

The ACGME Approach to Limiting Resident Duty Hours

Promoting Patient Safety, Resident Education and Resident Well-Being

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IOM Study to Optimize Resident Hours and Work Schedules to Improve Patient Safety

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Coming to Terms

Resident: a physician enrolled in a graduate medical education program

Residency: an accredited program of graduate education in which residents are given increasing and progressive responsibilities for the care of patients, under the supervision of qualified faculty

All residents are in training and must function under supervision

Residents do not have independent practice privileges

ACGME Accreditation Overview

~ 8,350 ACGME-accredited programs, collectively providing education for 105,000 residents and fellows

30% of programs undergo review each year (~ 3.3 year average between reviews)

ACGME annually surveys $\frac{1}{2}$ of all residents, and interviews ~ 12,000 residents as part of the site visit

The Goal

To produce competent physicians who are trained in a specialty and who are prepared for the safe, effective, and independent practice of medicine.

A brief history of Duty Hours and Resident Education

- 1971: Friedman et al. finds post-call residents make more errors in reading standard electrocardiograms
- 1981: ACGME begins to require "time for rest"
- 1984: A patient (Libby Zion) dies in a NY teaching hospital
- 1988: New York State sets work hour and supervision requirements; AAMC recommends a national 80-hour limit
- 1989/90: ACGME sets 80-hour limit in several specialties, requires in-house call q 3 nights and 1 day off in 7 in all specialties
- 2001/02: ACGME develops current common duty hour limits

Resident Hours not a “New Issue”

Effect of sleep loss known for the past 40 years

Meta-analyses consistently found deleterious effect

Effect not related to intelligence, motivation, professionalism

Medicine depends on cognition, memory, vigilance

Development of patient safety systems still evolving

Duty Hour Limits Affect a Complex Environment

Residents not the only providers

Resident alertness one of several important considerations in patient safety or learning

The Standards in Brief

80 hours per week averaged over 4 weeks

1 day in 7 free from all responsibilities

Adequate rest (should be 10 hours)

In-house call no more than every third night

24-hour + up to 6 hour limit on continuous duty

Time for didactics, transfer and continuity of care; residents not allowed to see new patients after 24 h

In-hospital hours during call from home counted

In-house moonlighting counts toward weekly limit

Patterns of Response to the Standards

Common response: Scheduling strategies to reduce in-house call, reduce continuous duty period

There are limits to increasing resident efficiency

Popular but costly: Replacement strategies

Faculty, hospitalists, NPs, PAs – different skill sets, professional expectations

Still rare in 2007: New Models for education and patient care

Efforts are time- and resource-intensive

Reducing Hours: Selected Effects

Studies of the effect of reducing hours show:

- Little to no increase in hours of sleep
- Higher measures of overall satisfaction
- More reported self-learning, more personal time

Studies of reduced hours also show:

- Increased intensity (compression) of activities during remaining duty hours
- Decreased formal educational time, continuity of care
- Increased need for hand-offs

ACGME Accreditation Summary

2,589 programs (31%) programs reviewed in 2006-07

227 (8.8%) received one or more citations related to duty hour non-compliance

258 duty hour citations (2.9% of total citations)

Citations related to educational elements (faculty supervision, curricula) comprise 54%

Most common: citations related to 24 + 6 hour limit on continuous duty hours (59 citations)

ACGME received 10 complaints related to resident hours

ACGME Resident Survey: Duty Hours and Aspects of the Learning Environment

2007 survey encompassed 3,025 programs (36% of total),
58,602 residents (55 % of total)

94% residents reported they always/usually meet the duty
hour limits

Survey identified 115 (3.8%) programs as potential outliers,
with a significant percentage of residents reporting non-
compliance with the duty hour standards

ACGME Resident Survey: Follow-up for Outlier Programs

In addition to duty hour non-compliance, outlier programs more likely to have responses suggesting problems with teaching, service obligations and intimidation

Outlier programs receive follow-up from the ACGME, including:

- Requesting information on how duty hours are being addressed by the program

- Repeat survey

- If results not satisfactory, site visit date is moved up

ACGME Activities to Assess the Effect of the Duty Hour Limits

Recommendation:

Assess the effect of the common duty hour limits on the patient care and resident education, focusing on specific hypotheses how the standards affect resident learning and engagement in clinical care in particular specialties.

ACGME Efforts to Refine the Duty Hour Limits

Recommendation:

Use pilots at the Review Committee level to test changes to the common duty hour standards prior to broad implementation, to ensure that additional changes are based on valid and “actionable” evidence on their effect on the safety and effectiveness of care and on resident learning and resident well-being.

Questions under Consideration

What are positive and negative effects of the duty hour limits on patient care, learning and resident well-being?

Do negative effects relate to the standards or to how programs and institutions respond to reduced hours?

How do we educate residents about the importance of rest and alertness for patient safety?

What duty hour limits may benefit from refinement? What are anticipated benefits, potential negative consequences?

What opportunities exist to improve the accreditation process related to duty hours?

Focus on the Learning Environment

Duty hours cannot be treated as a stand-alone issue

ACGME effort must expand to other standards that collectively promote safe patient care and a high quality learning environment.

Approach must:

Be informed by the public attention focused on duty hours.

Fit within the greater focus on health care quality and safety.

Be sensitive to the role of residents as learners.