The American Board of Anesthesiology (ABA)
Position Paper on the
Institute of Medicine (IOM) Report on Resident Duty Hours
February 1, 2016

Outline

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II. Your organization’s formal position on the current ACGME resident duty hour requirements, including impact analysis, from your organization’s perspective, on costs and impact of implementation.

III. Your organization’s formal recommendations regarding dimensions of resident duty hour requirements, and justification (wherever possible) for these recommendations with evidence.

IV. Your organization’s formal recommendations regarding standards governing key aspects of the learning and working environment, and justification (wherever possible for these recommendations with evidence.

V. Your organization’s willingness to participate in a Resident Duty Hours in the Learning and Working Environment Congress, to be held in March 2016 in Chicago, Illinois. The attendees of this Congress will be configured to provide the ACGME with the breadth of perspectives across the medical community as it embarks on review and revision of the requirements addressing resident duty hours and learning and working environment.
The American Board of Anesthesiology (ABA)
Position Paper on the
Institute of Medicine (IOM)
Report on Resident Duty Hours

I. Your organization’s formal position on the recommendations contained in the Institute of Medicine (IOM) Report, including impact analysis, from your organization’s perspective, on costs and impact of implementation.

A. Introduction

Formal analysis on the impact of implementation of the IOM recommendations on resident duty hours for Anesthesiology residents is largely nonexistent. Initial concerns about compliance with the Institute of Medicine (IOM) report on resident duty hours for Anesthesiology included dilution of resident training and decreased clinical exposure to essential teaching cases. Data regarding potential negative effects on the quality of patient care and patient safety are conflicting. Residents are denied the opportunity to see the full arc of clinical care of a patient in the perioperative period due to the limitations of the 2011 Duty hours. The ABA believes it is important to educate the resident on the effects of fatigue and of fatigue mitigation. Furthermore, the ABA fully supports the 80 hour work rule as well as the call frequency not to exceed one in three days. However, we also strongly support a greater flexibility in the 10 hour break between clinical periods. As outlined in the ACGME Milestones for Anesthesiology, a resident should act as reliable team members, recognizing the impact of their work responsibilities on the institution and their colleagues.

B. Compliance with IOM Recommendations

1. Impact on the Quality of Patient Care and Patient Safety

   Anesthesiology is a unique profession because of the acute nature of patient interactions. Many anesthesiologists practice in high acuity settings such as operating rooms, labor floors, and intensive care units (ICUs). Continuity of care is important in such settings to promote patient safety. Compliance with the IOM duty hour proposal has increased the number of transfers of care. While the duty hour restrictions improved the teaching of “hand-offs” as well as enforcing the importance of complete transmission of information regarding patient care, a study confirmed that errors in caring for patients increased as the numbers of transfers increases. Concurrent with the change in duty hours has been an improvement in resident supervision which most likely resulted in the lack of change in patient outcomes.
2. **Impact on Quality of Resident Education**

There is no evidence that compliance with work hour requirements has decreased resident knowledge as assessed by standardized examinations. The average score of each class of resident on the annual in-training examination has not changed since implementation of work hour limitations (appendix 1). Similarly, the number of candidates passing both the Part 1 and Part 2 certification examinations has remained constant (appendix 2). Confounding this trend is the recent significant change in the certification process of the ABA, with the institution of an examination after completion of the CA-1 (PGY-2) year. The improvement in In-Training Examination scores was most likely a result of this change in the examination process. In meetings conducted at the offices of the ABA in 2014, program directors were emphatic that any change in the improvement of the certification process is challenging due to the reduced time available to prepare the residents. It is not the 80-hour rule that is causing this challenge, rather the 10 hour break between clinical training periods. The ABA will be modifying its current structured oral (Part 2 exam) in the future and, based on these meetings with program directors, is cognizant of the pressures program directors feel.

The IOM duty hour requirements have made it challenging for residents to attend scheduled conferences. As noted previously, this has not impacted test scores. However, medical schools are increasingly changing their educational programs to incorporate principles of adult learning and require active participation in their education. While residents now may be able to simply read a textbook or view the presentation that they missed on line, this cannot be done with interactive teaching sessions. Unique to Anesthesiology is the continuum of care of a patient throughout the perioperative period. As such, education in perioperative care may require a greater flexibility regarding the 10 hour break between clinical training to allow the resident to benefit from these opportunities.

3. **Impact on Resident Professionalism and Integrity**

While recognizing the importance of some restrictions on work hours, the ABA continues to worry that compliance with current standard fosters and promotes “shift worker mentality” among residents which negates efforts at encouraging the development of professionalism. An important goal of teaching professional behavior is to instill a sense of responsibility. Delegation of shifts when providing patient care for patients does not necessarily support the feeling of being responsible for patients. Unique patients and situations require greater flexibility.
4. Impact on Quality of Graduating Residents

In many circumstances residents are working fewer hours than their teachers and anesthesiologists in practice. Strict adherence to current duty hour requirements may not adequately prepare residents for practice after training.

5. Impact on Clinical Service

Teaching hospitals have put into place means to provide clinical service while allowing compliance with the current work hour requirements, changing the nature of patient care teams with greater responsibility being assumed by non-physician providers including nurse practitioners and, in the case of the provision of care in the operating room, nurse anesthetists and, in some states, anesthesia assistants. The impact of the change in the model of care delivery on patient outcome has yet to be determined. Due to the 80 hour rule, residents have benefited from functioning as members of a health care team.

Your organization’s formal position on the current ACGME resident duty hour requirements, including impact analysis, from your organization’s perspective, on costs and impact of implementation.

To meet early professionalism milestones residents must be able to act as reliable team members, recognizing the impact of their own work responsibilities on the institution and on their colleagues. Residents should also volunteer to assist colleagues, when appropriate, in order to ensure quality patient care. As such, revision of the restrictions of duty hours will enhance the professional development of residents as they assume the role of a reliable team member whose actions affect both patients and colleagues and allow residents to progress in the milestones of professionalism while personally experiencing the impact of their choices upon the medical team.

II. Your organization’s formal recommendations regarding dimensions of resident duty hour requirements, and justification (wherever possible) for these recommendations with evidence.

The ABA strongly supports the 80 hour work rule as well as the call frequency no greater than one day in three. The ABA also supports a greater flexibility to resident programs in the requirement for a 10 hour break between clinical training periods. This flexibility will not impact patient safety but will enhance resident education and professionalism. Restrictions on work hours are required to ensure that residents are not used to provide menial tasks and that their education is not compromised because of work requirements. However, work hour requirements that are put in place should not be so proscriptive that they
compromise resident professionalism and sense of responsibility as well as their ability to attend scheduled educational opportunities, whether they be didactic conferences, problem-based learning discussions or simulations.

III. Your organization’s formal recommendations regarding standards governing key aspects of the learning and working environment, and justification (wherever possible for these recommendations with evidence.

The ACGME, RRC, sponsoring institutions, and residency programs should ensure adherence to the current limits now, and to any new limits when implemented. Neither Medicare nor the Joint Commission should be involved. Professionalism and resident education should be regulated by medical organizations, not government agencies.

IV. Your organization’s willingness to participate in a Resident Duty Hours in the Learning and Working Environment Congress, to be held in March 2016 in Chicago, Illinois. The attendees of this Congress will be configured to provide the ACGME with the breadth of perspectives across the medical community as it embarks on review and revision of the requirements addressing resident duty hours and learning and working environment.

The ABA would be pleased to participate in the Congress.
References

Appendix 1

ITE Scale Scores at each Training Level from 2009 to 2015

Descriptive Statistics: ITE Scale Score from 2009 to 2015

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<tbody>
<tr>
<td>CB</td>
<td>N=468</td>
<td>Mean=19±5</td>
<td>N=638</td>
<td>Mean=21±5</td>
<td>N=726</td>
<td>Mean=20±6</td>
<td>N=707</td>
<td>Mean=22±6</td>
<td>N=895</td>
<td>Mean=21±5</td>
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<td>Mean=20±6</td>
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<td>Mean=20±6</td>
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<td>CA1</td>
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<td>N=1598</td>
<td>Mean=27±5</td>
<td>N=1572</td>
<td>Mean=28±5</td>
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<td>Mean=29±5</td>
<td>N=1596</td>
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<td>Mean=32±5</td>
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<td>N=1555</td>
<td>Mean=36±5</td>
<td>N=1571</td>
<td>Mean=35±5</td>
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*a* 2011 was the first year that the ABA switched vendor from Castle to PES. Since then, equivalent group equating method has been used to equate the exams from year to year.

*b* 2014 was the first year that BASIC Exam was administered.
Appendix 2

Part 1 (Computer-based MCQ) Certification Examination: Scale Scores from 2009 to 2015

<table>
<thead>
<tr>
<th>Exam Year</th>
<th>2009</th>
<th>2010&lt;sup&gt;a&lt;/sup&gt;</th>
<th>2011</th>
<th>2012</th>
<th>2013&lt;sup&gt;b&lt;/sup&gt;</th>
<th>2014</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td>N</td>
<td>2275</td>
<td>2061</td>
<td>2167</td>
<td>2143</td>
<td>2326</td>
<td>2390</td>
<td>2264</td>
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<tr>
<td>Mean Score</td>
<td>256</td>
<td>251</td>
<td>248</td>
<td>246</td>
<td>230</td>
<td>239</td>
<td>240</td>
</tr>
<tr>
<td>SD</td>
<td>67</td>
<td>83</td>
<td>83</td>
<td>65</td>
<td>77</td>
<td>79</td>
<td>79</td>
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</table>

Mean difference between the current year and 2009 (95% CI):

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<tr>
<th></th>
<th>2010&lt;sup&gt;a&lt;/sup&gt;</th>
<th>2011</th>
<th>2012</th>
<th>2013&lt;sup&gt;b&lt;/sup&gt;</th>
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</thead>
<tbody>
<tr>
<td>-5 (-0.3, -9)</td>
<td>-8 (-3, -12)</td>
<td>-10 (-6, -14)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-26 (-22, -30)</td>
<td>-17 (-13, -21)</td>
<td>-16 (-11, -20)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>2010 was the first year that the ABA switched vendor from Castle to PES, and a standard setting study was conducted that year.

<sup>b</sup>2013 was the first year that all candidates who had previously failed Part 1 exam could retake it without achieving “passing” ITE score to requalify.
Appendix 2 (continued)
Part 2 (Oral) Certification Examination: Scale Scores from 2008 to 2015

Descriptive Statistics: Part 2 (Oral) Certification Examination,
Scale Scores from 2008 to 2015

<table>
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<th>year</th>
<th>N</th>
<th>Mean Score</th>
<th>SD</th>
<th>Mean difference in the current year and 2009 (95% CI)</th>
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<td>2208</td>
<td>259</td>
<td>69</td>
<td>+12 (8, 17)</td>
</tr>
<tr>
<td>2011</td>
<td>1917</td>
<td>259</td>
<td>69</td>
<td>+9 (4, 13)</td>
</tr>
<tr>
<td>2012a</td>
<td>1922</td>
<td>255</td>
<td>71</td>
<td>+16 (12, 20)</td>
</tr>
<tr>
<td>2013</td>
<td>1979</td>
<td>263</td>
<td>67</td>
<td>+17 (12, 21)</td>
</tr>
<tr>
<td>2014</td>
<td>1911</td>
<td>264</td>
<td>70</td>
<td>+14 (10, 18)</td>
</tr>
<tr>
<td>2015</td>
<td>1895</td>
<td>261</td>
<td>66</td>
<td></td>
</tr>
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</table>

a Part 2 standard setting study was conducted in 2012.