HEMATOLOGY-ONCOLOGY CURRICULAR MILESTONES
A Collaboration of the American Society of Hematology & American Society of Clinical Oncology
Frequently Asked Questions

1. **What are the key definitions that I need to know to understand the Next Accreditation System (NAS)?** (Please note: if you have any specific questions on the Next Accreditation System or these terms, please refer to the ACGME.)

   **Entrustable Professional Activities (EPAs):** A critical part of professional work that can be identified as a unit to be entrusted to a trainee once sufficient competence has been reached. (Ten Cate 2005; Ten Cate & Scheele 2007).

   **Competence and Subcompetence:** There are six ACGME Core Competencies — Patient Care, Medical Knowledge, Practice Based Learning and Improvement, Systems Based Practice, Interpersonal and Communication Skills, and Professionalism. A subcompetence is a more granular look at the trainee's development. These are organized by category of competence.

   **Milestones:** Indicators of progression required to achieve the capability of unsupervised practice or aspirational level of performance.

   **Internal Medicine (IM) Subspecialty Reporting Milestones:** These are context free narrative descriptions of the progressive subspecialty skills. For Internal Medicine Subspecialties there are 24. The top of each milestone states the observable behavior. The columns from left to right show the progressive milestones for a trainee who is just starting all the way to an aspirational individual. The boxes at the bottom of the columns indicate where the trainee is on the milestone trajectory. A summative statement follows each group of milestones within the core competency.

   **Hematology-Oncology (HO) Curricular Milestones:** Descriptions of the progressive standards for the progressive development of knowledge, skills, attitudes and behaviors of HO fellows.

   **Clinical Competence Committee (CCC):** A committee appointed by the program director that must have representation from 3 program faculty members, and may include non-physician members of the care team. The CCC is charged with reviewing all evaluations on a twice-yearly basis and assuring that these reports are submitted to the ACGME.

2. **How are the HO Curricular Milestones different than the IM Subspecialty Reporting Milestones?**

   The ACGME requirement is that performance scores for the 24 IM Subspecialty Milestones must be completed for each fellow every 6 months, and reported to the ACGME. The first reporting window for fellowships will be November-December, 2014. The HO Curricular Milestones provide information regarding the specialty skills and behaviors required in each category.
3. How do I read the HO Curricular Milestones document?

<table>
<thead>
<tr>
<th>Critical Deficiencies</th>
<th>Ready for unsupervised practice</th>
<th>Aspirational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does not demonstrate sufficient understanding of the pathophysiology relevant to the disorder(s)</td>
<td>Inconsistently gathers and synthesizes critical information related to the patient and the pathophysiology to define the disorder(s)</td>
<td>Consistently gathers and synthesizes critical information related to the patient and the pathophysiology of common disorders</td>
</tr>
</tbody>
</table>

Comments:

In its entirety this is the Curricular Milestone. The boxes represent the stream of progression of a fellow through a Curricular Milestone.

4. Are HO Curricular Milestones required by the ACGME?

No, HO Curricular Milestones are NOT required by the ACGME. The HO Curricular Milestones were developed by workgroups at ASH and ASCO to help trainees and program directors understand the specific training requirements. The intention is that this will assist Program Directors to complete the IM Subspecialty Reporting Milestones documentation.

5. How were the HO Curricular Milestones developed?

The HO Curricular Milestones were developed in several phases. First, the behaviors and skills of the HO profession were discussed and a list was developed. Then, through an iterative process between the members of the ASH and ASCO curricular guideline committees, which had broad representation from US and Canadian programs, a final document was created. The work included in person meetings, email exchanges, and phone meetings until all of the participants were satisfied with the final document.

6. How will we use the HO Curricular Milestones?

The HO Curricular Milestones should be distributed to all of the fellows and the faculty in the program. They can be used in rotation evaluations. Since the HO Curricular Milestones are organized according to the IM Subspecialty Reporting Milestones, information can be directly fed into the IM Subspecialty Reporting Milestones. This would facilitate a comprehensive and organized performance assessment of each fellow by the CCC. Alternately, they could also be used as part of the orientation for a rotation so that expectations are clarified. Either of these methods is entirely appropriate, depending upon the size of the program.
7. Why are there so many Patient Care milestones?

The ASH and ASCO committees struggled with that same question! We decided that the core of the specialty was demonstration of application of clinical knowledge and skills. The committee took the activities that belong to the combined HO specialty and developed the language that describes the progressive skills and behaviors. We are also working on similar documents for the smaller number of programs that offer only Hematology or Medical Oncology training.

8. Why does PC4a reference the ABIM website? Also, it appears that the ABIM requirements are not exactly the same as those on the ACGME requirements. Why is this?

We discovered that there is a difference in the invasive procedures for which competence must be demonstrated during fellowship in the ACGME program requirements for HO and those listed on the ABIM website. See below table. We have asked the ACGME for clarification regarding how this will be monitored in the NAS.

<table>
<thead>
<tr>
<th>ABIM</th>
<th>ACGME</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>Demonstrate competence in performance of lumbar puncture and interpretation of cerebrospinal fluid evaluation</td>
</tr>
<tr>
<td>none</td>
<td>Demonstrate competence in access and care of Ommaya reservoir</td>
</tr>
<tr>
<td>Procedure: bone marrow aspiration and biopsy, including preparation, examination, and interpretation of bone marrow aspirates and touch preparations of bone marrow biopsies.</td>
<td>Demonstrate competence in preparation staining and interpretation of bone marrow aspirates, and touch preparations, as well as interpretation of bone marrow biopsies</td>
</tr>
<tr>
<td>Procedure: manage methods of apheresis</td>
<td>none</td>
</tr>
<tr>
<td>Procedure: administration of chemotherapeutic agents and biological products through all therapeutic routes.</td>
<td>Demonstrate competence in use of chemotherapeutic agents and biological products through all therapeutic routes</td>
</tr>
<tr>
<td></td>
<td>Demonstrate competence in intrathecal administration of chemotherapeutic agents</td>
</tr>
</tbody>
</table>

9. If the HO Curricular Milestones adopted the IM Subspecialty Reporting Milestones for procedures, why is there are separate stream for the ability to perform and interpret peripheral blood smear?

The ability to perform and interpret peripheral blood smear is essential to the practice of hematology. It is included in both ACGME and ABIM requirements, and is listed in PC4b since this is considered a noninvasive procedure.
10. Why does the Medical Knowledge section divide fund of knowledge into solid tumor oncology, malignant hematology, and non-neoplastic hematology?

This was done because clinical rotations are often separated into these broad areas. Our colleagues from Canada, in fact, have an oncology curriculum that does not include malignant hematology as that is under the hematology curriculum. The committee could have gone on and on with this part of the document, listing every area that a trainee must know (e.g., lung cancer, breast cancer, anemia, etc.) but the resulting document would have been unwieldy.

11. Why does genetic, genomic, molecular, and laboratory tests related to hematologic and oncologic diseases stand alone in the Medical Knowledge section?

It corresponds to the IM Subspecialty Reporting Milestone: “Knowledge of diagnostic testing and procedures”. The committees felt that this emerging area is so important that it should be specifically included in program curricula.

12. Why are some of the HO Curricular Milestones unchanged from the core IM Subspecialty Reporting Milestones?

Many of the subcompetencies and the subcompetency streams in Systems Based Practice, Practice Based Learning, Professionalism and Interpersonal Communication Skills are the same or similar to that in the IM Subspecialty Reporting Milestones. The ASH/ASCO curricular committee realized that the IM Subspecialty Reporting Milestones were sufficiently detailed that they could be used by all programs.

13. Why is there so much detail in the Interpersonal Communication Skills Subcompetencies?

Communication is of critical importance for Hematologist/Oncologists. Thus, specialty-specific content was added to the three subcompetencies. The first (Communicates effectively and compassionately with patients and caregivers) contains the specific skills expected of the trainee by the time he is ready for unsupervised practice. The second (Communicates effectively in interprofessional teams) sets higher expectations for HO fellows than for fellows in other subspecialty programs so the boxes have shifted to the left. The third (Appropriate utilization and completion of health records) includes specific documentation requirements that are critical for the specialty.

14. When will this document be updated? How often?

The plan will be to update the document at the same intervals as the IM Subspecialty Milestones. The ACGME has stated that this will be approximately every 2 years.