables the program director to sign off on the competency statement that the graduating resident “has demonstrated sufficient competence to enter practice without direct supervision.”

### Establishing Milestone Validity, Utility, and Practicality

Four members of the Pathology Milestone Working Group are program directors, and their programs served as alpha test sites. Alpha testing used a self-evaluation form developed for the Milestones, which was given to residents. In addition, although the guidance for alpha tests suggested evaluation of just 2 residents, in pathology, all residents in the alpha test programs were evaluated using the Milestones. After the alpha test programs validated the Pathology Milestones, beta testing was done at 12 additional pathology programs with program directors who were not members of the working group and who provided feedback by an online survey. The results were presented at the APC/PRODS meeting in July 2013, and beta test participants served on a panel answering questions from other program directors.

### Recommendations for Competency Committee Composition and Functionality

The ACGME recommends 3 to 5 faculty members on the CCC. However, because pathology is such a diverse

### Members of the Milestone Working Group

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specialty, including areas such as autopsy, surgical pathology, cytopathology, hematology/hematopathology, chemical pathology, microbiology, transfusion medicine and blood banking, molecular pathology, medical informatics, and laboratory administration, it may be more appropriate to include 8 to 10 individuals with supervisory roles in these areas. The CCC may include board-certified pathologists, nonphysician PhDs, pathologists' assistants, etc. If the program has affiliate institutions that provide required training experiences, a representative from the affiliates should be considered. The CCCs will review the various evaluation tools and documents, denoting residents' progress, and assign a Milestone level for each Milestone. The CCC serves an advisory role to the program director. The program director may sit on the CCC, yet he or she has the final decision on assigning the Milestone levels for each resident.

### Conclusion

The Pathology Milestones were designed by experts in the specialty to assist program directors and faculty in achieving uniformity in educating the next generation of pathologists and in assuring the public that pathologists entering the workforce have attained critical professional Milestones that have prepared them for unsupervised practice.

### References

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