



## **Committee on Optimizing Graduate Medical Trainee (Resident)**

### **Schedules to Improve Patient Safety**

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**Luella Toni Lewis, M.D.**

**Executive Vice-President,**

**Committee of Interns and Residents/SEIU Healthcare**

My name is Dr. Luella Toni Lewis and I am Executive Vice-President of the Committee of Interns and Residents/SEIU Healthcare. I received my medical degree from Georgetown University School of Medicine and completed my Family Practice residency in June at the New York Medical College/Brooklyn-Queens program. I am currently a Geriatrics fellow in Jamaica, N.Y.

The Committee of Interns and Residents celebrated its 50<sup>th</sup> anniversary this year and is the oldest and largest union of resident physicians in the U.S. Today we represent close to 13,000 interns, residents and fellows in public and private teaching hospitals in New York, New Jersey, Massachusetts, Washington, D.C., Florida, California, New Mexico and Puerto Rico. CIR negotiates collective bargaining agreements with our hospital employers over salary, benefits, hours of work and conditions of employment. Since our inception, we have strived to improve:

- The quality of care we provide to our patients;
- The quality of the medical training we receive; and
- The quality of resident physician work life and well-being.

Reducing resident work hours is key to each one of those goals and has been a central focus throughout CIR history. In 1975, a ground-breaking contract agreement eliminated the ubiquitous every other night call schedule for 2,000 CIR members in New York City's public and private hospitals. These were the first hour limits of any kind.<sup>1</sup> In 1989, CIR was at the forefront of the political push that created the first and only state work hour limits – The New York State Department of Health 405 Regulations.<sup>2</sup> In 2001, CIR joined with the American Medical Student Association and Public Citizen to file a petition before the Occupational

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<sup>1</sup> CIR's Role in 30 (Long) Years of Resident Hours Reform in the U.S. [www.cirseiu.org](http://www.cirseiu.org).

<sup>2</sup> NYS Department of Health 405.4 Regulations. <http://health.state.ny.us/nysdoh/phforum/nysrr10.htm>.

520 Eighth Avenue, Suite 1200, New York, NY 10018

Phone: (212) 356-8100 Fax: (212) 356-8111 E-mail: [info@cirseiu.org](mailto:info@cirseiu.org) <http://www.cirseiu.org>

Safety and Health Administration,<sup>3</sup> and helped introduce federal resident work hour legislation.<sup>4</sup> Those actions, along with important internal pressure from the AMA's Resident Fellow Section, were instrumental in convincing the ACGME to establish its first ever across specialty limit on hours in 2003.<sup>5</sup>

Suffice it to say, without resident activism on the issue of work hours, we would not be where we are today.

But where *are* we today? The ACGME sanctions on-call shifts of 24 + 6 hours for the transfer of patient information, clinic duty, and conferences. In the real world of residency that is interpreted simply as a 30 hour shift (except in New York State, where the 405

Regulations limit is 24 + 3). Many residents are scheduled to work these marathon shifts routinely – not once a month, not once a week, but according to the ACGME as often as every third day on clinical rotations throughout years of training. The 80-hour work week limit, averaged as the ACGME allows over a 4-week period, can easily translate in practice to weeks of 100 hours or more; surgical training programs may apply for 88-hour work weeks, also averaged over four weeks. And on home call, residents can be woken repeatedly throughout the night, but the only hours that count towards the hour limits are when a resident is called into the hospital.<sup>6</sup>

I am confident that this panel will have the benefit of expert testimony and research from those in the fields of sleep and occupational medicine. The evidence links working long hours with cognitive and clinical performance deficits and medical errors. You will also have the benefit of decades of research across industries which links sleep deprivation to an increase in the risk of industrial errors and accidents.

I am here, on behalf of CIR members, to tell you what it is like to take care of patients for a 30-hour shift with little or no sleep - especially when you know you are likely to be scheduled for another 30-hour shift before you can recover from this one. Acute and chronic sleep deprivation sets in and so does a common set of very human responses to these excessive hours. It is a rare resident who has not:

- Made a medication error, especially when calculating complicated pediatric dosages.
- Fallen asleep holding a retractor in surgery.
- Forgotten to order an important diagnostic test.
- Forgotten to check the results of an important diagnostic test.
- Purposely avoided a family member inquiring about their loved one because we were just too tired to have the conversation.
- Learned to resent a patient and dislike being a doctor because we were too tired or cynical or depressed to provide care.
- Nodded off at the wheel, while driving home post-call.

I can also tell you that we feel terrible when we make mistakes; when we give less

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<sup>3</sup> Petition to the Occupational Safety and Health Administration (OSHA); Washington, D.C.; April 30, 2001.

<sup>4</sup> H.R. 3236. The Patient and Physician Safety and Protection Act of 2001; H.R. 1228; The Patient and Physician Safety and Protection Act of 2005.

<sup>5</sup> Report of the ACGME Work Group on Resident Duty Hours and the Learning Environment: Executive Summary, p. 6. February 2002.

<sup>6</sup> Accreditation Council for Graduate Medical Education. Common Program Requirements. Available at: [http://www.acgme.org/ac-Website/dutyHours/dh\\_dutyHoursCommonPR.pdf](http://www.acgme.org/ac-Website/dutyHours/dh_dutyHoursCommonPR.pdf).

than optimal patient care; when we lack compassion and can only think about the next time we will be able to lay down. We try to do our best, but no human being should have to work these hours, especially those who are entrusted with the lives of others.

Resident safety and well-being is also a victim of the ACGME's lax hour limits. In 1998, CIR member Dr. Valentin Barbulescu died in a one-car crash after falling asleep at the wheel post-call from the CCU. Research done by the Harvard Work Hours Health & Safety group reveals that sleep deprived residents are at increased risk of car accidents,<sup>7</sup> and increased needlestick injuries, (and with that, exposure to HIV, HBV and HCV).<sup>8</sup> Stress, depression<sup>9</sup> and complications in pregnancy<sup>10</sup> have also been documented in studies of resident physicians and fatigue. Is there really any doubt that the extremely long hours we are required to work take a serious toll on our health and well-being?

Why does our profession – a profession that champions “evidence-based medicine” – choose to ignore the scientific research linking long work hours and sleep deprivation with medical errors and occupational injury? And why does the public *allow* the medical profession to ignore the evidence? The airline, trucking,<sup>11</sup> and nuclear power industries are required by federal regulation to limit the number of consecutive hours that their employees are scheduled to work because they are entrusted with the public's safety. Why is medicine any different?

CIR has three recommendations to make to this panel and the first one is this: **unequivocally act on the significant body of existing evidence and call for the prohibition of on-call shifts greater than 16 hours.**<sup>12,13</sup>

We understand the great economic and cultural shift that such a recommendation will set in motion. We recognize that this is a complicated situation, this juggling of patient safety, resident education, economics and culture. A rigid reduction in hours worked without analyzing *how* the work is organized is doomed to failure. That's why CIR stresses the need to re-engineer how the resident workday is organized. What keeps residents in the hospital so long? How can the work be re-organized so that patient safety and education are improved? We applaud medical educators who recognize that reducing resident work hours is actually an opportunity to re-think the entire training paradigm. It can be done and it must be done.

In our effort to identify best practices, CIR leaders have traveled to New Zealand, where 16-hour consecutive and 72-hour weekly work limits have been in effect since 1985,<sup>14</sup>

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<sup>7</sup> Barger, LK. Extended work shifts and risk of motor vehicle crashes among interns. *NEJM*. 2005;352: 125-134.

<sup>8</sup> Ayas, N, Barger, LK. Extended work duration and the risk of self-reported percutaneous injuries in interns. *JAMA*. 2006;296: 1055-1062.

<sup>9</sup> Reuben DB. Psychologic effects of residency. *Southern Medical Journal* 1983;76:380-383.

<sup>10</sup> Silva BM. Pregnancy during residency: a look at the issues. *Journal of the American Women's Association* 1992;47:71-75.

<sup>11</sup> Federal Motor Carrier Safety Administration. The Revised Hours of Service Regulations. 2005. Available at <http://www.fmcsa.dot.gov/print.asp?URL=/rules-regulations/truck/driver/hos/faxsheet.htm>.

<sup>12</sup> Lockley SW et al. Effect of reducing interns' weekly work hours on sleep and attentional failures. *NEJM*. 2004;351:1829-1837.

<sup>13</sup> Landrigan CP et al. Effect of reducing interns' work hours on serious medical errors in intensive care units. *NEJM* 2004;351: 1838-1848.

<sup>14</sup> New Zealand Resident Doctor's Association (NZRDA) Multi-Employer Collective Agreement (MECA). [www.nzrda.org.nz](http://www.nzrda.org.nz).

and to London, where an innovative project called “Hospital at Night” is fundamentally changing how Great Britain’s teaching hospitals are staffed between 9 pm and 7 am.<sup>15</sup> We learned an important lesson from Professor Elisabeth Paice, dean of postgraduate medical education and director in charge of training more than 8,500 physicians and dentists in London.

Professor Paice told us that she first had the idea for Hospital at Night fifteen years before, when she observed that much of what happened at night could really have occurred during the day and evening if hospitals had been better organized. But despite this insight she could not find any hospital to pilot her idea – because change is difficult the world over and British hospitals and medical educators were satisfied with the status quo.

Fast forward to 2004 and the implementation of the European Work Time Directive, which *required* British teaching hospitals to institute a precipitous reduction in doctor in training work hours from about 76 per week down to 58.<sup>16</sup> Suddenly, Professor Paice’s medical colleagues were willing to give Hospital at Night a try; a willingness that had been sorely lacking until the EU directive made change unavoidable.

And this leads me to CIR’s second recommendation: **safe, evidence-based hours limits must be made a legal or regulatory requirement across specialties, across hospitals and across the country, similar to other industries where the public’s safety is at stake.**

Without such a requirement, change will not happen because the economic and cultural pressures to hold to the status quo are too strong. Innovation will be limited to those few hospitals with insightful leaders who recognize the opportunity and are prepared to devote the necessary resources. The rest will carry on as they always have and patient and resident safety will continue to suffer.

Finally, I would like to address the issue of enforcing work hour limits. The ACGME maintains that there is no hours limit enforcement problem; that residents fill out annual work hour surveys and the results show that the vast majority (94% in 2006-07) “always or usually meet the ACGME’s weekly duty hour limits.” Of the 8,804 citations that the ACGME handed out in 2006-07, only 258 (2.9%) related to hour violations. In this same academic year, the ACGME received 10 complaints related to duty hours; 10 complaints from the more than 100,000 interns, residents and fellows currently training in the U.S.<sup>17</sup>

In 2006, JAMA published a web-based survey of interns from July 2003 through June 2004 that revealed significantly higher rates of non-compliance with the ACGME’s hours limits than the ACGME’s survey data.<sup>18</sup> This study is entirely consistent with CIR members’

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<sup>15</sup> “Shorter hours, fewer nights: life as a british resident,” ACP Hospitalist, 10/07.

[http://www.acponline.org/hospitalist/oct07/improve\\_training.htm](http://www.acponline.org/hospitalist/oct07/improve_training.htm)

<sup>16</sup> British Medical Association. Time’s Up: a guide on the EWTD for junior doctors.

[http://www.bma.org.uk/ap.nsf/AttachmentsByTitle/PDFtimesup2/\\$FILE/TimesUp2.pdf](http://www.bma.org.uk/ap.nsf/AttachmentsByTitle/PDFtimesup2/$FILE/TimesUp2.pdf).

<sup>17</sup> “The ACGME’s Approach to Limit Resident Duty Hours 2006-07: A Summary of Achievements for the Fourth Year under the Common Requirements, p. 2.

<sup>18</sup> Barger, LK, Interns’ compliance with accreditation council for graduate medical education work-hour limits, JAMA. 2006;296:1063-1070.

experience and those of our colleagues in non-union hospitals. Residents do not accurately report work hour violations. Why? Because they know that the only ACGME penalties in place -- program probation or, worse yet, loss of accreditation – mainly penalizes residents.

Added to this is the ACGME's lack of whistleblower protection for residents who report violations. The experience of Dr. Troy Madsen in 2003, the Johns Hopkins medical intern who reported hours violations to the ACGME, is illustrative.<sup>19</sup> Dr. Madsen first tried to address the problem internally, to no avail. When he filed his complaint with the ACGME and they contacted Johns Hopkins, it was all too obvious who had complained. The ACGME temporarily withdrew the residency program's accreditation, and Dr. Madsen endured withering ostracism from supervisors and peers until he finally resigned. Two months later he was accepted into residency in another state.

There is another model of enforcement that is instructive here and that is New York State. Department of Health regulations had been in place there since 1989, but were not seriously enforced until 2000 when legislation was passed to fund rigorous external monitoring. IPRO, a company with extensive compliance experience in the health care arena, won the state bid and has proceeded for the last six years to make annual unannounced site visits (lasting several days) to every teaching hospital in the state.<sup>20</sup> Residents are interviewed, schedules are analyzed and *hospitals* are fined for violations that show a consistent pattern. The system is not perfect, but it is a major improvement from the fatally flawed resident reporting mechanism that the ACGME relies on.

Therefore, CIR's third and final recommendation to this panel is that **the enforcement mechanism for resident work hour limits be taken out of the hands of the ACGME and the hospital industry and entrusted to an independent entity.** A 2002 *New York Times* editorial entitled *Sleep Deprived Doctors* hit the nail on the head when it observed that "Despite the tough talk [on enforcing the limits], the council faces an inherent conflict of interest. Its board is dominated by the trade associations for hospitals, doctors and medical schools, all of which benefit from the cheap labor provided by medical residents."<sup>21</sup>

Your work on this study could have a profound and lasting impact on the safety of patients and the training of physicians for years to come. We ask for your help. We need your help in addressing this serious problem. In summary, we urge you to:

1. Act on the scientific evidence and recommend shifts for resident physicians that are no greater than 16 consecutive hours;
2. Recognize that change will not occur unless all teaching hospitals are required by law to adhere to the same safe hour limits;
3. Insist on rigorous enforcement of work hour limits by an external agency that has no economic self interest in perpetuating the status quo.

Thank you for the opportunity to address you today.

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<sup>19</sup> "Whistleblower Backlash," *New Physician*, March 2004.

<sup>20</sup> "Working Hours and Conditions Post-Graduate Trainees Annual Compliance Assessment, Contract Year 5, 10/1/05-9/30/06 (<http://w2.health.state.ny.us/query.html?col=nysdoh&qt=resident+work+hours&search.x=12&search.y=9>)

<sup>21</sup> "Sleep-Deprived Doctors," *New York Times*, June 14, 2002.