RHODE ISLAND MEDICAL JOURNAL

SPECIAL SECTION

PROGRAM *in* LIBERAL MEDICAL EDUCATION, PART I

GUEST EDITOR JULIANNE Y. IP, MD

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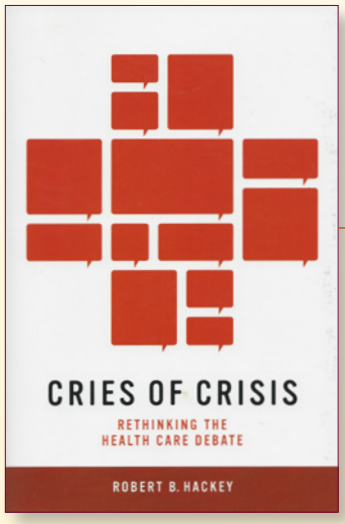

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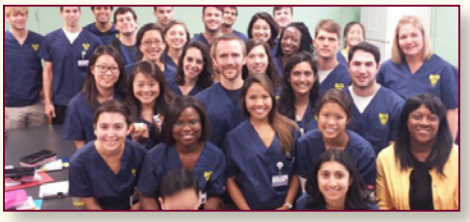

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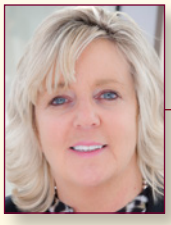

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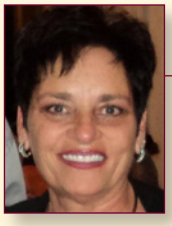

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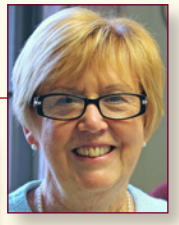

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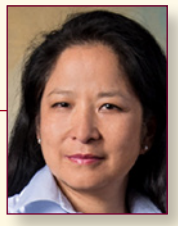

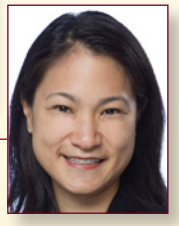

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On Time

JOSEPH H. FRIEDMAN, MD
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I HATE TO WAIT AND I hate making others wait even more. I cannot explain it, but there is something in my personality that simply abhors waiting. I am almost always on time to appointments, as are my wife and children. We're usually the first ones to a meeting. If I'm late I get agitated. Traffic jams are anathema and I try to travel special routes or times to avoid them. I've always been like this but it's gotten worse with age. As a result, I generally run my office on time. Not 100%, of course, but enough that my patients often comment on how they don't have to wait for me. "Dr. Friedman, how do you do it? You're always on time." They tell me of the waits in their other doctors' offices that may extend to hours.

A doctor I know, no longer practicing outpatient medicine, purposely made his patients wait at least 30 minutes. Of course, he had a job at a teaching hospital and was not in private practice. His secretaries were upset on behalf of the patients. He would sit at his desk doing paperwork or reading articles. His feeling, whether stated directly or not, was clearly that he was important: his MD was an abbreviation for "medical deity," and this was his way of indicating where he stood in the hierarchy.

I think most doctors run late because they spend variable periods of time with their patients, and also because of the need to overbook in case of no-shows. I don't think most doctors make patients wait on purpose. I am sure that most doctors, and certainly myself included, also run late because a patient arrives late or requires more time. Traffic can be unpredictable and a 20-minute drive becomes an hour if a car in front breaks down or there's an accident. Once that patient shows up late, the rest of the session runs late. And, of course, patients have all sorts of problems that require either extra attention or simply extra time in which to sympathize, support or explain. Giving an unpleasant diagnosis or prognosis isn't something that fits neatly into a 15-minute time slot.

In my case, patients tend to be very slow and cannot hurry if they're running behind. An unexpected call of nature may add 15 minutes to the trip. And patients who aren't old "regulars" often don't appreciate my compulsion over timeliness and may assume that arriving 10 minutes late still means they're early for when they think they will be called. I often start seeing a patient who tells me that his son, daughter or spouse was supposed to meet him, and that person arrives just as the patient is on his way out.

While no one has complained about me running on time, I've begun to worry that this is a sign of my compulsivity outweighing patient needs. To run on time I need to end discussions. I need to limit, hopefully without being rude or overly insensitive, the number of questions and length of discussion we can have. I allot 20 minutes for a follow-up visit and 40 for a new patient, a bit more than most private practitioners and a lot less than the average academic. At a discussion with one of my colleagues, a department chair, he bemoaned having only an hour with a new patient and 30 minutes for a follow-up. I don't know if I'd be a better clinician with the extra time, but I would undoubtedly seem like a nicer person, and would be less frantic about keeping the next patient waiting.

A doctor cannot please everyone and any compliment can be turned on its head. If I am praised for being "honest" or "direct," by one person, I am undoubtedly being criticized for being insensitive or worse by someone else. If I run on time, the patient and family, especially the child who has taken time off from work to chauffeur the parent, may be ecstatic that they're not wasting the whole morning in the doctor's office, or, on the other hand, may think, "this guy doesn't care. I see him every three or four months and he just wants me out of the office."

How much time is enough? How much time to sympathize for the death of a loved one, for the new diagnosis

of an incurable disorder? We all interact with our patients differently. I believe that these issues are sometimes addressed in modern medical training, as I've seen articles bemoaning the poor job we do. But, no matter how much these interactions are studied, and no matter how much they are taught, we all learn our own way. And no matter what that path is, it will never be right for everyone.

I hope that my patients understand that ending on time means the remaining patients are not going to have to wait. Like doctors, most are very understanding and sensitive to others' needs. ❖

Author

Joseph H. Friedman, MD, is Editor-in-chief of the *Rhode Island Medical Journal,* Professor and the Chief of the Division of Movement Disorders, Department of Neurology at the Alpert Medical School of Brown University, chief of Butler Hospital's Movement Disorders Program and first recipient of the Stanley Aronson Chair in Neurodegenerative Disorders.

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Rhode Island Medical Journal Submissions

The Rhode Island Medical Journal is a peer-reviewed, electronic, monthly publication, owned and published by the Rhode Island Medical Society for more than a century and a half. It is indexed in PubMed within 48 hours of publication. The authors or articles must be Rhode Island-based. Editors welcome submissions in the following categories:

CONTRIBUTIONS

Contributions report on an issue of interest to clinicians in Rhode Island. Topics include original research, treatment options, literature reviews, collaborative studies and case reports. Maximum length: 2000 words and 20 references.

JPEGs (300 ppi) of photographs, charts and figures may accompany the case, and must be submitted in a separate document from the text. Color images preferred.

CREATIVE CLINICIAN

Clinicians are invited to describe cases that defy textbook analysis. Maximum length: 1200 words. Maximum number of references: 6.

JPEGs (300 ppi) of photographs, charts and figures may accompany the case, and must be submitted in a separate document from the text.

POINT OF VIEW

The writer shares a perspective on any issue facing clinicians (eg, ethics, health care policy, patient issues, or personal perspectives). Maximum length: 600 words.

ADVANCES IN PHARMACOLOGY

Authors discuss new treatments. Maximum length: 1000 words.

ADVANCES IN LABORATORY MEDICINE

Authors discuss a new laboratory technique. Maximum length: 1000 words.

IMAGES IN MEDICINE

Authors submit an interesting image or series of images (up to 4), with an explanation of no more than 500 words, not including legends for the images.

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DINOSAUR PROVINCIAL PARK, ALBERTA

Marianne Migliori, RIMJ graphic designer, pauses at the bone bed of a 75 million-year-old Centrosaurus believed to have drowned with hundreds of other members of its herd in a tropical storm surge. The fossils lie at the floor of the Red Deer River valley, in a restricted area of Dinosaur Provincial Park, once the location of a sea shore in the late Cretaceous period.

DRUMHELLER, ALBERTA

The World's Largest Dinosaur, with its jumbo iPhone, stands guard outside the Drumheller visitor center in the Canadian badlands. This 85-foot tall T-Rex would dwarf the real thing (Marianne Migliori sits on its toe). Drumheller is home of the Royal Tyrrell Museum, the largest museum in the world devoted exclusively to paleontology, and with the greatest number of mounted dinosaur skeletons on display.

BOSTON, MASSACHUSETTS

Sarah Stevens, RIMS Office Manager, visited her distant relatives at the Franklin Park Zoo. Critically endangered in the wild, seven Western Lowland gorillas reside here. The Franklin Park Zoo is an active participant in the Gorilla Species Survival Plan. The sculpture of "Kiki and Kimani", by sculptor Janice Corkin Rudolf, was unveiled May 5, 2007 and was the final touch to the renovated indoor gorilla exhibit.

Wherever your travels take you, be sure to check the latest edition of RIMJ on your mobile device and send us a photo: **mkorr@rimed.org.**

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Task Specific Tremors

JOSEPH H. FRIEDMAN, MD

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A patient reported bilateral hand tremors when writing but not with other tasks. These "task specific" tremors are considered subcategories of essential tremor. Primary writing tremor, in which the tremor occurs only with writing, is probably the most common. The important teaching point is that the "standard" tremor assessment, watching the patient holding a sustained posture and touching his finger to the examiner's and then back to the nose is not adequate. Patients should be tested doing the activity that causes them the most difficulty.

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The new **IMAGES/VIDEOS IN CLINICAL MEDICINE** Section is open for submissions. Original, high-resolution images and videos which have not been published elsewhere will be considered. In a separate Word document please include a brief title, legend (150 words or less) providing relevant clinical information, findings, clinical course, and response to treatment if initiated. Any identifying information should be removed from the image.

Please include authors' names (limited to two authors), academic positions, address, email and telephone number.

Submissions should be sent to Dr. Joseph H. Friedman, editor-in-chief, joseph_friedman@brown.edu
and Mary Korr, managing editor, mkorr@rimed.org.

Overview of Brown's Unique 8-year Program in Liberal Medical Education (PLME)

JULIANNE Y. IP, MD
GUEST EDITOR

I am guest editing this month's and next month's editions of the *Rhode Island Medical Journal* (RIMJ) because I felt the need to share with the greater RI medical community some of the lesser-known aspects of Brown University's eight-year baccalaureate-MD program, the Program in Liberal Medical Education (PLME) and the Alpert Medical student's journey into medicine. As the Associate Dean of Medicine for PLME, I have the privilege of interacting with these students for eight years – the most formative years of their lives. I have included works that are scientific, reflective and creative from the PLMEs as well as Alpert Medical students who entered via the "standard route" of admissions.

This effort is dedicated to former Dean of Medicine David Greer, MD, whose vision created the PLME. His passing was a great loss to medicine, society and many of us personally; may this tribute be fitting of his legacy.

First, a brief history: in 1985, Dean David Greer and the then Associate Dean of Medical Education, Stephen Smith, created the PLME. They wished to accept the "best" high school students who would utilize Brown, and the College's unique Open Curriculum to craft their own educational paths. These individualized educational plans would allow students to pursue their passions be they in science or liberal arts but always with the view of medicine as a humanitarian pursuit, not a "trade" to be learned. Each PLME has always worked with an adviser to choose courses as well as activities during the academic year and summers that would allow them to fully develop personally, academically and professionally.

I focused on three specific areas to highlight in this edition of the RIMJ: first the "liberal" aspect of the PLME, through our special courses, preclinical electives, creative writing and reflection. This section culminates specifically with a piece from the Student Health Council which often helps students as they delve deeply into being a healthy, well-balanced, future physician. One of Brown's core competencies has always been self-awareness and the ability to develop professionally and these pieces are a small representation of how our students find their values.

Next, in Part 2 in the August RIMJ, I provide a current synopsis of our Brown medical international "exchange" programs. Dr. Greer was very active internationally as he felt the United States could learn a great deal from other nations. He was recognized with the Nobel Peace prize for his international work. And finally, I have included scientific research pieces that our students have written highlighting another core competency, lifelong learning. All Brown's PLME and AMS students are intellectually curious, strive for academic rigor and look to solve ongoing problems in the world. A quick note: these pieces were all voluntarily submitted when I sent out a general call for student participation. These are not necessarily representative of all the students' work but those who chose to share.

As the AMS and PLME strive to provide opportunities to broaden our student's perspective in caring for their patients, there are specific pre-clinical electives and now a new PLME course: Creative Decision Making, for students to take. The Creative Decision Making course is co-lead by one of our dedicated Medical Humanities faculty, Dr. Jay Baruch. He partnered with Rhode Island School of Design Museum Curator and Educator, Hollis Mikey, first in offering a pre-clinical elective in Medical Humanities and now a full-fledged course, Creative Dimensions of Medical Decision-Making, whose expressed mission is: to "think about how we think…to reflect on our habits of mind — how they shape our perceptions, interpretations, and critical decisions. Even in circumstances of complex problem solving, we are frequently unconscious of how and why we make the decisions we do; the assumptions made, the cognitive shortcuts taken, the narrative structure imposed." Emphasis will be placed on examining "Uncertainty and mystery which are critical dimensions of medicine. Rigorous out-of-the-box thinking and reflective skills which make for efficacious diagnosis and treatment cannot be acquired by leafing through books or staring at the pixels of PowerPoints; thus students will engage with creativity as ways to meet the challenges of medical practice." This and other medical humanities efforts are supported by Dr. Fred Schiffman and our local Gold Humanism Society chapter and Brown's Creative Arts Council, from whom I received a grant in support of the course.

This effort is dedicated to former Dean of Medicine David Greer, MD, whose vision created the PLME.

This course follows the fall semester PLME senior seminar which is an interdisciplinary and integrative science course that supplements the preparation of PLME for the study of medicine in the 21st century. The PLME Senior seminar which I lead uses a case-based approach to relevant

and contemporary subjects in medicine and health care, such as biological systems and their interactions, mechanisms of intra- and intercellular communication, drug therapy optimization, and humanistic aspects of patient care as well as addressed the social, behavioral and ethical contexts of health care in context of health care economics. One of the most important parts of the course is narrative reflection. As the course leader for this class, I highly encourage our students to be self-reflective and approach medicine empathically through these reflections. The first writings presented here are three reflections for the semester. After the student's submit, I respond to each student individually pushing them to think more deeply, challenging them and encouraging them to shift from their own lifelong learning to caring for patients. Our Associate Dean of Medical Education, Dean Allan Tunkel has been extremely supportive of these efforts as was former Associate Dean of Medicine Philip Gruppuso.

Author/Guest Editor

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Poetry of PLME, AMS Students

The following poems express the creativity of The Brown Program in Liberal Medical Education Program (PLME) and Alpert Medical School (AMS) students.

RADICAL. *2007, August*

MARA FEINGOLD-LINK, MD'17

"In 1980 the patient suffered from a right breast carcinoma. A total mastectomy was done, possibly a radical mastectomy."

Radical: of or going to the root or origin.

Radical: thoroughgoing or extreme, especially as regards change from accepted or traditional forms

Radical: favoring drastic political, economic, or social reforms by direct and often uncompromising methods

In 1980, radical feminist Audre Lorde, (Radical feminism: a movement based on the belief that the power structure in society is the diffuse and male-dominated patriarchy, which works to oppress countless populations and individuals, including all women) published her memoir, *The Cancer Journals*, about her experience with breast cancer, from biopsy to mastectomy.

(Radical: losing a part of one's body.)

Lorde describes in detail

her vicious pain and the

excruciating process of recovery.

(Radical: speaking openly about one's body.)

(More radical: a woman speaking openly about her body.)

(Even more radical: a woman speaking openly and simultaneously about the pain, ugliness, horror, beauty, strength, and love of her body.)

That same year, Janice Robertson,

who had never heard of Audre Lorde

and would not have called herself a feminist,

found a lump in her own breast

that the doctors decided was malignant.

Her current doctor writes that she underwent

a radical mastectomy,

(Radical mastectomy: surgical removal of the breast, underlying muscles, and lymph nodes in the axilla.)

maybe.

(Radical: that neither the patient nor her doctor knows for sure what surgery she received.)

Post-surgical checkup:

What is the origin of the pain? asks the doctor.

The patriarchy, answers Audre Lorde.

I don't know; it's all over, answers Janice Robertson.

Can you point to it? asks the doctor.

I wish, answers Audre Lorde.

I wish, answers Janice Robertson.

WHITE

ALEXANDRA WONG, PLME'18, MD'22

I hate white.

Paper.

The blank sheet in front of me mocks me, daring me to write something on it. Daring me to destroy the innocence, the purity of that flawless white. Daring me to besmirch perfection with the abstract smudges of graphite, or the dirtying blots of ink. Daring me to write something of worth – something worth butchering trees, something worth bleaching their natural splendor.

Snow.

The blizzard storm outside the window stops me, masking everything from my sight. Masking the warmth of a fire, the vitality of those flickering tongues. Masking the golden glow of the sun, or the silver shine of the moon. Masking anything of worth – anything worth seeing, anything worth noticing at all.

Four months ago, I never would have thought that I'd have to choose life or death for another person. Four months ago, I would've avoided this white, sterile room, this white, sterile bed, this white, sterile blanket.

This white, sterile person.

The blood is gone from his cheeks, once rosy and plump. The sparkle is gone from his eyes, once innocent yet penetrating. That was before a freak spell bubbled inside of him. The glow is gone from his skin, once radiant but soft.

Now, those specialists, resplendent in their white, clinical lab coats present me with a choice. A choice of life or death.

When I had my son, I was prepared. Prepared for the sleepless nights, the accidental magic, the energetic babbling. Prepared for the hair-color changing, the rebellious teens, the exploding food. I was happy to take those responsibilities. The bad came with the good, and I could find balance.

But this? The choice to encase him in a white, plastic tomb, still breathing, or to seal him into the earth, not breathing? What kind of a choice is that?

One spell. That's all it took: to seep into his veins and immobilize his nerves, throwing his natural chemical reactions into chaos. "Magic is just directed energy," they told me. I'm not stupid, I told them. Give me the science, and don't patronize me.

Silver-rimmed glasses slid down a nose, the eyes above it evaluating me. "Magically induced comas result from the blockage of the electrical signals of the nervous system. There are two types of such comas: one from an energy 'force field' blockage, the other from the disruption of electrical signals." He paused. A white, arched eyebrow. Continue, I said, my voice dead.

"Theoretically, to destroy the coma, you would break the force field or absorb the energy disruptions. But there aren't any therapies for that."

None? I ask mockingly, looking at this sheet of paper in front of me. No research papers published on the topic, their words and words of black meaningless?

"This spell," the white-haired man in front of me frowns. "It was painful. Spells like these augment the both the hormonal and electrical signaling in the nervous system. The magical energy tends to prefer the electrical side by exciting the electrons, although it also adds to the activation energy for the binding of neurotransmitters. Unfortunately, this spell wasn't developed well, so the curse isn't very stable. The magical energy wasn't a concentrated, controlled emotion, like normal incantations. With all of that extra magic bouncing around inside of him, it was almost a form of radiation, and it spread all across his body."

What do you get, when you combine radiation and spreading?

The dull beeping of monitors replaces the cracks of gunshots. Chemotherapy drugs and radiation treatments replace the last resort of the hydrogen bomb. The cancer cells are the terrorists, and the hospital bed is the battlefield.

Cancer.

That white tumorous mass. Growing inside of him, sucking out the warmth from his blood, the strength from his muscles, the life from his body.

The light from his eyes.

One cell. That's all it took: to replicate unregulated and spread across his limbs, destroying every healthy part in its path.

When I learned of my son's powers, I thought that magic could solve everything. With a muttered incantation, it should have evaporated the tumor in the blink of an eye. Apparently, magic doesn't work like that. Not biologically.

What use was magic, then?

What choice is this?

Four months, the specialists gave me. Four months that he could run around, smashing his toy cars together and smiling that beautiful baby smile. Four months for him to chase the blue jays flitting about our backyard, to inspect the creatures dancing on the water's surface in our neighborhood creek. Four months for me to say goodbye.

Three pieces of paper for me to read. Three pieces of paper to sign.

Two days to decide to keep him on life support, or to let him go.

Let him go? How could you possibly ask a mother to let her son go? When he's just begun his life, his new eyes barely taking in the rainbows of colors and shapes in the beautiful world we live in? When he hasn't learned the pressures of middle school, the pains of a broken heart, the happiness of a healed one? How could you ask a mother to snuff out her child's life? How could you?

How could you?

One signature, and it was done.

One name.

Bianca.

They unhook him from all of the machines, removing the tubes that kept him entangled in this white, barren battlefield.

It took three breaths.

Two blinks.

One smile.

Snow.

And yet, the flakes of water sprinkled across your eyelashes can be the most delicate blur to see. A perfectly ordinary substance changed, sculpted, assembled. A crystal, flawlessly formed with its microscopic beauty, and its sparkling structure.

Paper.

And yet, the dark symbols on a piece of perfect paper can be the most satisfying work to see. The culmination of hours of emotion, of heart, of soul. A bubble, capturing the very essence of a person's existence, or a person's imagination.

I hate white.

MATTERING

ZOE WEISS, PLME'12 SCB HUMAN BIOLOGY
AND AB ANTHROPOLOGY, MD'16

I think I've forgotten how to write.
Poised above a keyboard reaching for just one of
a dozen thoughts each darting by –
    gray and intangible,
as if my focus could not
    — hold —
to capture even a single frame.

So here I am, armed with a *third* cup of coffee,
a pile of half-opened deliberations
creased into bookmarks, tucked into a wide white pocket
writing about how I cannot write anymore.

My fingers — charmed into self-assurance
Tracing intersecting stains into perfect rings
As if to *reassure* the wood

It's not that I used to have such profound thoughts
and suddenly have deadened.

On the contrary
    they were *more-often-than-not*
        tritely existential, too proudly compassionate
written with the candor of a young scholar balancing cynicism, optimism, and reason,
    Animated by the notion that I may consider what does or doesn't matter,
    about the meaning of mattering,
    and the *mattering of mattering*.

Until I have been immersed in mattering,
    By a role most inconsequential.
    Un-pretty-un-poetic- awkward-flustering-nearly-always-lost

Watching the rise and fall of a rounded baby belly, shaken into cerebral oblivion,
    jarred by the shrill of the monitor remembering
Awed by toddlers whose bones break and bend and bruise
    Begging for a sticky purple popsicle
Who become children chasing cars into streets and out of trees;
    To teenagers whose dark eyes cast nooses as they roll,
Into young mothers, hair pulled tight,
    Too thin or too thick, painted with worry,
    lipstick, and cigarette smoke,
        A sleeping number to the hip, another tugging, screaming at her shirt,
            Dulled by paint chips, cockroaches
            coughing on air heavy with smoke and smog and violence.

I think those are things that matter.

But here I am, and wordless, paging through manuals
Dense with impressive language, surely
I should find a formula,
    Highly regarded, double blinded, multiphasic, systematic
Explaining this hierarchy of mattering
    Fashioned from rules spun by egos, debt and deprivation,
    Transiently occupied by people named "the ruptured spleen" and the "epidural in room two."

Here is where I begin forgetting.

Reflections from Students in PLME Senior Seminar, Doctoring Courses

The first reflection based on a prompt in the PLME Senior Seminar asking students to "think about when they or a family member may have been a patient." The preceding classes were breast cancer-related with genetic testing, choices about treatment if BRCA genes were identified and included a patient panel discussion with patients presenting their perspectives on their choices. After reading the submission, I would use the opportunity to send back comments and additional questions. For Eric Bai's reflection, for example, I would ask about "empathy" and how a physician might have addressed his family's needs. I would ask about cultural competency and how the US health care system might have integrated some traditional Chinese medicine into the care of his grandfather and finally, I would ask about Eric's reaction to dealing with death and dying.

PERSONAL REFLECTION ON END-OF-LIFE CARE

ERIC BAI, PLME' 16 SCB COMPUTATIONAL BIOLOGY, MD '20

Earlier this year, I saw how difficult it was for the doctor, patient, and family to decide not to proceed with treatment for a terminal condition. When I went back home last winter break, my grandpa (my mom's dad) had just checked into a local hospital a few days before I arrived, after weeks of a weak appetite and worsening jaundice. The doctors do an MRI and find two suspicious nodules in his pancreas. They operate a few days later and find late-stage pancreatic cancer. His symptoms are a result of the tumor impinging on neighboring vessels.

Everyone in my family, especially my grandpa and mom, takes this news with a businesslike trust in modern science. They had seen how much allopathic medicine worked – how "there was a pill for that" – and, coming from the spotty medical care of Communist China over twenty years ago, had spent their lives building trust in this paradigm. My mom wants to find "the best" treatment through whatever means possible, but it is very difficult since we were nearing the no-man's land between Christmas and New Year's. Somehow, we land an evaluation at City of Hope, one of the biggest cancer specialty hospitals in our area and also the closest out of all of our options, a few days before Christmas. And they take Medicaid. We think our luck has turned.

Grandpa is discharged from Whittier Hospital and, on the drive over to City of Hope, my mom talks on and on about all of the new treatments available for these types of invasive cancers, throwing around phrases like "radiofrequency ablation" or "targeted therapies." We get there, sit in a wonderfully sterile waiting room, and, a few hours later, find ourselves in a sun-filled exam room with a young Asian-American oncologist probably no older than 35. He speaks a valiant, if somewhat broken, Chinese and, on this foundation of a fluctuating language barrier and hope bordering on desperation, the conversation begins.

My mom clutches her paper filled with notes carefully transcribed from a phone call with a doctor-friend. She methodically runs through a list of possible options – what about X for his constipation? How about Y for appetite? Can we do Z to see if the tumor can be reduced? She looks over at me with a hopeful smirk: "I am a patient advocate who knows what's up and we are going to get this all sorted out."

My grandpa speaks no English and has only one question: "What can I do to live?" He says that he'll do anything, even chemo. Ever since I was very young, he's been afraid of dying. And so he pushes the question and my mom willing and gladly translates. She adds on all of the new therapies that she read about online earlier that day.

The oncologist looks thoughtful and starts laying out some options: "Don't rush. We have to see the best course of action." He seems to be the model of good physician behavior: he listens, answers questions, and addresses concerns. But he does not offer any of the guarantees that we are looking for. Nevertheless, he agrees to check my grandpa in that very same day.

So begins the long penultimate stay. Some combination of my dad, mom, sister, aunt, grandma and I take shifts at his bedside. We go in the morning. Another crew goes in the afternoon. My mom takes a few months unpaid leave from work. We bring him porridge, some preserved vegetables, chicken soup. We go hunting for fucoidan at all the local vitamin shops, because that's what the Chinese newspaper says cures cancer. We find it on Amazon and do next day. We give him 6 pills of fucoidan extract and a cup of lingzhi mushroom extract each day. Grandpa is restless and too independent. He doesn't listen to his nurses. He scares them.

After a week of procedures and tests, we go to the hospital in the late evening, around 4 p.m., to meet the oncologist for the final report. He and my mom stand outside of grandpa's room. He starts talking and the first two words that come out are, "I'm sorry." Bad news. You can see the realization

dawn on my mom. Her eyes dim. Her shoulders sag. But she continues to nod graciously and starts asking about next steps and what the handoff is going to be like. Ever the knowledgeable consumer.

The oncologist then goes into the room to break the news to my grandpa. Armed with his broken Chinese, he starts talking about quality of life and how chemo at such an advance age and state of disease would do more harm than good. My grandpa grabs the doctor's hand and begs for chemo. He says no. But my grandpa won't let go. This was one of the hardest things to watch.

And so he is discharged from the hospital and gets transferred to a hospice in Whittier a few blocks from Whittier Hospital, where he started this journey and where my sister and I were both born. They say he has one more month to live. They take him off all of his medications. Palliative care they say. He just needs to be comfortable. Stronger painkillers. His feet are grossly swollen. They lift them up to help the fluid flow out. My mom is concerned that the nurses aren't giving him enough attention. She puts up notes all around his room instructing the nurses on what to do. We go one morning and find him shivering without covers next to an open window. My mom is furious and we bring our own blankets. He doesn't eat much anymore. He gets fainter. He used to hold our hands when we went to see him but now, just a few days later, his eyes are blank.

Zheng Zhi Bo passed away at around 1:12pm on 1/12/2014. His room number is 112. He is a few years past 90. All told, this process goes from 12/19/2013 to 1/12/2014. Just 25 days. He is peaceful, no longer in tremendous pain. And we are glad to see him go.

My mom still somewhat clings to her alternative histories. If only he had been transferred to a higher-level facility sooner. If only his damn family physician had been more mindful of his complaints earlier. If only the nurses hadn't forgotten to cover him that morning.

For me, I can't know any alternative histories and the matrix of interactions is too complex for me to trace any meaningful trail of blame. I think about how difficult it must have been for that oncologist to say no, show restraint, and turn away in the face of such an eager, willing, and determined patient. I think about how my mom looked everywhere for sources of information to know how to proceed in the face of a condition that worsened by the minute. I think about what it is like to work in a place where people go to die. From this all, I know that restraint, patience, attention, and empathy are gold-star traits of a good physician. We can't predict what might be different, but we can listen to work towards the most humane outcome.

Reflections from Doctoring Courses

Similarly this type of reflection is submitted by students in the Doctoring courses year one and two of medical school. Each small group has a physician and a behavioral science faculty who similarly respond to the narratives. This student reflected on the "Check Lists" that the Doctoring course uses to help students with taking medical histories in a complete and orderly fashion.

Reflection for Doctoring: *"You come to medical school like anyone else." (A reflection on lists) As a Doctoring small group leader, we are asked to read and respond to our students' thoughts on medicine and medical school. While I was not Sarah's small group leader, if I had been, I might have taken the opportunity to push her to think more about "death" and how she was dealing with it based on her writing about her cadaver. I might ask her if she thought she "belonged" in medical school as so many students have doubts about this early on…and perhaps I would ask her how she was going to take care of herself as she progressed on her medical educational journey.*

CHECK LISTS AND THOUGHTS IN THE ANATOMY LAB

SARAH MAGAZINER, MD'19

There is a unique, somewhat arbitrary transition that occurs when a person is accepted into medical school. I remember, for example, the concern people had for my significant other during revisit weekend when we spent an hour in the anatomy lab peering into open chests, cradling various organs and limbs, and admiring the superior ventilation system. The assumption seemed to be that since my partner had not gone through the motions of a pre-medical student he was somehow less equipped to handle the sight of a cadaver – that the act of being accepted into medical school had automatically elevated the rest of us to a level of preparedness to deal with the complexity and intimacy of the lab and its contents, prematurely setting us apart from those *not* destined to be doctors.

The weekend was punctuated with moments that illuminated this hazy distinction and made me feel as if I had crossed an invisible threshold. When an admissions officer read aloud a list of impressive facts about the newly admitted class, I felt like I had only just been pressing my nose up against the glass, peeking into a world that I hoped to gain access to, and now I was magically on the other side and the people they were describing were my peers. I had somehow

made my way onto the admitted list, and I am continuously reminded that it is a highly privileged place to be.

In our Doctoring course we have been taught a list of questions to ask regarding a patient's chief complaint and the history of their present illness. And each day when we enter the anatomy lab, we are presented with a list of structures to find, accompanied by beautifully precise diagrams with color-coded labels. In either case we are told beforehand that the reality won't be anything like the books and there are moments when I realize that the list can't apply and the lines grow blurry and panic sets in: the veins aren't blue and the arteries aren't red, the structures are abnormal and the questions need to be modified because the patient isn't complaining of physical pain, she's worried about weight gain so on a scale of one to ten her pain is…different.

And in real life, my pain is different, too.

My most recent position didn't make it onto the highlight reel of profound accomplishments, prestigious jobs and exotic experiences, and it certainly can't be found on a list of pre-medical requirements. That is because the last job I held before coming to medical school was that of a full-time patient. I have accrued my own list of experiences and questions; my own private tally of fears, scars and discomforts. And like the infections that invaded my body, they remain invisible to the outside world. I often wonder if my ability to fully feel like a medical student is at all compromised by the fact that I have lists of medications to take each day, that I still spend a considerable amount of time in the doctor's office receiving treatments, or that I identify much more with patients than I do with doctors. As I get to know my classmates and start connecting faces and personalities to the impressive resumes, in my mind, the patient version of myself still cowers behind the glass feeling slow, clumsy and self-conscious about all the healing I have yet to do.

The more I get to know my new peers, it is not hard for me to understand why this group that I am now a part of is one that commands respect and responsibility before we have even truly earned it. Yet, as Robert Lowell points out in his essay *The Body of Strangers*, given the lack of "any *real* change in our abilities to help people," this transition represents a sudden inheritance of "more power than is yet deserved," and an expectation of "readiness" that others are not assumed to possess.

Writing this reflection only hours after removing a human heart and holding it steady while my classmate sawed through it, I remain humbled by this reality and increasingly aware of the parts of me that linger behind the glass, looking in at my current self. I admire how convincing I look in my scrubs, scalpel in hand; hear myself rattle off the names of the nerves in the posterior mediastinum; watch as I inspect what my classmate calls a "crazy looking tumor" on the lung of the cadaver on the next table. But I also think of my own experience with the grueling uncertainty of illness and wonder, as we sort through her insides, if we are addressing any of *her* unanswered questions; if this intimate vantage point sheds light on how she struggled in her final days. I see the slight shudder that goes through me when I glance past the gaping thoracic cavity and catch site of the cadaver's arm. I am reminded of my grandmother's soft papery skin and have the fleeting thought that maybe I should cover the cadaver up so she doesn't get cold. I think of her family, surrounding me in my position behind the glass, and have the urge to protect them, too. And I realize that my preparedness for this particular task is not intrinsically linked to how much I can separate myself from my humanity, how fully desensitized I can become, or to what extent I can repress my identity as a friend, a member of a family, or a patient. In reality, the glass is a mirror and the parts of myself that feel at ease in this environment are not that separate after all from the parts that remain fearful and uncertain, or even sick.

In fact, I think they need each other.

I expect that one of the more fulfilling aspects of medical school will be fostering these different parts of myself while accepting that they can, in fact, co-exist. I anticipate coming to acknowledge the hidden vulnerabilities that lie within others, appreciating the abnormal structures I encounter, and embracing any and all deviations from the lists. If it comes to a point where I struggle to do so, all I will need to do is hold up a mirror.

In the Doctoring Course, students may use the opportunity to reflect and try to make sense of their "past" lives as they journey into becoming a physician. The following three submissions are from another from medical students either reflecting or writing creatively to help themselves meld their personal and professional lives.

REFLECTIONS ON BEING A DOULA

KIRA NEEL, MD'18

Whether the parents-to-be I sit across from are 16 or 35, most conversations start with relatively blank stares and the question, "so…what exactly does a doula *do*?" Some women hear about doulas from friends who have used one, or from magazine articles, while others may learn about doulas from their providers, or pregnancy books. Continuous labor, delivery and postpartum support in the form of a birth doula is becoming more common as the positive benefits to birth outcomes become more widely known; yet doulas are not available to everyone. Doula services are generally paid for out-of-pocket and can cost anywhere from $400-$1,000 in Rhode Island. Relatively speaking, compared to the total cost of a hospital delivery, this is not a lot of money, but for many families, the cost is prohibitive. In response to this, national organizations, such as Health Connect One, train and provide community based doulas free of charge to low-income women.

I moved back to Providence in the fall of 2013 after years of working in the theater, and as a doula, in New York City. Upon my return, I reconnected with a mentor who asked if I was available and interested to attend births *pro bono*. I was! The first birth I attended was for a woman whose partner was incarcerated. Throughout labor – between meditating during contractions, receiving an epidural, eating containers of jello, sleeping, telling stories, and texting to remind her kids at home to do their chores – she received regular collect calls on her cell phone from her partner in prison. She kept him updated on the progress of her labor. They cried together sometimes; he consoled her, made her laugh and told her the sorts of sweet things we all hope our partners will say during labor. He told her he believed in her, he apologized for not being there, and yet, he was there, as best he could be. Late that night, she delivered their son vaginally, gave him the name they agreed upon, and began breastfeeding.

After delivery, birth doulas have an additional postpartum visit with parents and new babies at their home. We take that time to tell the birth story, process any remaining questions around the birth, and check in on how the transition home is going. I visited this mom for our postpartum visit on Halloween night. Her elder children were out trick-or-treating, and she was at home with her newborn baby. She shared the challenges of this initial postpartum period – she felt isolated, needed help with breastfeeding, missed the company of other adults, and was generally exhausted. Her sense of isolation was exacerbated due to the absence of her partner, but her feelings of exhaustion, struggles with breastfeeding and missing adults is common with many new moms I've worked with. I tried to connect her to services and mom support groups, but when I heard from her a few weeks later she had stopped breastfeeding and sounded resigned to making the best of her situation. (Since that time, there is now a Baby Cafe in Olneyville, and another slated to open in the summer of 2015 in South Providence, which is a great resource for pregnant and new moms seeking breastfeeding and social support).

As I transition into medical school, I continue to work as a doula whenever possible. In early 2014, Gina Rodriguez-Drix, Jennifer Rossi and I started the Doula Collective to expand access to free doula services in Rhode Island. We currently provide free doula services to teen moms, in partnership with the Nowell Academy, a charter school in Providence and Central Falls, specifically designed for pregnant and parenting teens.

I am excited to share my experiences and training with my medical school classmates. In the spring of 2015, the Doula Collective will be leading a workshop on doula care with Brown medical students thanks to a Petersen Fund grant from AMS. Lessons learned from my experiences as a doula are invaluable in shaping my vision for what it means to be a doctor: recognizing the importance of community-based partnerships; acknowledging patients' emotional responses to physical processes; navigating the boundaries of being emotionally present and holding space for a family while not making the process be about me; and learning how to take care of myself while on call, during labor, and after a birth. I am so thankful for the trust my clients have put in me, and grateful for the opportunity to be able to share my skills with the Providence community. It is my hope, and that of the Doula Collective, that, moving forward, we can create enough awareness of and access to doula care that the question of the future will instead be, "Hi. So, who is your doula?"

The 'L' in PLME: A Broad Approach to Medical Education

JULIANNE Y. IP, MD

The "L" in the PLME stands for Liberal and we strive and encourage our PLMES to have a broad-based liberal education with the underlying pedagogy that medicine is practiced in the real world. Students need to have an understanding of economics, political science, social and behavioral science as well as the humanities. Music and art bring cultural understanding and humanism to the practice of medicine. The AMS also offers "Pre-clinical electives" covering an array of topics including but not limited to: Complementary and Alternative Medicine, through Biotechnology or Informatics in Medicine, Fetal Medicine, Wilderness Medicine or Opera and Medicine.

The following is a final paper from the Opera and Medicine elective. This elective as with other medical humanities electives pushes our student to "think out of the box" and experience the human condition as others have throughout the ages, through the creative arts.)

DULCAMARA THE DUNCE: PERCEPTIONS OF PHYSICIANS IN *L'ELISIR D'AMORE*

DILUM ALUTHGE, PLME'15 SCB APPLIED MATHEMATICS, MD'19

Before the advent of the germ theory of disease, and other such seminal discoveries in medicine, those who occupied the role of physician in Western society generally had no effective medical care to offer their patients, instead relying on placebos, superstition, and "treatments" (such as bloodletting) that often did more harm than good.[1,2] Because of this inability to properly treat patients, physicians of the time were often seen as incompetent and self-serving. These perceptions manifested themselves not just in society but in the various works of art produced during the time, such as operas. An excellent example is Donizetti and Romani's 1832 opera *L'Elisir d'Amore* ("the Elixir of Love"). Examining the portrayal of Dr. Dulcamara in Act I of *L'Elisir* reveals the underlying perception of physicians as self-indulgent and fraudulent.

Romani's libretto spares no effort in depicting Dulcamara as pompous and self-indulgent. Indeed, the first time he appears on stage, Dulcamara is being "drawn on in a gilt chair" as his attendant sounds a trumpet.[3] As the peasants gather about, Dulcamara shows no modesty, introducing himself as "the greatest, wondrous benefactor, a doctor [without equal]," whose renown is "known the wide world through." As if that isn't enough, Dulcamara goes on to explain how he brings happiness wherever he "deign[s] to call," thus reminding the peasants of the elevated station he holds above them. All of these excerpts from the libretto serve to firmly establish Dulcamara is incredibly pompous and arrogant. And various stagings of L'Elisir often go further, supplementing the libretto with additional details designed to solidify this perception of physicians. For example, one staging portrays Dulcamara as very overweight, and dresses him with frills, fancy coats, and excessive jewelry.[4] This further solidifies the perception of Dulcamara (and by extension, physicians of the time in general) as pretentious and self-indulgent. But self-indulgence is not the worst of Dulcamara's flaws; the doctor is also portrayed, in no uncertain terms, as a fraud. To the villagers, Dulcamara promises limitless benefits; he can heal any ailment, improve any disability, give youth to the young. In his own words, upon taking his medicines, "all evils are at once upset."[3] The deception does not end with this general purpose scam. When Nemorino (the opera's protagonist) asks Dulcamara if he sells a certain love potion (the "amorous drought of Queen Isotta"), Dulcamara claims that he certainly does (despite having never heard of it) and improvises, selling Nemorino an ordinary bottle of wine. When Nemorino inquires how long it will be for the potion to take effect, Dulcamara tells him one day, which as he explains to the audience is enough time for him to leave town. One staging further enhances this last point (the picture of Dulcarama fleeing town before Nemorinio realizes the deception) by having Dulcamara and his assistant begin rapidly packing up the cart once Dulcarama has sold the "love potion."[4] Altogether, these various deceptions, as portrayed in the libretto and various stagings, firmly establish Dulcamara as a fraud and a charlatan, a reflection of society's latent frustration with doctors that, due to their lack of expertise and tools, fail to deliver on any promises.

Given the substantial progress made in medicine since the 19th century, one would expect that perceptions of physicians have changed dramatically. While change has indeed occurred, there are signs that some threads of the same frustrations persist in society today. Popular television programs such as Family Guy[5] and 30 Rock[6] feature physicians (Dr. Elmer Hartman and Dr. Leo Spaceman, respectively) that are laughably and outrageously incompetent. And small-scale surveys seem to indicate that the perception of doctors as primarily driven by money is far from absent today.[7] Finally, and perhaps most interestingly, a recent study in the

International Journal of Obesity found that patients were less trusting of doctors that were overweight, and were less inclined to follow their medical advice.[8] These signs imply that the perception of doctors as self-indulgent, incompetent, and fraudulent may be more prevalent today than we care to admit. Although physicians may no longer be selling wine to patients, in a way, Dr. Dulcamara lives on today.

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The quintessential part of reflection, however, is how to process and manage one's values and stay well. The following two submissions are based on "wellness." We have a very strong commitment to our students "self-awareness" and put many support programs in place to help them deal with the stresses of medical school: not only the volume of material that has to be learned coupled with constant assessment. This stress in itself would be enough. But having to deal with death initially through the anatomy course and their first patients, their cadavers, onto their Doctoring patients and the stories the patients will tell them. The submission by Lauren Galvan is based on her entire undergraduate concentration, which she developed as an "independent concentration" on her interests in wellness and mental health. The second is submitted by the Student Health Council, which is a modeled on and works with the Physicians Health Council of the RI Department of Medical Licensure, and offers many opportunities to address wellness as our students progress as physicians. Their paper outlines their role and goals.

THE STOCK MARKET OF MENTAL HEALTH

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Think about your mental health for a minute.

What are you feeling right now?

Now, think about the history of your mental health.

How were you feeling yesterday? Five months ago? Five years ago?

My answers look like this: Sleepy, fine, the worst I've ever felt, fine. Many of us will have varying answers to these questions that, if were plotted on a graph, may look like a sinusoidal wave, or, if we're into chemistry, a conformational energy diagram.

But guess what?

That's completely normal.

You see, our mental health is much like the stock market. It goes up and down. It fluctuates every second of every day. Sometimes we're sick – we might be experiencing a depressive episode. Or, if we have anxiety, we might be having an anxiety attack. But then, at other times, we're healthy and happy – our significant other might have proposed, or, if we don't believe in marriage, we might have gotten ourselves a new job...or a new puppy.

And just like we invest in the stock market, we invest in our own mental health...or at least we think we do. Wouldn't it sound great on a resume to call yourself a self-employed Mental Health Investor? Maybe not.

The problem is that the job description of being a Mental Health Investor is not what it sounds like. On the surface, it sounds like we should invest in our mental health and pay some good money to buy medication when we detect a problem. And while that is true to an extent, the more important and most difficult bullet point on the job description is to pay close attention to what is going on with our emotions and remain a balanced observer while doing it.

This is one exception to the stock market metaphor, and many of us do not realize it until it is too late – until we're sitting in the bathroom stall crying about our unfulfilling job, or tumultuous relationship, or, God forbid, our unsuccessful life. Some of us do not realize the importance of remaining a balanced observer until we're diagnosed with a label that holds an enormously negative and persistent social stigma.

When our mind goes "public," when we experience some emotional state, our mind gives us the opportunity to purchase a part of the company. In other words, it gives us the chance to "buy-into" our emotion. Naturally, human beings like to invest energy in our more extreme emotions because of the side effect of intense pleasure. Or because, in the case of intense pain, our evolutionary instincts draw us to pay attention to that end of the spectrum to possibly prevent harm. However, the more we invest in those states, the more the stock – and stake – increases. The stock increases when we invest in pleasurable experiences and it also increases when we experience pain and invest in trying to avoid it. This leaves us with irrefutable high stake emotional states that make us more at risk for mental health challenges.

Sometimes, we even become so engrossed in the investment of pleasure or in the investment of avoiding pain that we learn to live with those states and feel comfortable in them, which can be seriously dangerous to our holistic health and well-being and set us up for major disappointments. These

states leave us with the Freudian "pleasure principle" goal of achieving the perfect life without hardship, making our focus stray from our own life's reality. Instead of focusing on what *is*, our focus during these states tends to gravitate to what *should be* or what *was*. When the stock and stake increases like this, we subconsciously garner more expectations about the perfect "happy" lives we should be living, but for some reason that we always manage to find, aren't. We throw our emotional health out of balance without even knowing we're doing it. And that is the most dangerous thing of all.

The more we invest our energy into those extreme states of mind, the less energy we have to expend on what I call the "in-between" experiences of life, like the ordinary yet majestic butterfly fluttering above your hair, or your baby son's small yet gorgeous giggle, or the peace that comes simply by sitting still in a chair after a long day at work. By solely investing in the high-risk emotions that we already know so well and have been invested in for so long – those of seeking pleasure and those of avoiding pain – we lose touch with what is happening "in the now" – in the present moment – which many of us are unfamiliar with and should get to know, because the present is a pretty cool place to be.

We have the power to choose where we put our energy and where we focus our attention. But by no longer investing so much energy into those high-risk stocks, we can scratch "Mental Health Investor" off of our resume and call ourselves "mental health observers" instead. Let us remain balanced while simply observing our fluctuating emotional states of life, and if our mind wants us to pay attention to something, by all means, let's pay attention to it. But always remember to stay balanced. There are an infinite number of things in the present moment that we can experience.

The distance we can put between ourselves and our thoughts, emotions, and feelings by observing them instead of investing so much in them may come in handy when making decisions, not to mention it will give us ample space for reflection and pave the way for self-acceptance.

I think that once we realize one alternative way to invest in our mental health is to simply observe our emotions and be mindful of them, we will all find a little bit of inner peace in the chaotic stock market that is our external – and internal – world.

So like my mentors have said to me countless times before, and as I say to you for the first time but certainly not the last:

Go, and experience.

A Student Collaboration to Address Mental Health Wellness in Medical School

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We know that medical students have high rates of depression, are more likely to commit suicide and are at higher risk of substance abuse.[1,2] At the Student Health Council (SHC) of Alpert Medical School, we seek to address these statistics and promote well-being. Our first step is to normalize the impact that medical school can have on one's mental health.

A few times a year, we hand out blank postcards to all medical students and collect their anonymous "secrets" via a locked mailbox to display at "Our Med School Confession" events. One particular sentiment — isolation from others — is repeatedly expressed in the over 80 secrets we have gathered thus far. Students articulate that despite being surrounded by caring people, they often feel alone.

Medical school is indeed full of caring people – those who give up sleep, sacrifice connections with friends, and neglect their own bodily needs while running around on the wards – all in order to care for patients. But how successful are we at caring for each other? We are told to be heroes, and heroes show no signs of weakness. We are taught not to have needs, or at the very least to dismiss them as unimportant. So if *we* deny ourselves our own needs, perhaps we also fail to recognize and support those of our peers, and the result is a group of people in which many members feel lonely.

Struggling with a sense of isolation is difficult enough, and the demands of medical school only exacerbate these feelings. In our first two preclinical years, we must master enormous amounts of information without much context. A monthly cycle of exams descends upon us, and our evaluations and grades depend on little else but our ability to memorize material and tackle complicated test questions. For most of us, it is the first time we are no longer at the top of our classes, the first time we confront failure, the first time we lose sight of our passions and interests outside of medicine.

In the latter two years, we are whisked away rather unceremoniously to the hospitals, where we occupy the very lowest position in medicine's hierarchy. Our short white coats mark us as experts to patients but as clumsy learners to our residents and attendings, who expect us to know things we have never learned, and to understand how to function in the established culture of each hospital. As we begin to navigate these unfamiliar spaces, we are confronted with diseases, procedures, blood, tissue and sometimes death. Yet the perfect medical student remains unaffected by the long hours, the sometimes disparaging comments of our superiors, and the heart-rending stories of our patients. Rather, we are expected to exhibit enthusiastic smiles and project an unadulterated eagerness. The daily exhaustion and self-doubt is enough to cause depression or anxiety for those who have never experienced them, as well as to exacerbate any mental health problems a student may already endure.

In its conception, the SHC followed the model of the Physician Health Committee, a Rhode Island Medical Society group that offers confidential assistance to doctors affected by substance abuse or psychiatric issues, with the goal of preventing negative impacts on patient care and on the physician's licensing status and career. Building upon this model, we have since grown, and now have various components to our programs. One major goal of the SHC is to provide confidential peer counseling services. So much of what keeps medical students from seeking help is stigma — the fear that others might find out that we are not strong enough to survive medical school without help. The SHC works both with undergraduate students in the Program in Liberal Medical Education (PLME) and our fellow medical students by offering support, referring students to counseling resources, and most importantly lending the ear of someone who knows what the experience of medical school is like. By advertising ourselves as peers who are willing to listen to fellow students' struggles, we hope to disempower the stigma associated with isolation and vulnerability.

Throughout the year, we create safe spaces to foster discussion about the various issues faced by physicians-in-training. We hold a Depression Panel annually, an event closed to administrators and faculty, in which a number of third- and fourth-year medical students who have struggled with depression speak openly about their experiences. For the yearly Physicians in Recovery talk, the SHC hosts a physician speaker who has a personal history with substance abuse. We have also hosted community support groups in the aftermath of events such as the death of a fellow student, the Boston marathon bombing and the no indictment verdicts of Eric Garner and Michael Brown.

In addition, we work with our administration and course leaders to advocate for student wellness in our community. We have partnered with the Doctoring program to hold students-only drop-in sessions on days that address difficult topics, such as depression and interpersonal violence. We talk to first year students during their orientation, lead empathy and wellness workshops for doctoring students, and address rising third years about issues of mistreatment and self-care

before they enter the hospital.

We also recognize that high-achieving underrepresented minorities may face additional challenges, often in the form of alienating commonplace exchanges or in confronting stereotyped based expectations.[3,4] We are working to improve collaboration with the Office of Diversity and Multicultural Affairs to foster open discussion and activism regarding minority mental health in both medical school and in our future practice as clinicians.

Our model is piecemeal and experimental, and continues to change as new members from each successive class bring their diverse life experiences, perspectives, and goals. While the SHC may not be able to change the culture of medicine, we normalize its effects by acknowledging its existence. We believe that our presence tells our community it is okay to grieve in medical school, okay to be affected by our surroundings and okay to take the time to care for ourselves and each other.

Acknowledgment

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Heat Illness – A Practical Primer

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INTRODUCTION

In the United States, heat injury results in approximately 650 preventable deaths annually. From 1999–2009, over 7,000 heat-related deaths were reported with 72% directly due to heat exposure and the remaining 28% due to heat-induced exacerbations of underlying medical conditions. Also, annually, an estimated 9,000 high school athletes are treated for exertional heat illness and this number is increasing.[1]

Heat illnesses encompass the spectrum of disease from heat rash, heat cramps, heat exhaustion, to heat stroke. With proper precautions, heat-related deaths are entirely preventable. While typically believed to be a problem of those in warmer environs, the highest recorded incidence of exertional heat stroke occurs at the Falmouth Road Race in Massachusetts with a reported rate of 1–2 events per 1,000 entrants. However, proper planning and vigilance have resulted in no deaths.[2,3] This review examines the physiology, risk factors, diagnosis, treatment, and prevention of heat illness.

HOW DOES THE BODY NORMALLY KEEP COOL?

Cooling is a complex interplay of conduction, convection, radiation, and evaporation. Conduction is the direct transfer of heat across a temperature gradient through physical contact, for example, placing ice packs in the axilla and groin. Convection is similar except heat is lost through the movement of liquids or gas, such as warm core blood carried to the skin's surface or fanning the body. Radiation is a form of heat loss through infrared rays without physical contact, as occurs when the sun transfers heat to the earth. Conduction, convection and radiation rely on a heat gradient so in warmer climates, the degree of heat transfer is not significant. Evaporative heat loss occurs when heat is lost through water vapor pressure, such as evaporating sweat. Evaporation is responsible for 80-90% of the body's heat dissipation during exercise in the heat and is the most effective involuntary heat loss mechanism.[4]

An increase in body temperature, sensed by the hypothalamus, results in cutaneous vasodilation and a reduction in the basal metabolic rate, accomplished by alterations in subcutaneous blood flow, sweat production, skeletal muscle tone, and overall metabolic activity. If this response is inadequate to manage the heat stress, cholinergic sympathetic fibers stimulate sweat production. Sweat needs to evaporate (not be wiped off) in order to contribute to cooling. The conversion of 1.7 ml of sweat to the gaseous phase consumes 1 kcal of heat.

Athletes typically lose about 1 liter of water per hour (via sweat) but during high-intensity exercise or in well-trained, acclimated athletes, this can increase to up to 2 – 2.5 liters of water per hour.[5] The rate of sweat production is dependent on environmental conditions, intensity of exercise, fitness level, and acclimation of the individual, while the rate of sweat evaporation relies on ambient temperature, humidity, and the area of skin exposed to air.

RISK FACTORS

The elderly (>65), children (<18), outdoor workers such as firefighters and construction workers, athletes, and those taking certain medications, are among those at risk for developing heat illness. During July and August, the risk of heat illness rises dramatically. This is due to increased temperature and humidity and a slowing of the evaporative process, increased ambient humidity, overall dehydration and in athletes lack of heat acclimation, deconditioning, and wearing athletic equipment.[6,7]

MEASURING HEAT STRESS

Heat stress conditions are measured by the wet-bulb globe temperature (WBGT), which takes into account the dry-bulb (ambient) temperature, wet-bulb temperature (humidity), and globe temperature (radiant heat). Environmental conditions are quantified using the equation $WBGT = 0.7T_{wb} + 0.2T_g + 0.1T_a$ (T_{wb} is the natural wet-bulb temperature, T_g is the globe thermometer temperature, and T_d is the dry-bulb temperature).

Ideally, the WBGT should inform activity modification; however, measurement requires specialized equipment that is not frequently available. Heat index is used as a substitute, and while this takes into consideration temperature and humidity, it excludes the contribution of radiation and so reflects heat stress in shady areas.

HEAT CRAMPS

Heat cramps are painful involuntary muscle spasms seen in fatigued muscles under heat stress. They are caused by electrolyte imbalances and dehydration, and are often seen in people who have been profusely sweating and in athletes

who exercise vigorously while rehydrating with hypotonic liquids such as water. Prevention algorithms include rehydrating with sports drinks when exercising in the heat and ensuring adequate dietary sodium intake during meals. Heat cramps are treated by withdrawing from the activity, resting in a cool environment, and hydrating with sports beverages or salty foods. Many people may have re-occurring episodes of heat cramps, highlighting the importance of identifying any modifiable, pre-disposing factors such as a low-salt diet, salty sweaters (those with a very high sodium concentration in their sweat)[8], and those unaccustomed to the duration/intensity of exercise. Exertional complications of sickle cell trait (SCT) includes muscle cramping and diligence should be taken to differentiate between the two.[9] In general, SCT causes cramping that is painless and the muscles look and feel normal.

HEAT SYNCOPE

Heat syncope manifests as lightheadness or a temporary loss in consciousness. This typically occurs while standing for long periods of time in the heat or immediately after cessation of exertion. When an individual is exposed to a hot, humid environment, cutaneous blood vessels dilate to cool the body. Venous pooling results in inadequate venous return and decreased cardiac output compromising cerebral perfusion and leading to syncope. Recovery is quick once supine. The elderly are at an increased risk of heat syncope as a result of underlying medical conditions and the medications used to treat them. It is critical that this is distinguished from collapse due to a more serious pathology; for example, arrhythmogenic or SCT collapse does not resolve when supine, as opposed to the transient nature of heat syncope.[9]

HEAT EXHAUSTION

Heat exhaustion is the inability to continue work or exercise in the heat and occurs when an individual has not maintained their fluid or electrolyte intake. This can develop over repeated exposure to elevated temperatures, especially in the non-acclimated population. In addition to physical exhaustion, heat exhaustion includes profuse sweating, weakness, chills, malaise, nausea, vomiting, and irritability. Risk factors include inadequate fluid intake, a BMI greater than 27 kg/m^2, and an inappropriate work-to-rest ratio. Objectively, the individual will have an elevated core temperature but, in contrast to exertional heat stroke, the temperature will remain below 40°C (104°F). Treatment includes immediate removal from the environment to a cool area. Clothing should be loosened and athletic equipment (helmets, shoulder pads, etc.) removed. Patients with heat exhaustion should also rehydrate with cool fluids and avoid heat stress for 24 to 48 hours. Replacement should be done with cool fluids as this is better absorbed.

HEAT STROKE

Heat stroke occurs when the body's cooling mechanisms become overwhelmed and are unable to keep up with the heat gained/produced by the body. There are two classifications of heat stroke, classical heat stroke (CHS) and exertional heat stroke (EHS). Both are fatal if untreated. CHS typically occurs in the elderly with predisposing conditions or taking medications that impair heat loss and in young children who are left in unventilated cars on hot days. This is a non-exertional form of heat stroke. In contrast, exertional heat stroke (EHS) typically occurs in healthy, young athletes who are exercising in hot or humid conditions and is among the top 3 leading causes of death in the athlete.

An elevated rectal temperature (usually >40°C (104°F)) with CNS dysfunction is the pathognomonic feature of heat stroke.[10,11] Sweating is not a diagnostic criterion to differentiate between heat exhaustion and heat stroke.[10] CNS dysfunction includes confusion, disorientation, irritability and in severe cases, coma, seizures, and delirium. Many EHS victims will have an initial rectal temperature between 106-109°F. A rectal temperature is the only valid temperature measurement in EHS cases as all other devices have been demonstrated to be invalid within a working/exercising population.[12]

COOLING METHODS FOR EHS

The treatment goal is to reduce body temperature to 102˚F or less within 30 minutes of collapse as mortality increases significantly when cooling is delayed.[13-16] To achieve this, cooling to 102˚F prior to hospital transfer is optimal. Discontinuing cooling to transport the patient arrests the cooling process, subjecting the cells to continued denaturing, and placing the individual at risk for death. Optimal cooling equates to a mean cooling rate of >0.15˚C per minute or > 1°C every 6 minutes.

Ice water immersion offers a cooling rate of ~1˚F every 3–4 min and is the most rapid and ideal method to lower core temperature.[17-19] Ice water immersion should be started once heat stroke is discovered and discontinued when the body temperature is 102˚F. Cooling should not be discontinued to transport to the hospital.

If ice water immersion is not possible, alternative methods such as cold water immersion,[18] rotating wet ice towels or cold water dousing should be used even though they are not as efficient. Isolated fanning has been found to cool at a rate of 0.02˚ C/min. but has been found to potentiate the effect of other cooling methods. Ice packs applied to areas with major arteries and capillary beds including the axilla, groin, and neck has a cooling rate of 0.028˚C/min. and even though commonly employed is inefficient. Even though these are not optimal methods of cooling, when used, can be continued en route to the hospital.

Common misconceptions limiting immersion is that ice or cold-water immersion would lead to peripheral

vasoconstriction retarding heat loss, and would result in shivering, increasing core body temperature. These hypotheses were originally observed in normothermic individuals but when investigated in those with EHS, have not been substantiated.[17] If shivering becomes a concern, benzodiazepines can be administered when the patient is in a monitored setting.

PREVENTION

The elderly are at increased risk for heat illness. The ability to sense and dissipate heat are both compromised, underlying medical conditions, such as hypertension and diabetes, reduce the ability to dissipate heat and medications exacerbate this problem. While fans can help cool a person, this is not very efficient when temperatures approach 90˚F. When available, air conditioning is optimal. During the warmest hours of the day the elderly should be encouraged to take a cool shower or go to the mall, library, a senior center, or the movies. Neighbors or relatives should check on the elderly twice a day to evaluate for heat illness. Eating small meals frequently is preferred in the heat and since the elderly and children don't sense thirst at the same serum osmolality as young adults, they should not wait until they are thirsty to drink fluids.

In athletes, the majority of heat illnesses occur in July and August as summer practices begin. Athletes are typically deconditioned and have not acclimated to the environmental conditions. Acclimatization results in decreasing basal body temperature, heart rate and results in an earlier onset of sweating. The NCAA and the Interassociation Task Force for secondary schools recommends a gradual increase in exposure to hot and humid environmental conditions over a 10- to 14-day period.[20] Many states have adopted heat acclimatization policies for secondary school athletics. The policy for Rhode Island can be found on the Rhode Island Interscholastic League website.

Proper hydration contributes to preventing heat illness as it can help keep body temperature and heart rate lower and dehydration may reduce the gains made during acclimatization. Hydration should occur before, during, and after exercise as outlined in the position statement by the American College of Sports Medicine (http://journals.lww.com/acsm-msse/Fulltext/2007/02000/Exercise_and_Fluid_Replacement.22.aspx). Athletes should be encouraged to avoid water losses of more than 2% of their body weight and to monitor their urine color as an indicator of hydration status.

Lastly, organized sports should ensure best practices including sideline personnel prepared to provide prompt care and an emergency action plan to optimize emergency care.

SUMMARY

Heat stroke is one of the top three causes of death for athletes. Vigilance is required to prevent these illnesses and when faced with an individual who is suffering an exertional heat stroke, the goal is to aggressively cool the patient to 102°F within 30 minutes to optimize survival. The elderly are also at risk for heat illness and physicians caring for these patients should discuss prevention and treatment plans.

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Attending Physician Attitudes Toward Choice of Oral Anticoagulant for the Treatment of Venous Thromboembolism

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ABSTRACT

Until recently, warfarin has been the primary treatment of venous thromboembolism (VTE). Limited data are available regarding physician attitudes toward anticoagulant choice in the setting of novel oral anticoagulant (NOAC) availability. This study sought to evaluate attending physician attitudes toward NOACs. A survey was sent to attending physicians from internal medicine (primary care and hospitalist medicine), family medicine, cardiology, and hematology-oncology asking about their preference and reasoning for choice of oral anticoagulant for the treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE). Warfarin was the most common choice of initial treatment of both DVT (85.6%) and PE (89%). Among the specialties surveyed, cardiologists were more likely to use rivaroxaban as initial treatment of VTE as compared to other specialties including internal medicine or hematology (p=0.011 for DVT and 0.004 for PE). Cost-effectiveness and lack of a reversal agent were cited as the major disadvantages for NOAC use.

KEYWORDS: Venous thromboembolism, Dabigatran etexilate, Warfarin, Rivaroxaban, Physician practice patterns

INTRODUCTION

For over five decades, the vitamin K antagonist warfarin has been the standard of care for outpatient treatment of acute venous thromboembolic disease (VTE). However, warfarin is not without its limitations as it has a narrow therapeutic window requiring frequent laboratory monitoring, many drug-drug and drug-food interactions, and requires individual dosing based on the international normalized ratio (INR).[1]

It has now been over 3 years since the novel oral anticoagulants (NOAC) were approved by the United States Food and Drug Administration (FDA).[2] Initially dabigatran etexilate gained approval for atrial fibrillation based on the RE-LY trial, followed by the approval for both rivaroxaban and apixaban for this purpose based on the ROCKET-AF and ARISTOTLE trials respectively.[3,4] These agents have also been approved for thromboprophylaxis after total hip and knee replacement.[5]

On Nov. 2, 2012, rivaroxaban was the first NOAC approved in the United States for the treatment and secondary prevention of DVT/PE. The NOACs have a broad therapeutic window allowing for fixed dosing and no requirement for laboratory monitoring or adjustments based on body weight. As a result, novel anticoagulants have been rapidly adopted for anticoagulation in patients with atrial fibrillation.[6] This is in contrast to their adoption for patients with venous thromboembolic disease, which has been lower than expected.[7,8] Some have suggested that the possible reasons for its low uptake are cost, inability to readily measure the level of anticoagulation, and the lack of an immediate antidote in the event of life-threatening bleeding. Furthermore, the level of comfort for prescribing rivaroxaban may be different depending on one's specialty, level of training, and experience in treating patients with thromboembolic disease.[7]

By surveying a large group of both community and academic physicians affiliated with a tertiary care center, we sought to identify the factors that influence physicians' decisions in prescribing NOACs for the treatment of thromboembolic disease in clinical practice, and to compare these factors between specialties and across experience levels. These data reveal the current attitudes toward prescribing NOACs for thromboembolic disease and may elucidate the reasons for the slow uptake of rivaroxaban for the treatment DVT/PE.

METHODS

Survey methods

The study is a cross-sectional questionnaire based survey of attending physicians in the State of Rhode Island who would be likely to have prescribed therapy for venous thromboembolism (VTE) within the previous 6 months. After review and approval by the Rhode Island Hospital Institutional Review Board (IRB), an investigator-authored survey was sent electronically to 365 attending physicians from internal medicine and family medicine. Physicians were identified in one of three ways: 1. All physicians within the Lifespan Health System (Rhode Island) provider directory with a primary specialty listing of internal medicine, primary care, general internal medicine, hospitalist medicine, hematology, cardiology, or family medicine; 2. Physicians from these specialties on the distribution list for Medical Grand Rounds at the Alpert Medical School of Brown University (Providence, Rhode Island); and 3. Physicians from these specialties with publicly available contact information on practice websites within the region. Details of the survey content are shown in the Appendix. Both academic and community practitioners were surveyed and among the physicians from

internal medicine, this group included cardiology, hematology, primary care, and hospital medicine. The online survey was active from Dec. 5, 2013 until Feb. 1, 2014.

Statistical methods

General descriptive statistics were calculated while responses from various specialties were compared using Chi-square analysis. Given the hypothesis that number of years in independent practice may affect choice, a Mantel-Haneszel Chi-Square trend test was used to compare responses among categories based on years since completion of residency or fellowship. All analyses were performed using SAS version 9.3 (SAS Institute Inc., Cary, NC, USA).

RESULTS

Of the 365 physicians who were sent the survey invitation, 89 (24.4%) completed all or some of the questionnaire. Self-reported characteristics of the respondents are shown in **Table 1**. Most attending physicians (81%) reported starting a patient on an oral anticoagulant for treatment of DVT or PE in the previous six months. Warfarin was the most commonly reported oral medication for treatment of VTE with 85.6% of physicians choosing it as initial treatment of DVT and 89% of physicians choosing it as initial treatment of PE. The distribution of results is shown in **Table 2**.

Among those choosing warfarin as initial treatment of DVT, most (52.2%) felt that the cost of the newer anticoagulants was the most important factor in their decision. Only 42% reported cost as the major factor in choosing warfarin for PE with 30% stating they felt comfortable with warfarin and found no reason to change. Additionally, 26% reported the lack of an effective reversal agent with the newer anticoagulants to be the major factor in their decision to choose warfarin as initial agent for PE therapy. Among those who chose rivaroxaban as initial treatment of DVT, most (75%) said the most important factor was that no lab monitoring was required. For those choosing rivaroxaban to treat PE, 100% of the respondents said the lack of required lab monitoring was the major deciding factor. Physician responses as to the items they considered advantages and disadvantages of rivaroxaban as compared to warfarin are shown in **Table 3**.

Differences were seen by specialty in regards to treatment of DVT (Chi-Square 21.3, DF=9; p=0.011) and PE (Chi-Square 24.2, DF=9; p=0.004) as shown in **Table 4**. The number of years since completing residency/fellowship did not significantly affect choice of oral anticoagulant for treatment of PE (Mantel-Haenszel Chi-Square 2.46, DF=1; p=0.12) or for treatment of DVT (Mantel-Haenszel Chi-Square 2.13, DF=1; p=0.15)

Table 1. Self-reported characteristics of the survey respondents

Primary Specialty	N=85
Internal Medicine	84 (98.8%)
Cardiology	11 (12.9%)
Hematology	16 (18.8%)
Hospital Medicine	18 (21.2%)
Primary Care	39 (45.9%)
Family Medicine	1 (1.2%)
Years since finishing residency/fellowship	**N=86**
<5 years	23 (26.7%)
5–9 years	10 (11.6%)
10–19 years	25 (29.1%)
20 years or more	28 (32.6%)

Table 2. Attending physician responses for initial choice of anticoagulant in patients with normal renal function and VTE.

Deep Vein Thrombosis (DVT)	N=84
Apixaban	1 (1.2%)
Dabigatran	2 (2.4%)
Rivaroxaban	9 (10.8%)
Warfarin	71 (85.6%)
Pulmonary Embolism	**N=83**
Apixaban	1 (1.2%)
Dabigatran	3 (3.7%)
Rivaroxaban	5 (6.1%)
Warfarin	73 (89%)

Table 3. Physician responses regarding advantages and disadvantages of rivaroxaban as compared to warfarin

Advantages	N=88
Cost-effectiveness balance	5
Superiority of rivaroxaban in preventing recurrent DVT/PE	12
Less drug-food interactions	38
Reduced clinic/lab visits	71
Disadvantages	**N=88**
Cost-effectiveness balance	47
Limited personal clinical experience with rivaroxaban	49
Lack of reversal agent	57
Inability to monitor degree of anticoagulation	23
Risk of intracranial hemorrhage	10
Risk of gastrointestinal bleeding	16

DISCUSSION

With the addition of NOACs, the treatment landscape of thromboembolic disease has undergone a major change. These newer agents have clear advantages over the traditional vitamin K antagonist warfarin. There are also some disadvantages to therapy with NOACs, however. To our knowledge, this is the first attempt at understanding factors that influence physician attitudes towards NOAC treatment in an acute setting such as thromboembolic disease. Based on this survey, cardiologists felt the most comfortable in the use of NOAC for therapy for thromboembolic disease, more

Table 4. Percentage of internal medicine respondents in each specialty choosing a particular oral anticoagulant for treatment of VTE.

	Cardiology	Hematology	Hospital Medicine	Primary Care
PE	**N=11**	**N=14**	**N=18**	**N=38**
Apixaban	0	0	0	1 (2.6%)
Dabigatran	1 (9%)	0	1 (5.6%)	1 (2.6%)
Rivaroxaban	4 (36.4%)	1 (7.1%)	0	0
Warfarin	6 (54.6%)	13 (92.9%)	17 (94.4%)	36 (94.7%)
DVT	**n=11**	**N=15**	**N=18**	**N=38**
Apixaban	0	0	0	1 (2.6%)
Dabigatran	1 (9%)	0	1 (5.6%)	0
Rivaroxaban	5 (45.5%)	1 (6.7%)	1 (5.6%)	2 (5.3%)
Warfarin	5 (45.5%)	14 (93.3%)	16 (88.9)	35 (92.1%)

so than primary care physicians and hospitalists.

There were four major conclusions of this study. First, treatment with NOACs still do not have widespread acceptance as first-line outpatient therapy for VTE as the vast majority of physicians surveyed still are using warfarin for first-line therapy. Secondly, the most common reasons reported for not using therapy with NOAC were cost and lack of reversibility with NOACs. Thirdly, the vast majority of physicians who reported using a NOAC for VTE therapy felt that not having blood level monitoring was the major reason for their choice. Interestingly, cardiologists were more likely to use therapy with NOACs for treatment of DVT/PE than internists, and years since completion of training did not seem to matter in the use of NOACs.

Lee et al, in a Markov model using a United States payer/Medicare perspective and a lifetime time horizon, concluded rivaroxaban was cost-effective in patients with atrial fibrillation in comparison to warfarin.[9] Despite these data, however, cost has been described as the major reason for not using NOAC therapy in a paper by Huang et al, analyzing the use of NOAC therapy in stroke prevention in patients in atrial fibrillation.[10] Our study shows similar findings.

The cost of rivaroxaban is approximately $300–$350 in US dollars per month. One limitation to our study is that it did not specifically look at what factors involved in the cost of NOACs ultimately led to NOAC nonuse; however, it is possible that the direct cost to patients who may have high insurance copays for newer medications may be a deterrent for its widespread use.

Of no surprise, the major reason cited for use of NOAC therapy in patients with DVT/PE was lack of required laboratory blood monitoring. This has been cited before and is the major patient motivator in requesting a switch from warfarin to a NOAC in many patients.

Doctors' personal experience with prescribing newer drugs has been recognized as a major influential factor in a doctor's willingness to prescribe a drug.[11] Interestingly, our study showed that cardiologists were more likely to prescribe a NOAC for treatment of DVT/PE then other specialties. This is likely on the basis of the U.S. Food and Drug Administration (FDA) having approved dabigatran on Oct. 19, 2010 for stroke prevention in atrial fibrillation, allowing for cardiologists to have more experience with the NOACs as they are the predominant specialty for treatment of this condition. In fact, it has been suggested that physicians who have prescribed dabigatran for atrial fibrillation more than 10 times are more comfortable in prescribing the drug then those who have not.[10] It is likely that the cardiologists who have had a positive experience with NOAC therapy in atrial fibrillation are more comfortable in prescribing NOACs in VTE therapy. Hence, with more time and more experience of other specialties in the use of NOACs, it is likely that use of NOACs in the treatment of DVT/PE will rise.

In our study, one factor that did not influence the decision to use NOACs was the physician's number of years out of residency/fellowship. Although one might assume that physicians who have been recently trained may be more likely to invoke a newer drug therapy, interestingly, that was not the case in our study. Similar findings, however, were also seen in a collection of physicians surveyed for dabigatran use in atrial fibrillation, and in a survey amongst general practitioners prescribing new drugs.[10,12]

Limitations of this study include its survey of a limited geographic region as well as the low response rate (24.4%). There are data, however, that surveys of physicians are less sensitive to issues with response rates and that even surveys with low response rates are still indicative of the larger physician population.[13]

At the time this survey was conducted, only warfarin and rivaroxaban held active FDA approvals for the treatment of VTE. Efficacy data were available, however, in the form of published trials for rivaroxaban (EINSTEIN-DVT and EINSTEIN-PE), dabigatran (RECOVER and RECOVER II), and apixaban (AMPLIFY).[14-18]

Novel oral anticoagulants are a major advance in the treatment of VTE and many physicians in this survey cited lack of blood laboratory monitoring as the major reason for their use. One year after the approval for NOACs for the treatment of DVT/PE, however, warfarin was still the overwhelming first choice for anticoagulation for the treatment of VTE. Cost and lack of reversibility were cited as the major reasons for NOAC nonuse. Based on the higher acceptance of NOAC use among cardiologists surveyed who treat DVT/PE, we feel that with more experience in prescribing NOAC therapy, we will likely see a significant increase in prescriber usage of NOAC therapy.

APPENDIX

Physician Survey Regarding Novel Oral Anticoagulant (NOAC) Use for the Treatment of Venous Thromboembolism

DEMOGRAPHICS

- What is your primary specialty?
- Internal Medicine/Primary Care
- Internal Medicine/Hospital Medicine
- Internal Medicine/Hematology
- Internal Medicine/Cardiology
- Family Medicine

Approximately how many years since you finished residency/fellowship?

- <5 years
- 5 - 9 years
- 10-19 years
- 20 years or more

ATTITUDE QUESTIONS

Have you started a patient on an oral anticoagulant for treatment of DVT or PE in the last 6 months?

- Yes
- No

For patients with normal renal function, my initial choice for an oral anticoagulant is

	Apixaban	Dabigatran	Rivaroxaban	Warfarin
Deep vein thrombosis (DVT)				
Pulmonary Embolism (PE)				

Display This Question:
If Deep vein thrombosis (DVT) - Apixaban Is Selected
The most important factor in my choice of apixaban as initial treatment for DVT is:

- No lab monitoring required for my patients
- It has less of a chance for intracranial hemorrhage than warfarin
- No food restrictions for my patients
- Less medication interactions

Display This Question:
If Deep vein thrombosis (DVT) - Dabigatran Is Selected
The most important factor in my choice of dabigatran as initial treatment for DVT is:

- No lab monitoring required for my patients
- It has less of a chance for intracranial hemorrhage than warfarin
- No food restrictions for my patients
- Less medication interactions

Display This Question:
If Deep vein thrombosis (DVT) - Rivaroxaban Is Selected
The most important factor in my choice of rivaroxaban as initial treatment for DVT is:

- No lab monitoring required for my patients
- It has less of a chance for intracranial hemorrhage than warfarin
- No food restrictions for my patients
- Less medication interactions

Display This Question:
If Deep vein thrombosis (DVT) - Warfarin Is Selected
The most important factor in my choice of warfarin as initial treatment for DVT is:

- Cost of newer anticoagulants
- I am comfortable with using warfarin and find no reason to change
- I am concerned about the risk of gastrointestinal bleeding with newer anticoagulants
- Lack of an effective reversal agent with the newer anticoagulants

Display This Question:
If Pulmonary Embolism (PE)- Apixaban Is Selected
The most important factor in my choice of apixaban as initial treatment for PE is:

- No lab monitoring required for my patients
- It has less of a chance for intracranial hemorrhage than warfarin
- No food restrictions for my patients
- Less medication interactions

Display This Question:
If Pulmonary Embolism (PE)- Dabigatran Is Selected
The most important factor in my choice of dabigatran as initial treatment for PE is:

- No lab monitoring required for my patients
- It has less of a chance for intracranial hemorrhage than warfarin
- No food restrictions for my patients
- Less medication interactions

Display This Question:
If Pulmonary Embolism (PE)- Rivaroxaban Is Selected
The most important factor in my choice of rivaroxaban as initial treatment for PE is:

- No lab monitoring required for my patients
- It has less of a chance for intracranial hemorrhage than warfarin
- No food restrictions for my patients
- Less medication interactions

Display This Question:
If Pulmonary Embolism (PE)- Warfarin Is Selected
The most important factor in my choice of warfarin as initial treatment for PE is:

- Cost of newer anticoagulants
- I am comfortable with using warfarin and find no reason to change
- I am concerned about the risk of gastrointestinal bleeding with newer anticoagulants
- Lack of an effective reversal agent with the newer anticoagulants

Please check any of the items that you consider as *ADVANTAGES* of RIVAROXABAN as compared to WARFARIN for the treatment of DVT and PE:

- Cost-effectiveness balance
- Superiority of rivaroxaban in preventing recurrent DVT/PE
- Less drug/food interactions
- Reduced clinic/lab visits

Please check any of the items that you consider as *DISADVANTAGES* of RIVAROXABAN as compared to WARFARIN for the treatment of DVT and PE:

- Cost-effectiveness balance
- Limited personal clinical experience with rivaroxaban
- Lack of reversal agent
- Inability to monitor degree of anticoagulation
- Risk of intracranial hemorrhage
- Risk of gastrointestinal bleeding

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Disclosure

The authors have no conflicts of interest in relation to this work.

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Adult Spinal Deformity: Contemporary Treatment and Patient Outcomes

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ABSTRACT

The incidence of symptomatic adult spinal deformity (ASD) is increasing due to aging of the population, iatrogenic factors, and an increasingly active elderly population. Spinal deformity in the adult population can produce major functional disability. Patients with less severe forms of ASD can generally be managed without operative intervention. For those individuals with disabling pain, functional impairment, or progressive spinal malalignment, surgical treatment is available and effective. However, the surgery is complex and associated with a significant risk of perioperative complications. Efficacy and safety is optimal when operative intervention is performed by a surgical team (and hospital system) experienced in the management of complex spinal pathology. Quality of life for the ASD patient can be greatly improved with proper patient selection, technical execution, and perioperative care.

INTRODUCTION

Adult spinal deformity (ASD) is caused by malalignment of the thoracic or lumbar spine which results in varying degrees of back pain, radicular leg pain, torso deformity, activity limitation, and social stigma due to abnormal posture. ASD becomes increasingly common with advancing age and is an underappreciated cause of disability in the elderly population. The United States Census Bureau estimates that the population aged 65 and over will increase from 13% in 2010 to 20% in 2030.[1] Schwab *et al* found that 68% of asymptomatic volunteers over the age of 60 had degenerative scoliosis.[2] It is expected that the number of patients suffering from degenerative spinal disorders, particularly adult spinal deformity (ASD), will follow a similar trend. Increasing patient expectations for maintenance of function in later years will require effective nonsurgical and surgical strategies for management of ASD.

Patients with ASD can have scoliosis (a curvature on the anteroposterior radiograph), kyphosis (forward curvature on lateral radiograph), positive sagittal balance (whole torso leaning forward), and spinal and neuroforaminal stenosis (decreased space available for the neural elements). Degenerative scoliosis often leads to spinal and neuroforaminal stenosis which may lead to back and leg pain and walking intolerance, and may also cause a deformed appearance of the torso. Left untreated, pulmonary dysfunction may occur, although this is uncommon. Kyphosis and positive sagittal balance cause the body's center of gravity to move forward in space, which can cause severe exhaustion with ambulation and disabling pain. ASD patients, especially those with positive sagittal balance, often suffer significant disability.[3] The quality of life for adults with spinal deformity has been assessed in multiple studies utilizing instruments such as the Scoliosis Research Society Outcomes Instrument (SRS-22).[4,5] Baldus *et al*[4] found that ASD patients report functional limitations, increased pain and increased use of analgesic medications. ASD patients are often limited to light work and household chores, while unaffected adults can participate in sports and perform heavier work.[5] Berven *et al* found that ASD patients are more likely than non-ASD individuals to suffer from anxiety and depression, which may be related to increased pain.[5]

While non-operative treatment modalities are the appropriate initial option, these measures provide limited benefit in the setting of disabling pain or progressive spinal malalignment. Furthermore, there is limited supportive data regarding the efficacy of conservative care for ASD patients.[6] The most commonly prescribed conservative therapies include bracing, physical therapy, injections, and chiropractic manipulation.[6] External orthoses have been utilized but provide only modest short-term relief.[7] While Barrios *et al*[8] documented significant pain relief in ASD patients treated with physiotherapy, these results have been difficult to reproduce. There is limited evidence in support of chiropractic care for ASD.[6] Transforaminal corticosteroid injections have been shown to provide some benefit, but only in patients with true radicular pain.[9]

A study by Glassman *et al* demonstrated that, despite questionable benefit, non-operative resources are frequently utilized by patients with ASD.[3] The authors divided 585 non-surgical ASD patients into high-symptom and low-symptom groups based on an Oswestry Disability Index (ODI) score of greater or less than 20 respectively. Symptoms of ASD reported on the ODI include limitations in personal care, lifting, walking, sitting, standing, sleeping, sex life, social life, and travelling due to back pain. Eighty-eight per cent of high-symptom patients and 70% of low-symptom patients reported recent treatment for ASD symptoms including

Figure 1a: Elderly female with coronal malalignment and positive sagittal balance – note forward posture on photograph and lateral radiograph.

Figure 1b: [*Images at right*] Improved coronal and sagittal spinal balance following spinal osteotomy.

narcotics, physiotherapy and pain management referral. Though high-symptom patients were more likely to require injections and pain management, low-symptom patients also demonstrated substantial use of resources.

OPERATIVE TREATMENT OF ADULT SPINAL DEFORMITY

Advances in pre-operative optimization, operative techniques and perioperative management have made surgical intervention a reasonable alternative for an increasing number of patients.[10,11] Multiple investigators have reported substantial benefit of surgery with respect to pain, self-image, function, and ability to perform physical activities. These benefits have been demonstrated despite the complexity of spinal realignment procedures and a substantial perioperative complication rate.[10]

Surgery for adult spinal deformity most often includes posterior spinal instrumentation with pedicle screws and rods to fixate the spine with an improved posture, with bone graft placed to achieve boney fusion. Spinal osteotomy may be required to

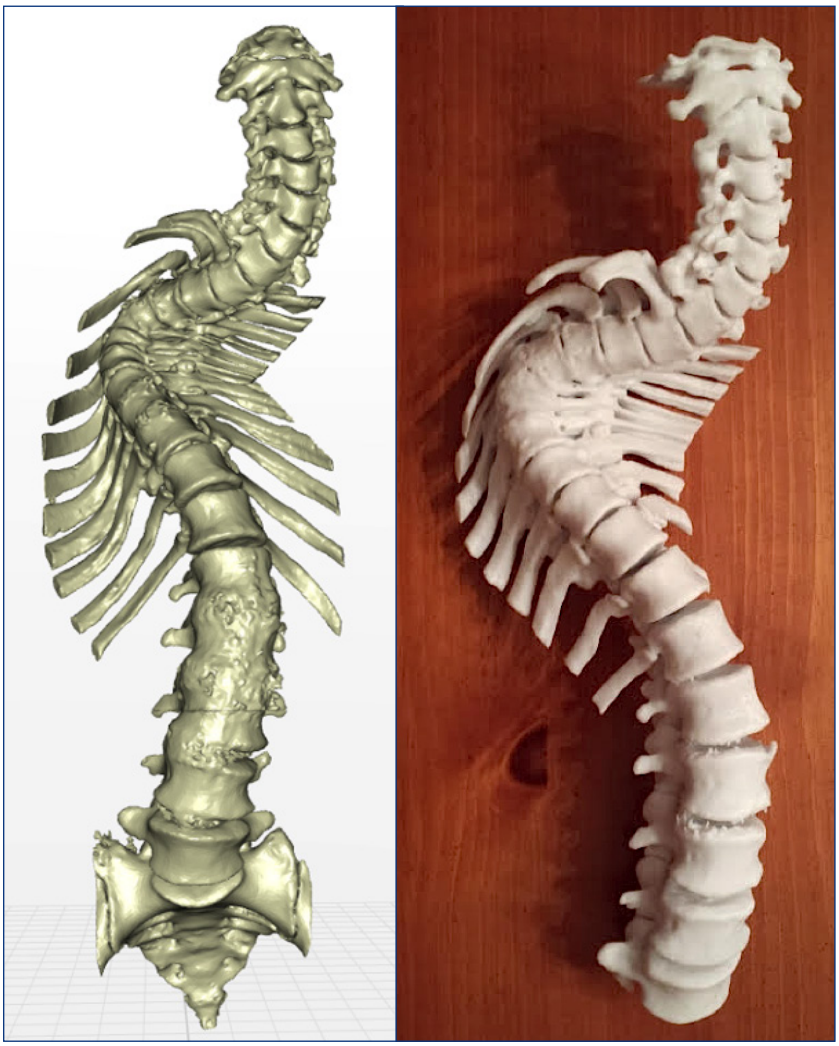
realign the spine for severe deformities, which add complexity and complication risk to the surgery. Additionally, anterior or lateral spinal approaches for fusion may be indicated to help improve the chance of operative success. Decompression is added to the procedure when stenosis is symptomatic.

There is a large body of evidence demonstrating positive mid- to long-term outcomes following surgical intervention for ASD.[10,12-14] Yadla et al. found that operative intervention for adult spinal deformity is associated with improvement in both radiographic and clinical outcomes at a minimum 2-year follow-up.[11] Paulus et al. assessed heath-related quality of life outcomes for non-operative and surgical treatment of ASD; conservative care provided no measurable benefit while surgery improved quality of life measures, pain, and disability due to back pain as measured by the ODI at 2- to 5-year follow-up.[14] A recent investigation by Haque et al. in 2014 comparing different methods of surgical treatment documented success in maintaining improved spinal alignment and in decreasing patient symptoms.[15] A cost-effectiveness analysis performed by McCarthy et al. found that surgical treatment for ASD is also cost-effective after a 10-year period.[16]

The success rate of ASD surgery is related to careful patient selection, and is challenging to strictly define. Numerous studies have documented improved pain and function at 2-year follow-up with favorable outcomes than non-operatively treated ASD patients.[14] Dissatisfaction rates of up to 25% have been reported, although this data stems from surgical techniques which have since been largely abandoned due to unacceptable morbidity.[17] Postoperative complication rates of up to 50%, with major complication rates of over 13%[14] are an important factor when patients and surgeons are considering corrective surgery.

It is important to recognize that the evidence supporting successful outcomes for surgical treatment of ASD emanates from tertiary referral spine centers. Increased surgeon experience and hospital staff familiarity associated with increased volume is essential to ensuring a consistently positive surgical outcome. A recent study by Paul et al. assessed the complication rates, length of stay (LOS) and hospital charges for patients with adolescent spinal deformity treated with spinal arthrodesis by surgeons across a range of annual case volumes.[18] The authors concluded that patients treated by higher volume surgeons experienced fewer complications and had shorter LOS.[18] It is logical to assume that the results of Paul et al. can be extrapolated to the adult spinal deformity population.

Figure 2: 3D reconstruction of severely deformed spine, printed for surgical planning.

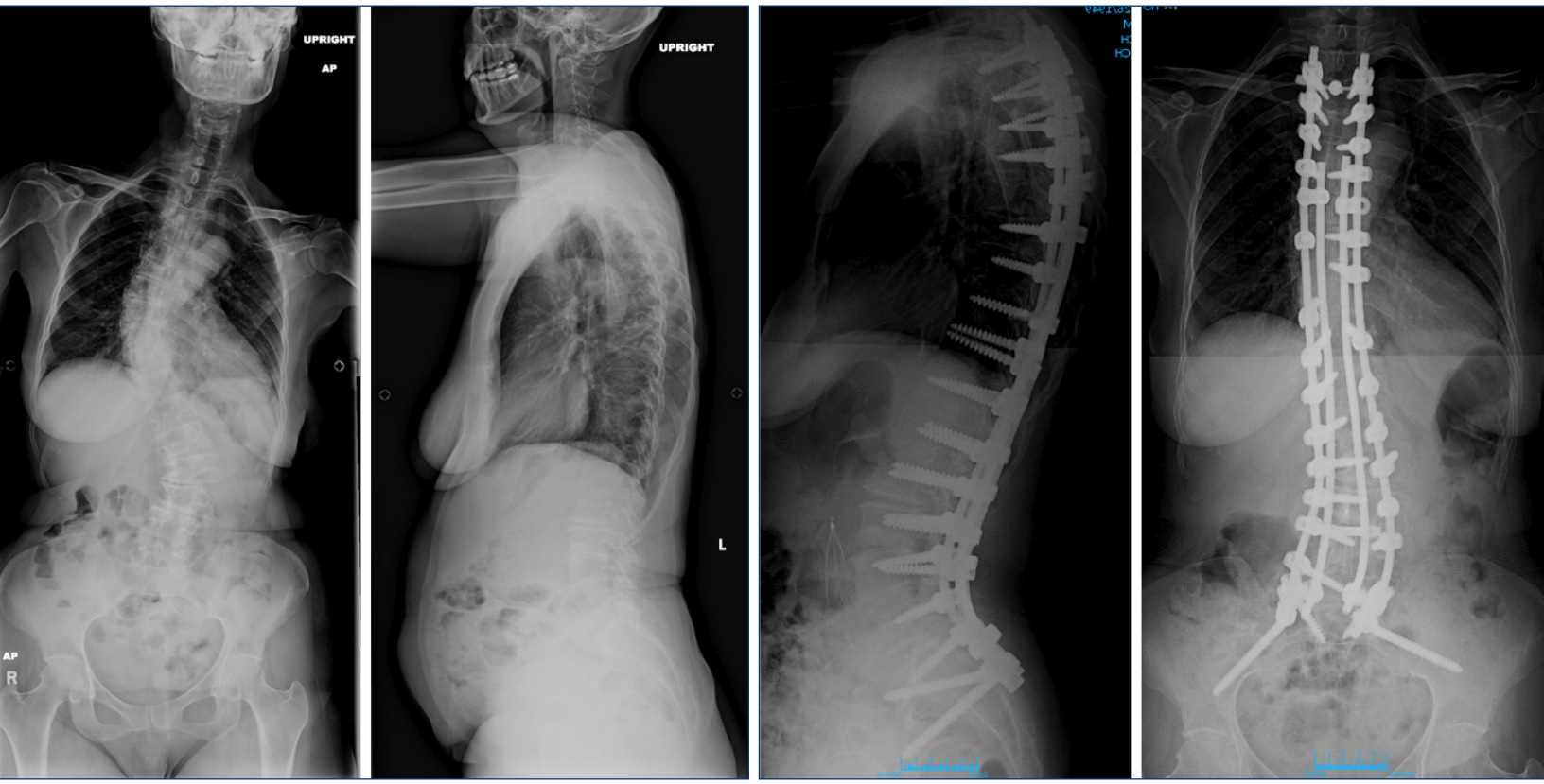


ADVANCED TECHNOLOGY

Advances in diagnostic imaging and surgical technology have improved the safety profile of adult spinal deformity procedures. The generation of three-dimensional radiologic images of the spinal column allows for more precise preoperative planning (**Figure 2**). Computer navigation during surgery allows the insertion of spinal fixation devices with greater accuracy and less radiation exposure to the patient

The role of minimally invasive (MIS) techniques for ASD is expanding. Although most patients with severe spinal deformity require traditional open posterior spinal surgery, several less invasive surgical options are now in use. In a recent study by Haque et al., the results of open surgery were compared to MIS and hybrid approaches: while all techniques resulted in similar functional outcomes, complications were lowest with MIS and hybrid approaches.[15]

Figure 3: Anteroposterior and lateral radiographs revealing adult spinal deformity patient pre- and post-operatively with correction of curve magnitude.



DISCUSSION

Adult spinal deformity is a disabling condition which will increase in incidence in the coming years. Advances in preoperative planning, operative techniques, and perioperative care have improved the outcomes of ASD patients following surgical correction (**Figure 3**). Despite largely positive outcomes, surgical complications are still common. To optimize the outcomes of adult spinal deformity patients, careful patient selection and operative care by an experienced surgical team is mandatory.

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An Electrical Burn

SETH GEMME, MD; GREGORY JAY, MD; WILLIAM BINDER, MD

From the Case Records of the Alpert Medical School of Brown University Residency in Emergency Medicine

DR. SETH GEMME: Today's case is a 19-year-old woman with no past medical history who presented after she received a significant electrical injury while reaching into a cabinet in an abandoned power sub-station. Her companion stated that when she reached into the cabinet she grabbed onto a "green glass object." He heard a screeching sound and the patient was thrown to the floor. Her hand was severely burned and she was confused. When EMS arrived clean dressings were immediately applied to her burns. She denied drug or alcohol use and reported severe pain in her left arm and right leg.

DR. KEN WILLIAMS: What immediate life-threatening conditions must be recognized and treated by the pre-hospital health care providers? Where should the patient be transported?

DR. GEMME: The first objective of the EMS providers in an emergency response is scene safety. The responders must confirm that the power company has turned off power, and that objects around the victim will not produce or conduct electricity. Once scene safety is confirmed, airway, breathing and circulation must be addressed. Life-threatening arrhythmias should be treated according to advanced cardiac life support protocol. IV access should be obtained and a fluid bolus given. If blunt trauma is suspected, as in this case in which she was thrown to the ground, spine immobilization precautions must be completed. The patient's burns should be kept clean with appropriate sterile dressings. The patient should be transported on a cardiac monitor by advanced level EMS to a level 1 trauma center. The patient requires medical and, most likely, surgical management by physicians who are experts in burn care. Patients who require transfer to a burn center include any who have partial thickness burns >10% of total body surface area, burns to the face, hands, feet, genitalia, perineum, major joints, any third-degree burn, chemical burns, electrical burns, inhalation injury, and burns with multiple injuries. Although only needing to meet one to qualify for transfer, our patient meets many of these criteria.

DR. SETH ROUGAS: What did the physical exam reveal?

DR. GEMME: On primary survey the patient's airway was patent, her breath sounds were equal and she had a BP of 114/86 mm Hg with a regular heart rate of 104. She was in mild distress due to her pain, but cooperative with the exam. She was alert and oriented to person only and with a Glasgow Coma Scale (GCS) of 14 (she lost one point for confused speech). She moved all limbs and had severe burns to her left hand, left arm and right knee. Her secondary survey examination revealed a normal HEENT exam. EMS placed the patient in a cervical spine collar but she was without tenderness on palpation. Her chest, abdomen and pelvis were normal. Her left arm had partial deep (second-degree) burns to the antecubital fossa and severe full thickness (third-degree) burns over all aspects of her left hand. Her hand was held in a flexed and rigid position due to tetany and spasm. Her right knee had second-degree burns on the medial aspect. Her left forearm and upper arm had tight compartments without palpable pulses distally. Her legs had normal compartments to palpation and intact pulses. EMS reported that she was shocked by 10,000 V of electricity.

DR. WILLIAM BINDER: How often do electrical injuries occur and what is the significance of the amount of voltage?

DR. GREGORY JAY: Data from the 1990s suggest that about 1,000 people in the United States die annually due to electricity exposure.[1] There is a bimodal distribution of injury, with one peak prior to age 6, and another occurring among young adults.[2, 3] Males are predominantly affected.[4, 5] While some evidence suggests that the incidence of low-voltage injury has slowed in the pediatric population, high-voltage injury in the adult population has remained unchanged, and electrocution is the fourth leading cause of death among work-related traumatic injury cases.[4, 6]

A high-voltage injury has been historically defined as exposure to 1,000 volts or more. This number is somewhat arbitrary as significant injuries have occurred at 600 V from 3rd rail injury.[7] Voltage is often the only variable known, and higher voltage can lead to significant burns. (Ohm's law, $V = I \times R$, readily translates to tissue damage due to Joule's law, in which thermal energy $= I^2 \times R \times T$, where I is current, R is resistance and T is time of exposure.) Current, on the other hand, has the greatest impact on energy delivered, as is evidenced by Joule's law, and can be either direct or alternating.

Household electricity is typically 110–230 V and is alternating current. A TASER can deliver 50,000 volts over milliseconds, while high tension power lines can deliver 100,000 volts, and lightning can deliver over 10 million volts of direct current.[8, 9] Direct current causes a single muscle contraction and can lead to mechanical injury as the patient can be literally thrown from the source of electricity. Alternating current presents different dangers as it can cause repetitive muscle contractions creating tetany in a hand grip leading to prolonged exposure to a source of electricity.[1] Mechanisms of injury due to electricity can be from direct impact of current on nerve conduction systems leading to arrhythmias, blunt mechanical injury, thermal energy injury causing significant burns, and electroporation, in which cell membranes are rendered porous leading to cell death.[1]

DR. RACHEL FOWLER: What are the clinical implications of an electrical injury?

DR. GEMME: Injuries to each organ system occur due to electrical exposure. Cardiac injury can occur from coronary artery spasm, cell death through electroporolation, as well as arrhythmia. Ventricular fibrillation can occur with low voltage alternating current, while asystole is more common with direct current or high voltage alternating current.[1, 10, 11, 12] Respiratory arrest may occur due to inhibition of CNS respiratory drive or through paralysis and tetany of respiratory muscles.[1] The musculoskeletal system can be affected by the high resistance of bone and can consequently suffer severe electrothermal injury. Additionally, muscle tetany can lead to falls and fractures of the long bones.[1] Muscle is subject to edema and deep tissue necrosis leading to rhabdomyolysis and compartment syndromes.[13] Neurologic abnormalities are quite common in lightning and electrical injuries and cause a broad array of deficits. Sequelae extending from PTSD to post- concussive syndromes causing behavioral and personality changes can occur. In severe cases motor neuron syndromes, parkinsonism and dystonia have been reported.[14]

Burn injuries to skin can be due to current flow against tissue resistance leading to energy transfer and the heating of tissue. The burns suffered from these injuries are difficult to assess as the superficial manifestations belie deep tissue necrosis and damage.[13] Alternatively, burns can be due to the heat of arcing when high voltage current passes through the air – electricity can arc at temperatures of 4,000 degrees centigrade – or from materials being ignited.[15]

DR. THOMAS HARONIAN: Given her history of exposure and her injuries what type of electrical injury do you suspect and what diagnostic tests need to be preformed?

DR. GEMME: The patient likely sustained a high-voltage injury (>1,000 Volts). The point of contact was her left hand but the path of current flow is difficult to determine and is, at best, a clinical guess. Given the high-voltage injury, I was concerned for indirect blunt trauma, deep burns, tissue ischemia/necrosis, rhabdomyolysis, fracture, and the possibility of delayed sequel. Laboratory studies including a complete blood count, a basic metabolic panel (BMP), CPK, urinalysis, pregnancy test, and coagulation studies, as well as an ECG, and plain film radiographs of her chest, left hand, and right knee were obtained. Additionally, a brain and cervical spine CT were included and she was placed on a cardiac monitor. Finally she was started on intravenous normal saline and given a tetanus booster vaccine.

The patient's ECG demonstrated sinus tachycardia at a rate of 108 with normal intervals and no ischemia. Her chest x-ray and brain and cervical spine CT was unremarkable while the x-ray of her hand showed a severely contracted hand with diffuse soft-tissue edema and disruption. Her labs showed a slightly elevated WBC count at 15,000 wbcs/microliter, but electrolytes, urinalysis, ucg, and coagulation studies were normal. Her CPK was elevated at 1050 U/L.

DR. BRIAN CLYNE: Given her trauma evaluation, what was your treatment and ultimate disposition plan for the patient?

DR. GEMME: The patient's left hand was severely burned and the circumferential nature of the burns made it quite likely that she would suffer compartment syndrome in both her left arm and left forearm. Consequently, the patient went to the operating room from the ED and required left hand amputation due to the extent of necrotic and unsalvageable tissue. She was treated with left arm and forearm fasciotomies and admitted to the trauma intensive care unit for post-operative management and right leg compartment checks. She required several revisions of her left arm surgery and closure of her fasciotomies at later dates. While high voltage injury can result in the development of cataracts within hours to many months after an incident, it is usually the result of electrical exposure to the face.[16] The patient demonstrated no evidence of cataract on immediate and delayed ophthalmology evaluation, and follow-up was recommended as needed for any perceived changes in visual acuity. The patient did, however, experience severe depression due both to the amputation and from the neuropsychiatric effects of high-voltage electrical exposure. She was discharged several weeks after her presentation.

FINAL DIAGNOSIS: Severe burns and amputation of left hand due to electrical injury; depression.

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Implications of the Affordable Care Act on Access to Effective HIV Services in Rhode Island

WILLIAM McQUADE, DSC, MPH; MARIANNE RAIMONDO, PhD, MSW, LICSW; PHANIDA PHIVILAY-BESSETTE; THEODORE MARAK, MPH; PAUL LOBERTI, MPH

Human immunodeficiency virus (HIV) remains a major public health issue in the United States with over 1.2 million people living with the disease and approximately 50,000 new cases identified annually.[1] Considerable progress has been made in the last few decades in treating the disease but progress still needs to be made in combating transmission of the virus and building the infrastructure necessary to treat prevalent cases going forward.

The Medical Monitoring Project (MMP) is a CDC initiative to assess the health care needs of people who are infected with the HIV virus.[2] Data from this Project have been very useful in understanding the multiple health care needs of the HIV population including comorbid conditions such as hepatitis C and tuberculosis. MMP data also address the psychosocial needs of the HIV/AIDS population and demonstrate the importance of comprehensive health coverage for this vulnerable population.

CDC guidelines recommend that primary care practices and clinics monitor HIV/AIDS services through proactive Counseling, Testing and Referral (CTR) that includes timely diagnosis, immediate referral to treatment, offering Anti-Retroviral (ARV) treatment – with the ultimate goal of viral suppression.[4] All adolescent and adults should be assessed for HIV risk factors and high-risk patients (i.e., men having sex with men (MSM), injecting drug users (IDU) and heterosexuals who have had unprotected sex should all be screened for HIV with appropriate screening tests. In addition to these established high-risk groups, it should be noted that HIV rates are higher in black and Hispanic populations and among men and women between 30 and 39 years of age.

Rhode Island is now considered a *moderate-low burden* state by CDC with between 1,000 and 3,999 prevalent cases.[5-6] Today there are approximately 2,200 people living with HIV/AIDs (PLWHA) in the state, and less than 100 new cases have been identified each year since 2011.[8] In addition, the RI Department of Health estimates that there are approximately 400 HIV positive people who are unaware of their HIV status. 'Unawares' are at increased risk of transmitting the disease and are a critical population for screening, early diagnosis and referral.

The purpose of this paper is to identify the coverage and treatment options for people living with HIV/AIDS in Rhode Island and the impact of the Affordable Care Act on funding and access to health care services for people with HIV/AIDS. We briefly review general HIV incidence, prevalence and transmission patterns in RI before reporting on quality measures along the HIV Continuum of Care in selected practices in the Ryan White Part B program. We conclude with some recommendations for next steps and suggestions for how the primary care community can continue to assist the state in assertive testing, early diagnosis and treatment efforts.

METHODS

Given the variety of treatment options available to the PLWHA population, data for this study have come from multiple sources. Data on disease occurrence were derived from the Department of Health HIV/AIDS Surveillance System, while data on performance measures associated with quality come from the Executive Office of Health & Human Services (EOHHS) Ryan White Program. Data on risk factor assessment have come from the RI Behavioral Risk Factor Surveillance Survey. Finally, estimates on the impact of the Medicaid program on services for HIV come from the EOHHS Medicaid Medical Information System (MMIS). National data pertaining to the HIV Continuum of Care are referenced from CDC. In an effort to use the most current data available, we report data from multiple reporting periods.

Coverage/Treatment Options for People Living with HIV/AIDS

The primary sources of public funding for HIV/AIDS come from Medicaid/Medicare insurance coverage or from the Ryan White Program. The Ryan White Program is a key source of HIV care, treatment, and support for individuals who are uninsured and underinsured. Ryan White provides funding for both medical care and non-medical case management services helping individuals living with HIV/AIDS to be engaged and retained in care and treatment. Ryan White has been an important program for patients to overcome some of the barriers associated with medical adherence related to multiple comorbidities. In short, these services provide continued opportunities for access to care including behavioral health services, transportation, housing, and employment. It is important to note that Ryan White is not an insurance program; it offers payment for critical services for PLWHA who are uninsured or underinsured.

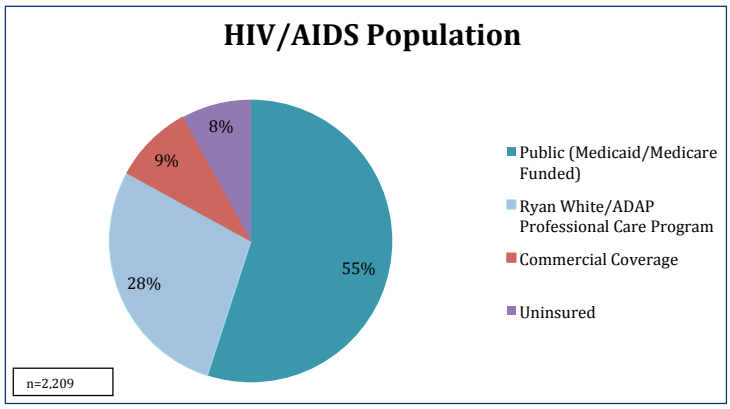
Prior to January 2014, full Medicaid coverage for PLWHAs was available to people with incomes below 100% of the federal poverty level (FPL). PLWHAs with incomes below

400% FPL were eligible for limited HIV/AIDS benefits through the Ryan White Program (e.g., support services, case management, home/community-based health services, emergency relief, limited dental, etc.) as well as pharmaceuticals through the AIDS Drug Assistance Program (ADAP).

In states such as Rhode Island that chose to expand Medicaid under the Patient Protection and Affordable Care Act (ACA), full Medicaid benefits are now available to all adults without dependent children with incomes less than 138% FPL. In addition, people with incomes between 138% and 400% of the FPL are eligible for subsidies to purchase full benefit coverage on the state-based or Federal health insurance exchanges. The Ryan White/ADAP programs are still available for HIV/AIDS related services for people under 400% FPL with both public and private coverage. (As such, there is some overlap in coverage among the various programs making unduplicated counts difficult.)

Figure 1 illustrates the population distribution among the various coverage types as of January 2014, after implementation of the ACA. Note that 55% of PLWHAs are covered by some type of public insurance (mostly Medicaid and Medicare) while 28% receive HIV/AIDS-related services through the Ryan White/ADAP Professional Care Program. About 9% have some kind of private insurance (including that purchased on the Exchange - Health Source RI). It is estimated that 8% of the known PLWHA population are uninsured (n=300), 83% of them receive care at Federally Qualified Health Centers (FQHCs) and other sites that receive funding for uncompensated care. About 2% have no insurance and no known site of care. Nationally, almost 30% of PLWHAs have no health insurance coverage.

Figure 1. Coverage Type/Funding Source for Health Care Services for People Living with HIV/AIDS in Rhode Island: 2015



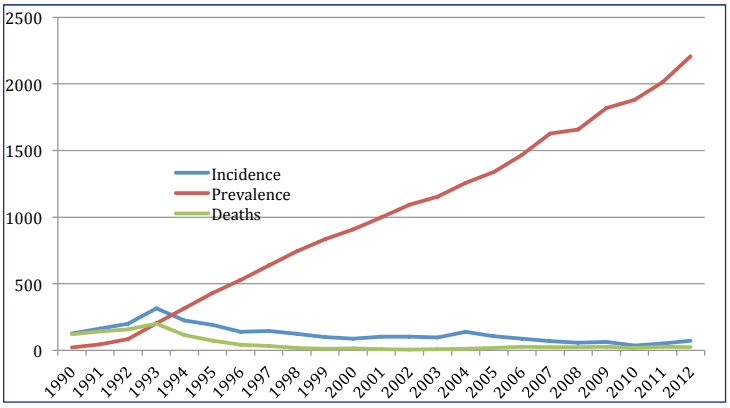
Source: RI Executive Office of Health and Human Services. Ryan White/ADAP Program

The ACA has had a significant impact on both the availability and extent of health coverage for at least 15% of the HIV/AIDS population in the state. First of all, about 260 PLWHAs have transitioned to full Medicaid coverage as a result of expansion provisions of the ACA. These patients were only receiving partial coverage prior to the ACA and now have full medical benefits. In addition, the RI Ryan White Program is making premium assistance payments for 74 PLWHAs to purchase insurance through Health Source RI. As such, about 15% of the HIV/AIDS population is now receiving full medical coverage as a result of the ACA.

Epidemiology of HIV in RI

Figure 2 illustrates trends in HIV parameters in RI from 1990 to 2012. Prior to 1994, PLWHAs were dying faster than new cases were being added. Since 1994, the prevalence of HIV has increased precipitously while both incidence and deaths have declined. Increased prevalence is the result of more effective treatment along with public and private funding for treatment.[5] Essentially, HIV is now considered a chronic disease with a longer life expectancy. Reduction in incidence is primarily due to better public health control of transmission and compliance with treatment protocols among PLWHA.[6] Still, approximately 100 new cases of HIV are identified annually suggesting that progress needs to be made in controlling transmission.

Figure 2. Trends in HIV Occurrence (Incidence, Prevalence and Deaths) in RI 1990–2012



Source: RI Department of Health (HEALTH) HIV Surveillance Program.

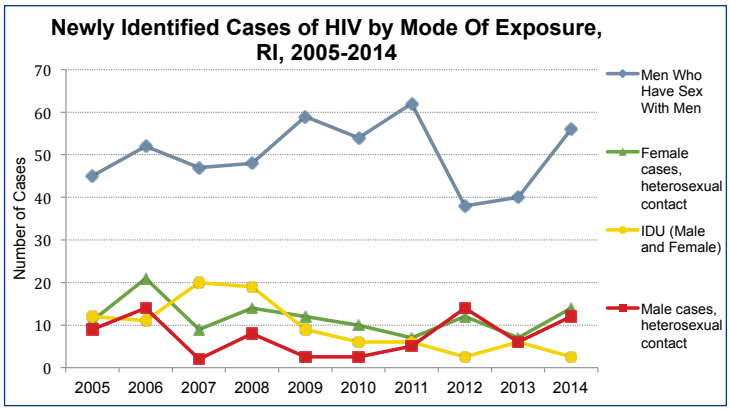
Figure 2 also suggests that PLWHA represents a growing population in Rhode Island with health care needs that will continue to require monitoring and intervention. Therefore, efforts regarding early identification of the disease, early ARV therapy resulting in viral suppression, all bode well for better outcomes and reducing transmission. The State of RI has begun several initiatives with the goal of getting to 'zero' native new cases in RI. While 34% of Rhode Island adults have 'ever' been screened for HIV, more targeted screening efforts may help identify the 'unawares.'[8]

Figure 3 illustrates the exposure status of new cases of HIV by category. Consistent with national trends, the predominant mode of transmission is through men having sex with men (MSM). Perhaps the most striking result in Figure 3 is the precipitous decline in transmission through injecting drug use (IDU); largely due to the establishment of the state's syringe exchange program and the repeal of

the syringe act that required a prescription for the purchase of syringes.[9] Until recently (2010), women were a bit more likely to contract HIV from sexual contact with men than men were to have the virus transmitted from sexual contact with women. However, more recently the transmission rates have been almost identical.

It should be noted that over 60% of PLWHA are sexually active, about 25% have unprotected sex and 13% have unprotected sex with a partner with unknown or negative HIV status.[2] Among men having sex with women, 14.5% are having unprotected sex and 9% are having unprotected sex with a partner with negative or unknown HIV status. Among HIV positive women having sex with men, 14.6% have unprotected sex with a partner of negative or unknown HIV status.

Figure 3. New Identified Cases of HIV by Mode of Exposure: 2005–2014



Source: RI Department of Health (HEALTH) HIV Surveillance Program.

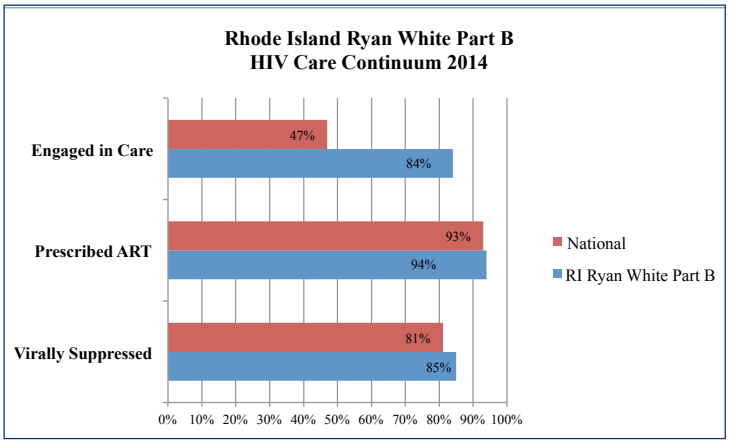
Performance Measures/HIV Continuum of Care

Nationally monitored performance measures on the HIV Continuum of Care include: 1) the percent of diagnosed cases that are engaged in care (i.e., have at least 2 outpatient visits per year); 2) percent prescribed antiretroviral therapy; and 3) the percent who achieve viral suppression.[4] **Figure 4** compares the performance of three RI Ryan White Part B sites with national data from HRSA/HAB. These sites were selected on the basis of the fact they are the only Part B funded entities providing Medical Case Management. The populations sampled represent about 15% of the known PLWHA in RI. Rates are reported as the percent of the diagnosed cases.

In Rhode Island, EOHHS collaborates with Ryan White Part B Funded Medical Case Management Agencies to continuously improve the quality of the care provided to PLWHA. Funded agencies are required to report clinical quality performance measures routinely. EOHHS monitors these measures to identify where gaps may exist in connecting people living with HIV to sustained, quality care, and to implement system improvements and service enhancements that better support individuals through the continuum.

Note that everyone in the Ryan White program has been diagnosed with HIV/AIDS and had at least some contact with the health care system to be included in the sample. As such, the engaged rates are not exactly comparable to national data. On the other hand, the percent prescribed ART and the percent virally suppressed are comparable from both samples. Over 90% of the patients who are engaged in care are successfully placed on anti-viral therapy and over 80% of them achieve viral suppression. These results suggest that Ryan White agencies are exceeding national performance standards in treating HIV cases.

Figure 4. 2014 Performance Measures for HIV Care Continuum: Selected Practice Sites in RI vs National Rates as Reported to the RI Executive Office of Health and Human Services.



https://careacttarget.org/library/data-ryan-white-and-continuum-hivaids-care
Source: RI Executive Office of Health and Human Services. Ryan White/ADAP Program. National rates referenced through HRSA/HAB.[4]

CONCLUSIONS

Prior to the ACA, only people with incomes below 100% FPL were eligible for full Medicaid coverage for HIV services. PLWHA with incomes below 400% FPL received limited services through the Ryan White Program and/or partial benefits offered through the Medicaid program. Since implementation of the ACA, approximately 15% of the PLWHA population now has full medical coverage – thus reducing the number of uninsured and underinsured.

While RI is fortunate to be a moderate-low burden state, we still see about 100 new cases per year and the prevalence of the condition is increasing each year. Approximately 15% of the PLWHA are unaware of their disease status and many who are aware of their disease status do not comply with recommendations to reduce transmission. Therefore, clinicians should continue to be vigilant in screening high-risk populations and counseling known cases on strategies to prevent transmission.

As HIV/AIDS continues to look more like a chronic disease with a large prevalent population, clinicians and policy makers need to be concerned about the state's infrastructure available to treat the population. Fortunately, clinical quality measures from the Ryan White Program offer encouraging signs that RI is well poised to meet the HIV/AIDS challenge going forward.

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Rhode Island Monthly Vital Statistics Report
Provisional Occurrence Data from the Division of Vital Records

VITAL EVENTS	REPORTING PERIOD		
	JANUARY 2015	12 MONTHS ENDING WITH JANUARY 2015	
	Number	Number	Rates
Live Births	947	11,408	10.8*
Deaths	1001	10,094	9.6*
Infant Deaths	6	58	5.1#
Neonatal Deaths	5	48	4.2#
Marriages	183	7,015	6.6*
Divorces	301	3,030	2.9*
Induced Terminations	278	2,915	255.5#
Spontaneous Fetal Deaths	53	590	51.7#
Under 20 weeks gestation	52	520	51.5#
20+ weeks gestation	1	70	6.1#

* Rates per 1,000 estimated population
# Rates per 1,000 live births

Underlying Cause of Death Category	REPORTING PERIOD			
	JULY 2014	12 MONTHS ENDING WITH JULY 2014		
	Number (a)	Number (a)	Rates (b)	YPLL (c)
Diseases of the Heart	165	2,312	219.5	3,414.0
Malignant Neoplasms	194	2,414	229.2	6,294.5
Cerebrovascular Disease	25	380	36.1	480.0
Injuries (Accident/Suicide/Homicide)	71	734	69.7	10,915.0
COPD	44	501	47.6	482.5

(a) Cause of death statistics were derived from the underlying cause of death reported by physicians on death certificates.
(b) Rates per 100,000 estimated population of 1,051,511 (www.census.gov)
(c) Years of Potential Life Lost (YPLL).

NOTE: Totals represent vital events, which occurred in Rhode Island for the reporting periods listed above.
Monthly provisional totals should be analyzed with caution because the numbers may be small and subject to seasonal variation.

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RIMS and Coverys announce new partnership

In October 2014, the Medical Society entered into a new strategic partnership with Coverys, the 40 year-old medical liability insurance giant headquartered in Boston.

Coverys and RIMS have pledged to combine and coordinate their complementary strengths for the purpose of enhancing patient safety. The two organizations share the conviction that safety is fundamental to promoting and maintaining the kind of professional liability environment that everyone wants for Rhode Island: one that is stable and responsive to the needs of the medical profession and the public. RIMS and Coverys are uniquely positioned to support each other in this endeavor.

Key elements of the new collaboration will be peer review, risk management and continuing education. RIMS' peer review prowess is well established, particularly in the highly sensitive and all-important area of physician health. In addition, RIMS is recognized by the American Council for Continuing Medical Education (ACCME) as the agency responsible for accrediting the CME programs of all the hospitals within the state of Rhode Island. RIMS has been a consistent star nationally in earning an unbroken string of long-term recognitions from ACCME.

For its part, Coverys is one of a tiny number of medical professional insurers that have devoted the necessary and substantial resources to gaining and maintaining full accreditation by the ACCME as a source of Category 1 CME credits for physicians. RIMS regards this extraordinary commitment to CME as particularly meaningful and praiseworthy in an insurance company. Of course, medical peer review and continuing medical education, each in its own way, provide targeted risk management and serve to enhance quality and safety.

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RIMS has also agreed to advise Coverys and to offer the company additional eyes and ears focused on the evolving insurance market, the medical practice environment and the medical liability climate, as each of these is affected by legislative, regulatory, judicial, economic, demographic and political developments in the Ocean State. In recognition of their strong relationship and mutual support, RIMS and Coverys will also engage in joint marketing.

Coverys is the sixth largest medical liability insurer in the nation. It protects more than 32,000 physicians, dentists and other health professionals nationally, as well as over 500 hospitals, health centers and clinics. It is rated A ("excellent") by A.M. Best. It writes over $400 million in premium, has net assets of $3.5 billion, and maintained a policyholder surplus of $1.5 billion as of the end of last year. Member companies include Medical Professional Mutual Insurance Company ("ProMutual") and the ProSelect Insurance Company.

Coverys is the dominant insurer of physicians and surgeons in Rhode Island. The Rhode Island Medical Society Insurance Brokerage Corporation (RIMS-IBC) is proud to have been appointed as an agent for Coverys three years ago. The RIMS-IBC is a full-service agency that specializes in medical professional liability.

RIMS-IBC

Robert A. Anderson, Jr, Director of the IBC, can be reached at 401-272-1050.

SECOND ANNUAL RIMS MEMBERS

CONVIVIUM

SAVE THE DATE

SEPTEMBER 26

The *new* tradition continues. Members are invited to schmooze, graze, and relax with colleagues at Agawam Hunt during the day and at the Save The Bay Center in the evening.

HOW DO YOU SWING?

Whether you prefer a golf club or tennis racquet, come play at Agawam Hunt in Rumford.
Starting at 10am
Reserve your tee time or court now, contact Steve DeToy.

EAT, DRINK, BE CHUMMY

Nosh and mingle waterside at the Save the Bay Center in Providence.
Entertainment by The Bebop Docs
6:30pm

RIMS 204TH ANNUAL MEETING

Inauguration of Officers and Presentations
Dr. Charles L. Hill Award
Dr. Herbert Rakatansky Award
Dr. John Clarke Award
Dr. Stanley M. Aronson Award

WATCH FOR YOUR INVITATION LATER THIS SUMMER!

Working for You: RIMS advocacy activities

June 1, Monday

Reinventing Medicaid Task Force

Speaker Mattiello Fundraiser

Council Meeting; Health Director Nicole Alexander-Scott, MD, MPH, special guest and presenter

June 2, Tuesday

Physician Health Committee, Herbert Rakatansky, MD, Chair

Meeting with Purdue PhRMA regarding legislation

Workers Comp Fee Schedule Task Force Meeting

Legislative Hearings

June 3, Wednesday

Childhood Obesity Prevention at Heart Association

Meeting with BMLD regarding proposed physician regulations

Meeting with Chairman McNamara regarding legislation

Legislative Hearings

Sen. Ottiano Fundraiser

June 4, Thursday

Meeting with Good Samaritan Coalition

Meeting with Chairman Miller and Senate staff regarding legislation

Legislative Hearings

June 5, Friday–June 9, Tuesday

AMA House of Delegates Meeting; Peter Karczmar, MD; Alyn L. Adrain, MD; Peter A. Hollmann, MD; and RIMS staff attending

June 8, Monday

Chairman Kennedy fundraiser; Michael Migliori, MD, Chair, RIMS Public Laws Committee attending

June 10, Wednesday

Legislative hearings

June 11, Thursday

Meeting with Good Samaritan Coalition

Meeting with Chairman McCaffrey regarding Good Samaritan legislation

Legislative hearings

June 15, Monday

Meeting with Pfizer regarding legislation

Meeting with alliance of YMCAs of Rhode Island regarding legislation

Conference call with Good Samaritan coalition

June 16, Tuesday

Meeting at Rhode Island Blood Center regarding potential relocation of RIMS office

Conference call with American Association of Medical Society Executives regarding RIMS presentation on membership development at annual meeting

Legislative hearings

June 17, Wednesday

Primary Care Physicians Advisory Committee meeting at DOH

Health Professional Student Loan Repayment Program board meeting at DOH

Conference call with Good Samaritan coalition

Legislative hearings

June 18, Thursday

SIM Steering Committee meeting; Peter A. Hollmann, MD, and RIMS staff

Legislative hearings

June 19, Friday

Lifespan new residents orientation, Rhode Island Hospital, RIMS staff attending

June 22, Monday

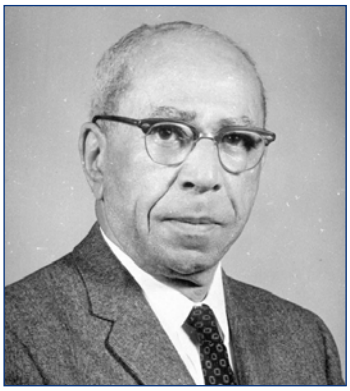
Senator Reed, Governor Raimondo; Roundtable Discussion regarding drug overdose

Meeting with Health Insurance Commissioner regarding physician reimbursement

Legislative hearings

Finance Committee meeting

RIMS/Baystate Financial welcome reception for new Lifespan residents



COURTESY OF RAY RICKMAN

Dr. Carl Gross

R.I.'s history of black doctors, a commentary by RIMS Executive Director Newell E. Warde, PhD, was published on the editorial page of the June 25, 2015 issue of Providence Journal.

June 23, Tuesday

Legislative hearings

Conference Call with the RIMS Group Membership Taskforce

Health Professional Student Loan Repayment Program awards ceremony

June 24, Wednesday

Legislative hearings

June 25, Thursday

Mental Health and Substance Abuse Coalition

Meeting with Health Insurance Commissioner

Legislative hearings

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Why You Should Join the Rhode Island Medical Society

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Symposium Examines Racial, Ethnic Barriers to Health Care; Implicit Biases

MARY KORR
RIMJ MANAGING EDITOR

PROVIDENCE – Dr. Jeffrey Borkan opened a symposium on race, ethnicity and the Patient Centered Medical Home (PCMH) June 16th at the Alpert Medical School by saying racial and ethnic barriers in the PCMH and health care need to be examined and strategies developed to address them.

"Questions on this topic haven't been asked, the discussion hasn't happened. African Americans, Latinos, and the poor are sicker and die at a younger age. We need to focus on the health and well being of the populations we serve and prioritize that for our most underserved," he said.

Dr. Borkan is chair of the Department of Family Medicine and assistant dean, Primary Care-Population Medicine Program Planning, at Brown.

Keynote speaker M. Norman Oliver, MD, chair of the Department of Family Medicine at the University of Virginia, addressed implicit biases in health care, among many other topics. He said a 2002 report by the Institute of Medicine (IOM), "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care," showed that minorities were less likely to be given appropriate cardiac medications or to undergo bypass surgery, and were less likely to receive kidney dialysis or transplants.

"We are members of the communities we serve. We are leaders and we should be joining with policy makers and other members of the community to address the social determinants of health," Dr. Oliver said.

Dr. Pablo Rodriguez, an ob-gyn physician, who moderated a roundtable discussion at the event, related an incident in his office which highlighted implicit biases. The patient he was seeing had a thick African accent and, to his ultimate chagrin, he began speaking very slowly and in basic terms to her. She listened politely and then informed him she was a physician trained in England.

"Well, we all have human experiences like this. It's part of the learning experience," Dr. Rodriguez said.

The IOM study recommended collecting data on patients' race, ethnicity and preferred language (REL) as one avenue to eliminate disparities by using EMR records to develop strategies to offer appropriate preventive care. The Affordable Care Act (ACA) expands and standardizes data collection about race, ethnicity and language. Several health care providers at the event questioned how this data can be used most effectively.

On the academic level, Jabbar Bennett, PhD, associate dean of recruiting and professional development at Brown, spoke of the Race and Medicine Task Force at the medical school, established to re-envision how medical students are taught about race, as one example of examining these issues. He also spoke of efforts at Brown to recruit medical students, faculty and fellows who are members of underrepresented groups.

The symposium was hosted by the medical school, the Brown Primary Care Transformation Initiative and supported by the Care Transformation Collaborative of Rhode Island and PCMH-Kids.

The planning committee included Joanna Brown, MD, MPH; Victoria Adewale, MSc; Robert Alleyne, Anne Pushee, RN; Jeffrey Borkan, MD, PhD; Roberta Goldman, PhD; Maria Sullivan and Kelli Landry. ❖

MARY KORR

A symposium on Race, Ethnicity and PCMH: Ensuring Everyone Has a Voice, was held June 16 at the Alpert Medical School. Dr. Pablo Rodriguez at podium moderated a policy roundtable discussion.

Cancer Research at RIH Gets $5.8M NIH Grant

Five-year grant helps fund research activities at the Center for Cancer Research Development

PROVIDENCE – The National Institutes of Health (NIH) has awarded Rhode Island Hospital $5.8 million to support the hospital's cancer research program. It is the third phase of an Institutional Development Award (IDeA) Center of Biomedical Research Excellence (COBRE). Originally established at Rhode Island Hospital in 2002, the Center for Cancer Research Development (CCRD) has supported research conducted by a talented pool of cancer researchers. The center previously earned two NIH grants of $8,617,015 and $10,853,821, which supported the first two phases of activity, respectively. With this additional support in funding, the CCRD will launch several pilot programs and extend the sustainability of its programs beyond Phase III. The funding will be spread over five years.

"This award will strengthen Rhode Island Hospital's biomedical research infrastructure, support research projects in innovational scientific areas, and provide mentoring and training activities to increase the ability of junior investigators to compete independently for NIH or other external, peer-reviewed support," said **BHARAT RAMRATNAM, MD**, medical director of Lifespan's Clinical Research Center and the head of CCRD. Dr. Ramratnam will serve as the principal investigator of the grant, and he explained that a portion of the federal monies is designated for a new program that fast-forwards cancer-related research initiated by junior investigators. Additionally, funds will be used to support state-of the-art core facilities in proteomics and molecular pathology. By propelling usage of these core services, the center will provide critical support to the clinical and research programs of cancer investigators in Rhode Island.

"In addition to the founding grants, we have secured more than $23 million in federal funding for COBRE plus $240 million in external grant funding at Lifespan since 2013," said **PETER SNYDER, PHD**, senior vice president and chief research officer for Lifespan. "The fact that NIH has entrusted Rhode Island Hospital with three coincident COBREs underlines the confidence they have in our research facilities and talent. That investment enables us to attract and support scientists and clinicians who work at the leading edge of their fields and who have the scientific vision to transform patient care. As we expand our pursuits at the Coro Building, the nucleus of our research activities, so too will our network of new partners, and that in turn will diversify our funding resources."

"The Warren Alpert Medical School of Brown University is extremely pleased that the COBRE Center for Cancer Research Development (CCRD) at Rhode Island Hospital, under the leadership of Dr. Bharat Ramratnam, has received funding for another five years," said **EDWARD HAWROT**, associate dean for biology at Brown University. "Previous CCRD studies have aimed at elucidating the cellular and molecular pathways leading to cancer, especially cancers of the liver, intestine, pancreas, and colon. Such efforts are in complete alignment with the medical school's priorities, which include a major focus on the advancement of research in translational science. Jack A. Elias, MD, dean of medicine and biological sciences at Brown, envisions that the newly established Brown Institute for Translational Science will work closely with the CCRD at Rhode Island Hospital over the next five years to help translate fundamental discoveries in basic science into new diagnostics and therapeutic approaches that will benefit the community at large."

"COBREs like this one are thematic, multidisciplinary programs that enhance faculty and institutional research capabilities in states that historically have had low levels of National Institutes of Health funding," said **W. FRED TAYLOR, PhD**, who directs the IDeA program at NIH's National Institute of General Medical Sciences. (NIGMS) "This final phase of funding will enable Rhode Island Hospital to sustain the cancer research program it developed during earlier stages of funding and prepare the scientific cores for the transition from IDeA support to independent support."

The mission of the COBRE CCRD is to create, interpret and apply new knowledge based on original, collaborative, multidisciplinary laboratory studies to uncover the cellular and molecular pathways leading to cancer arising in the liver, intestine, pancreas and colon. Rhode Island is ranked thirteenth in the nation for cancer mortality rates. Cancer and cancer-related disease cost the state approximately $900 million per year in combined losses from medical care and decreased productivity and place a heavy emotional and mental burden on patients and their families.

"Thanks in part to researchers here in Rhode Island, major advancements are being made in the fight against cancer. The folks here at the center do outstanding work and these federal funds will help them upgrade their biomedical infrastructure and continue cutting-edge research that is unlocking cures and improving treatment options," said U.S. Sen. Jack Reed, a senior member of the Senate Appropriations Committee, who has helped direct over $47 million in fiscal year 2015 NIH funding to Rhode Island. ❖

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NIH Awards Women & Infants $5M Grant to Study Perinatal Biology

PROVIDENCE – Women & Infants Hospital has recently received a nearly $5 million grant from the National Institutes of Health (NIH) to support an Institutional Development Award (IDeA) Center of Biomedical Research Excellence (COBRE) for Perinatal Biology. Of the more than 100 COBREs across the country, Women & Infants is the only one specifically focused on developmental research. The IDeA program builds research capacities in states that historically have had low levels of NIH funding by supporting basic, clinical and translational research; faculty development; and infrastructure improvements.

Under the leadership of **JAMES F. PADBURY, MD**, pediatrician-in-chief and chief of Neonatal/Perinatal Medicine at Women & Infants Hospital and the William and Mary Oh -William and Elsa Zopfi Professor of Pediatrics for Perinatal Research at The Warren Alpert Medical School of Brown University, and **SURENDRA SHARMA, MBBS, PHD**, research scientist at Women & Infants and professor of pediatrics at the Alpert Medical School, the COBRE team will continue its research in perinatal biology, including studies of fetal and newborn development, placental biology, and reproductive diseases including preterm birth and preeclampsia.

"Our projects are focused on critical windows of development and reproductive life. Environmental disturbance or other influences during these critical windows can have lasting effects," said Dr. Padbury. "Our overarching hypothesis is that understanding these effects during critical developmental periods informs the mechanisms of health and disease throughout life."

James F. Padbury, MD

Surendra Sharma, MBBS, PhD

WOMEN & INFANTS

Work supported by the COBRE in Dr. Sharma's laboratory has identified novel new insights into the pregnancy disorder, preemclampsia, or pregnancy-induced hypertension. "We have recently demonstrated that preeclampsia originates from protein misfolding and aggregation. This leads to disturbances in placental function and many of the mother's symptoms," explained Dr. Sharma. "Remarkably, transthyretin, the protein we have identified that is misfolded in preeclampsia, is also disturbed in some cases of Alzheimers disease. Our current work is focused on the mechanistic similarities between preeclampsia and Alzheimers disease and whether preeclampsia may be a risk factor for later development of Alzheimers."

Dr. Sharma and his colleagues are also working to develop a diagnostic test to confirm that preeclampsia can be identified much earlier in pregnancy. He said, "Identifying preeclampsia earlier will certainly lead to new and better treatments."

This is a Phase III award intended to consolidate the formation of the Center for Perinatal Biology and support the administrative activities of the Center. It will also provide state-of-the-art equipment to support the Center's Molecular Biology and Imaging Core. The Center and the COBRE researchers' laboratories are located in Providence's "Knowledge District" in the Kilguss Research Institute, the Laboratory for Molecular Medicine and the Coro Research building.

Other investigators include Sunil Shaw, PhD and Shibin Cheng, MD, PhD. Senior investigators also participating in the projects are Ulrike Mende, PhD; Walter Atwood, PhD; Qian Chen, PhD; Pamela Swiatek, PhD; and Karl Kelsey, MD. ❖

Bradley Hasbro Children's Research Center and Adoption Rhode Island launch COMPASS Clinic

Pilot program, funded through a Rhode Island Foundation grant, will care for behavioral health needs of Rhode Island youth in foster care

PROVIDENCE – The Bradley Hasbro Children's Research Center (BHCRC) and Adoption Rhode Island have partnered in a yearlong pilot project to develop a mental health clinic serving adolescents in the child welfare system. The COMPASS Clinic is funded through a $64,665 pilot grant from the Rhode Island Foundation and will offer a program of integrated clinical care that will work to address the behavioral health needs of youth in foster care in Rhode Island.

Annually in Rhode Island, there are approximately 2,000 children in the Department of Children, Youth and Families' (DCYF) care. Current data indicates that nearly 50 percent of youth in foster care have significant mental health needs that require treatment. The COMPASS Clinic introduces another evidence-informed treatment model to the community to address the shortage of trauma informed and adoption competent services for this population.

"Currently, youth with emotional or behavioral mental health needs are often referred to community providers for more extensive evaluation and outpatient treatment, a process that can result in delays in services," said **WENDY HADLEY, PhD**, a staff psychologist from the BHCRC. "However, research has found that early identification and treatment of mental health problems can offset the negative outcomes associated with delays in treatment, such as school drop-out, substance abuse, early pregnancy, and later, unemployment or underemployment."

"Children who have been removed from their homes due to abuse or neglect are particularly vulnerable, at risk for psychiatric illness, at risk for more and higher doses of psychotropic meds, and have a harder time getting into appropriate outpatient treatment," said **ELIZABETH LOWENHAUPT, MD**, a psychiatrist from the BHCRC who helped develop the pilot program. "Many of these children end up in the hospital, at the Rhode Island Training School, or in out-of-state residential placement if they are unable to get enough mental health support for them and their families."

One of the priorities of the COMPASS Clinic is to address the current shortage of evidence-based clinical care for children in the foster care system and to meet the unique needs of this community. In this yearlong pilot project, adolescents in foster care experiencing mental health issues such as depression or anxiety will be paired with a mental health clinician from either Bradley Hospital or Adoption Rhode Island. Clinicians are cross-trained in best practice interventions for delivering adoption competent and trauma-informed mental health treatment.

"Many youth in foster care, certainly those who have experienced the most significant trauma, may become confused or ambivalent about their permanency goal, including that of adoption. This ambivalence can contribute to an array of complex and conflicting emotions, the negative of which include feelings of grief, loss, identity confusion, and urges to seek validation from others in ways that can be self-destructive," said **RITA CAPOTOSTO**, clinical director of Adoption Rhode Island. "For some youth, the drive to connect with birth families, and the sense of divided loyalty between one's birth family and current adult caretakers can be quite strong, which can contribute to ambivalent relationships and conflicts with current caregivers."

The COMPASS Clinic will address the sensitivity required for the complicated and unique aspects of caring for children in the foster care system. Clinicians in the treatment program will integrate these considerations within all aspects of treatment, starting from the point of assessment, in order to communicate empathy and to establish a strong therapeutic alliance with the youth.

The project aims to develop a model that can be sustained as an on-going treatment clinic for youth in the child welfare system. While this clinic model is the first in Rhode Island devoted to the evaluation and care of a foster care population, there are similar models in other areas of the country, including Dallas, Texas and Cuyahoga County, Ohio. ❖

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MEMORIAL HOSPITAL

Sex Ed by Brown Med volunteers.

Dr. Susanna Magee Leads Successful Sex Ed by Brown Med program

PAWTUCKET – **SUSANNA MAGEE, MD, MPH** is leading a group of 41 first and second-year medical students who are hoping to lower teen pregnancy rates in Central Falls. Across Rhode Island, approximately one girl in 100 will give birth while she is between the ages of 15 and 19. But in Central Falls, that rate is quadruple the state average.

NAOMI ADJEI, MD'17, is working with four other Alpert medical students to create a better sex ed program for the city's middle schoolers. Sex Ed by Brown Med, which debuted in the 2014–2015 school year, is a collaboration between Alpert Medical School, the Rhode Island Department of Education, and the Board of the Central Falls School District. Teams of medical students, after a comprehensive training program, taught sex ed classes to 168 seventh- and eighth-graders at Calcutt Middle School in Central Falls.

The idea for Sex Ed by Brown Med was conceived in 2013 after Adjei listened to a speech on teenage pregnancy by Susanna Magee, MD, MPH, the director of the Maternal and Child Health at Memorial Hospital. Dr. Magee encouraged the students to get into the community and start working for change, and they did just that.

With Dr. Magee serving as faculty advisor, the students designed a comprehensive sexual education curriculum using web-based, validated education modules. Topics include reproductive system anatomy, sexually transmitted infection, teenage pregnancy and parenthood, sexual decision making, abstinence, contraception, sexual violence, and gender identity.

Preliminary surveys showed how knowledge increased among the seventh graders and teachers loved the program.

Sex Ed by Brown Med hopes to show that the program not only increases students' knowledge, but also contributes to a decreased teen pregnancy rate in Central Falls. ❖

Recognition

Dr. James F. Padbury Honored with Silver Rattle Award

PROVIDENCE – **JAMES F. PADBURY, MD**, pediatrician-in-chief and chief of Neonatal/Perinatal Medicine at Women & Infants Hospital of Rhode Island and the William and Mary Oh-William and Elsa Zopfi Professor of Pediatrics for Perinatal Research at The Warren Alpert Medical School of Brown University, was honored with the Silver Rattle Award from the Rhode Island Healthy Mothers, Health Babies Coalition at the coalition's annual May Breakfast.

WOMEN & INFANTS

Since 2001, the Silver Rattle Award has been given to someone or an organization that has "shaken up the system for Rhode Island mothers and babies." Dr. Padbury was awarded by the coalition specifically for his continued efforts to develop the single-family room neonatal intensive care unit (NICU) at Women & Infants Hospital, a Care New England hospital.

Dr. Padbury gave the keynote address at this year's breakfast, during which he highlighted the history of the new model of the NICU as well as the successes and challenges the unit has faced since its inception in 2009. ❖

Kent Hospital Receives NICHE Elder Care Designation

WARWICK – Kent Hospital announced it has received distinction as a NICHE Hospital (Nurses Improving Care for Healthsystem Elders) designating its commitment to elder care excellence as determined by thorough review and evaluation by an independent and international review panel focused on improving elder care.

"The Kent Hospital nursing staff has made this distinction possible through education and implementing evidence-based best nursing practice related to the care of our elderly patients," said Rebecca Burke, chief nursing officer, Kent Hospital. "The NICHE program provides us a framework to further improve our practice around the quality and safety of this very important and growing segment of our population."

NICHE is an international program designed to help improve the care of older adults. The vision of NICHE is for all patients 65 and over to be given sensitive and exemplary care. The mission of NICHE is to provide principles and tools to stimulate a change in the culture of healthcare facilities to achieve patient-centered care for older adults. NICHE, based at NYU College of Nursing, has more than 550 hospitals and healthcare organizations from the U.S., Canada, Bermuda and Singapore in the network. ❖

Dr. Christy Dibble Earns Dr. Joseph DiMase Memorial Healthcare Professional Award

PROVIDENCE – **CHRISTY DIBBLE, DO**, director of Women & Infants' Center for Women's Gastrointestinal Health and assistant clinical professor in the Department of Medicine at The Warren Alpert Medical School of Brown University, has received the Dr. Joseph DiMase Memorial Healthcare Professional Award from the Partnership to Reduce Cancer in Rhode Island, Rhode Island Department of Health.

WOMEN & INFANTS

Dr. Dibble received the award for her work as physician-chair of the Rhode Island Screening and Detection Workgroup of the Partnership to Reduce Cancer in Rhode Island, part of Rhode Island's Cancer Control Plan. The focus of the workgroup, on which Dr. Dibble has been chair since 2005, is reducing colorectal cancer and eliminating disparities in screening and detection in Rhode Island. This award is to recognize a state's comprehensive cancer control coalition that has successfully achieved evidence-based and measurable impact in projects and/or interventions.

The Detection and Screening workgroup, under Dr. Dibble's direction, has served as a springboard for statewide and regional collaboration aimed at decreasing the burden of colorectal cancer for all Rhode Islanders. To this end, the workgroup supported the Screening Colonoscopies for the Underserved Program (SCUP) to address the critical issue of screening for the un- and underinsured. The SCUP program served as a vital pilot program for the state, aiming to improve eligibility for future favorable federal grant funding for colorectal cancer screening programs. Through SCUP, Partnership members gave their time to provide training and support to patient navigators at community health centers.

More than 250 colonoscopies have been performed through SCUP, including pathology and follow-up. Screenings are performed by more than 60 volunteer surgeons who provide the screenings to patients at sites either in or close to their own communities. As a result of this initiative, data for the rate of adenamatomous polyps discovered, cancer detected, and polyps removed has increased significantly. This initiative has also resulted in an increase in the number of Hispanics served.

Dr. Joseph DiMase, founder of SCUP, passed away of leukemia in April 2012. Because of his vision for SCUP, the program served hundreds of uninsured Rhode Islanders, ultimately saving lives, and will continue to screen those at risk for colorectal cancer. It is because of his extraordinary efforts that the Partnership created the Dr. Joseph DiMase Memorial Healthcare Professional Award to honor those health care professionals who go above and beyond to support the mission of the partnership. ❖

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Recognition

Women & Infants Honors Nurses During National Nurses Week

PROVIDENCE – During National Nurses Week (May 6–12, 2015), Women & Infants Hospital presented several awards of excellence.

The 2015 Mary Dowd Struck Award was presented to **CHRISTINA RIBEIRO-OURIQUE, RN, BSN**, of Coventry. The award for honors a nurse annually for exemplifying clinical excellence, professional collegiality, patient and family advocacy, and passion for women's and newborn health.

The 2015 Carol Opiekun Scholarship Award was presented to **HEATHER MURPHY, RN, BSN**, of Warwick, who has worked with Women & Infants for 17 years. Murphy is a nurse on the fourth floor oncology unit. With the scholarship, Murphy hopes to finish her Family Nurse Practitioner degree program with her "thirst for more clinical know how." The Carol Opiekun Scholarship was established in 2012 as a means of supporting the continuing education efforts of nurses at Women & Infants Hospital.

LESLIE ROSA, RN, of Norton, MA, a nurse in the Division of Urogynecology and Reconstructive Pelvic Surgery, received the 2015 Home Loan Unsung Hero Award, given annually to a nurse who performs heroic acts above and beyond the scope of their regular jobs. Rosa was nominated by her colleagues for her efforts in organizing a clothing drive for domestic violence victims in her department. The clothes collected help victims who have to turn over their clothes as evidence for further investigation in their case. ❖

Women & Infants Receives Third 2015 Women's Choice Award

Hospital is among America's Best Hospitals for Cancer Care

PROVIDENCE – Women & Infants Hospital has earned a 2015 Women's Choice Award® for its Program in Women's Oncology, making it one of America's Best Hospitals for Cancer Care. This evidence-based designation identifies the country's best health care institutions based on robust criteria that consider patient satisfaction, clinical excellence and what women say they want from a hospital.

"This is the third Women's Choice designation Women & Infants has earned in 2015 – first as an America's Best Hospital for Obstetrics and next as Best for Breast Care. Each of these announcements highlights the outstanding care we provide women and their families every single day," said Mark R. Marcantano, president and chief operating officer at Women & Infants Hospital. "Our Program in Women's Oncology is one of the nation's leading services for the diagnosis, treatment and research of women's cancers. We are very proud that this excellence is being recognized."

Women & Infants is among the elite group of 331 hospitals that have earned the 2015 Women's Choice Award by meeting the highest cancer care accreditation standards of the American College of Surgeons Commission on Cancer, as well as for their excellence in clinical performance with regard to patient safety measures, and for their high recommendation rate, a measure that is very important to women in choosing a hospital. ❖

Center for Reproduction and Infertility at Women & Infants Earns Nursing Center of Excellence Distinction

PROVIDENCE – The Center for Reproduction and Infertility (REI) at Women & Infants Hospital of Rhode Island, a Care New England hospital, has earned the status of a Nursing Center of Excellence from The Nurses' Professional Group of the American Society of Reproductive Medicine (ASRM). This approval status will be active for the next three years. The Nursing Center of Excellence status indicates that at least 50 percent of the registered nurses and/or nurse practitioners in the Center for Reproduction and Infertility are experienced in reproductive endocrinology nursing and have completed the additional training in this area through the American Society for Reproductive Medicine (ASRM) eLearn REI Nursing Certificate Course.

A total of 16 nurses from Women & Infants Hospital completed the training course, including: **SUSAN BACON, RN**; **LYNNE BROWNING, RN, CNM**, interim nurse manager; **SUSAN BYRNE, RN**; **LINDA CAMPBELL, RN**; **BARBARA DOCKRAY, RN**; **NANCY DONAHUE, RN**; **REBECCA ENRIGHT, RN**; **CONI FERLAND, RN**; **LISA KONVAR, RN**; **ANGELA MATARESE, RN**; **SUSAN MCLINDEN, RN**; **LISE MCPARLIN, RN**; **HITHERIAS MERLINO, RN**; **DEIDRE MITCHELL, RN**; **SUSAN PEARSON, RN**; and **DIANE SHARKEY, RN**.

ANGELLEEN PETERS-LEWIS, RN, PhD, chief nursing officer and senior vice president of patient services is happy to see nursing at Women & Infants continue to take steps to improve the patient experience. "The literature suggests that nursing specialty certification improves quality of care and patient outcomes. As we move toward a health care system that is focused on quality and outcomes, I am thrilled that our nurses are preparing themselves to practice to the fullest potential and make significant contributions to the quality agenda." ❖

Recognition

Vareen O'Keefe-Domaleski Receives Excellence in Leadership Award

Bradley Hospital Chief Nursing Officer Honored by New England Chapter of the American Psychiatric Nurses Association

EAST PROVIDENCE – **VAREEN O'KEEFE-DOMALESKI, RN, MSN, EdD**, vice president for patient care and chief nursing officer of Bradley Hospital, has been awarded the Nancy M. Valentine Excellence in Leadership Award, given annually by the New England Chapter of the American Psychiatric Nurses Association (NEAPNA). The award recognizes a NEAPNA member who demonstrates vision, tenacity, perseverance, commitment, initiative and facilitation in improving mental health care and the advancement of the profession of psychiatric nursing.

BRADLEY HOSPITAL

O'Keefe-Domaleski was nominated for the award by nursing staff at Bradley Hospital. Kristin Lundsten, MSN, BSN, RN-BC, a clinical nurse manager at Bradley Hospital, spoke of O'Keefe-Domaleski's encouraging and proactive role as a nursing leader in her nomination letter.

"She is a transformational leader who role models for other nurses in a way that inspires them to move forward on important mental health initiatives within the organization," said Lundsten. "When Vareen arrived at Bradley Hospital, many of the disciplines, including nursing, were compartmentalized in different silos. Through her gentle leadership, she has successfully moved us toward a systems view of the organization where all disciplines, units, and departments work collaboratively as a single entity."

O'Keefe Domaleski has served as chief nursing officer at Bradley Hospital since 2012. She oversees the nursing staff within Bradley Hospital's many programs and services, as well as guides strategic planning, nursing practice and quality. In her role as vice president for patient care she oversees several other key departments at Bradley Hospital. She joined Bradley Hospital from Brattleboro Retreat in Vermont, a 149-bed psychiatric and substance abuse hospital serving children, adolescents and adults in acute, partial and residential levels of care. She has also held senior level positions at Hampstead Hospital in New Hampshire; Sheppard Pratt Health System in Baltimore, Maryland; and McLean Hospital in Belmont, Massachusetts.

O'Keefe Domaleski received her registered nurse diploma from Massachusetts General Hospital in Boston, Massachusetts, followed by a bachelor's degree in nursing from Worcester State College in Worcester, Massachusetts. She later received her master's degree in administration in nursing services from the University of Lowell in Lowell, Massachusetts and a doctoral degree in leadership and human and organizational studies from The George Washington University in Washington, D.C. O'Keefe Domaleski is also a Johnson & Johnson/Wharton Fellow in nurse executive management. ❖

Jeffrey Burock, MD, Named 2015 Physician of the Year at The Miriam

PROVIDENCE – **JEFFREY BUROCK, MD**, division director of psychiatry at The Miriam Hospital, is the recipient of the Charles C.J. Carpenter, MD, Outstanding Physician of the Year Award for 2015. The annual recognition distinguishes a physician, nominated by his or her peers, for outstanding contributions to the field of medicine, as well as professionalism and patient care.

MIRIAM HOSPITAL

Dr. Burock received this year's honor at The Miriam's annual meeting of the Medical Staff Association.

The Charles C.J. Carpenter, MD, Physician of the Year Award recognizes a physician for qualities that Dr. Carpenter, an esteemed infectious diseases specialist, embodies. As director of the Lifespan/Tufts/Brown Center for AIDS Research (CFAR) and a professor of medicine at The Warren Alpert Medical School of Brown University, he has achieved widespread recognition for his efforts to treat diseases in developing countries and train researchers in international health.

"It is an honor to receive this important recognition for work that I feel privileged to be able to do," said Dr. Burock. "Up to 40 percent of our medical-surgical patients have co-morbid mental health conditions which often go untreated. It is truly rewarding to have the opportunity to treat the whole patient and assess and factor in physical as well as mental well-being on the path to delivering health with care."

A geriatric psychiatrist, Dr. Burock's expertise is far reaching – ranging from treating Alzheimer's disease and Parkinson's disease, delirium, and post-stroke complications to schizophrenia, bipolar disorder, and addictive disorders.

Dr. Burock, a resident of Warren, attended medical school at Creighton University School of Medicine and completed his residency and a fellowship at Brown University-affiliated hospitals. Board certified in psychiatry, geriatric psychiatry, and psychosomatic medicine, he has worked on numerous committees and initiatives aimed at improving the quality of mental health care at The Miriam and Rhode Island hospitals. He is a native of Center Valley, Pennsylvania. ❖

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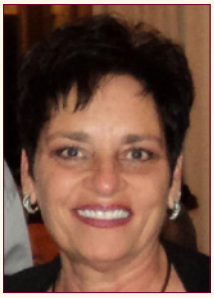
Appointments

Deborah Stamp Named VP, Patient Care Services and Chief Nursing Officer at Fatima


CHARTERCARE

NORTH PROVIDENCE – **DEBORAH STAMP, RN, BSN, MED, CCM**, has been named Vice President, Patient Care Services and Chief Nursing Officer for Fatima Hospital. She has served as Interim Chief Nursing Officer since March and previously served as Systems Director of Case Management with CharterCARE Health Partners since 2010.

She has held a number of senior leadership roles within CharterCARE since joining Roger Williams in 2005 as Director of Case Management. Previously, she served as Chief Operating Officer and Vice President of Clinical and Quality Management at Northwest Community Nursing. Stamp received her MEd in Health Education from Rhode Island College. She received her BSN in Nursing from Salve Regina University. Stamp has a long history with both CharterCARE hospitals, having held her first nursing job at Fatima following her graduation from the School of Nursing at Roger Williams Medical Center. She is a consultant and speaker on Joint Commission preparedness, regulatory compliance and case management issues.

"Deb brings more than 40 years of nursing, clinical, quality and leadership experience to this position," said Thomas Hughes, president of Fatima Hospital. "She is a proven leader who understands and supports the importance of quality patient care, the patient experience and a relationship-based model of care."

Fatima Hospital is an affiliate of CharterCARE Health Partners. ❖

M. Patricia Haskins Named Director of St. Joseph Health Center

CHARTERCARE

PROVIDENCE – **M. PATRICIA HASKINS** has been named Director of the St. Joseph Health Center, a comprehensive community-based health center providing primary care and specialty care services to the communities of South Providence, Pawtucket, and Johnston. The Health Center is an affiliate of CharterCARE Health Partners. Haskins is a resident of Foxboro, Mass.

Haskins most recently held positions with Southcoast Health System as Director of Operations for both the primary care and physicians' group. In these positions, she provided leadership and direction to multiple primary care practices, walk-in centers, and specialty practices in orthopedics, cardiology, pediatrics, and surgery. Previously, she served with the Steward Physicians Network as Director of Physicians Practice Operations for both the system and practices based at Steward Carney Hospital. She is a cum laude graduate with a Bachelor of Arts degree in Healthcare Administration from Stonehill College.

As Director, Haskins will manage the day-to-day operations of the Health Center, which offers numerous services including adult prenatal, pediatric and adult primary care programs, specialty clinics, an extended hour walk-in clinic, as well as a highly successful pediatric and adult dental program. She will also oversee related clinics in Pawtucket and Johnston.

"We are pleased to welcome Patricia Haskins to this leadership role with the St. Joseph Health Center," said Lester P. Schindel, CEO of CharterCARE. "The Health Center is committed to a healthier community through delivery of primary, pediatric, and specialty care, along with numerous programs in preventative medicine." ❖

Maureen A. Chung, MD, Surgical Oncologist, Joins Southcoast Physicians Group

SOUTHCOAST

DARTMOUTH, MASS. — **MAUREEN CHUNG, MD**, a renowned surgical oncologist specializing in diseases of the breast, has joined Southcoast Physicians Group as Medical Director of their Breast Care Program.

Prior to joining Southcoast, Dr. Chung was a breast surgeon at Women & Infants Hospital and Rhode Island Hospital, and previously served as program director of the Breast Disease Fellowship at Women & Infants Hospital. She was also on the Board of Directors of the Rhode Island Breast Cancer Coalition. Subsequently, Dr. Chung served as the director of the Margie Petersen Breast Center at Saint John's Health Center, as well as the director of the Breast Oncology Fellowship Program and the Margie and Robert E. Petersen Breast Cancer Research Program at John Wayne Cancer Institute in Santa Monica, CA.

Dr. Chung attended McGill University in Montreal, Canada, where she earned her undergraduate and master's degree in science. She received her medical degree from McGill University and her doctorate degree from Brown University. Dr. Chung completed a general surgery residency at McGill University and a surgical oncology fellowship at Brown Medical School in Providence.

Board certified in general surgery, Dr. Chung is a fellow of the American College of Surgeons and the Royal College of Physicians and Surgeons of Canada. Dr. Chung is also a member of numerous surgical organizations, including the Society of University Surgeons, the Society of Surgical Oncology, the American Society of Breast Surgeons, the New England Surgical Society, the American Association for Cancer Research and the Rhode Island Medical Women's Association. ❖

Appointments

Dr. Vivian Sung Named to International Urogynecological Association Committee

WOMEN & INFANTS

PROVIDENCE – **VIVIAN W. SUNG, MD**, a urogynecologist in the Division of Urogynecology and Reconstructive Pelvic Surgery at Women & Infants Hospital and an associate professor of obstetrics and gynecology at The Warren Alpert Medical School, has been selected to serve on the International Urogynecological Association Terminology and Standardization Committee.

The committee, which is comprised of 10 members selected from across the globe, is responsible for the development, publication and management of international documents aimed at standardizing the terminology, classification and outcomes for the field of female pelvic disorders. The committee frequently collaborates with other international organizations, including the International Continence Society, to develop joint reports for the field.

Dr. Sung is the principal investigator of the Pelvic Floor Disorders Network (PFDN) grant awarded to only eight sites across the country by the National Institutes of Health, including Women & Infants Hospital. The network is studying cutting-edge, non-surgical and surgical treatments for women suffering from urinary incontinence, pelvic organ prolapse and fecal incontinence.

A resident of Providence, Dr. Sung is a graduate of Tufts University School of Medicine and completed her residency at Magee Women's Hospital at the University of Pittsburgh School of Medicine. She completed a dual fellowship in female pelvic medicine and reconstructive pelvic surgery, and epidemiology and clinical trials at Women & Infants Hospital/Brown University. ❖

Recognition

Coalition For Children Names Louis Giancola 2015 Champion For Community Change

WAKEFIELD – South County Hospital HealthCare System President & CEO Louis Giancola has been named the 2015 Champion for Community Change, an award presented by the Washington County Coalition for Children.

The award was presented at the Coalition's 13th Annual Children's Issues Forum on June 3.

"In the midst of tumultuous changes in healthcare, Lou Giancola understands the importance of community," said Louise Kiessling, MD, who presented the award.

Dr. Kiessling lauded Giancola specifically for his favoring of a community health planning committee, which led to collaboration with the Coalition and others to establish the new South County Healthy Bodies, Healthy Minds Collaborative. The Collaborative, which serves one of Rhode Island's 11 Health Equity Zones, is set to receive an estimated $1 million in federal funding over four years with the goal of improving residents' health.

"His actions embody the Coalition's mission: Be a voice that advocates for the health and well-being of children," she said.

In addition to directing the community health planning committee, Giancola has been actively engaged in Rhode Island's Care Transformation Collaborative (CTC), where he fostered the implementation of one of the state's two Community Health Teams in South County. The Health Team provides supports and wraparound services to high-cost Medicaid users in an effort to improve health outcomes and reduce healthcare costs.

SOUTH COUNTY HOSPITAL

Louise Kiessling, MD, presented the award to South County Hospital HealthCare System President & CEO Louis Giancola.

"I am thrilled to have received this award from the Washington County Coalition for Children," Giancola said. "They do wonderful and important work on behalf of the children in our community, and it's an honor to be recognized by such an organization for such a worthwhile cause." ❖

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Graduation

Kent Hospital's Fifth Class of Resident Physicians Honored at Graduation Ceremony

Research awards announced

WARWICK – Kent Hospital held its fifth graduation for residents who have completed the Emergency Medicine, Family Medicine and Internal Medicine Graduate Medical Education (GME) programs on June 18 at Quidnessett Country Club.

"I would like to congratulate all of our GME residents on their graduation. Their hard work and dedication is clearly visible by this impressive achievement," said **MICHAEL DACEY, MD, MS, FACP**, president and COO Kent Hospital. "I would like to wish these physicians well as they embark on this exciting time both personally and professionally."

"Graduate Medical Education at Kent continues to grow and gain national recognition," said **JOSEPH SPINALE, DO, FACC**, senior vice president, chief medical officer and director of medical education at Kent. "Our program at Kent continues to grow as we welcome in a new class of students and wish our graduates all the success they deserve. Each year we continue to grow and build our program as we prepare these physicians for a successful career."

Psychiatrist Opportunity

Arbour-Fuller Hospital, a 103-bed private behavioral health hospital located in South Attleboro, Massachusetts is currently recruiting full-time psychiatrists to work on the Adolescent or Adult Inpatient Units. Enjoy a positive work/life balance with Monday through Friday schedule with **no call required**. The Hospital offers a highly competitive compensation and benefits package. This includes: reimbursed malpractice insurance, health and dental insurance, paid time off, continuing medical education allowance, and 401K with matched portion. Arbour-Fuller is licensed by the Massachusetts Department of Mental Health and accredited by The Joint Commission. For more information on the opportunity to work with an outstanding administrative and clinical team, please contact in-house recruiter Andree Paige at

Work 617-390-1437; Cell 617-429-4240

Email: andree.paige@uhsinc.com

2015 Graduating Class

The graduates, who comprise the fifth graduating class include:

Love Daoud, DO, Emergency Medicine
Anthony DePalma, DO, Emergency Medicine
Elysia Mallon, DO, Emergency Medicine
Kelly McDonough, DO, Emergency Medicine
Vincent Varamo, DO, Emergency Medicine
Khatija Zahiruddin , DO, Emergency Medicine
Amanda Beretta, DO, Family Medicine
C. Tyler Vogt, DO, Family Medicine
Chelsea Michaud, DO, Internal Medicine
Danica Buzniak, DO, Internal Medicine
Todd May, DO, Internal Medicine

Kent Hospital is a major teaching affiliate of the University of New England College of Osteopathic Medicine. Graduate Medical Education at Kent started in 2008 and currently has 46 residents and four fellows enrolled.

Research Recognition

Residents at Kent Hospital participated in the Fourth Annual Research Forum at Kent Hospital on April 27, 2015. Five residents and one student were asked to present their research or cases during the program. The event was attended by residents and attending physicians from Kent. Medical students had their own research assembly on April 23, 2015.

14th Annual NEOMEN Research and Scholarship Forum at the University of New England in Biddeford, ME

Almost all residents were accepted and attended the event. Monetary prizes were awarded and winners from Kent were:

1st Place Resident Original Research

Clinicians' Smart Phones in the Emergency Department: Functional or Fomite?
Khatija Zahiruddin, DO; Kelly McDonough, DO; Nick Billings, DO; Victoria Leytin, MD

1st Place Resident Case Reports

Case of Irregular Wide Complex Tachycardia
Vincent Varamo, DO; and Nicole Durfey, MD

3rd Place Student Case Presentation

Neuroleptic Malignant Syndrome: A Forgotten Diagnosis for Fever
Alison Dengos, MSIII; Alisa Merolli, MD

Graduation

Memorial Holds 37th Annual Residents' and Fellows' Graduation

PAWTUCKET – Graduation day exercises were held on June 19 for residents and fellows completing their training at Memorial Hospital of Rhode Island. **EDWARD SCHOTTLAND**, president and COO, performed the dual role of congratulating the graduates and greeting the new residents and fellows coming to the hospital in their wake.

MEMORIAL HOSPITAL

Front L–R: Graduating Family Medicine residents Carmen Goojha, MD; Alexis Drutchas, MD; Melissa Mackel, DO;Jennifer Lu, DO; Jessica Huang, MD; Erin Wisman, MD; Mark Turshen, MD. *Back L–R:* Cara Berkowitz, MD; Kristina Conner, MD; Daria Szkwarko, DO; Lauren Goddard, MD; Sara Watson, MD; Tania Menz, MD.

Family Medicine

In the Family Medicine Department, Melissa Nothnagle, MD, residency program director, Fadya El Rayess, MD, MPH, associate program director, Anna Filip, MD, assistant program director and Jeffrey Borkan, MD, PhD, physician-in-chief, Department of Family Medicine, announced the graduates and welcomed new residents.

Family Medicine graduates included: **Cara Berkowitz, MD**, who will continue her training as an ER Fellow at Maine General Hospital; **Krissy Conner, MD**, who will be starting a Fellowship in Hospice and Palliative Medicine at Brown University; **Alexis Drutchas, MD**, will be a family physician working in the inpatient and outpatient setting at Fenway Health Center in Boston, MA; **Lauren Goddard, MD**, is joining Jamestown Family Practice; **Carmen Goojha, MD**, will be teaching medical students in the Brown Doctoring Program; **Jessica Huang, MD**, will be joining a family medicine practice in Massachusetts; **Jennifer Lu, DO**, will move on to be a family physician based in Orange County, California; **Melissa Mackel, DO**, is staying with Brown Family Medicine in the Sports Medicine Fellowship; **Tania Menz, MD**, will be joining a family medicine practice in Massachusetts; **Daria Szkwarko, DO**, will be starting in a Global Health, Preventive Medicine Fellowship at the University of Massachusetts in Worcester, MA; **Mark Turshen, MD**, is co-owner/physician at Direct Doctors; **Sara Watson, MD**, will join the practice at Thundermist South County; and **Erin Wisman, MD**, is joining a federally qualified health center in Rhode Island.

MEMORIAL HOSPITAL

Front L–R: Graduating Internal Medicine residents Mobeen Rehman, MD, Maxwell Afari, MD and Mohammad Ashkiani, MD. *Back L–R:* Takehide Umeda, MD; Thomas Guerrero, MD; Mohammed Salhab, MD; Rasha Alqadi, MD; Hammad Shafqat, MD; Rajesh Shrestha, MD; Adil Bhutta, MD.

Internal Medicine

In the Internal Medicine Division, the following physicians graduated and moved on in their careers: **Maxwell Afari, MD**, will continue his training with a Cardiology Fellowship at St. Elizabeth's Hospital/Tufts University School of Medicine, Boston, MA; **Rasha Alqadi, MD**, with a Rheumatology Fellowship at Roger Williams Medical Center, Providence, RI; **Mohammad Ashkiani, MD**, will take a hospitalist position at Catholic Medical Center, Manchester, NH; **Adil Bhutta, MD**, will move on to a hospitalist position at Yale-New Haven Hospital, CT; **Thomas Guerrero, MD** will continue his training with a Hematology/Oncology Fellowship at St. Elizabeth's Hospital/Tufts University School of Medicine, Boston, MA; **Mobeen Rehman, MD**, will move on to a Cardiology Fellowship at Wayne State University/Detroit Medical Center, Detroit, MI; **Mohammed Salhab, MD**, will move on to a Hematology/Oncology Fellowship at the University of Massachusetts Medical School, Worcester, MA; **Hammad Shafqat, MD**, will continue his training with a Hematology/Oncology Fellowship at the Medical University of South Carolina, Charleston, SC; **Rajesh Shrestha, MD**, will take a hospitalist position at Rhode Island Hospital, Providence, RI; and **Takehide Umeda, MD**, will move on to a Pulmonary/Critical Care Medicine Fellowship at the University of Minnesota Medical School, Duluth, MN.

Graduates received their plaques from Eleanor Summerhill, MD, residency program director, Dino Messina, MD, PhD, associate program director, Joseph Diaz, MD, physician-in-chief, Department of Medicine and Sabrina Witherby, MD, Sajid Saraf, MD, both assistant program directors, and Salaheldin Elhamamsy, MD, assistant program director for Continuity Practice.

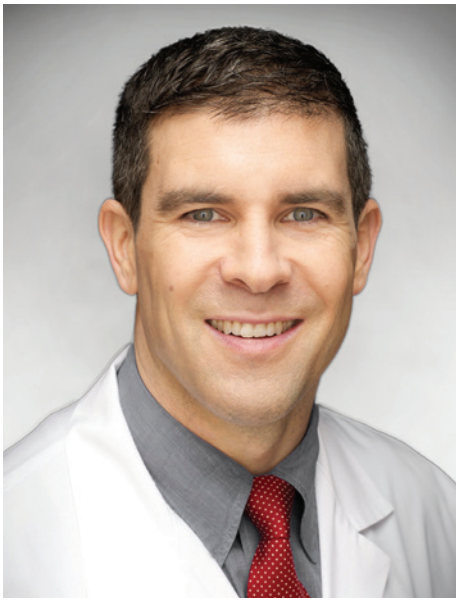
Other Programs

Courtney Glenn, DPM and **Andrew Knudsen, DPM** both graduated from the Podiatric Medicine and Surgical Residency Program. Dr. Glenn will be relocating to Georgia and Dr. Knudsen will be relocating to North Dakota.

Ashley Lakin, DO, **Matthew Malek, MD** and **Julia Oat-Judge, MD**, graduated from the Maternal Child Health Fellowship Program.

Amity Rubeor, DO, graduated from the Sports Medicine Fellowship Program. **Andrea Miele, PhD**, graduated from the Neuropsychology Program. ❖

University Orthopedics proudly announces the appointment of Brett Owens, M.D.



Brett Owens, M.D. is a fellowship-trained, board certified orthopedic sports medicine surgeon specializing in arthroscopic repair of sports-related injuries, including complex knee and shoulder reconstructions.

Lieutenant Colonel Owens was most recently Chief of Orthopedics and Sports Medicine at Keller Army Hospital at West Point, NY, caring for soldiers and cadets at the United States Military Academy, and was Team Physician for Army lacrosse, rugby, and football teams. While deployed in Iraq during Operation Iraqi Freedom, Dr. Owens was Chief of Orthopedics at the 86th Combat Support Hospital.

Dr. Owens is Team Physician for the U.S Lacrosse National Men's Team USA, and will assist Dr. Paul Fadale and Dr. Michael Hulstyn in caring for the athletes of Brown University. He is a Professor at the Uniformed Services University and is on the faculty at the Alpert Medical School of Brown University. He will perform surgery at The Miriam Hospital and Rhode Island Hospital, and will see patients at University Orthopedics' Butler Campus and Providence offices.

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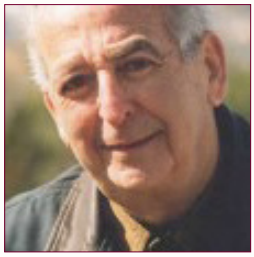
Obituaries

DR. JAMES P. CURRAN, JR., 70, died May 29. He was the cherished husband of Rosemary (Racine) Curran whom he married April 22, 2000. He was the beloved father of James P. Curran III of No. Smithfield and Kimberly Hisoire of Douglas, MA.

Born and raised in Woonsocket, Dr. Curran is a graduate of Mt. St. Charles Academy where he served as class president and was the captain of his football team. He continued his education at the College of the Holy Cross, MA, and earned a B.S. in psychology. Dr. Curran later attended the University of Illinois and received both a Master's and a PhD in clinical psychology. Dr. Curran began his career as an associate professor of psychology at Purdue University, IN. He later returned back to his home state to accept a position at Brown University where he was appointed to the VA Medical Center in Providence. Dr. Curran began as the Director for the Outpatient Psychiatry Clinic and later became the Chief of the PTSD program which he developed.

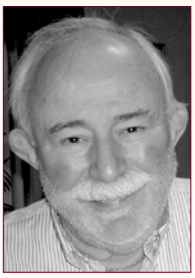
In 1984, Dr. Curran began a clinical practice in Woonsocket and later developed Plaza Psychology & Psychiatry. He served as a board member of the RI Psychological Association and Board of Examiners in Psychology. Founder of the Coalition of Mental Health Professionals of RI, his work extended to many public safety professionals including firefighters and health care professionals. Dr. Curran's passionate work for veteran's rights' and tireless efforts to help PTSD patients was truly his life's work. Dr. Curran's accomplishments include more than 50 articles in professional journals, approximately 20 book chapters and one book.



DR. EDWARD SPINDELL, 87, died June 24th at the Philip Hulitar Inpatient Center. He was the beloved husband of Judith (Kay) Spindell of Providence. They were married for 30 years. Born in Providence, a son of the late Simon and Jeanette (Sokol) Spindell and brother of the late Dr. Lloyd Spindell, he was a lifelong Providence resident.

Dr. Spindell was a summa cum laude graduate of Classical High School and a Phi Beta Kappa graduate of Brown University. In 1953, he received his MD degree from Boston University, eventually becoming board certified in orthopedic surgery. From1955 to 1957, he served as Captain in the U.S. Air Force at Chanute AFB in Illinois. Returning to Providence, Dr. Spindell began a private practice that covered a span of nearly 40 years. During this time, he was a senior attending physician at Miriam, Rhode Island, Memorial, and Roger Williams Hospitals. He became Chief of Orthopedic Surgery at Miriam Hospital from 1992 to 1997. Before retiring, he was honored by an evening of recognition for his many years of service to the hospital.

He leaves his loving children, Marcia Spindell and her husband, Jonathan Lentz, Ahvi Spindell and his wife, Jane Gabbert, and Stephen Spindell and his former wife, Blanche; grandchildren: Joshua and Aaron Lentz and Jessica Spindell and Simon Spindell. He also leaves step-children, Dr. Faith Tobias, Chaim Cohen and his wife, Michal, Julie Corwin, and Pamela Greiner; step-grandchildren: Yonah, Shira and Yair Cohen, and Mason and Kaden Tobias, all of whom were dear to his heart. He will be fondly remembered by his friends and patients, and held in cherished memory by his family. In lieu of flowers, contributions in his memory may be made to The Holocaust Resource and Education Center, 401 Elmgrove Avenue, Providence, RI 02906 or Home & Hospice Care of RI, 1085 North Main St., Providence, RI 02904.

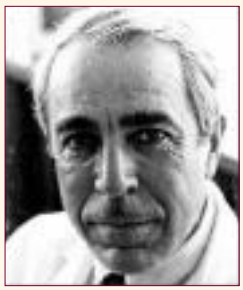


DR. ALBERTO F. TONELLI, of Uxbridge, MA, formerly of Greenville, RI, 81, a loving and devoted husband, father, grandfather and caring physician, passed away on May 31st after a year of failing health. Dr. Tonelli is survived by his wife of 54 years, Virginia (Clegg) Tonelli, daughter Elisabetta (Bettina) Tonelli-Sippel and husband Richard, son Stefano Tonelli and wife Elisabeth (Dabney), and several grandchildren and great-grandchildren.

He was born in 1933 in Bologna, Italy, and graduated from the University of Bologna in 1959 and completed an internship at St. Joseph Hospital in Providence, RI, and a 4- year residency in Internal Medicine at the Presbyterian University of Pennsylvania Medical Center, Philadelphia, PA. After running a busy medical practice in Italy, he returned to the US in 1979 to begin a 3-year fellowship in Hematology/Oncology at the Presbyterian University of Pennsylvania Medical Center and Memorial Hospital in Pawtucket, RI, following which he opened a medical practice in North Providence, RI.

He retired from private practice in 1993 but worked until his 80th birthday at Disability Determination Services (DDS) in Providence, RI, as Chief Medical consultant, in Worcester, MA, as Quality Assurance medical consultant, as well as at the University of Massachusetts Medical School in Auburn, MA as Physician Advisor.

Obituaries



DR. ARMAND D. VERSACI, 91, of Providence passed away on June 17th at Tockwotton on the Waterfront in East Providence. Born in Endicott, NY, in 1923, he grew up in Schenectady, NY, son of first-generation Italian immigrants.

Dr. Versaci graduated from Union College, earning a BA in 1945 Phi Beta Kappa, and in 1947 was the first Italian American to receive a degree from Harvard Medical School. Dr. Versaci did his surgical internship at Roosevelt Hospital in New York City and residency at Albany Hospital. He served as Chief of Surgery at the United States Air Force Hospital in Valdosta, Georgia in 1952. From 1973 to 1990, Dr. Versaci was Chief, Department of Plastic Surgery, at Rhode Island Hospital. He also served at Women and Infants Hospital and was a consulting physician to the VA Medical Center in Providence. In his own words, he was proud to have performed "more than 20,000 surgical procedures " for Rhode Islanders.

At Rhode Island Hospital, he and Dr. Richard Sexton co-founded the first residency program in plastic surgery in New England and helped established the program for plastic surgery at Brown Medical School. He considered one of his proudest accomplishments to be mentoring more than 60 plastic surgeons from across the globe. While at Brown, he created a plastic surgery exchange program with young surgeons from Italy. The Congress of Italian and American Plastic Surgeons facilitates exchanges and conferences among practicing plastic surgeons in Italy and the United States.

In the course of his career, he gave numerous presentations and lectures in his field. During his service at Rhode Island Hospital, he began medical missions at the invitation of poor and underdeveloped communities around the world, an activity that absorbed his time and energy during retirement. Dr. Versaci served as trustee on the Board of Directors of the Rhode Island School of Design and often provided free medical attention to artists in need.

Following retirement from his practice in 1996, Dr. Versaci organized and participated in over 60 charitable medical missions, in association with Physicians for Peace and Brown Medical School, in rural and underserved communities in Latin America, Europe, and the Middle East, specializing in treatment for burn victims. He established children's burn treatment facilities and trained doctors and nurses in Guatemala with Dr. Lourdes Santiso, and in Nicaragua with Mrs. Vivian Pellas, funded by the Association for Burned Children of Nicaragua. In 1999, the Carter Family Charitable Trust established the Armand D. Versaci Research Scholar in Surgical Sciences Award at the Brown University School of Medicine that hosts an annual lecture in his honor. The biennial Versaci Lectureship was created by the Congress of Italian and American Plastic Surgeons in 2004.

With his wife, Nancy, who was Director of the David Winton Bell Gallery at Brown, Dr. Versaci collected art. They developed and shared a love for 20th century Russian constructivist painting and modern art created between the wars and always enjoyed and supported local artists.

Dr. Versaci is survived by his four children, Russell, William, Lisa, and Lori, as well as by nine grandchildren. A memorial service will be held on Tuesday, July 21st at 10:30 AM at Manning Chapel, 69 Brown Street in Providence, RI. A reception will immediately follow the service at the Brown Faculty Club. Gifts in memory of Dr. Versaci can be made to the Armand D. Versaci Research Scholar In Surgical Sciences Award – Brown University, Gift Cashier, Box 1877, Providence, RI 02912.

DANIEL E. WROBLESKI, MD, 69, passed away peacefully at home with his wife and dog by his side on May 28, 2015. He was the husband of Dr. Caroline Susan Wilkel. Born in Holyoke, MA, he attended Deerfield Academy and almost got expelled during his senior year for cooking kielbasa in his dorm room. He then went on to Trinity College where he was provided an excellent pre-medical education to then receive his medical degree from Columbia College of Physicians and Surgeons.

After graduation, he spent seven years of training in New York, Providence and Boston to achieve certification in colon and rectal surgery. Dr. Wrobleski was the first colon and rectal surgeon in the state of Rhode Island. He mentored and shared his outstanding surgical skills with many residents, fellows and colleagues. The "Wrobleski scissors" are legend.

Besides his wife and father he is survived by a daughter, Amanda Dillon Foley and her husband Patrick, a grandson Finn Patrick "Finnski" Foley, his dog Skipper, a sister-in-law Elizabeth A. Wilkel and his godson Zachary O'Connor.

In lieu of flowers donations may be made to the South Kingstown Land Trust, 227 Robinson St., South Kingstown, RI 02879 or to the East Greenwich Animal Protection League, PO Box 184, East Greenwich, RI 02818.

Obituaries

ROBERT A. CARNEVALE, MD, passed away on June 26, 2015 surrounded by his family at Rhode Island Hospital. Fifty years earlier, as a teenager, he had his first job sweeping the hospital floors. His son Joseph, now a third-year Brown medical student, walks these same halls as he visits patients during rounds. Dr. Carnevale was a cardiologist, a teacher, a storyteller, an explorer, a comedian, an historian but above all else a husband, father, grandfather, brother, son, and friend.

He was born, raised, and educated in Providence. He attended Classical High School and Providence College, before studying medicine at New York Medical College. In 1975, he returned to RI for an Internal Medicine residency and Cardiology fellowship at Rhode Island Hospital. From the earliest stages of his exposure to medicine he had a passion for direct patient care. In 1980, along with his wife Joanne and Cheryl McVay, he built a health practice in the Elmhurst section of Providence, which was unique in that it focused on primary care and cardiology. As a pioneer in echocardiography, he traveled the world learning and teaching the latest technologies in cardiac imaging. As a clinical associate professor of medicine at Brown University, Dr. Carnevale devoted his time to educating medical students, sonographers, residents, and fellows in the art of medicine.

In 1995, together with friends and colleagues, he was involved in the creation of a new concept in care, a group practice but without walls. The practice was called Coastal Medical, where Dr. Carnevale served for many years as a founder, treasurer, chairman of the finance committee, and later medical director. In 2014, he was awarded the Irving Addison Beck Memorial Award from the American College of Physicians. Today, he is known to all as a teacher of those who wish to learn, an impassioned caregiver to patients, but overall a community physician who loved his patients like his family and would go above and beyond for them - no phone call was too late, no visit too far.

Dr. Carnevale is survived by his wife of 36 years Joanne, his four children Kerri, Jessie, Bobby, and Joey, two grandchildren Peter and Charlotte, his mother and father Angelo and Anna, his uncle and aunt Henry and Sheila, brothers and sister Frank, Tom, and Mary-Ellen. Donations can be made in his name to Brown Medical Annual Fund.

Beauty in the Garden: Medicinal, Toxic, Benign

Toxicologist Captures Poisons and Panaceas of Medicinal Plants at Alpert Photo Exhibit

MARY KORR
RIMJ MANAGING EDITOR

PROVIDENCE–**JASON B. HACK, MD**, has been taking photos of medicinal and poisonous plants for years. A variety of his images, all taken in Rhode Island with a Nikon 5200, are now on display in the Alpert Medical School lobby.

Dr. Hack is division director of Medical Toxicology, director for the educational program in medical toxicology, and an associate professor of emergency medicine.

He completed his residency training in emergency medicine at Bellevue Hospital in New York, and a fellowship in toxicology at the New York City Poison Center. His research interests include assessment of intoxicated patients and adverse events associated with medications, drugs of abuse, and new antidotes.

Recently, RIMJ posed a few questions to Dr. Hack about his avocation.

Q. How did you become interested in photography?

A. As an academic emergency physician and medical toxicologist I do a lot of teaching. Nothing sticks in the mind better than a striking image. For years I had been annoying my family as we were out and about with "wait, wait, I just want to get a picture of this…" if I saw anything that I might possibly have reason to talk about in a future lecture. A couple of thousand pictures later I'd amassed a pretty broad library of medical/toxicology related photos.

A few years ago my wife encouraged me to start exercising more to have a break from work. I decided I wanted to 'power walk' a few miles a day in my new neighborhood. With all good intentions I struck out on my first day decked out in shorts and new sneakers, ready to forget about work for a short time and work up a sweat marching

PHOTOS COURTESY OF JASON HACK, MD

Morning glory
The seeds of many species of morning glory contain a naturally occurring tryptamine lysergic acid amide (LSA). Chemical differs slightly from LSD and effects are similar when taken in large doses.

Jimsonweed
Datura stramonium contains atropine, hyoscyamine, hyoscine, and scopolamine: belladonna alkaloids that block peripheral and central muscarinic receptors from binding acetylcholine. This blockade results in an anticholinergic toxidrome. The mnemonic for this syndrome—"blind as a bat [big pupils], mad as a hatter [altered mental status, hallucinations, delirium], red as a beet [flushed skin], hot as a hare [fever], dry as a bone [dry mouth], full as a flask [full bladder but can't urinate], silent as a mouse [no bowel movements]"—helps doctors remember its symptoms.

down streets I'd only driven before. Going through the neighborhood at a slower speed allowed me to take in details I'd missed before, and I realized that the beautiful gardens of my neighbors were filled with dazzling poisonous plants. I was struck by these gorgeous, exceptionally toxic or medicinal plants swaying in the breeze growing next to benign ornamental ones—without anything to distinguish between them. I began to think about the origins of many of the medications we use — these little sterile pills often began as green plants with fragrant blooms growing out of warm soil. The next day my 'power walk' outfit included my camera!

I started taking unstaged, close, hand-held images — to allow the viewer to see the fleeting combination of natural light, breeze, richness of color and imperfections, while minimizing background and context.

Death cap
Amanita phalloides: The principal toxin is a-amanitin, which damages the liver and kidneys. Death cap is the most poisonous of all mushrooms and has caused the most human deaths from mushroom poisoning. The primary poison is not deactivated with cooking. A half cap is enough to kill an adult and most of its victims are children, amateur mushroom hunters and immigrants who confuse this species with edible species from their native lands.

Foxglove:
Digitalis purpurea: The toxins are cardiac glycosides that bind to the sodium/potassium ATPase channel to slow and strengthen the heartbeat. In overdose: nausea, vomiting, weakness, altered mental status, yellow vision, arrhythmias, slow heartbeat, death.

St. John's Wort
More than 50 chemical compounds have been isolated in this plant. Preliminary studies suggest that St. John's Wort may prevent nerve cells in the brain from reabsorbing certain chemical messengers including dopamine and serotonin. Nearly 100 prescription drugs are known to interact with St. John's Wort.

Q. What sources do you use to research these plants?

A. Over the past 15 years of being a medical toxicologist and an avid reader I have accumulated a home library of books on poisonous and medicinal plants – many found in antique (read: second-hand) bookstores or yard sales. One of my favorite resources is my friend Jen who is a master gardener. Ill be out, see an interesting plant I don't know, snap a picture of it with my phone, and text it to her for identification – a sort of 'stump the expert.'

Q. What is the most unusual one you have found?

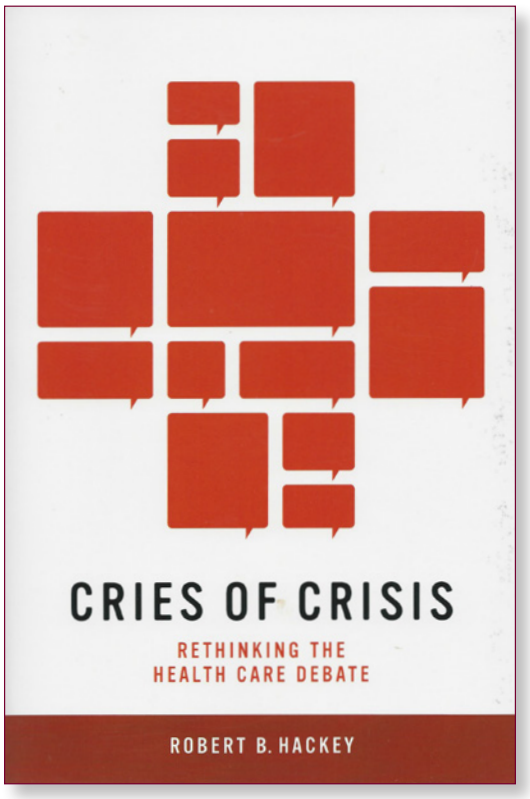
A. I photographed a Castor Bean (*Ricinus communis*) plant growing in front of a house in my neighborhood. Beautiful, huge reddish/purple multi-pointed leaved plant that also happens to be the source for ricin – arguably the most potent plant-derived poisons in the world.

Q. Is your work on display anywhere else other than the medical school?

A. I also donated 20 images that are hung in the hallways on permanent display in the brand new Women's Health inpatient unit at RIH. I have recently had other images on display at the Warwick Museum of Art in their show "Colors of Spring." I have images on sale at the David-Max boutique in East Greenwich and at Serendipity Boutique in Wickford and I can be contacted at ToxinRI@gmail.com if anyone has interest in limited edition large format images. ❖

Cries of Crisis: Rethinking the Health Care Debate analyzes decades of health care reform

MARY KORR
RIMJ MANAGING EDITOR



PROVIDENCE – Professor **ROBERT B. HACKEY, PHD**, (Brown '92, political science and public policy), currently the Director of the Health Policy and Management Program, Providence College, has published extensively in the field of health care policy.

His latest book on the rhetoric of health care reform, *Cries of Crisis: Rethinking the Health Care Debate*, published by the University of Nevada Press in 2012, was recently released in paperback.

In it, Dr. Hackey examines the role the news and entertainment media and politics has helped shaped health care perceptions and debate over the past half century in this country. He argues the resulting rhetoric of crisis will not solve the complex and chronic financial and structural issues that beset the health care system in this country.

In the following Q&A with the *Rhode Island Medical Journal*, he summarizes key tenets of *Crisis*, framing the conversation through an Ocean State and national lens.

Q. How do you describe the current state of health care in this country and in RI, reframing it away from the decades-long terminology of "crisis?"

A. The US health care system doesn't face a crisis – despite its problems, it's not at risk of imminent collapse. Instead, the health care system is beset by a variety of chronic problems which must be managed, not cured. As we've seen in the wake of the Affordable Care Act, there's no quick path to reach the IHI's triple aim of improving population health, generating better patient outcomes, while simultaneously controlling costs. Instead, policymakers (and physicians) need to focus on smaller steps that – taken together – will represent real, meaningful changes. This will be familiar to many physicians, who routinely treat patients suffering from a variety of distinct, yet related conditions. Imagine the US health care system as an obese patient suffering from diabetes, arthritis, hypertension, and chronic acid reflux. Crisis talk encourages us to look for magic bullets – a quick, effective, and decisive treatment – but improving quality, reducing malpractice risk, and controlling costs elude quick fixes.

Our current approach to health policy often fails to recognize the complex interrelationships among the problems we face. As a result, policymakers often unintentionally undermine the foundation of our health care system. As illustrated by the debate over the 2015 state budget, hospitals, physicians, and nursing homes operate in a climate defined by stagnant or declining reimbursement. For institutional providers, this puts pressure on staffing, which has a clear impact on the quality of care by raising the risk of preventable medical errors as overworked and stressed providers scramble to care for more patients. Physicians, for their part, face

VIDEO – Click to watch Dr. Robert B. Hackey discuss *Cries of Crisis: Rethinking the Health Care Debate*

growing pressure to see more patients each day, and now must track more patient data using electronic health records. Preserving the unique character of the doctor-patient relationship is a challenge in this climate. Shorter patient visits also affect the quality of care, as it is difficult for time-pressured physicians to coax patients into sharing all relevant information in a compressed visit, and if they do so, for doctors to have time to reflect upon and synthesize this information before moving on to the patient waiting in the next exam room. Our system does not reward physicians for spending "quality time" with patients.

Excerpt

Chapter One, "The Rhetoric of Health Care Reform"

p. 25: Cries of Crisis in debate over health care reform feature several complementary yet distinct stories of decline. As Deborah Stone notes, a story of decline typically begins with "a recitation of facts or figures purporting to show that things have gotten worse…What gives the story dramatic tension is the assumption, sometimes stated and sometimes implicit, that things were better than they are now and that the change for the worse causes or will soon cause suffering." Crisis narrative promised supporters of health care reform a short-term political advantage by demanding immediate attention from policy makers. In the absence of a "meltdown," however, repeated warnings of impending collapse were unpersuasive. In the end, narratives of crisis are counterproductive, for their rhetorical shortcomings offer ample opportunities for opponents to challenge, if not discredit, the need for significant policy change. The result, too often, has been stalemate.

Q. What are the top takeaways from your book, *Cries of Crisis*, the readership of the *Rhode Island Medical Journal* would be most interested in?

A. We need a better diagnosis of what ails the US health care system. Crisis talk is actually counterproductive, for it encourages policymakers to scramble to take decisive action to "cure" a variety of crises (e.g., rising costs, the uninsured, the shortage of nurses, and the rising cost of malpractice insurance). For more than forty years, different groups have defined the problems facing the US health care system as a crisis, but this diagnosis is inaccurate, and actually muddies the waters of public debate. Costs continue to rise, for example, but there's no clear "tipping point" at which our spending on health care will reach an "unsustainable" level. Furthermore, despite repeated cries that we face a crisis in health insurance, more than 80% of Americans (and Rhode Islanders) are insured, and most insured patients express high levels of satisfaction with their access to care, the quality of care they receive from providers, and their coverage.

Health care reform reflects our expectations for the role government should play in our society. The health care system represents one-seventh of the US economy, so any efforts to control costs or improve access to care will have larger economic repercussions. At a time when trust in government is low, health care reformers must rebuild confidence that government is up to the task of reform. For me, that starts small – we need to take meaningful steps to expand access, control costs, and address quality problems to demonstrate that we can work together for a common purpose.

Q. What has been the impact of the ACA as you see it on providers and populace?

A. The ACA is really misnamed – a much better description would be the Accessible Care Act, not the Affordable Care Act. Affordability remains a challenge on several levels. We've subsidized the cost of private health insurance coverage through the ACA for individuals, but doing so comes at a high cost to the federal government, which picks up most of the cost for individuals and families who purchase coverage through state health insurance marketplaces. In addition, many of the private policies purchased through health insurance marketplaces such as HealthSource RI have very high deductibles, which leaves newly insured patients effectively underinsured (particularly if they suffer from one or more chronic conditions). High cost sharing actually discourages patients from seeking care in a timely fashion. We've made progress reducing the number of uninsured Americans – a significant accomplishment – but uncompensated care remains a huge issue for hospitals. Since the ACA has not achieved anything close to universal coverage – even in states such

as Rhode Island, where we embraced Medicaid expansion – providers still face the dilemma of treating many uninsured and underinsured patients. The state's decision to cut Medicaid reimbursements this year was troubling, for it threatens access to care for publicly insured patients. In an environment of decreasing reimbursement, many providers in private practice can no longer afford to accept a substantial number of Medicaid patients. My fear with the continued erosion of Medicaid reimbursement is that more providers will opt out of the program, creating access barriers for patients. In addition, decreased participation by physicians in private practice will simply pass the burden of caring for publicly insured patients to community health centers and hospital clinics. Writing in 1988, Stuart Altman argued that "halfway competitive markets and ineffective regulation" defined the US health care system. Five years after the passage of the ACA, I think that still provides a disturbingly accurate description of where we stand.

Q. What state(s) offer the best example of providing quality and accessible health care and containing medical costs for its population?

A. The New England states have all done well in terms of expanding access to care (all have below average percentage of uninsured), but rising costs remain a concern across the nation. In particular, as we saw in Governor Raimondo's budget this spring, every state struggles with the cost of Medicaid. Medicaid is one of the largest – if not the largest – line items in every state budget. Medicaid expansion offered a readily available path to increase access to care, but making it a centerpiece of the ACA's efforts to expand access to care was an odd choice. As a joint state/federal partnership, rising spending on Medicaid places enormous pressure on state, which unlike the federal government, have a constitutional requirement to balance their budgets. Across the US – even in states which did not expand Medicaid eligibility – what's known as the "woodwork effect" is contributing to significant increases in Medicaid spending that far outstrip increases in state tax revenues and overall spending. Outreach efforts succeeded in bringing many individuals and families who were previously eligible for Medicaid (but who had not applied) into the system. However, while the federal government pays 100% of the cost of newly eligible individuals (based on higher income eligibility thresholds), states must contribute to the cost of previously eligible enrollees at their existing Medicaid matching rate (FMAP). This is a huge issue in states that did not expand Medicaid, but it's also a challenge here in RI.

Q. The federal and state healthcare exchanges – which is more viable in the long run for states in your opinion?

A. State-based exchanges have not achieved better results, across the board, than those operated in partnership with the federal government or managed exclusively by the federal government through healthcare.gov. The federal exchange offers economies of scale, with a unified web architecture that can be adapted for individual states. Despite the rocky rollout of the federal government's web site in 2013, the performance of healthcare.gov improved markedly over the past two open enrollment periods. States have an important role in consumer education and outreach, and also in terms of regulating insurance markets, which vary considerably. Those tasks, however, don't require states to establish, operate, and update web portals. Much of what we've spent on HealthSource RI over the past several years has been for IT consulting fees in an effort to create a "unified health infrastructure." Going forward, without federal funds to defray these costs, I'm not sure that a state-based exchange is financially sustainable in RI and other states with relatively small individual – and small group – insurance markets. A state partnership marketplace, which preserves state control over consumer education, outreach, and regulation of the insurance market, may offer a more sustainable model in the long run. ❖

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100 Year Ago – July 1915: A Floating Hospital for Children Launches in Narragansett Bay

Chair of RIMS pediatric section heads the medical effort

MARY KORR
RIMJ MANAGING EDITOR

In July 1915, thanks to the efforts of seven members of the Women's Alliance of the New-Church of the General Convention of New Jerusalem in Providence, a group of 30 poor mothers and their young children took a day-long cruise on the steamer *Minnie V. Pope*, owned by E. H. Wardwell of Bristol, who provided the ship *gratis*.

Physicians and nurses volunteered their time to carefully screen and examine the children for any contagious diseases. A simple lunch was provided for the mothers, mostly immigrants from Italy, Ireland and Eastern Europe. There were instructed in well baby care and the infants were bottle-fed sterilized milk.

According to the *Rhode Island Medical Journal* (RIMJ) of November 1917, **DR. HENRY WINANS BURNETT** led the medical effort. He labored for many years at the Children's Outpatient Dept. at Rhode Island Hospital and the North End Dispensary and was the first chairman of the Pediatric Section of the Rhode Island Medical Society.

RIMJ noted, "in the early days of his work he did much for the baby camps close to the congested districts and from its inception was Chairman of the Baby Welfare Committee."

It was from these crowded tenements that the passengers of the floating hospital came from. After that first successful summer, The Floating Hospital Association was incorporated and selected Dr. Burnett as its examiner.

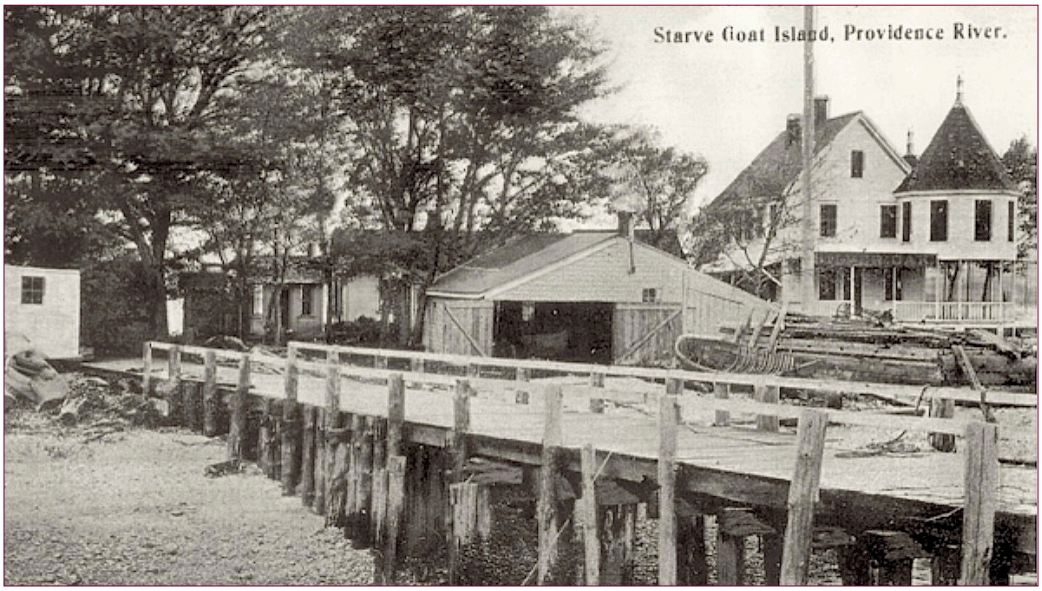
In 1917, the Association purchased a large houseboat for $3,000, which replaced the *Minnie* and served as the floating hospital until 1920, when the owner of Starve Goat Island, Frank Pettis, an oyster dealer, offered the premises for use by the Association. The houseboat was "beached" on the island off Field Point in the Providence River, off Pawtuxet Village, and transformed into a land facility for summertime use by children. The island was later dubbed "Sunshine Island." Parents were permitted a monthly visit.

The floating hospital, funded by the City of Providence at $2,000 per annum, existed until 1938, when the Great Hurricane destroyed the island. The Association then used land in Barrington and Warwick for its summer camps, until 1961. ❖

For more photos of the floating hospital and Sunshine Island, visit http://rhodetour.org/items/show/3?tour=1&index=2

[Above] *Providence Journal* photograph of the Providence Floating Hospital Association's houseboat.

[Right] Starve Goat Island later became known as Sunshine Island when the Providence floating hospital for children relocated here.



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