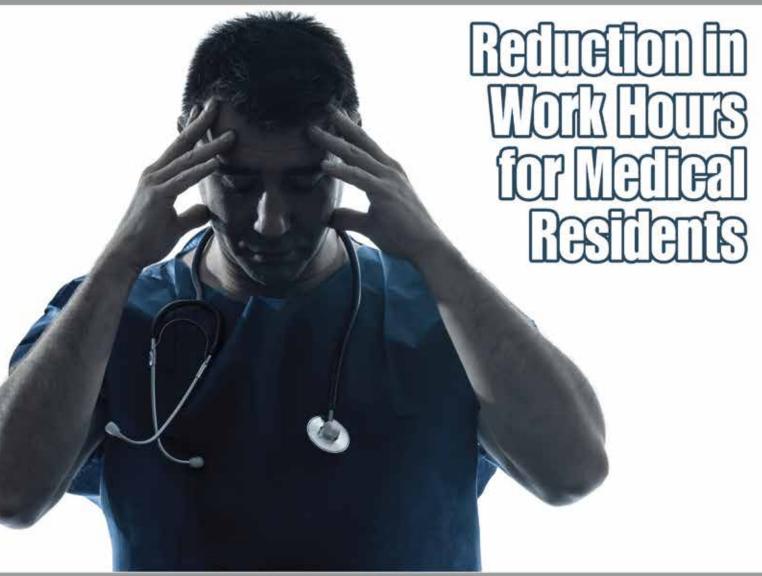
WORCESTER COMMENTAL COMMENTS OF THE COMMENTS O

Volume 77 • Number 6 Published by the Worcester District Medical Society Nov./Dec. 2013



www.wdms.org

Presorted Standard US Postage PAID Worcester, MA Permit No. 467

DARE YOU TEST DRIVE THREE GERMAN WUNDER CARS IN ONE VISIT?



We're Ready If You Are.

Our three dealerships are now in one handy Shrewsbury location. So you can put a new BMW, Audi and Mercedes through their paces to see how they feel. And, how you feel.

WAGNER FAMILY OF AUTO STORES

A long way from typical dealers.

BMW, AUDI, MERCEDES-BENZ, SHREWSBURY, ROUTE 9
508-581-5999 | www.wagnermotors.com





academics

arts

athletics

technology



Educating college-bound students Pre-K through Grade 12

Bancroft students discover themselves as leaders, learners, and global citizens, developing the skills to succeed in the world's top colleges and beyond.



110 Shore Drive Worcester, MA 01605 508.854.9227 www.bancroftschool.org



What do you want for your son's high school experience?

Challenging Academics:

 Named by the Siemens Foundation and the CollegeBoard as leading Massachusetts in AP Math, Science, and Technology

Formation of Values:

110 year tradition of intellectual, moral, and spiritual education

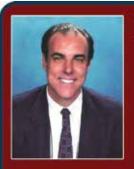
Transformational Experience:

 18 varsity sports and 50 clubs for a well-prepared and well-rounded young man

For Information Regarding Admission and Financial Aid Contact:

ST. JOHN'S HIGH SCHOOL

Admissions Office: 508-842-8934, ext. 266/230 Visit our website: www.stjohnshigh.org



DR. CHRISTOPHER VAN KLEECK Licensed Psychologist

255 Park Ave., Suite 1000 Worcester, MA

Now Accepting New Psychotherapy Patients

vankleeck@charter.net 508-612-6212

medicine

Worcester Medicine is published by the Worcester District Medical Society 321 Main Street, Worcester, MA 01608 e-mail: wdms@massmed.org web: www.wdms.org phone: 508.753.1579

WDMS Officers

President: Michael Hirsh

Vice President: Rebecca Spanagel

Secretary: Spiro Spanakis Treasurer: Robert Lebow

Joyce Cariglia, Executive Director Melissa Boucher, Administrative Assistant Francine Vakil, WDMS Alliance

WDMS Editorial Board
Jane Lochrie, MD, Editor
Lisa Beittel, MBA
Anthony Esposito, MD
Michael Hirsh, MD
Anne Kane, RN, PhD
Michael Malloy, PharmD
Thoru Pederson, PhD
Joel Popkin, MD
Robert Sorrenti, MD
Peter Zacharia, MD
Emily Tsanotelis, Student Representative



Publishing, Design, Event Planning, & Web Development

Production and advertising sales by Pagio Inc. 88 Winter St., Worcester, MA 01604 508.756.5006

Paul Giorgio, President Donna Roberson, Editor Justin Perry, Art Director Chris Reddy, Account Executive Kerry Cyganiewicz, Account Executive Kelsey Lemmon, Account Executive Vanessa Herbold, Account Executive

Worcester Medicine does not hold itself responsible for statements made by any contributor. Statements or opinions expressed in Worcester Medicine reflect the views of the author(s) and not the official policy of the Worcester District Medical Society unless so stated. Although all advertising material is expected to conform to ethical standards, acceptance does not imply endorsement by Worcester Medicine unless stated. Material printed in Worcester Medicine is covered by copyright. No copyright is claimed to any work of the U.S. government. No part of this publication may be reproduced or transmitted in any form without written permission. For information on subscriptions, permissions, reprints and other services contact the Worcester District Medical Society.

contents vol. 77, No. 6

NOV./DEC. 2013

6 Editorial

Jane Lochrie, MD

Giant Steps in Resident Education: Where Have They Led?

Joel H. Popkin, MD

13 A Resident's View of How the New 16-hour Rule Has Changed the Workforce

Renu Goyal, MD

14 Duty Hours: The Changing Face of Caring for Patients

Deborah DeMarco, MD, FACP, and Anne Campbell Larkin, MD, FACS

16 Nursing Reflections on Resident Duty Hour Restrictions

Dawn Carpenter, DNP, ACNP-BC

18 Legal Consult

Peter Martin, Esquire

20 In Memoriam

Richard H. Angoff, MD Carlton Manville Akins

22 As I See It

Nicole Mushero, Ph.D.

24 Society Snippets
Holiday Reception
and A Night at the Movies

26 Society Snippets
8th Annual Louis A. Cottle
Medical Education Conference



On the Cover: Reduction in Work Hours for Medical Residents

The WDMS Editorial Board and Publications Committee gratefully acknowledge the support of the following sponsors:

UMass Memorial Health Care
Reliant Medical Group
The Louis Albert Cottle, MD Trust Fund

Editorial

Jane Lochrie, MD



Jane Lochrie, MD

The controversy regarding resident work hours that started with the death of Libby Zion in 1984 continues today. Extended work hours and fatigue among residents have been a concern of medical educators for many years. The Accreditation Council for Graduate Medical Education (ACGME) introduced work hour limitations for all residents to 80 hours per week in 2003. The most recent regulations limit

all first-year residents to 16 hours per day. This has been a twoedged sword. While residents spend less time in the hospital and are theoretically more rested, the residents' workload has not decreased and they are expected to do the same amount of work is a compressed period of time, leading to burnout. Ironically, several large studies have failed to show an improvement in patient safety or quality of care. In fact, residents complain that new work hours decrease continuity of care, take away from their educational time and increase errors due to multiple handoffs.

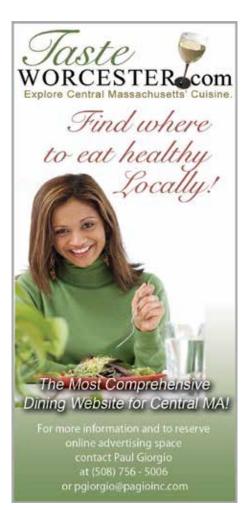
Dr. Joel Popkin, the former program director for Internal Medicine at St. Vincent Hospital, reports on several studies looking at the 16-hour rule. He conducted a study in 11 ACGME-accredited internal medicine residency programs pre and post the 16-hour rule for interns rotating in the MICU. He confirmed that while the 16-hour shift improved the time for reading and decreased sleepiness, the rule seemed detrimental to resident satisfaction with the number of patient contacts, continuity of care and preparation for second year.

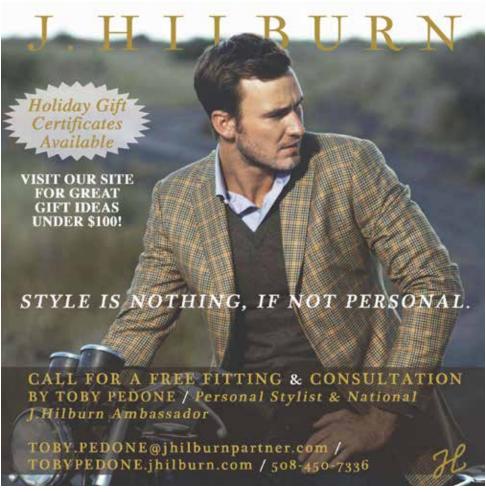
Renu Goyal, the chief of Hospitalist Medicine at Reliant Medical Group, reminds us that one cannot generalize the impact of work hour restrictions on the training of all residents, and she gives us her ideas of the pros and cons of these limitations.

Dr. Deborah DeMarco, the current associate dean for Graduate Medical Education and former program director for Internal Medicine at the University of Massachusetts, and Dr. Ann Larkin, the program director for Surgery at UMass Memorial Health Care, confirm what the other authors state regarding patient safety and handoffs, resident burnout and quality of patient care. They give a unique perspective of the generational gap between the baby boomer faculty and the millennial residents.

In her article regarding a nurse's perspective on the work hour limitations, Dawn Carpenter, DNP, ACNP-BC, notes that hospital work in general has transitioned to shift work because of the increase in the acuity of care of the hospitalized patient. She has noticed that residents are rested, refreshed and more engaged in didactic learning since the ICU has changed from 24-hour to 12-hour shifts.

The work hour limitations are here to stay. It is the job of all medical educators to design programs that balance work hours and quality patient care. Currently, there is limited evidence available and more research on the complex topic is required.





wachusett liquor

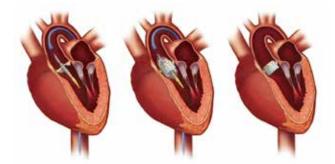


UMass Memorial Medical Center is screening patients for transcatheter aortic valve implantation (TAVI)



Do you have patients with severe aortic stenosis who are at high risk for surgical intervention or deemed inoperable?

They may be candidates for TAVI, an FDA-approved, minimally invasive procedure where a new aortic valve is implanted percutaneously via the femoral artery or through a small, anterolateral chest incision, without the need for sternotomy or cardiopulmonary bypass.



TAVI:

- Is a minimally invasive option for select patients with severe, symptomatic aortic stenosis
- Is FDA-approved for patients who are considered high risk for surgery or who are inoperable
- Has been shown to significantly improve quality of life and reduce mortality for this patient population

To schedule a screening:

Telephone: 508-334-VALV (8258) Email: tavi@umassmemorial.org

Heart & Vascular
CENTER OF EXCELLENCE





Giant Steps in Resident Education: Where Have They Led?

Joel H. Popkin, MD



Joel H. Popkin, MD

Introduction

In 1984, Libby Zions, an 18-yearold woman, died while under the care of residents at New York Hospital. Her father's campaign to condemn the entire medical education system, including seeking murder charges against the residents involved, ultimately led to the New York State Department of Health's

recommendation to limit resident work hours. Additional congressional action came thereafter. Since then, in attempts to prevent the kinds of medical errors that led to Zions's death, a variety of residency program reforms have been enacted. As the misdiagnosis (the true diagnosis still remains a mystery) and mismanagement were ascribed in large part to fatigue ~ an arguable case at best ~ the most consequential focus of rule changes has been progressive restrictions in resident duty hours.

The Accreditation Council for Graduate Medical Education (ACGME) in 1990 set an 80-hour-per-week duty hour limit, which includes at least one 24-hour period entirely off. By 2003, the limit was extended to all specialties, along with an additional proviso of a maximum shift length of 24 hours, with up to six additional hours for education and handoffs. The most recent directive², put into effect in July 2011, restricts interns to shifts not exceeding 16 hours. In addition, it strongly encourages strategic napping.

With the threat of loss of accreditation, the consequences of non-compliance are substantial. Intense pressure on residency programs to comply with regulatory scrutiny is therefore universal among training programs, and that includes barring interns from finishing their patient duties if they have gone past their allotted shift.

Even though sleep has usually, but not invariably, increased since institution of the most recent regulations ~ the 16-hour rule ~ there are few data that validate an improvement in resident education and patient outcomes. With universal inviolable rules put in place, it is now a huge challenge to evaluate prospectively the effects of the rule change³. In fact, the administrative representation of the ACGME itself has conceded that "We've created a rigid monster without flexibility³." During my tenure as a residency program director, the ACGME leadership often said that Congress threatened that if the ACGME didn't crack down on sleep deprivation, Congress would do so.

A study from 2004 convincingly demonstrated that the elimination of extended work shifts significantly reduced the number of hours worked, improved sleep duration and, most importantly, decreased the rate of attentional failures4. But alertness, per se, is not necessarily a simple inverse of sleepiness, since fund of knowledge, experience and limiting stress may obviate the advantages of increased sleep⁵. What their work was not designed to do was to investigate if such interventions improve resident health and education, as well as patient safety⁴.

A randomized trial, utilizing a single center ICU setting of medical interns, did show that interns in an every-third-night rotation vs. a schedule limited to 16-hour shifts made significantly fewer serious medical errors, but no difference was found in preventable adverse events. Potential small biases in fully blinding the observers were pointed out by the authors.⁶ However, bi-

ases were felt to be much more substantial by Rosenbaum and Lamas³, who noted that, "Three residents from the intervention group wrote a letter questioning the study's conclusions. They wrote: 'Worried residents and attending physicians, aware that the interns on the intervention schedule were poorly informed, took a more active role in patient care, making the majority of decisions and more closely supervising the interns' actions. This hypervigilance may have strongly biased the study toward a positive result.7' Dr. Jeffrey Drazen, who was an attending on the ICU service at that time, reported that a fourth intern was added to the service of the limited schedule group and went on to say that "although the interns were more awake and made fewer serious mistakes during the intervention schedule, they often knew very little about the patients who had been admitted the night before they came on duty. On these occasions, I had to base patient care decisions on information provided by the other resident who was working on the standard overnight shift schedule or on personal knowledge gleaned from seeing the patient the day before8."

Interestingly, in a subsequent prospective cohort study of three pediatric residencies, Landrigan and another group found that after the 2003 rule changes, rates of resident burnout decreased, but total work hours, sleep, depression, medication errors and education showed no improvement.⁹

Finally, a single institution survey of internal medicine residents in 2001 administered the same survey in 2003, after the 80 work hour regulations went into effect and compared well-being, patient care and education in these two groups of a total of 161 residents (118 respondents). The survey found an increase in career satisfaction and a decrease in burnout, but negative effects on patient care and education¹⁰.

The 16-Hour Rule

In a pilot study of creating a 16-hour shift in one of two gastroenterology services at the Mayo Clinic, patient care was unchanged in the intervention and control groups. However, in the intervention group, residents reported feeling less prepared to manage cross covered patients and trended toward decreased perception of quality of education and balance between personal and professional life. They also reported fewer time-off hours between shifts¹¹.

While fatigue can be identified and quantitated, it is much more of a challenge to ascertain its effects on patient care and resident education, since the 16-hour rule also impacts handoffs, supervision, education, accumulation of experience and ownership of patients. All of these affect patient outcomes, and it is unclear what the new systems have done regarding these critically important aspects. As a result, these rules have not been free of controversy. In a recent survey of program directors, 83% agreed with an 80-hour weekly maximum of duty hours, but only 14% prospectively supported the 16-hour rule¹².

In 2010, a large, nationwide survey asked residents how they felt about the upcoming 16-hour rule change. These residents came from multiple specialties and all years of training, so those surveyed were not necessarily directly affected. Nevertheless, these 2,561 respondents indicated that while they expected the changes to have a positive effect on their quality of life, they also anticipated striking negatives regarding quality of care, education, experience, fund of knowledge and resident preparation for more senior roles. Opinions were closer regarding patient safety, with 34% feeling that it would be positively affected and 39% that it would be negatively affected. The results for overall education showed a 48% negative vs. 26% positive¹³.

A follow-up survey after the rules change demonstrated similar feelings to those that had been anticipated: In the move to a 16-hour maximum shift, 42.8% of residents reported no change in the quality of education, while 40.9% reported that it had worsened and only 16.3% said it had improved. More than 50% said that preparation for more senior roles was worse. Decreased exposure to patients, conferences and continuity of care were all reported, as was a 72% increase of handoffs¹⁴.

Interestingly, although improvement in the quality of life predicted for interns was borne out, about half of the senior residents reported it worsening. Overall, only 22.9% of the residents were in favor of the new regulations, as compared to 48.4% who were opposed¹⁴.

Finally, two very recent studies report that reducing intern duty hours has disrupted training, increased error rate and has had minimal impact on sleep^{15, 16}. Patient handoffs seem to be a particular menace, as an estimated 80% of significant medical errors involve miscommunication between caregivers at these times, according to the Joint Commission's Center for Transforming Healthcare¹⁷.

Our Study

With the medical literature so contradictory in judging the advantages of more sleep vs. the potential cost of increased hand-offs, loss of continuity of care and the possible educational harm from seeing fewer patients, we designed a study to look specifically at interns' perception ~ before and after the 16-hour rule change ~ of their educational and patient care experiences

in the Medical Intensive Care Unit (MICU). Most surveys have not queried the affected residents directly, and those that have may have introduced bias by framing the questions in a "before and after" format, as well as by surveying all trainees for effects on rules involving only the intern class.

Our study population included all internal medicine interns in 11 ACGME-accredited programs during the 2010-11 (pre-16-hour rule change) and the 2011-12 (post -rule change) academic years. A total of 305 interns participated.

Resident perception data, obtained nearly in real time and unbiased to work hour rule changes, support the concerns expressed in the program director and resident surveys described above. We have shown that while PGY-1s report the 16-hour maximum shift in the MICU has improved the availability of reading time and decreased sleepiness, the new rules seem detrimental toward satisfaction with the number of patients allotted per trainee, patient care, continuity of care and preparation for the second year.

We also addressed ~ and confirmed ~ previously postulated concerns, based on anecdotal data, that interns were leaving at the end of the shift to comply with the rules, but were completing administrative work off site¹⁵.

Conclusion

In conclusion, a misdiagnosis in 1984, albeit tragic but very probably mistakenly attributed to exhaustion, has led to ever-ongoing, remarkable changes in the training of residents. With all that has been written, a relative paucity of data exist regarding residents' perception of their education, patient care, pre and post the most recent rule changes for 2011. The mistakes in the management of the Libby Zion case ~ and those prior and since ~ may have involved a component of fatigue, but surely the lack of experience, supervision and an absence of a safety net computerized drug interaction system all played a role, and perhaps the role.

It remains murky, at best, if the changes in the education of medical students and residents and the quality of teaching by attending physicians has improved since universal rules changes began in 2003. Faculty has less time to teach, and although residents are working fewer hours, the residents may well be performing the same amount of work in less time. With the probability of patient care responsibilities overwhelming education, increased resident burnout is the expectation¹⁸.

One thing that is clear is that changes in the work hours have come from neither the analysis of robust data nor input from those on the front lines. Most studies, including ours, demonstrate that the new rules have largely negated the purpose of the changes.

Worsened safety outcomes may well be in part due to communication errors that are an integral component of handoffs and multiple residents caring for individual patients. Programs for improving handoffs are in the making, but proof of success, if any, has yet to be demonstrated.

This article is a cautionary signal that untested rule changes have the potential to erode resident education and morale, and consequently the safety and future care of their patients. The implications of any detriment to resident education are profound, and theories about improving educational and patient safety outcomes by adding "strategic napping" and "alertness management" to program curricula are simplistic approaches to complex processes which can be best designed and managed by program directors and residents, rather than congressional leaders who are largely unconnected and unknowing of the issues. Those who inculcate evidence based medicine – i.e. those who are directly responsible for propagating our next generation of physicians – need to regain custody of their training.

Joel Popkin, MD, is a clinical professor of medicine at University of Massachusetts Medical School, the director of Special Services at the St. Vincent Hospital Internal Medicine Residency Program and a staff physician at the Reliant Medical Group.

References

- 1. Spritz N. Oversight of physicians' conduct by state licensing agencies lessons from New York's Libby Zion Case. Ann Int Med. 1991;115:219-222.
- 2. Accreditation Council for Graduate Medical Education. The ACGME 2011 duty hour standards (http://www.acgme-2010 standards.org/pdf/monographs/jgme-monograph.pdf).
- 3. Rosenbaum L, Lamas D. Residents' duty hours-towards an empirical narrative. N Engl J Med 2012;367:2044-9.
- 4. Lockley SW, Cronin JW, Evans EE, et al. Effect of reducing interns' weekly work hours on sleep and attentional failures. N Engl J Med 2004;351:1829-37.
- 5. Moller HJ, Devins GM, Shen J, Shapiro CM. Sleepiness is not the inverse of alertness: evidence from four sleep disorder patient groups. Exp Brain Res 2006;173(2):258-266.
- 6. Landrigan CP, Rothschild JM, Cronin JW, et al. Effect of reducing interns' work hours on serious medical errors in intensive care units. N Engl J Med 2004;351:1838-48
- 7. Pennell NA, Liu F, Mazzini MJ. Interns' work hours. N Engl J Med 2005;352:726-8.

- 8. Jeffrey M. Drazen, M.D. Awake and Informed. N Engl J Med 2004;351:1884.
- 9. Landrigan CP, Fahrenkopf AM, Lewin D, Sharek P et al. Effects of the Accreditation Council for Graduate Medical Education duty hour limits on sleep, work hours, and safety. Pediatrics. 2008;122(2):250-258.
- 10. Lara Goitein, MD; Tait D. Shanafelt, MD; Joyce E. Wipf, MD; Christopher G. Slatore, MD; Anthony L. Back, MD. The Effects of Work-Hour Limitations on Resident Well-being, PatientCare, and Education in an Internal Medicine Residency Program. Arch Intern Med. 2005;165:2601-2606.
- 11. McCoy CP, Halvorsen, AJ, Loftus, CG, et al. Effect of 16-Hour Duty Periods on Patient Care and Resident Education. Mayo Clin Proc. 2011;86(3):192-196
- 12. Antiel RM, Thompson SM, Reed DA, et al. ACGME duty-hour recommendations —
- a national survey of residency program directors. N Engl J Med 2010;363(8):e12.
- 13. Drolet BC, Spalluto, LB, Fischer, SA. Residents' Perspectives on ACGME Regulation of Supervision and Duty Hours A National Survey. N Engl J Med 2010;363(23):e34.
- 14. Drolet BC, Christopher, DA, Fischer, SA. Residents' Re-

- sponse to Duty-Hour Regulations A Follow-up National Survey. N Engl J Med 2012;366:e35
- 15. Sen S, Kranzler HR, Didwania AK, Schwartz AC, Amarnath S, Kolars JC, et al. Effects of the 2011 duty hour reforms on interns and their patients. JAMA Intern Med 25 Mar, doi:10.1001/jamainternmed.2013.351.
- 16. Desai SV, Feldman L, Brown L, Dezube R, Yeh H-C, Punjabi N, et al. Effect of the 2011vs 2003 duty hour regulation-compliant models on sleep duration, trainee education, and continuity of patient care among internal medicine house staff. JAMA Intern Med 25 Mar, doi:10.1001/jamainternmed.2013.2973.
- 17. Joint Commission Center for Transforming Healthcare. Improving transitions of care: hand-off communications. June 27, 2012. http://www.centerfortransforminghealthcare.org/assets/4/6/CTH_Hand-off_commun_set_final_2010.pdf
- 18. Wayne, Diane B. Arora, Vineet. Resident duty hours and the delicate balance between education and patient care. J Gen Intern Med 23(7):1120–1



A Resident's View of How the New 16-hour Rule Has Changed the Workforce

Renu Goyal, MD



Renu Goyal, MD

Undeniably, I have detested the changing resident duty hours in the past years and the impact on patient care. Then, each year, there are few residents who demonstrate amazing all-round aptitude, reminding me that one cannot generalize the impact of training on seasoned physicians and graduating residents.

Current medical practice is far more complex and goes beyond the patient and physician interaction. Every day, a significant portion of the physician's time is spent on EMR, communicating with a multidisciplinary team and explaining diagnostics and treatment choices to patients and families.

As a clinician, here are my observations, pros and cons:

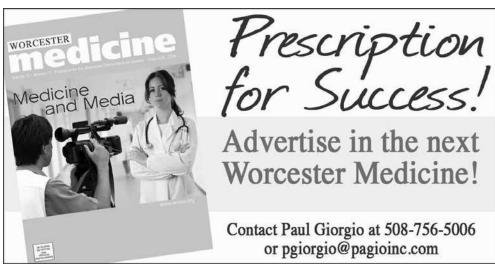
- 1. Limiting resident duty hours (shift mentality) can affect the acumen gained from the longitudinal course of the patient and capability to address long-term treatment goals.
- 2. To compensate for limited duty hours of residents, there were increased costs for same patient care, as practices had to hire NPs and PAs to assist with the duties of the residents.
- 3. Residents and seasoned physicians (both) can improve on quality of hand-offs.
- 4. Seasoned physicians seem to have more clinical experience, perhaps due

to their rigorous training in the past, enabling them to differentiate an acute clinical situation promptly.

- 5. Current residents are more skilled at EMRs and seem comfortable working in a multidisciplinary team setting and implementing protocols.
- 6. Graduating residents may need a seasoned physician to mentor them for couple years in practice.
- 7. Seasoned physicians could benefit from the technological skills of graduating physicians.

As a future consumer, I believe our current graduates will serve the community well.

Renu Goyal, MD, is chief of the Department of Hospital Medicine at Reliant Medical Group, hospitalist at Saint Vincent Hospital and assistant professor of medicine at University of Massachusetts Medical School.



Duty Hours: The Changing Face of Caring for Patients

Deborah DeMarco, MD, FACP, and Anne Campbell Larkin, MD, FACS



Deborah DeMarco, MD, FACP



Anne Campbell Larkin, MD, FACS

Limits on resident duty hours were mandated by the ACGME due to public outcry regarding safety of care that patients receive in teaching hospitals from fatigued physicians. In 1984, the Bell Commission instituted regulations for training programs in New York so that residents had more supervision, could work no more than 24 consecutive hours and no more than 80 hours per week. Calls for further reductions, as well as institution of "mandatory naps" during prolonged work shifts, led the ACGME to convene a Task Force on Quality of Care and Professionalism. Additional changes were made to the regulations, effective in 2011, with more emphasis on the learning environment.

Program directors adapted their curricula and schedules to meet the new duty hours requirements, including the addition of night float rotations and increased handoffs. Many have found it particularly challenging to find ways to insure that the total resident experience creates a fully competent physician. Among program directors' many concerns are the increase in handoffs, allowing independent patient care experiences and overall competency. Since residents are less "present," there is less of an opportunity for learning their craft and less role-modeling by faculty and senior residents. Curricula have been changed to allow for teaching even the most basic skills, such 14 | Worcester Medicine NOV/DEC. 2013

as having conversations with patients, in the classroom, often using simulation.

Literature studying the effects of the regulations on patient safety, clinical outcomes and education is mixed, with increased handoffs and resident burnout as major contributors. While it is too soon to evaluate the effects of the 2011 regulations on patient safety and outcomes, one national survey of residents showed that the majority of respondents felt dissatisfied with their learning environment since the new regulations were instituted. The experience at our institution is aligned with this dissatisfaction. Our internal surveys show that residents often perceive an imbalance between service and education. They feel overworked and perceive less time for learning outside the hospital. Direct quotes from our institutional 2013 annual resident survey include:

"The ratio of workload to education is a little skewed towards the workload. This results in increased fatigue and difficulty with educational productivity."

"The service months are very busy and they don't leave time for learning outside of the hospital."

"The attendings need more academic time for teaching and to help residents with research."

"There is not enough protected time for studying and education. ... too much study and educational time is taken up by service obligations."

"Not much time left over for independent study."

National and local experience does not support the notion that increased time away from the hospital translates into increased studying and reading, as reflected by scores on the in-service exams and board pass rates. Residents relate that they need to read and study more, but they feel too burned out to do so outside of the hospital. Decreased lengths of stay, high acuity of illness, frequent handoffs, copious paperwork and pressure to discharge patients as early as possible are all contributors to resident burnout. This supports the ACGME view that limits on duty hours without changing the working environment will not meet the goals of improved patient safety and resident well-being.

What largely concerns program directors is the perception that residents have lost a sense of ownership. Movement toward a shift mentality is contrary to the environments in which most attendings learned our craft and honed our skills. We struggle with the balance of adherence to duty hours regulations and the ultimate responsibility of teaching residents that our patients must and do come first. While the latest iteration of the duty hours regulations substantially curtailed hours among interns, they also made strides in addressing this particular dilemma. Specific language, noting that residents should attend to the urgent needs of a patient above their own, validated what we all know to be critical in the practice of medicine.

If program directors have struggled with the shift in standards, faculty has struggled even more. The majority of our current work force in medicine is comprised of baby boomers, who are highly committed to their jobs as defining their self-worth. They have difficulty understanding why it can't be like it was "when I was a resident." They feel they have lost continuity with their teams while simultaneously having to perform tasks previously delegated to learners. We hear residents express sympathy for the attending workload and taking over the "burden of care." Unfortunately, faculty often unknowingly place undue pressure on residents, directly or indirectly. Residents are placed in the middle, torn between pleasing their attending and adhering to well-intended regulations.

Changes proposed in the Next Accreditation System align with generational characteristics of our current residents. The millenials embrace teamwork and technology. They like supervision and enhanced oversight as they grew up with "helicopter parents" and often received immediate (and positive) feedback. They work hard but do not measure their worth by the number of hours per week worked, as boomers do. Although most feel that, in theory, the duty hours regulations are a positive step in achieving a safer environment for patients, we must change the learning environment to provide an enhanced educational experience for our trainees. At a time when funding is shrinking, we must examine ways to economize our time without compromising our mission. Currently, we teach out of context and away from the patient. The timing is perfect for a return to bedside teaching, which can "count twice" for the harried attending physicians, who can provide direct patient care and direct observation of trainees. This will also be required as we assess milestones in the Next Accreditation System.

We are at the precipice of massive shifts, both in how we provide care for our patients and how we educate the next generation of physicians and surgeons. The duty hours regulations have provided us a challenge and opportunity to create ways to benefit all those we serve.

Deborah DeMarco, MD, FACP, is senior associate dean for Clinical Affairs and associate dean for Graduate Medical Education and professor of medicine at University of Massachusetts Medical School

Anne Campbell Larkin, MD, FACS, is associate professor of surgery, director of the Surgery Residency Program and assistant dean of Graduate Medical Education at University of Massachusetts Medical School



Nursing Reflections on Resident Duty Hour Restrictions

Dawn Carpenter, DNP, ACNP-BC



Dawn Carpenter, DNP, ACNP-BC

I have worked in critical care for 25 years as a staff nurse, clinical nurse specialist, nurse manager and nurse practitioner (NP). During this time, I have witnessed a transformation of our residents. All of these experiences have shaped my perspectives on recent regulatory changes restricting residents to 16-hour work shifts.

One of the biggest changes, not just in residencies but in hospitals overall, is the transition of hospitals to shift work. This transition has occurred in many services, which may or may not be resident dependent. The reason for this change is that the acuity of patients in the hospital continues to rise. Increasing acuity means the pace and type of care a patient needs escalates. The escalating acuity, in turn, increases the demands on the provider. It's now a rarity that a provider has a "quiet night" in the hospital. Many of our patients require frequent assessment because their health condition is constantly changing. It is now commonplace for severely ill patients to require the persistent and prolonged attention of the provider.

History

Part of the initial resident work hour restrictions included limiting residents to 30 hours of continuous work. The transition to the 30-hour limit was eased by each resident working 24-

hour shifts. At the inception of the NP and physician's assistant (PA) roles in the ICU, many replicated the resident workflow and hours by also working 24-hour shifts.

I observed that fatigue seemed to cause our brains to just stop working or get a little fuzzy in the wee hours of the morning. Little things could wait for the day shift, such as stopping intravenous fluids, advancing a diet or discontinuing a catheter. Subtle changes in patient care were missed or overlooked. The nuances of why someone became mildly hypotensive or febrile were not always explored.

In addition, the providers' personal safety was challenged by the long hours, as they were falling asleep on the drive home and being awakened by the sound of the rumble strips along the highway. Patients didn't deserve a sleep deprived or inattentive provider watching over them. Doctors and nurses took action to remedy the risky situation. Thus, we changed our schedule to work 12-hour shifts, and so, we were well prepared for the regulations that restricted resident hours to 16-hour shifts. Now everyone, NPs, PAs and residents alike, are working 12-hour shifts in our critical care departments and many other services, as well.

Changes

The biggest change I've observed since the 16-hour rule went into effect is that the residents are rested, refreshed and eager to engage in patient care and eager to learn. They are able to be vigilant about the subtleties and nuances of critically ill patients. Changes in patient conditions are noted much sooner,

16 | Worcester Medicine NOV./DEC. 2013

and diagnoses are made earlier. Treatments and interventions, including antibiotics, are instituted in a more timely fashion. Patient progression through the hospital stay to discharge is expedited. As a direct result, it seems to me, patient outcomes are improved, and most importantly, lives are saved.

The second biggest change I noted is that residents are now more engaged in didactic learning. They are reading textbooks while on shift and looking up articles. They are no longer trying to run off to the call room to catch a few winks before a crisis or admission occurs. Residents are more alert and attentive during morning lecture time. Residents are also expected to develop presentations on various topics while on service, and I've observed these presentations have become more thorough and detail-oriented.

One of the most common arguments I've heard against the reduction in work hours is that it has increased the number of handoffs occurring between the 12-hour shifts. Handoff communication is a verbal report from providers to providers about patients' conditions and active problems. Their concern with increasing handoff communications is that patient data is not always communicated verbally. My response to this concern is that handoff communication is a learned skill and by the time the residents rotate through the ICU, they are proficient at this skill. Secondly, the implementation of electronic health records allow for the many details about patients to be accessed easily and aren't as crucial during this verbal report.

In Closing

I am a firm believer that the resident work hour reduction to 16 hours has resulted in safer patient care, improved outcomes and shorter hospital stays. In addition, the health care providers are more productive and engaged. Fatigue is commonly cited as a cause of errors, and for this reason alone, it makes perfect sense to impose limits on provider work hours to assure safer, higher quality patient care.

Dawn Carpenter, DNP, ACNP-BC, is an assistant professor at the Graduate School of Nursing at the University of Massachusetts Worcester and coordinator of the Adult-Gerontology Acute Care Nurse Practitioner track. She is also a nurse practitioner in the Critical Care Department at UMass Memorial Health Care System.



The Affordable Care Act: A Law of Unintended Consequences?

Peter Martin, Esquire



Peter Martin, Esq.

AUTHOR'S NOTE: I wish to acknowledge with gratitude, my partner, Terrence J. Briggs, Esq., for his assistance in writing this article

The rollout of the Affordable Care Act (ACA) has been eventful, to say the least. It is difficult to predict how state governments, providers, insurers, employers and consumers will re-

act to its ongoing implementation or how the law might evolve over time. What is evident now is that its complexity is presenting extraordinary challenges that, as of this writing, have not been resolved. I describe three of these challenges below.

I. Premium Payments

In Massachusetts, our state health reform law for years has required employers with eleven or more employees to provide a so-called "Section 125" plan (named for the section of the Internal Revenue Code governing such plans) to enable employees ineligible for employer-sponsored health coverage to use pre-tax dollars to purchase individual health insurance policies offered through the Connector, Massachusetts's health care exchange. However, a recent ACA interpretation from the Treasury Department prohibits an employer from using a Section 125 plan to allow employees who are not eligible for the employer's group health plan to pay for individual coverage with pre-tax dollars beginning on Jan. 1, 2014.

Massachusetts employers have been urgently investigating

their options. One is to ease the eligibility rules under their existing group health plans to include these previously ineligible employees. Another is to create or join a "private exchange," which might be outside the reach of the Treasury's interpretation. In the meantime, there are indications that the Connector is seeking some relief from this dilemma. But time is growing short for employers to deal with this conflict between state and federal health care reform.

Although the state passed a statute designed to align pre-existing Massachusetts health reform law with the federal ACA, it did not deal with this conundrum, which arose out of a recent federal interpretation of the term "qualified benefit" under the ACA. As of this writing, this unintended conflict between state and federal law has not been resolved, though it is to be hoped that a solution will appear ~ perhaps through additional Massachusetts legislative action or perhaps through withdrawal of the Treasury interpretation ~ before the end of 2013.

II. SHOP Exchanges

Another challenge is posed by the so-called SHOP exchange, which is available for employers with fewer than 50 full-time-equivalent employees as a source of qualified health plan coverage for their employees. All such plans must meet ACA requirements, such as providing minimum actuarial value (coverage of at least 60 percent of a plan's total cost) and essential health benefits. Small employers concerned about the premium costs of plans offered through a SHOP exchange may consider self-insuring. (About 8 percent of small employers currently self-insure.) Self-insured employers are not subject to state-mandated benefits rules or certain consumer protections. The employer assumes the risks that premiums set for

the self-insured plan are insufficient to cover the actual costs of coverage for the year. They protect against catastrophic cases, and the costs they would impose on the employer, through the purchase of stop-loss insurance. A recent study in Health Affairs suggested that because the ACA requires the guaranteed availability of health insurance coverage, a self-insured employer that experiences a catastrophic case one year could seek to obtain community-rated group health insurance the next year in an effort to avoid increases in its stop-loss premiums for that subsequent year.

One possible consequence of this strategy if widely adopted could be an increase in adverse selection in plans offered through the SHOP exchanges. If small employers with younger, healthier employees choose to take the risk of self-insurance, fully-insured plans will carry the greater risks posed by a less-healthy population and will see higher premiums as a consequence. One model cited in the Health Affairs article estimated that the difference between fully and self-insured premiums could be 25 percent for single coverage and 19 percent for family coverage. These differences could ultimately lead to a so-called "death spiral" in the SHOP exchange offerings ~ higher premiums lead employers with the youngest, healthiest employees to self-insure, leaving employers with older and sicker enrollees in the SHOP exchange, which, in turn, leads to departures from the SHOP exchange of the employers with the younger and healthier employees, and so on.

The Health Affairs study concludes that to prevent the ACA's unintended effect of driving small employers toward self-insurance, Congress should prohibit the sale of stop-loss coverage to small employers. While that may be unlikely, what is actually happening according to the study is that self-insurance is increasingly being considered by small employers. Based on our experience, employers do not grasp the level of financial risk that they are assuming when they self-insure. If their premium expectations are not met by the plans offered through the SHOP exchanges, the movement to self-insurance might accelerate, leading to wide-scale abandonment of the exchanges by small employers. This would be an outcome contrary to one of the ACA's fundamental mechanisms to increase access to health insurance.

III. State Exchanges

A third unintended consequence of the ACA is based on the statutory language itself: The availability of subsidized health insurance plans is limited to exchanges "established by the state." In the 36 states that have refused to set up state exchanges, the exchanges are operated by the federal government. Will individuals seeking federal health insurance premium subsidies in those states be denied that assistance because the

subsidies will be offered through federally run exchanges, not exchanges "established by the state"? This is the argument set out in cases pending in the federal courts, which will have to decide whether the quoted phrase is merely an ACA drafting error, and not a reflection of congressional intent, and thus, can be interpreted to include the federal exchanges.

If the courts rule instead that the ACA really does limit premium subsidies to plans purchased through exchanges established by a state, a great many people may be adversely affected. The Congressional Budget Office estimates that by 2016 some 80 percent of people obtaining coverage through exchanges will enroll in subsidized health plans. That amounts to 16 million people, many of whom will enroll through a federal exchange and thus be denied premium subsidies. That is surely contrary to another of the ACA's intended effects: to increase access to health insurance through subsidized coverage.

In addition, this specific piece of statutory language could adversely affect the ACA's employer mandate. Employers face a fine under the ACA if one of their employees obtains subsidized coverage through an exchange. If the employee cannot obtain subsidized coverage because he or she lives in a state without a state-run exchange, the employer ought not to be liable for that fine. The policy underlying the ACA's employer mandate penalty ~ inducing employers to offer health insurance coverage to their employees ~ will be weakened, even after the delay in those penalties expires in 2015.

These three unintended consequences of the ACA derive from three different sources: the pre-existing Massachusetts health reform law, the guaranteed availability of ACA health insurance coverage and other states' refusals to implement exchanges, combined with the ACA's own terms. In normal times, we would expect the Congress to make these kind of adjustments to a major governmental program. These are not normal times, so there is little chance of this happening. Consequently, any resolution of these challenges is likely to come from disparate sources: state legislative or regulatory action, successful efforts to make SHOP exchange coverage sufficiently attractive to small employers and judicial interpretations of congressional intent. Regardless of whether these resolutions are forthcoming, what is clear now is that the Affordable Care Act's scope and complexity presents an example of the law of unintended consequences.

Peter J. Martin, Esquire and Terrence J. Briggs, Esquire are partners in the Worcester office of Bowditch & Dewey, LLP, their practice concentrating on health care and nonprofit law.

Richard H. Angoff, MD 1948-2013

The Worcester medical community lost one of its most respected and beloved physicians when Dr. Richard Angoff passed away in February. Dick was a graduate of the University of Pennsylvania and Georgetown University Medical School. He completed his medical residency at Rhode Island Hospital and his cardiology fellowship at the University of Massachusetts Medical Center. Over the course of his 32 years in practice, he provided dedicated and truly compassionate care to countless numbers of patients and served as a much sought after and invaluable consultant at Worcester City, Hahnemann, Fairlawn, Holden and Memorial hospitals. Generations of medical students, residents and cardiac fellows benefited enormously from his teaching, guidance and experience over the years. He leaves a loving family, including his wife, Chris; daughters, Rachel and Rebecca; sons, Andy, Matt, Mike and Josh; his sonin-law. Paul; and his grandsons, Jameson and Julian. Dick's family was a never-ending source of pride and happiness for him.

Dick is sadly missed by his friends, colleagues and loyal patients, who remember with fondness his wit, his self-deprecating humor and his warm compassion towards everyone with whom he came into contact. To this day, many of his patients continue to vividly and emotionally describe memories of their years of care by Dick that all relate to his kindness, his empathy and his humor. Dick had the rare talent of always being able to put people at ease, be they anxious patients, worried family members or bewildered house staff. A simple and most fitting eulogy came from one patient who simply said, "I didn't just lose my cardiologist, I lost my friend."

The poet Maya Angelou must have had Dick in mind when she said, "I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel." Speaking on behalf of all of the patients that he comforted, cared for and counseled over the years and for all of his friends and colleagues who he encouraged, supported and laughed with, none of us will ever forget how Dick Angoff made us feel.

~ David P. Lyons, MD

Carlton Manville Akins 1940-2013

Carlton "Carl" Akins, MD, passed away on June 9, 2013 from pancreatic cancer. Carl was one of the founding members of the Department of Orthopedics at UMass Medical School. He joined the faculty in 1974, after completing his service in the United States Navy Medical Corps, where he served as a lieutenant commander. Carl was born in Red Wing, Minn., and attended high school there. He graduated from Harvard College in 1962 and Harvard Medical School in 1966. He completed his orthopedic training in the Harvard program and served as chief resident at Massachusetts General Hospital in 1972.

In 1985, Carl was instrumental in founding the UMass Self Insurance Trust, the captive malpractice insurer for the UMass group practice physicians. After the merger of UMass and Memorial in 1998, the Self Insurance Trust morphed into Commonwealth Professional Assurance Company (CPAC), and Carl served as the medical director of that entity until his death. His depth of knowledge in the area of professional liability was legendary, and CPAC thrived under his leadership.

In addition to providing orthopedic services at UMassMemorial, Carl utilized his pediatric orthopedic skills at the Massachusetts Hospital School in Canton and served as the chief of orthopedics there since 1984. He also served as a consultant to the athletic department at Harvard.

Carl leaves his wife of 47 years, Caroline, and his son, Jonas Peter Akins, of Kent, Conn. Carl will be remembered by all who knew him for his dry wit, insightful conversation and his dedication and attention to detail in everything that he did.

~ Stephen E. Tosi, MD

Chief physician executive and sr. vice president of UMassMemorial HealthCare



is now online!



thevitalitymag.com

Current Issue

All the articles & photos
 from our most recent issue
 & archives of all past issues!

Local Listings

- Culture, dining, shopping, entertainment, & more!

And A Lot More!!!

On the Town

- Pictures from local events!

For web & print advertising information contact Paul Giorgio at pgiorgio@pagioinc.com or 508/756/5006

Medical Marijuana

Nicole Mushero, Ph.D.



Nicole Mushero, Ph.D.

When I first came to the debate about medical marijuana, I was in favor of it. Growing up, I had attended many classes and programs, which talked about the dangers of drugs, marijuana included, but it didn't seem to me, from my experience in the world, that marijuana really was that dangerous. The drugs that seemed most dangerous to me were the ones that were le-

gal and readily available. I knew people with lung cancer from a lifetime of smoking. I knew people whose lives had been washed away by alcohol and others who had been killed by drunk drivers. In my experience as a medical student, I've also met people who are addicted to prescription pain medications and have learned how many people overdose on those drugs that doctors hand out daily. In just one month on the wards, I met more than one person who had destroyed their liver with acetaminophen, which wasn't a drug even mentioned in any of those anti-drug lectures.

And yet, I didn't know anyone who had become so dependent on marijuana that their lives had been ruined or who felt that they couldn't get up in the morning without a smoke. It seemed obvious to me that marijuana wasn't as dangerous as some of these other, legal drugs, never mind that it was more dangerous than crack or opiates. But I had no proof either way because there were few, if any, good studies about marijuana addiction or the physical effects of using the drug. This is part of the problem when we are talking about doctors prescribing it to patients.

What I started to discern as I discussed this topic in preparation for the vote at the 2012 annual MMS meeting was that there is a difference between changing the classification of marijuana from a Schedule I substance or de-criminalizing possession of marijuana (which had already been done in Massachusetts in 2008) and making physicians the arbiters of who gets marijuana legally and how much they should take. The fact is no one knows how much should be prescribed or taken by patients. No one really knows the indications for using marijuana or even how much it really helps any of the symptoms it is purported relieve. Although I believe people who currently use marijuana for symptom relief are benefitted in some way, I also believe that the placebo effect is a real thing and that the plural of anecdote is not data. There are many examples throughout even recent history of a drug that is thought beneficial by clinical experience, which turned out not to be when put to the test of a randomized-controlled trial.

I think it is only fair that marijuana be put through the same paces as any other medication that doctors prescribe today. Until that time, I stand on the side of marijuana being declassified, and even decriminalized, but not with those who think it should be prescribed by physicians.

Nicole Mushero, Ph.D., is a third-year medical student at the University of Massachusetts Medical School.

Worcester District Medical Society *Invites you to a*

Holiday Reception &

A Night at the Movies

"Escape Fire"
The Fight to Rescue American Healthcare

Thursday, December 12, 2013 5:30 pm Mechanics Hall

Reception: 5:30 pm; Movie to follow

To Register

E-Mail: wordmsa@massmed.org

Call: 508-753-1579

WORCESTER DISTRICT MEDICAL SOCIETY 8th Annual Louis A. Cottle Medical Education Conference

CEO FORUM HEALTH CARE IN CENTRAL MASSACHUSETTS



Panelists: left to right:

Eric G. Wexler, MBA - President & CEO of the Chicago and New England Region for Vanguard Health Systems and CEO of Saint Vincent Hospital, Worcester, MA

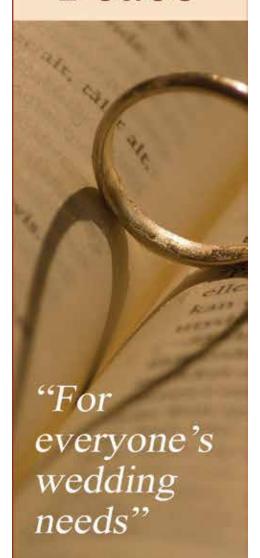
Patrick L. Muldoon, MBA, FACHE - President, UMass Memorial Medical Center, the Academic Medical Center partner of UMass Medical School.

Eric Buehrens - Chief Operating Officer/Executive Vice President, Reliant Medical Group.

Wayne B. Glazier, MD (at podium) - President, Central Massachusetts Independent Physicians Association (CMIPA)

George M. Abraham, MD, MPH - Moderator, Chair, WDMS Medical Education Committee

Commonwealth of Massachusetts Justice of the Peace



Paul Giorgio 508-414-4454 pgiorgio@pagioinc.com Bringing the pieces of your health care together.



NaviCare® HMO SNP personalizes care for adults 65 and older with MassHealth Standard.

You receive all of the covered Medicare and MassHealth Standard benefits, items and services. Your NaviCare coverage and care include:

- a Navigator to help coordinate all your health care needs and a primary care team, including physician, specialists, nurse case managers and social workers
- your choice of primary care physicians from our network
- transportation to medical appointments when authorized
- denture coverage, hearing aids and vision services
- medical care and support 24/7 by phone
- home care and personal care assistance if needed

All at no cost to you!

Navicare is for adults 65 or older who live in the plan's service area and have MassHealth Standard and Medicare Parts A and B, or just MassHealth Standard. For more information, please call:

1-877-255-7108 (TTY users, please call TRS Relay 711)

Monday through Friday, 8 a.m. to 8 p.m. (From October 1–February 14, we're available seven days a week.)

www.navicare.org



NaviCare is a Coordinated Care plan with a Medicare contract and a contract with the Massachusetts Medicaid program. NaviCare is a voluntary program in association with MassHealth/EOHHS and CMS. The benefit information provided is a brief summary, not a complete description of benefits. For more information contact the plan. Limitations and restrictions may apply. Benefits, formulary and pharmacy network may change on January 1 each year.

12-679-042 Rev. 00 8/12 H9001 N 2013 193 Accepted 09222012

World class cancer care, right in the heart of Worcester.

Reliant Medical Group is proud to offer hematology/oncology care and chemotherapy services at the new Saint Vincent Cancer and Wellness Center.

Our staff provides consultations and care inside a soothing, modern environment that has been expressly designed for patients

battling cancer. The new Infusion Center has been carefully created for the ultimate in patient comfort, featuring heated chairs, warm blankets, flat-screen televisions and even iPads® that patients can borrow while undergoing treatment.

oncology program at the Saint Vincent
Cancer and Wellness Center can offer your
patients the very best in cancer care, please call
(508) 556-5400.







Atrius Health

RELIANT MEDICAL GROUP DIVISION OF HEMATOLOGY/ONCOLOGY • SAINT VINCENT CANCER & WELLNESS CENTER
ONE EATON PLACE • 3RD FLOOR • WORCESTER, MA • WWW.RELIANTMEDICALGROUP.ORG



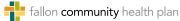
Now she has a helping hand, even when we're not there.

When Grandma showed some signs of dementia, we didn't know where to turn. We were trying to arrange care for her, losing time at work and wondering what to do. A nursing home seemed like our only choice. Then we found Summit ElderCare®, a Program of All-Inclusive Care for the Elderly that has been providing compassionate and cost-effective care to older adults for over a decade.

Summit ElderCare is an insurance, medical care and social services program all in one convenient package that includes home care, personal care and even prescription drugs, when approved. And all approved services are fully covered with no copayments or deductibles.*

To learn more, talk to one of our enrollment specialists or visit us on the Web.





A Program of All-Inclusive Care for the Elderly (PACE) offered by Fallon Community Health Plan

1-800-698-7566 (TDD/TTY: 1-800-889-4106) www.summiteldercare.org

* In some cases, there may be a monthly premium required based on your income or assets. All services must be provided by or authorized by the PACE Interdisciplinary Team (except emergency services). PACE participants may be held liable for costs for unauthorized or out of PACE program agreement services.

09-626-129 Rev. 01 8/11 SEH2219_2007_29 06/25/07

ADMISSION OPEN HOUSE

UPPER SCHOOL

October 27th • 1pm - 4pm

Grades 9-12 and postgraduates

MIDDLE SCHOOL

November 3rd • 1pm - 4pm

Grades 6, 7 and 8





Come CHECK OUT OUR NEW FALL MENU!



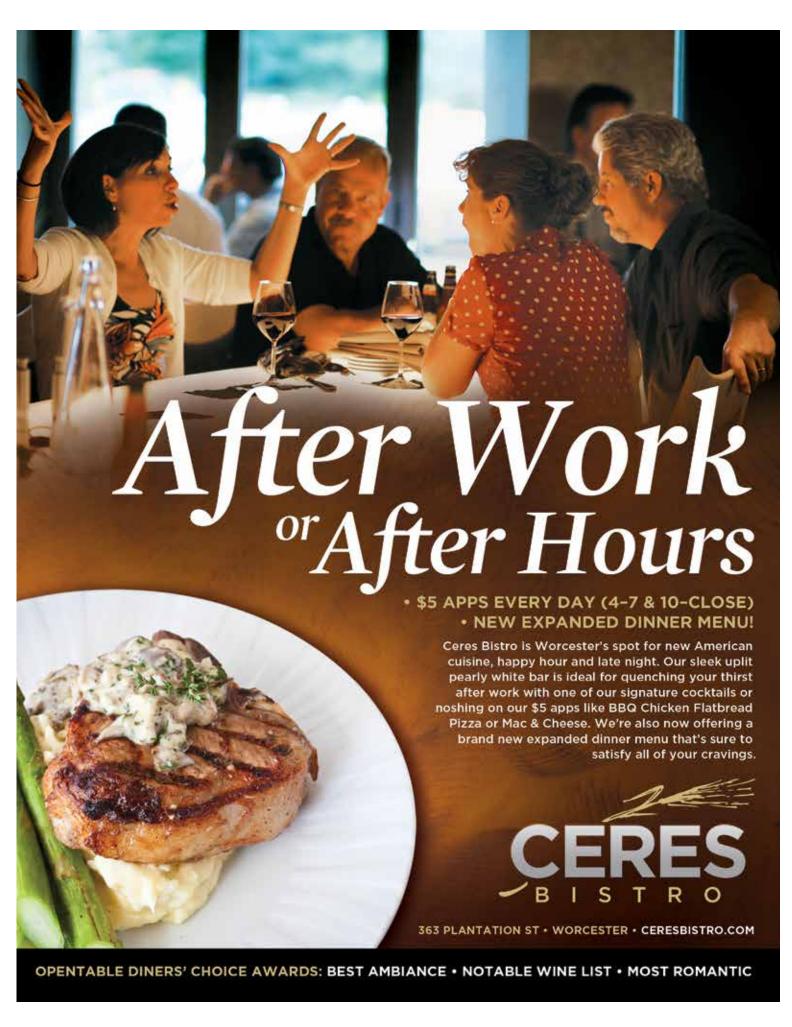








OPEN DAILY 11:30AM 278 Shrewsbury St. 508.757.1450 Worcester www.flyingrhinocafe.com





WEVE MOVED TO A NEW HOME!

#6 Park Avenue

Why hire Worcester and Worcester Counties #1 selling office whether you're selling a property or buying your next?

- √ Most experienced real estate professionals in Central MA.
- √ Maximize your home's price by exposing it to the largest buyer pool.
- √ nemoves.com, coldwellbanker.com, realtor.com, boston.com, trulia, zillow, yahoo, nytimes.com, wallstreetjournal.com, plus a dozen of the best real estate websites.
- √ Looking to buy? We'll help you find your dream home or investment.

We're the right firm for the job.

COLDWELLBANKÉRWORCESTEROFFICE.COM NEWENGLANDMOVES.COM



COLDWELL BANKER D

508.795.7500

6 Park Ave., Worcester, MA 01605

NEMOVES MORTGAGE LLC Call Chris Stelmach 508-635-6770

for financing options