Volume 91 No. 8 August 2008

Medicine & Health Rhode Island

Publication of the Rhode Island Medical Society

Medical Education

What's in a Name???

GOOD - authentic, honest, just, kind, pleasant, skillful, valid

NEIGHBOR - friend, near

ALLIANCE - affiliation, association, marriage, relationship

CORPORATION - company, business establishment

A Good Partner Makes the Difference

It's Official:

The Rhode Island Medical Society's Insurance Brokerage Corporation

has contracted with

The Good Neighbor Alliance Corporation

to provide their members

Employee Benefits

Specializing in Employee Benefits since 1982

Let the Best in the Business Take Care of Your Employee Benefit Needs.

The Good Neighbor Alliance Corporation

1-800-462-1910 or 401-467-2880

www.goodneighborall.com

UNDER THE JOINT EDITORIAL SPONSORSHIP OF:

The Warren Alpert Medical School of Brown University
Edward J. Wing, MD, Dean of Medicine & Biological Science

Rhode Island Department of Health
David R. Gifford, MD, MPH, Director

Quality Partners of Rhode Island
Richard W. Besdine, MD, Chief Medical Officer

Rhode Island Medical Society
Nick Tsiongas, MD, MPH, President

EDITORIAL STAFF
Joseph H. Friedman, MD
Editor-in-Chief
Joan M. Retsinas, PhD
Managing Editor
Stanley M. Aronson, MD, MPH
Editor Emeritus

EDITORIAL BOARD
Stanley M. Aronson, MD, MPH
John J. Cronan, MD
James P. Crowley, MD
Edward R. Feller, MD
John P. Fulton, PhD
Peter A. Hollmann, MD
Sharon L. Marable, MD, MPH
Anthony E. Mega, MD
Marguerite A. Neill, MD
Frank J. Schaberg, Jr., MD
Lawrence W. Vernaglia, JD, MPH
Newell E. Warde, PhD

OFFICERS
Nick Tsiongas, MD, MPH
President
Diane R. Siedlecki, MD
President-Elect
Vera A. DePalo, MD
Vice President
Margaret A. Sun, MD
Secretary
Mark S. Ridlen, MD
Treasurer
Barry Wall, MD
Immediate Past President

DISTRICT & COUNTY PRESIDENTS
Geoffrey R. Hamilton, MD
Bristol County Medical Society
Herbert J. Brennan, DO
Kent County Medical Society
Rafael E. Padilla, MD
Pawtucket Medical Association
Patrick J. Sweeney, MD, MPH, PhD
Providence Medical Association
Nitin S. Damle, MD
Washington County Medical Society
Jacques L. Bonnet-Eymard, MD
Woonsocket District Medical Society

Cover: "What Is Man?" digital. John Teehan is a Providence writer, artist, and musician. His has created covers for past journals, the SFWA Bulletin, and several books on *The Twilight Zone*. His poetry can be seen in recent issues of *The New York Quarterly*.

Medicine & Health
RHODE ISLAND

VOLUME 91 NO. 8 August 2008

PUBLICATION OF THE RHODE ISLAND MEDICAL SOCIETY

COMMENTARIES

238 Mission Statements
Joseph H. Friedman, MD

239 These Are the Times That Try Men's Soles
Stanley M. Aronson, MD

CONTRIBUTIONS

SPECIAL ISSUE: Medical Education
Guest Editor: Eli Adashi, MD

240 Introduction: Medical Education
Eli Y. Adashi, MD

242 The Warren Alpert Medical School of Brown University: Class of 2008
Philip A. Gruppuso, MD, Eileen Palenchar, MD, and Janice Viticonte

247 Preparing for the Silver Tsunami: The Integration of Geriatrics Into the New Medical Curriculum at the Warren Alpert Medical School of Brown University
Renée R. Shield, PhD, Terrie Fox Wetle, PhD, and Richard W. Besdine, MD

252 Development of a Student-Based Teaching Academy
Steven C. Rougas, Jack C. Rusley, Beverly R. Young, Carmelle V. Romain, Jason V. Lambrese, Richard Dollase, EdD, Alicia D. Monroe, MD, and Dale A. Ritter, PhD

255 Increasing Post-partum Depression Detection In Rhode Island: Targeting Pediatric Providers
Elizabeth M. Strawbridge, MD, Margaret Howard, PhD, Patricia Nolan, MD, MPH, and Edward Feller, MD

COLUMNS

258 IMAGES IN MEDICINE – Anterogade Amnesia and Fornix Infarction
James Y. Chen, MD, Vlad Zayas, MD, and Richard Gold, MD

259 HEALTH BY NUMBERS – Patterns of Health-Related Quality of Life and Associated Health Risks Among Rhode Island Adults in 2004
Jana Hesser, PhD, and Yongwen Jiang, PhD

262 PUBLIC HEALTH BRIEFING – Prescribing for Self and Others
Robert Crausman, MD, and Bruce McIntyre, JD

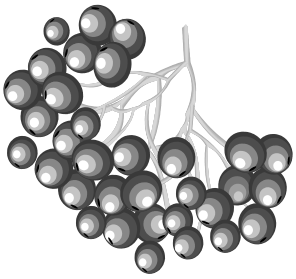
263 PHYSICIAN'S LEXICON – The Dilemma of Multiple Meanings
Stanley M. Aronson, MD

263 Vital Statistics

264 August Heritage

Medicine and Health/Rhode Island *(USPS 464-820), a monthly publication, is owned and published by the Rhode Island Medical Society, 235 Promenade St., Suite 500, Providence, RI 02908, Phone: (401) 331-3207. Single copies $5.00, individual subscriptions $50.00 per year, and $100 per year for institutional subscriptions. Published articles represent opinions of the authors and do not necessarily reflect the official policy of the Rhode Island Medical Society, unless clearly specified. Advertisements do not imply sponsorship or endorsement by the Rhode Island Medical Society. Periodicals postage paid at Providence, Rhode Island. ISSN 1086-5462. POSTMASTER: Send address changes to Medicine and Health/Rhode Island, 235 Promenade St., Suite 500, Providence, RI 02908. Classified Information: RI Medical Journal Marketing Department, P.O. Box 91055, Johnston, RI 02919, phone: (401) 383-4711, fax: (401) 383-4477, e-mail: rimj@cox.net. Production/Layout Design: John Teehan, e-mail: jdteehan@sff.net.*

Commentaries



Mission Statements

There are certain words that cause a reflex response in me. Probably the most common one is "proactive." When I hear someone, always the head of some organization, say the word, I interpret it to mean, "something bad is going to happen and I don't have a clue as to how we'll respond." I will not cite examples since most readers are as familiar with this as I am.

I have a gut response to the use of "impacted" as a verb, as in, "his lack of health insurance impacted his medical care." The first time I recall seeing this use was in quotes from Alexander Haig, a former head of West Point, who became an advisor to Henry Kissinger during the Viet Nam war, and then secretary of state. For many years, I thought that his aphasic constructions on how well the Viet Nam war was going, presaged a left temporal brain tumor. Since he's still alive, no more aphasic than before, I acknowledge my error, still wondering if his fluent agrammatisms and empty content were acquired on purpose, or the result of a brain injury. He used the word impacted frequently. I believe it was not an accepted use of the word at the time but now is. As a personal whim but also to improve quality, the word "impacted" cannot be used as the past tense in this journal except to describe severe constipation.

The topic of this commentary, however, is The Mission Statement. Unlike "impacted" which makes my heart race a little, "mission statement", like "proactive," makes my eyelids droop. I have been to a few meetings, including "retreats" in which groups of very smart people debated the statement describing the principles their organization stood for, and how best to state them. In my experience, the debates were always about the presentation and little about the principles, and were usually about as useful as proactive planning.

This came to mind recently when I received an unsolicited e-mail from the American Association of University Professors containing a debate on the value of the mission statement, triggering this commentary. They included one piece in favor, one against and one that was a satire, so presumably one for and two against. The argument in support of the mission statement was strong: institutions were set up with specific missions and that as societies change one must use the mission statement as the backbone for establishing priorities. New ventures must be considered in light of the goals of the institution. New administrators, in particular, needed to follow the mandates, as laid out in the mission statement.

The opposing view held that a mission statement for that author's university department, a non-science field, was intended solely to produce a rubric for judging faculty. The mission statement was to follow certain guidelines that would allow "product," certain objectively measurable achievements, to be established. How could one measure love of literature, increased appreciation for poetry or art, or an actual work of creative expression? The author considered that particular use of the mission statement a pseudo-scientific perversion.

The satire focused on the usual elements of political correctness, what goals could be deemed culturally biased, what were the implications of prioritizing goals, and such like issues.

I collected a few mission statements from medical groups and was surprised to find that most were very reasonable, even exemplary presentations of principles. One hospital states that its mission is to provide the best care it can. A university medical department states that its mission is to provide the best training it can.

The mission of academic clinical departments is not so clear cut, especially in a time of financial constraints. Clinical departments are devoted to providing the best care possible, the best teaching possible and the best research possible. Some might include outreach missions to the needy, or international bridging. The problem of the mission statement is where to place the emphasis. No one would sacrifice clinical care, yet it is an unlikely scenario that any clinical department would choose a well funded researcher who rarely saw patients in favor of an excellent clinician who never published papers for the one slot available. The justification would be that others with clinical expertise can "cover" for the weaker clinician, that the money brought in would help the clinical and teaching effort and that this researcher would bring "cutting edge" knowledge into the department. So, if the mission statement calls for "the highest standards of clinical expertise, teaching and research" we may or may not interpret this to be the order of priorities. After all, there may be three equally important goals, but only one can be placed first in a sentence. The question then becomes how malleable the three are, and, can a department, wholly focused on clinical care and teaching, forgoing research, claim to be fulfilling its mission? When money is tight, as it has been for the last two decades, constraints dictate the choices. Which is why I have a great deal of skepticism about the importance of mission statements other than to lay out very broad principles that are often obvious. For example, a research institute in New Haven only does research on neurodegenerative diseases. They see patients only in the context of research studies. They do no teaching. Their mission is research, clinical and basic. The NIH clinical arm does research and training. They treat patients only if they enter a protocol. Teaching hospital departments also may have such well-defined missions. Many teaching hospitals provide clinical care and teaching and have no intention of performing research. Staff who want to do research may pursue it as a hobby, as do those in private practice.

As money has dried up in medical research, it seems clear to me that university hospital clinical departments have become more reliant on clinical dollars (which are also drying up), with less time devoted to research and education. The

mission statements haven't changed but the constraints have. Departments have evolved new names for the roles of their faculty, and old rules mandating that a certain minimum percentage of faculty had to be on the "research track" have gone by the board in favor of a pragmatic approach that allows the department to stay alive and deliver care and teaching.

The mission statements haven't changed, but the mission has. "Staying alive" has become the underlying theme for many departments. Missions are important and departments should know what they are. Mission statements need to be flexible yet not limiting, and hopefully, reflective of the actual mission. Too often they are more PR than guiding principles, not worth the effort taken to create them.

– JOSEPH H. FRIEDMAN, MD

Disclosure of Financial Interests

Joseph Friedman, MD, Consultant: Acarta Pharmacy, Ovation, Transoral; Grant Research Support: Cephalon, Teva, Novartis, Boehringer-Ingelheim, Sepracor, Glaxo; Speakers' Bureau: Astra Zeneca, Teva, Novartis, Boehringer-Ingelheim, GlaxoAcadia, Sepracor, Glaxo Smith Kline

These Are the Times That Try Men's Soles

On Memorial Day of this year, the New York City Department of Health warned Manhattan citizens to refrain from removing their shoes and socks when walking through Central Park. This edict was not prompted by any imminent threat of hookworm disease [typically transmitted via bare feet] or of an alien virus, heretofore unknown, that thrives in new-mown grass and endangers the lives of those foolhardy enough to expose their toes. No, the warning was issued because of the extremely remote threat of stepping on a rusty nail contaminated with tetanus germs. No actual cases were cited.

There always seems to be someone to take the simple, pastoral joys out of life, to deny humanity certain inalienable pleasures. For a constricted civilization confined to their shoes, ties, beliefs and other paraphernalia of uptight prudery, there arises a visceral, indeed atavistic, pleasure in walking barefoot upon a verdant lawn. Imagine if walking barefoot were declared illegal except for one day in mid-June, each year. Oh, how citizens would flock to the parks on that joyous day and revel in experiencing the tingling of grass upon their naked feet, with no intervening socks or shoes. It is perhaps akin to Emerson's observation: "If the stars should appear but one night in a thousand years how would man believe and adore."

This is not to deny the malign role of the tetanus germs in human history. Admittedly, tetanus infection survives only in a narrow niche of human experience. Unlike the germs that cause great epidemics, it is transmitted neither by air nor contaminated water; nor does it travel from person to person via venereal contact or by contaminated needles or blood specimens; nor even by the intermediacy of an insect such as the anaphelene mosquito. It is a disease which is infectious but not communicable.

The germs of tetanus [*Clostridium tetani*] are extremely hardy, capable of surviving even in the absence of oxygen. They thrive in the manure of domesticated livestock and therefore in the pastures that provide fodder for cattle. The tetanus germ is able to subsist for years as inactive spores intermixed in the top soil of pastureland. But when, for example, fragments of muddied clothing [bearing tetanus spores] are thrust into the body following battle wounds, the tetanus spores become activated, multiply and produce an exotoxin [called tetanospasmin], a nerve poison which is then carried by nerve fibers and the blood stream to the remainder of the body thus affecting the connections between motor nerves. This chemical disturbance of the junction between nerve endings causes intense and painful muscle spasms called tetany. The jaw muscles contract, for example, producing a phenomenon called lockjaw. Difficulties in swallowing and even breathing arise, followed by lability in both blood pressure and body temperature. The muscle spasms are unyielding and may result in severe arching of the trunk. If untreated, death generally ensues within days. Tetanus infection is such a common complication of battlefield wounds that members of the military in most armies are routinely immunized against tetanus infection. In World War II, amongst 4.5 million Americans who were wounded in battle, only four cases of tetanus were recorded, a tribute to the military immunization program.

Deep wounds sustained by civilians are routinely treated with surgical debridement and tetanus immunization. Thus, tetanus infections in nations such as the United States are now rare.

During the last decade there have been about 43 cases of tetanus recorded per year in the United States. The great majority have been documented in California, Texas and Florida. The protective effects of childhood vaccination against tetanus, [a requirement for entrance into the public school system of all 50 states], tend to diminish over the years, thus making the elderly or foreign-born immigrants substantially more susceptible to tetanus infection. Two other groups are particularly vulnerable: Those with diabetes and those chemically dependent who employ illicit drugs such as heroin intravenously. In the case of addicts, the germs are introduced by syringe needles which are contaminated with soil.

Yet tetanus infection persists elsewhere, particularly as a major cause of death amongst newborns, especially in southern Asia and Africa. Two traditional factors contribute materially to the presence of tetanus infection in the newborn. First, in many cultures, the severing of the newborn's umbilical cord is done ritually by using the father's scythe, thus symbolically reaffirming the paternity of the offspring. Yet another source of contamination is the use of mud packed against the umbilical stump of the newborn to diminish the bleeding, a common maneuver in regions without health centers. In both instances—the farming implement and the farmyard mud—the likelihood of contamination from tetanus spores is high. The World Health Organization estimates that

400,000 to 600,000 infants die each year from tetanus infection.

A myth prevails in the United States that penetrating wounds caused by rusty nails result in tetanus. It is not the rust but the soil-contamination with tetanus germs that remains the cause. Tetanus infection, for practical purposes, has now become a burden virtually confined to third world nations, and particularly their rural newborn. The New England states have not seen a case of tetanus for over a decade, even amongst its barefoot-in-the-park population.

– Stanley M. Aronson, MD

Disclosure of Financial Interests

Stanley M. Aronson, MD, has no financial interests to disclose.

Correspondence
e-mail: SMAMD@cox.net

Introduction: Medical Education

Eli Y. Adashi, MD

Upon my appointment in 2004, Brown's Corporation and Administration tasked me to expand the medical student body (then 60-70 matriculants/year), codify the piloted Pre-Med application process, design a new integrated medical education curriculum, rank in the top quartile of US medical schools, grow the biology program, expand the Public Health Program and locate it in a new facility, reconstitute the divisional leadership team and establish an academic medical center with Brown's teaching hospital partners. The latter was to include the activation of the Brown-Hospital Partnerships, the establishment of a Medical School facility off of College Hill as well as the joint definition of and investment in Brown-Hospital Centers of Research Excellence.

At this time—thanks purely to the hard work of many in our midst and to a newly reconstituted divisional leadership team—much of that agenda has either been accomplished or is underway. Some elements of this vision remain to be realized and will require ongoing investment by future administrations.

The MD class of 2011, ninety six strong, is our largest ever. Pre-Med matriculants (~1% of ~3,000 applicants/year) - now a regular component of the student body—are scholastically indistinguishable from Ivy peers. A new and integrated pre-clinical curriculum—replete with a novel two year-long Doctoring course and an innovative Scholarly Concentration Program - is poised to explore its clinical component. A rise of 12 rungs in the *US News & World Report* research rankings over the last four years now ties Brown's Medical School with its counterparts at Dartmouth College and the University of Iowa while outranking 75% of all accredited US medical schools.

With the recruitment of 27 new faculty into the Biology and Public Health Programs via the Plan for Academic Enrichment and with several faculty searches still underway, a campus-based roster of 110 tenure track scientists/scholars (a 40% increase since 2004) is within reach. Further, with the Public Health Program in its own home (an 11-story building at 121 South Main St. purchased in 2005) replete with an expanded faculty body and newly developed educational offerings, an accredited school status can now be explored. Finally, with the recruitment of 4 new departmental chairs and with several additional such searches poised to be launched, the ongoing renewal of the academic leadership is well in progress.

Although a physically distinct, programmatically coordinated academic medical center remains to be fully realized, palpable progress to this end is evident through the activation of the Brown-Hospital Partnerships, formulation of a Dean's Strategic Plan, establishment of regular channels of communication, improvement of the tenor of the conversation, joint recruitment of officers for both strategic planning and enterprise-wide research, alignment of Brown-Hospital recruitment protocols for chairs of clinical departments, and the progressive centralization of intellectual property efforts. Moreover, ongoing discussions with Brown's Hospital partners give rise to the hope of establishing an academic medical center complete with a vigorous Brown-Hospital research alliance, one that will complement a successful extant educational partnership.
Most importantly, the vote of confidence afforded by the Warren Alpert Foundation's $100 million gift has assured that the establishment of a Medical School facility off College Hill and that investments in Brown-Hospital Centers of Research Excellence are now in the realm of reality.

We did not stop there.

With accreditation of the Medical School secure through 2013, re-designed and improved medical student advising, upgraded physical facilities, expanded compensation for pre-clinical teaching faculty, expanded summer research assistantships, improved US Medical Licensing Examination test scores, strong residency matching record, implementation of three new combined degree programs (MD/MPH, MD/MPP and MD/MPA), the introduction of online admission (Banner®) and student/faculty assessment (OASIS®) systems, increasingly paperless faculty affairs office, improved outreach to alumni, a strategic communication and marketing plan, substantially increased total endowment (to $327 million; an 80% increase since 2004), a growing financial aid endowment (to $72 million; a 50% increase since 2004), an ambitious annual fund, growing balanced budgets (to $130 million; a 60% increase since 2004), the introduction of the national AOA honor society, 2 new endowed chairs committed to ongoing innovation in medical education and a new medical education building in the planning phases, Brown's newly named Alpert Medical School is soundly positioned for further progress.

Similarly, the inauguration of the Sidney E. Frank Hall for Life Sciences as well as the renovation of the research space within the Biomedical Center facility, continued Brown's trans-

formation in the life sciences. The establishment of an office for Graduate and Postdoctoral Studies, the introduction of competitive graduate student stipends, the doubling of predoctoral training grant and fellowship support (from 44 to 88 positions), the implementation of the Marine Biological Laboratory partnership, the recruitment of new faculty, the marked improvement of faculty compensation and the addition of new research space, have all converged to enhance the divisional scientific training environment. Moreover, the garnering by faculty of signature program project and center awards (e.g. National Children's Study)—along with the prospect of an institutional Clinical and Translational Science Award—have given Brown's biomedical enterprise a growing critical mass of large (often > $10 million) cross-disciplinary inter-institutional investigative initiatives (12% year-to-date increase—over last year—in peer-reviewed grant dollars awarded).

Complemented by a newly established Investigator Bridge Fund, 9 newly added/appointed endowed chairs, the Excellence in Women's Health Seed Grant Program, the Dean's Award for the Advancement of Women Faculty, the launching of the Center for Restorative and Regenerative Medicine, the AIDS Center, the Vision Research Center, the Bio-repository component of an anticipated Personalized Medicine Program, a planned Brown-wide Global Health Program and a proposed Correctional Medicine Program, an already vibrant intellectual enterprise is now on the move.

Although much has been accomplished, many challenges remain. Amongst select future tasks I would mention growing the financial aid capacity of the Alpert Medical School, endowing and expanding its MD/PhD Program, redesigning the Clinical Curriculum, enhancing faculty diversity, creating a Brown-Hospital Research Alliance, achieving consensus on joint Brown-Hospital centers of excellence, striving for programmatic coordination commensurate with an Academic Medical Center, working towards increasing the wet lab research space, working towards greater support of graduate training, securing a CTSA Award, and working towards the accreditation of the Brown School for Public Health.

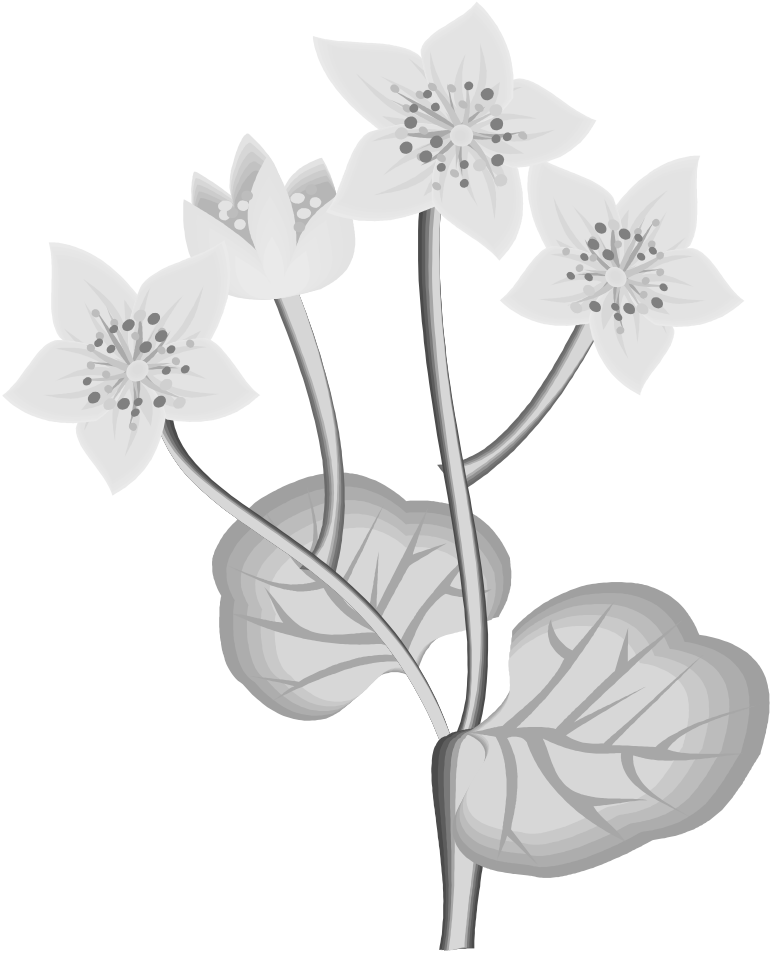
I appreciated the opportunity to have made a difference. To all who have played such an important role in advancing this enterprise of ours, I express my deepest gratitude and appreciation.

Eli Y. Adashi, MD, was Dean of the Warren Alpert Medical School of Brown University from 2004-8.

Correspondence
e-mail: eli_adashi@brown.edu

Disclosure of Financial Interests

The author has no financial interests to disclose.



The Warren Alpert Medical School of Brown University: Class of 2008

Philip A. Gruppuso, MD, Eileen Palenchar and Janice Viticonte

On May 25, 2008, 70 men and women received the Doctor of Medicine degree from The Warren Alpert Medical School of Brown University, representing the 34th class of physicians graduated from our institution since 1975. Of the 2,484 previous graduates, approximately 328 (13%) are licensed to practice in Rhode Island. This article introduces the graduates of the MD Class of 2008 to the physician community in our state.

A Portrait of the Class of 2008

Of the 70 graduates, forty-two were women (60%) and 28 were men (40%). The racial/ethnic composition of the class (Table 1) shows a similar proportion of students from Caucasian American backgrounds (46%) as the previous year (48%). Sixteen percent of the graduates are members of minority groups underrepresented in medicine (7 African Americans, 3 Mexican American, and 1 mainland Puerto Rican) as defined by the **Association of American Medical Colleges (AAMC)**. This number represents a slightly lower proportion of underrepresented minority students than the 19% underrepresented minority students reported for last year's graduates. The proportion of students from underrepresented groups among all students at the Alpert Medical School at present (combined for the four years) is 14%, although this determination does not take into account the 32 students (9%) who chose "Prefer not to respond" when asked to indicate their ethnicity on their medical school application.

Twelve of our most recent graduates are residents of Rhode Island. They came from ten communities: two students from Pawtucket, two from Cranston, and one student each from Barrington, Bristol, Cumberland, Lincoln, Providence, Slocum, Wakefield and Warwick. Students graduated from Bishop Hendricken, Cranston High West, Lincoln School and Lincoln High School, Moses Brown, Mount St. Charles, St. George's School, Shea, South Kingstown, Toll Gate, and Tolman high schools.

The largest proportion of students in the MD Class of 2008 comes from the **Program in Liberal Medical Education (PLME):** 29 graduates (41%).

The medical school has special agreements with post baccalaureate premedical programs at Bryn Mawr College, Goucher and Columbia University that were established shortly after the PLME was inaugurated. Students from these programs decided upon a career in medicine only after completing college. Typically, they have been engaged in other careers for several years following college. The goals in establishing this route of admission were to maintain a rich diversity in the student body by admitting students who were older and who had different academic and life experiences, and to round out the total class size to compensate for the expected attrition from the PLME. Fifteen members (21%) of the class were post baccalaureate students, nine from Bryn Mawr College, four from Goucher and two from Columbia University.

Fourteen of the graduating students were admitted through the Brown–Dartmouth Medical Education Program, in which students spend their first two years of medical school at Dartmouth, then transfer to Brown for the final two years.

Among the remainder of the class, six students were part of the **Early Identification Program (EIP)**, one from Tougaloo College, two from Providence College, two from Rhode Island College and one from the University of Rhode Island. EIP students are offered provisional admission to the medical school during their sophomore year at their undergraduate colleges. Of the remaining graduates, two entered medical school through the MD/PhD program, two through advanced transfer and two through the Brown Avenue route by which Brown undergraduate students have been brought to the medical school. The recently implemented standard premed route will produce its first graduates in 2009.

Brown University was the most common undergraduate college among the graduates, accounting for 32 graduates. Tougaloo came second with four members, then Harvard, Middlebury, Providence College, Rhode Island College and the University of Rhode Island, each with two members from the Class of 2008.

The most common undergraduate major (40%) was biology (including subdisciplines such as biochemistry, life science, neuroscience, and microbiology). Science majors taken together (including math, engineering and psychology) accounted for 61% of all majors, while 29% of majors were in the humanities and 10% in the social sciences. Among the humanities majors, English was the

Sex			
	Male	28	40%
	Female	42	60%
Race			
	Caucasian American	32	46%
	Asian American	18	26%
	African American	7	10%
	Mexican American	3	4%
	Other Hispanic	3	4%
	Cuban American	1	1%
	International	2	3%
	Did not self-identify	4	6%
State of Residence			
	Rhode Island	12	17%
	California	10	14%
	New York	9	13%
	New Jersey	5	7%
	Texas	4	6%
	Pennsylvania	3	4%
	Connecticut	2	3%
	Florida	2	3%
	Maryland	2	3%
	Massachusetts	2	3%
	Michigan	2	3%
	Missouri	2	3%
	Other States	14	20%
	Other Countries	1	1%

Table 1. Demographic Characteristics of the MD Graduates of the Warren Alpert Medical School Class of 2008

Specialty Choice	2008 No.	2008 %	2007 No.	2007 %	2006 No.	2006 %	2005 No.	2005 %	2004 No.	2004 %
Primary Care, Total	**35**	**50%**	**47**	**50%**	**34**	**38%**	**32**	**44%**	**41**	**47%**
Internal Medicine, Total	13	19%	19	20%	17	19%	16	22%	20	23%
Categorical Med	13	19%	16	17%		0%	10	14%	15	17%
Primary Care	0	0%	3	3%		0%	6	8%	5	6%
Pediatrics	9	13%	13	14%	9	10%	4	5%	6	7%
Family Medicine	6	9%	8	9%	5	6%	7	10%	9	10%
Medicine/Pediatrics	3	4%	4	4%	1	1%	2	3%	4	5%
Obstetrics & Gynecology	4	6%	3	3%	2	2%	3	4%	2	2%
Surgery	**5**	**7%**	**6**	**6%**	**9**	**10%**	**3**	**4%**	**4**	**5%**
Surgical Subspecialties, Total	**8**	**11%**	**8**	**9%**	**10**	**11%**	**6**	**8%**	**12**	**14%**
Ophthalmology	2	3%	0	0%	2	2%	3	4%	5	6%
Orthopedics	2	3%	3	3%	4	5	2	3%	3	3%
Neurosurgery	1	1%	0	0%	1	1%	0	0%	0	0%
Urology	2	3%	2	2%	1	1%	1	1%	1	1%
Plastic Surgery	1	1%	1	1%	0	0%	0	0%	1	1%
Otorhinolaryngology	0	0%	2	2%	2	2%	0	0%	23	26%
Dermatology	**1**	**1%**	**4**	**4%**	**5**	**6%**	**5**	**7%**	**1**	**1%**
Emergency Medicine	**5**	**7%**	**3**	**3%**	**7**	**8%**	**3**	**4%**	**4**	**5%**
Psychiatry	**3**	**4%**	**8**	**9%**	**5**	**6%**	**4**	**5%**	**4**	**5%**
Neurology	**1**	**1%**	**1**	**1%**	**1**	**1%**	**1**	**1%**	**1**	**1%**
Transitional & Preliminary Medicine *	**1**	**1%**	**7**	**8%**	**0**	**0%**	**1**	**1%**	**2**	**2%**
Institutional Specialties, Total	**9**	**13%**	**7**	**8%**	**9**	**10%**	**9**	**12%**	**10**	**11%**
Anesthesiology	1	1%	3	3%	2	2%	0	0%	3	3%
Pathology	3	4%	0	0%	1	1%	0	0%	0	0%
Rehabilitation Medicine	0	0%	0	0%	0	0%	0	0%	1	1%
Radiology & Rad Oncology	5	7%	4	4%	6	7%	9	12%	6	7%
Delaying Residency	**1**	**1%**	**2**	**2%**	**9**	**10%**	**9**	**12%**	**0**	**0%**
Not Entering Medicine	**1**	**1%**	**0**	**0**	**0**	**0%**	**0**	**0%**	**0**	**0%**
Totals	**70**	**100%**	**93**	**100%**	**89**	**100%**	**73**	**100%**	**79**	**100%**

The data from previous years reported in this table have been revised from previously published reports to reflect the intended specialty choice of graduates rather than the type of program in their first postgraduate year (e.g., a graduate with a first-year preliminary position in internal medicine and an advanced match in dermatology is reported now as dermatology, not internal medicine).

Table 2. Specialty Choices for Warren Alpert Medical School Classes of 2004–2008

most common choice, while psychology was the most popular choice among those majoring in the social sciences. Six students double-majored.

Where They Are Going

Internal medicine remained the most frequently selected specialty (13 graduates). Pediatrics was the second most frequent career choice (9 graduates); family medicine was the third (6 graduates). Table 2 shows the distribution of residency program choices among the Class of 2008.

The proportion of the class (35 students) entering specialties in primary care remained the same as the Class of 2007 at 50%. The primary care designation includes the fields of internal medicine, pediatrics, family practice, medicine/pediatrics, and obstetrics and gynecology. For the second year in a row, the percent of students entering primary care disciplines slightly exceeded the national average (46.5% for 2008).[1] The past two years represent a reversal of a trend that occurred during the previous five years. During those years, the percentage of our students pursuing primary care careers declined and was below the national benchmark from 2004 through 2006.

The actual number of graduates who will eventually practice primary care after completing their graduate medical education will be smaller than the 50% reported here. Based on previous data from the AAMC that tracked graduates, we estimate that approximately one third of our graduates will actually practice primary care.

The specialty choices for all members of the Class of 2008 are given in Table 2 and illustrated in Figure 1. As has been the case in previous years, our most recent graduates chose to pursue training in general surgery at a rate lower than the national average (7.1% versus 9.8%) while opting for surgical specialties at nearly twice the national average (11.4% versus 6.7%). Similarly, our students are moving on to so-called institutional specialties (anesthesiology, pathology, rehabilitation medicine, radiology and radiation oncology) at a rate that is more than twice the national figure (12.9% versus 7.1%).

Table 3 lists the residency destinations of the Class of 2008 graduates. Of the 70 graduates, 68 are entering residency training next year. Two are delaying their residencies. Eleven graduates matched with Brown-affiliated residency programs and will be staying in Rhode Island. California is the most popular

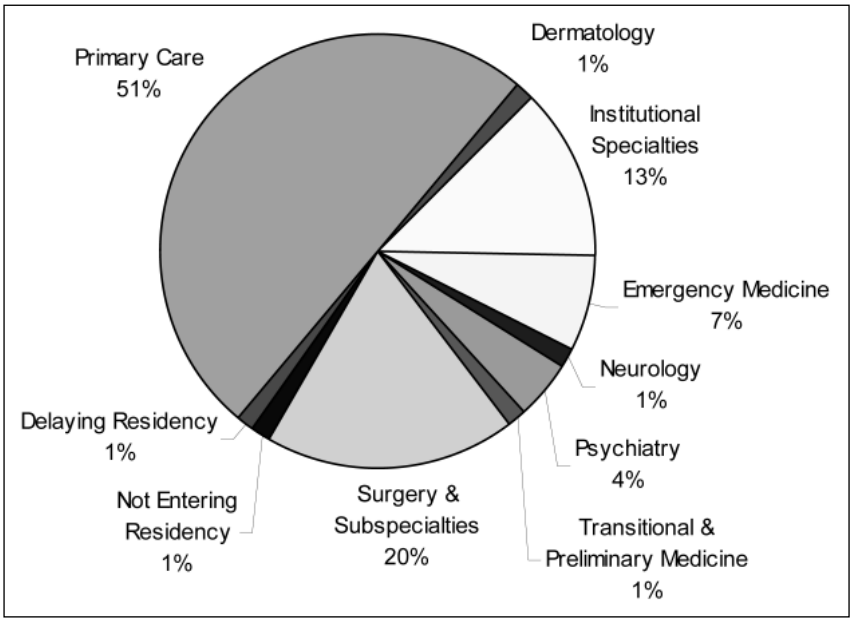


Figure 1: Specialty Choices of the Warren Alpert Medical School of Brown University. Class of 2008

Table 3. The Warren Alpert Medical School MD Class of 2008 Residency Positions

Name	Facility	Affiliated Medical School	Specialty
Liza Aguiar	Rhode Island Hospital	Alpert Medical School	Urology
	Rhode Island Hospital	Alpert Medical School	Surgery (Prelim)
David Ain	Massachusetts General Hospital	Harvard Medical School	Internal Medicine
Carmen Barnes	St. Vincent Regional Medical Center	University of New Mexico SOM	Family Practice
Sophia Califano	University of Michigan Hospitals	University of Michigan Medical School	Internal Medicine
Joyce Chen	Cambridge Health Alliance	Harvard Medical School	Psychiatry
Wendy Chen	University of Pittsburgh Medical Center Education Program	University of Pittsburgh SOM	Ophthalmology
	University of Pittsburgh Medical Center Education Program	University of Pittsburgh SOM	Internal Medicine (Prelim)
Alan Chu	University of California, Los Angeles Medical Center	David Geffen School of Medicine	Surgery (Prelim)
Anita Chu	University of Virginia Medical Center	University of Virginia SOM	Psychiatry
Christina Cinelli	Johns Hopkins Hospital	Johns Hopkins University SOM	Radiology
	Mercy Medical Center	University of Maryland SOM	Internal Medicine (Prelim)
Gina Coscia	New York Presbyterian Hospital	Weill Medical College of Cornell University	Pediatrics
Siri Daulaire	Rhode Island Hospital	Alpert Medical School	Emergency Medicine
Apara Dave	Duke University Medical Center	Duke University SOM	Med/Peds
AuTumn Davidson	University of Massachusetts Program	University of Massachusetts Medical School	Ob/Gyn
Bradley DeNardo	Rhode Island Hospital	Alpert Medical School	Pediatrics
Sybil Dessie	Beth Israel Deaconess Medical Center	Harvard Medical School	Ob/Gyn
Stacey DiPalma	Long Island Jewish Medical Center	Albert Einstein College of Medicine	Psychiatry
Luisa Duran	Santa Clara Valley Medical Center	Stanford University SOM	Internal Medicine
Shahrzad Ehdaivand	Rhode Island Hospital	Alpert Medical School	Pathology
Grace Farris	Beth Israel Deaconess Medical Center	Harvard Medical School	Internal Medicine
Juliann Gaydos-Gabriel	Swedish Medical Center	University of Washington SOM	Family Practice
Joshua Gepner	Oregon Health & Science University Hospital	Oregon Health & Science University SOM	Family Practice
Rebecca Gerber	University of Virginia Medical Center	University of Virginia SOM	Radiology
	Brown University Internal Medicine Residency Program	Alpert Medical School	Internal Medicine (Prelim)
Michelle Glasgow	Yale-New Haven Hospital	Yale Medical School	Ob/Gyn
Reynaldo Gomez	San Diego Naval Medical Center	Naval Medical Center	Transitional
Jonathan Greer	Massachusetts General Hospital	Harvard Medical School	Surgery
Gloria Gutierrez	Memorial Hospital	Alpert Medical School	Family Practice
David Hahn	McGaw Medical Center	Northwestern University	Neurosurgery
	McGaw Medical Center	Northwestern University	Surgery (Prelim)
Silvia Hartmann	Children's Hospital	Harvard Medical School	Pediatrics
Benjamin Hodgson	University of Massachusetts Program	University of Massachusetts Medical School	Emergency Medicine
Joshua Honeyman	UMDNJ-RW Johnson-Piscataway	University of Medicine & Dentistry of New Jersey	Surgery
Ami Parikh Jhaveri	New York University Medical Center	New York University SOM	Internal Medicine
Michael Joseph	Boston University Medical Center	Boston University SOM	Internal Medicine
Katja Karrento	Rhode Island Hospital	Brown University	Pediatrics
Soyun Kim	University of California, Los Angeles Medical Center	David Geffen School of Medicine	Emergency Medicine
Alexa LaFaunce	Oregon Health & Science University Hospital	Oregon Health & Science University SOM	Internal Medicine

Table 3. The Warren Alpert Medical School MD Class of 2008 Residency Positions (cont.)

Syed Latif	Brown University Internal Medicine Residency Program	Alpert Medical School	Internal Medicine
Michael Lee	Rhode Island Hospital	Alpert Medical School	Emergency Medicine
Olga Lemberg	Kaiser Permanente Medical Group	Oakland Medical Center University of California	Pediatrics
L. John Ly	University of California	David Geffen School of Medicine at UCLA	Med/Peds
J. Benjamin Mathis	Hospital of the University of Pennsylvania	University of Pennsylvania Health System	Pathology
Margaret McKinney	Stanford University Program	Stanford University School of Medicine	Internal Medicine
Rushabh Modi	Cedars-Sinai Medical Center	David Geffen School of Medicine at UCLA	Internal Medicine
Christina Moon	Johns Hopkins-Wilmer Eye Institute	Johns Hopkins SOM	Ophthalmology
	Albert Einstein Medical Center	Jefferson Medical College	Transitional
Carla Moreira	Rhode Island Hospital	Alpert Medical School	Surgery (Prelim)
Elizabeth Naylor	Duke University Medical Center	Duke University Health System	Dermatology
	Yale-New Haven Hospital	Yale Medical School	Internal Medicine (Prelim)
Samantha Nazareth	New York Presbyterian Hospital	Weill Medical College of Cornell University	Internal Medicine
Rahim Nazerali	University of California Davis Medical Center	University of California-Davis SOM	Plastic Surgery
Christian Nixon	University of California-San Francisco	University of California-San Francisco SOM	Pathology
Lisa Norlander	Ventura County Medical Center	David Geffen School of Medicine at UCLA	Family Practice
Min Jung Park	Hospital of the University of Pennsylvania	University of Pennsylvania Health System	Orthopedic Surgery
Misa Perron-Burdick	Kaiser-Permanente-Oakland	University of California, San Francisco School of Medicine	Ob/Gyn
Christina Ronai	University of Washington Affiliated Hospitals	University of Washington SOM	Pediatrics
Justin Routhier	Brigham & Women's Hospital	Harvard Medical School	Radiology
	Tufts Medical Center	Tufts Medical Center	Transitional
Albert Scappaticci	Rhode Island Hospital	Alpert Medical School	Radiology
	Brown University Internal Medicine Residency Program	Alpert Medical School	Internal Medicine (Prelim)
Joshua Spaete	University of Michigan Hospitals	University of Michigan Medical School	Internal Medicine
Bethany Stafford	Children's Hospital of Los Angeles	Keck School of Medicine of University of Southern California	Pediatrics
Elizabeth Strawbridge	Maine Medical Center	University of Vermont COM	Family Practice
Gita Suneja	Hospital of the University of Pennsylvania	University of Pennsylvania Health Care System	Radiation-Oncology
Vivian Tang	Tufts Medical Center	Tufts Medical Center	Pediatrics
Montoya Taylor	Ohio State University Medical Center	Ohio State University COM	Med/Peds
Michael Tracy	Stanford University Programs	Stanford University SOM	Pediatrics
Jean Turner	Beth Israel Deaconess Medical Center	Harvard Medical School	Anesthesiology
	Cambridge Health Alliance	Harvard Medical School	Transitional
Michael Wang	University of North Carolina Hospitals	University of North Carolina SOM	Neurology
	Brown University Internal Medicine Residency Program	Alpert Medical School	Internal Medicine (Prelim)
James Wilkerson	University of Maryland Medical Center	University of Maryland SOM	Orthopedic Surgery
Farrah Wolf	Rhode Island Hospital	Alpert Medical School	Surgery (Prelim)
Ezekiel Young	University of Miami School of Medicine	University of Miami SOM	Urology
	Jackson Memorial Hospital	University of Miami SOM	Surgery (Prelim)
Janet Young	University of California Davis Medical Center	University of California-Davis SOM	Internal Medicine
David Zinn	University of Michigan Hospitals	University of Michigan Medical School	Emergency Medicine

State	Number	Percentage
California	15	21%
Connecticut	1	1%
Florida	1	1%
Illinois	1	1%
Maine	1	1%
Maryland	3	4%
Massachusetts	12	17%
Michigan	3	4%
New Jersey	1	1%
New Mexico	1	1%
New York	4	6%
North Carolina	3	4%
Ohio	1	1%
Oregon	2	3%
Pennsylvania	4	6%
Rhode Island	11	16%
Virginia	2	3%
Washington	2	3%
*Students delaying residency	2	3%
Total	70	97.00%

Table 4. Where Graduates are Going for PGY1 Residency

destination state, soon to become the home for 15 graduates. Massachusetts was the second most popular locale with 12 graduates locating there. Of note, 8 graduates will be moving into Harvard-affiliated residency programs.

Table 4 lists those states where the graduates will be going for their first year of residency training. Approximately half of the Class of 2008 (49%) will stay in the Northeast, a decrease from the 65% in the previous class. Twenty-seven percent of graduates will go to the West Coast, a marked increase from 8% last year.

Conclusion

As has been true in previous years, the proportion of Alpert Medical School graduates entering primary care residencies closely approximates the national data for all US medical school seniors. Residency choices of our graduates indicate a continued trend towards surgical specialties and institutional specialty disciplines. In the aggregate, our graduates continue to compete successfully for highly competitive graduate training programs.

References

1. National Resident Matching Program Results and Data, 2008 Main Residency Match, Table 10: U.S. Seniors Matched to PGY-1 Positions by Specialty, April 2008.

Philip A. Gruppuso, MD, is Associate Dean for Medical Education and Professor of Pediatrics.

Janice Viticonte is a Medical Residency Program Coordinator.

Eileen Palenchar is a Student Affairs Consultant.

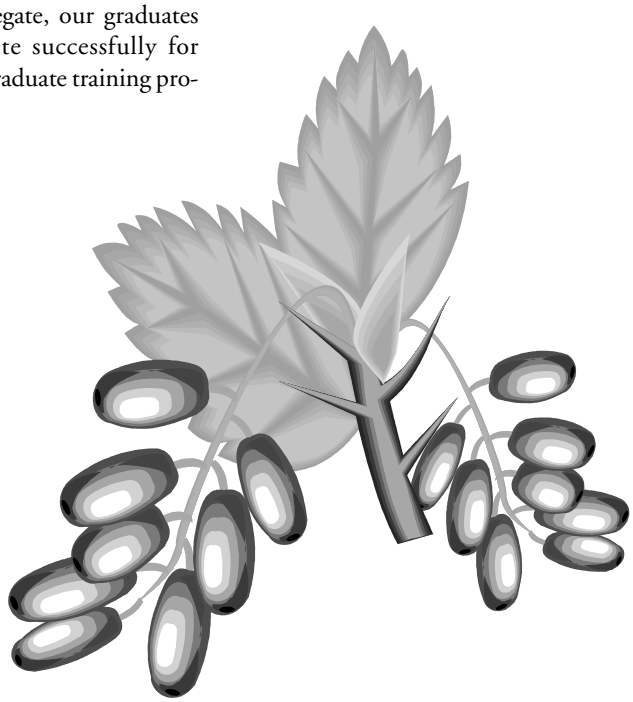
All are with The Warren Alpert Medical School of Brown University.

Disclosure of Financial Interests

The authors have no financial interests to disclose.

Correspondence

Philip A. Gruppuso, MD
The Warren Alpert Medical School of Brown University
Box G-A218
Providence, RI 02912
Phone: (401) 863-1618
E-mail: Philip_Gruppuso@Brown.edu



Preparing for the Silver Tsunami: The Integration of Geriatrics Into the New Medical Curriculum at The Warren Alpert Medical School of Brown University

Renée R. Shield, PhD, Terrie Fox Wetle, PhD, and Richard W. Besdine, MD

Old age is the most unexpected of all the things that happen to a man.

– Leon Trotsky
(Lev Davidovich Bronstein),
Diary in Exile, 1935

When current medical students begin residencies, the first baby boomers will reach Medicare eligibility (1/1/2010). The Warren Alpert Medical School of Brown University has seized this demographic certainty to ensure that its graduates, regardless of medical specialty, know how to care for older adults.

The redesign of the medical school curriculum in academic year 2006-2007, previously described in *Medicine & Health/Rhode Island*,[1] provided an ideal time to launch an ambitious program to teach principles and content of geriatrics to all students. When the Donald W. Reynolds Foundation awarded a $2 million, 4-year grant to Brown in July 2006, the essence of the proposed project was captured in the slogan, "Geriatrics for every student, every course, every year." Targets were medical students, residents in multiple specialties and faculty development. As the medical school has streamlined its preclerkship courses by integrating physiology, pathophysiology, pharmacology and pathology in each of the organ blocks, aging content is integrated as appropriate. No longer are age and disease tacitly and inextricably linked; the distinction between normal aging and pathology is explicitly taught.

Reynolds has awarded 30 curriculum grants to US medical schools since 2001. In the project's two years at Brown, we have accomplished the following initiatives.

Pre-Clerkship Courses

Pre-clerkship courses were the first priority. Faculty geriatricians and advanced fellows on the Reynolds team identified essential geriatrics content that could be added to the syllabus of each course, in synchrony with the goals of each course director, section leader and lecturer. Geriatrics faculty provided detailed content outlines, cases for small group learning and PowerPoint slides. Understanding that students focus on tests, exam questions (>150 to date) testing knowledge of the aging-related content were constructed and many were used. We increased aging-related content for 1st year students from <6 hours to >45 hours, and for 2nd year students from 16 to 46 hours.

The Anatomy Lab Comes Alive

Anatomy is a highlight. Death certificate data on the 24 cadavers of the 2006-7 academic year revealed that the mean age at death was 80.5, and the median was 86. Causes of death and comorbid conditions illustrated our nation's most prevalent causes of morbidity and mortality, which were discussed with the students in the context of their own cadavers. Geriatricians led a "walk the tables" lab session, discussing the aging and disease findings in each cadaver. In their first semester of medical school, students learned that their cadavers illustrated complex medical problems representative of the living patients they were about to encounter in clinical settings.

Scholarly Concentrations (SCs)

Another highlight of the curriculum redesign has been the SCs program, previously described in *Medicine & Health/Rhode Island*.[2] Students identify an area of interest from among the 10 SCs, and together with a mentor, develop a project. In the first year, 6 MD2010 students chose the SC-Aging. Concentrators are assigned a volunteer community-dwelling "Elder Guide," with whom they develop a social relationship in monthly visits. Each year, concentrators participate in group "field trips" and small group sessions, and attend many of the core lectures in the Geriatrics Summer Series.

The projects of the first class of concentrators are diverse. Difu Wu (mentor, RW Besdine) prepared >40 aging-related content outlines for the 1st year Integrated Brain Sciences course; these materials are the basis for a geriatric neurology text he and geriatrics and neurology faculty are writing. Amy Hsu (mentor, J Teno) studied feeding tube insertion rates for end-stage dementia patients across hospitals, and presented a poster at the American Geriatrics Society meeting. Ian Buchanan (mentor, RW Besdine), who has been awarded an NIH Howard Hughes Scholarship, created a web-based interactive curriculum on transitions in care. Ronen Stein conducted focus groups with 4th year medical students to ascertain perceptions and knowledge of end-of-life care (mentors, R Shield, N Long). Robert Velasco (mentor, P Pirraglia) assessed risk factors for success of pulmonary rehabilitation for older veterans with chronic pulmonary disease; he presented a poster at the American Thoracic Society meeting.

Virtual Patients

Web-based learning has been integral to self-directed study. Geriatricians worked with former Dean for Medical Education Stephen Smith to develop interactive media cases of older patients. In a longitudinal multi-year case, an elderly woman falls, has serious sequelae and subsequent comorbid conditions. Epidemiological context, screening tests and treatment are part of this lively DVD, which also features several older patients who recount their falls.

Doctoring – The Longitudinal Relationship

For the two-year Doctoring course, geriatrician Naomi McMackin paired students with consenting residents in **assisted living facilities** (ALFs). During this year-long relationship, students practiced their physical exam and interviewing skills, learning how to discuss sensitive issues such as end-of-life care.

Clerkships

All clerkships but pediatrics have explicit mandatory clinical exposures to older patients, enriched by multiple small group discussion cases. The newly integrated surgery case features an elderly woman presenting with diverticulitis; themes include uncommon symptoms and functional loss, exposing students to clinical situations in which aging affects evaluation and management.

In 2008, a new clerkship focus is proceeding in tandem with the curriculum redesign. In the traditional apprentice model of medical training, individual clerkships had little communication, resulting in duplication and overlap. In the reorganization of the clerkships, the Reynolds contribution is to identify broad clerkship "themes;" candidate themes are germane to aging, but not exclusively geriatrics topics.

End-of-Life Theme

The Reynolds Clerkship Advisory Group is creating an end-of-life theme to be implemented across clerkships. The core didactic content and clinical experiences related to end- of-life care will be taught, as decided by each clerkship's leadership. The family medicine clerkship will include content about delivering bad news; in the experiential component students will participate in a patient conversation about advanced directives in the outpatient setting. In surgery, students will learn about informed consent, including temporary suspensions of DNR/DNI status for surgery. The students will witness a patient discussion regarding informed consent for surgery. In psychiatry, students will learn about grief, bereavement, failed grieving and the assessment of suicide risk; in the experiential component students will assess a suicidal patient for safety.

Residencies

Residencies in Internal Medicine, Emergency Medicine, Family Medicine, Psychiatry and OB-GYN have been enriched. All internal medicine residents have a mandatory 1-month geriatrics block in year 1, consisting of non-hospital clinical experiences, a 10-session didactic series and work on a personal project. Many residents rotate through the **geriatrics teaching service** (**GTS**), caring for Geriatrics Practice in-patients; geriatrics faculty are attendings, and fellows rotate as well. Emergency Medicine residents run 8 geriatrics cases, developed by EM faculty using high fidelity mannequins in the Rhode Island Hospital Simulation Center. The first EM geriatrics fellow began a 2-year academic program in 2006. Half the EM interns rotate on the GTS. Family medicine residents have a 3-year continuity experience in geriatrics, including **nursing home** (**NH**) care, case discussions, didactics and most recently the deployment of an electronic medical record in the NH. Psychiatry, with its own academically oriented 2-year geriatrics fellowship, has an extensive resident curriculum. OB-GYN residents have clinical experiences in geriatric gynecology and uro-gynecology, reinforced by 5 annual lectures on principles and practice of care for older patients. Some interns rotate on the GTS.

Educational Resources in Aging (ERA)

The Brown Reynolds Project launched the ERA website in fall 2007. Created by medical students Sareh Rajaee and Joanne Chiu, the site houses all aging-related materials created at Brown (>100 elements). Using the MyCourses program, a webspace tool for all Brown University courses, a generic username and password allows access for non-Brown users. Files are organized for students, residents, faculty and general audiences. The "For Students" folder includes aging syllabi on the organ systems, **Problem-Based Learning** (**PBL**) cases for clerkships, and slide sets for courses. The "For Residents" folder includes cases for residents in each specialty, and supporting slide sets. The "For Faculty" folder, accessible only by Brown faculty, stores exam questions and other sensitive information. The "General Resources" section houses many slide sets, relevant articles and web resources. The site is featured on the **POGOe** (**Portal of Geriatric Online Education**) website, a Reynolds Foundation inventory of aging-related products, and is accessible through the Brown Library's and Gerontology Center's homepages.

Faculty development

Two initiatives target practicing physicians, especially those who mentor and teach medical students.

Facilitator guides. Physicians and social scientists in lectures and small groups teach Doctoring students interviewing, physical examination and professionalism. The additional aging-related content and the longitudinal ALF experience are accompanied by written facilitator guides for the instructor teams to use with students. Facilitator guides include practicing the geriatrics interview, end-of-life decision-making, sexual history-taking and geriatrics vital signs.

Geriatrics for the Practicing Physician. As readers of this *Journal* know, a column on care of older patients has been a regular feature since January 2007, supported by Quality Partners of RI. Topics covered include avoiding and managing polypharmacy, falls, transitional care, elder abuse and mistreatment, hypoactive delirium and NH feeding tube decisions. Edited by Ana Tuya Fulton, MD, and written by Brown geriatricians and geriatrics fellows, the column alerts physicians to frequently encountered problems in older patients.

Evaluation

Each component of the Reynolds project is being evaluated. Two strategies, the "Dose" and "Journaling" initiatives, are innovative.

Geriatrics Dose

Determining how much geriatrics content is delivered to students is complex. In collaboration with course directors, lecturers began to integrate new aging content into the pre-clerkship curriculum. Beyond documenting these additions, we assessed the students' perceptions of the amount and quality of the aging-related content. Several volunteers ("trackers") from the 1st and 2nd year classes were recruited to report on geriatrics content in every lecture, lab and small group. Via tracking sheets, students documented the minutes of aging content, level of integration, and other evaluative comments.

From these reports, interesting definitional issues arose. If aging content were truly successfully integrated, the student might not identify it as "aging" content (i.e., "stealth geriatrics"). Moreover, students may not define "aging" traditionally; for example, and much to the evaluators' surprise, a 47-year-old patient was described as "geriatric." Student com-

ments have included suggestions for improvement. For example, a student, praising a lecture on dementia, suggested "causation" be better explained. Such feedback can spur mid-course corrections. Course directors and instructors are also asked to report on the aging content, cases and exam questions included in their courses.

Journaling

"What are your experiences, reactions, and insights related to the geriatrics content you have received in your medical school courses?" This question is posed weekly to medical student volunteers in the journaling project. A second question asks for student responses to older patients encountered that week. In some weeks, a third question is added, tailored to that week's curricular topics. In personal, thoughtful, and sometimes moving accounts of their insights, misgivings and musings, students explore their notions about becoming physicians and what it means to care for older patients.

In these essays and in the debriefing "thank you lunches" held at semester end, students have shared their perceptions about the project's value, as well as our efforts to integrate geriatrics. A qualitative analysis team of two geriatricians, a medical anthropologist, a gerontologist and a health services researcher is analyzing the journals. These journals reveal shared meanings that provide clues to how students respond to their courses, what they think it means to be a physician, and how they may care for older patients after they graduate.

Acknowledgement

The authors wish to acknowledge Joanne Chiu, 4th year medical student at the Warren Alpert Medical School, for her assistance in the preparation of our paper.

References

1. Garg S, Gruppuso PA, Dumenco L. *Medicine & Health/RI* 2007;90;272-4.
2. Rickards E, Borkan J, Gruppuso PA. *Medicine & Health/RI* 2007;90;275-82.

Renée R. Shield, PhD, is Clinical Associate Professor of Community Health and Director, Resource Center for Geriatrics Education.

Terrie Fox Wetle, PhD, is Associate Dean of Medicine for Public Health and Professor of Community Health.

Richard W. Besdine, MD, Professor of Medicine, is Greer Professor of Geriatric Medicine, and Director, Division of Geriatrics (Medicine) and Center for Gerontology and Healthcare Research.

All are with The Warren Alpert Medical School of Brown University.

Disclosure of Financial Interests

The authors have no financial interests to disclose.

Correspondence:

Renée R. Shield, PhD
The Warren Alpert Medical School of Brown University
Box G-121(6)
Providence, RI 02912
Phone: (401) 863-9958
E-mail: Renee_shield@brown.edu

RI Responds

When you respond, RI Responds!

Working together, we can ensure that Rhode Island is prepared to respond to an emergency.

When a public health emergency or other large-scale disaster occurs, many agencies will need volunteers who are licensed healthcare professionals. RI Responds is a statewide system for the registration and coordinated placement of healthcare professional volunteers.

By registering for RI Responds, you can:

- Choose one of the three volunteer opportunities that best matches your availability and skills.
- Submit individual contact information to a secure database. We want to know the best way to reach you if we need your help.
- Provide details about your individual skills and competencies. We want to put your skills to the best use possible during an emergency.
- Permit your license(s) to be verified before an emergency. We want to organize qualified volunteers quickly and effectively.

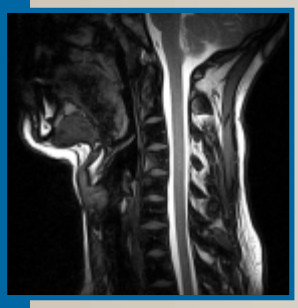
Register today at www.RIResponds.org

SERV·RI

RI RESPONDS IS A PARTNERSHIP AMONG THE RHODE ISLAND DEPARTMENT OF HEALTH, RHODE ISLAND DISASTER MEDICAL ASSISTANCE TEAM AND RHODE ISLAND MEDICAL RESERVE CORPS.

THE IMAGING INSTITUTE

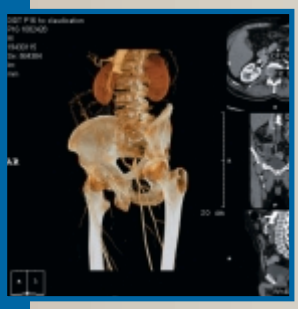
OPEN MRI • MEDICAL IMAGING



High Field MRI

- **Offering both 1.5T High Field & Higher Field OPEN MRI Systems**
- **Advanced CT with multi-slice technology, 3D reconstruction**
- **Digital Ultrasound with enhanced 3D/4D technology**
- **Digital Mammography with CAD (computer assisted diagnosis)**

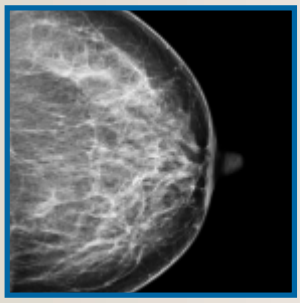
MRA



CT • 3D CT

CTA

3D Ultrasound



Digital Mammography

Digital X-Ray & DEXA

- Preauthorization Department for obtaining all insurance preauthorizations
- Fellowship, sub-specialty trained radiologists
- Friendly, efficient staff and convenient, beautiful office settings
- Transportation Service for patients

Higher Field OPEN MRI

WARWICK	CRANSTON	CRANSTON	N. PROVIDENCE	E. PROVIDENCE
250 Toll Gate Rd.	1301 Reservoir Ave.	1500 Pontiac Ave.	1500 Mineral Spring	450 Vets. Mem. Pkwy. #8
TEL 401.921.2900	TEL 401.490.0040	TEL 401.228.7901	TEL 401.533.9300	TEL 401.431.0080

A Clearer Vision of Health™

theimaginginstitute.com

Development of a Student-Based Teaching Academy

Steven C. Rougas, Jack C. Rusley, Beverly R. Young, Carmelle V. Romain, Jason V. Lambrese, Richard Dollase, EdD, Alicia D. Monroe, MD, and Dale A. Ritter, PhD

In restructuring the preclinical curriculum at the Warren Alpert Medical School of Brown University, we have focused equally on integrating basic science instruction and on providing students with essential clinical skills. To improve our students' clinical competence, we introduced Doctoring, a two-year course that involves students developing clinical skills in didactic and small-group sessions led by physicians and social and behavioral science teachers. In addition, students practice communication, history-taking and physical examination skills in physicians' offices and other clinical settings such as emergency rooms and hospital-based clinics.

In redesigning our pre-clinical curriculum, we, like other medical schools, faced logistical hurdles; e.g., finding adequate resources and sufficient one-on-one teaching time. The lack of direct faculty observation of medical students—in the busy office practice or hospital setting—has been noted.[1] Yet, such one-on-one observation is critical for medical students until they have mastered their skills.[2] One possible solution, the use of non-faculty teaching associates, has proven a viable alternative to strictly faculty-based teaching of clinical skills.[3]

The role of medical students as non-faculty teaching associates has not been adequately described, though their efficacy as teachers in the clinical years has been well documented.[4] The premise of peer-assisted learning is that students can help other students learn, while deriving some benefit for themselves.[5] One key reason cited for the effectiveness of the near-peer model is the "cognitive congruence" of near-peer teachers with their students.[6] Upper class students are close in experience to their under-class peers and can empathize with the learner, coach at a level appropriate for the learner, and anticipate and reframe learning.[7]

Over the last two years, the Alpert Medical School has created a student-based Teaching Academy that utilizes the experience of second-year students to provide one-on-one feedback and coaching to first-year students.

First Year: Role of the Teaching Fellow in Doctoring

In the initial year, the Teaching Academy was composed of 28 second-year medical students who coached first-year students in the Doctoring course. Four fellows served on the Teaching Academy Executive Committee as student coordinators. Along with faculty advisors, the student coordinators supervised the second-year fellows, coordinated with the Doctoring course leaders, and communicated problems to small-group faculty. The other 24 second-year fellows worked directly with first-year students. Each fellow was assigned to four first-year students and met with these students in pairs for one hour each month. (Figure 1) Review session content focused on hands-on skills and clinical interviewing practice. Fellows were required to attend a series of workshops to ensure their competence as coaches, and were provided with a handbook of cases, clinical vignettes, and skills checklists. At the end of each review session, both fellows and first-year students completed a short feedback form to monitor the progress of each individual in the program.

Our evaluation data indicate that second-year students who coach first-year students can provide valuable opportunities for enhanced clinical skills practice often absent from standard first-year curricula.

Specifically, the first-year student feedback form assessed the usefulness of teaching academy sessions in imparting

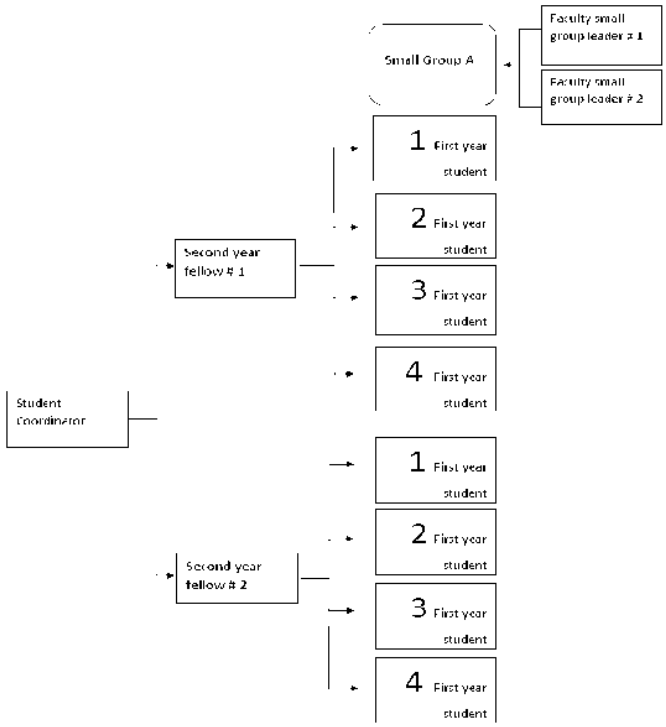


Figure 1. Organization of the Doctoring course
There are four student coordinators of the executive committee. Each coordinator oversees a total of six second year fellows, who each work with a total of four first year students in pairs. Those four first year students, along with four first years from another fellow, comprise a Doctoring Course small group. Each small group is supervised by two faculty small group leaders.

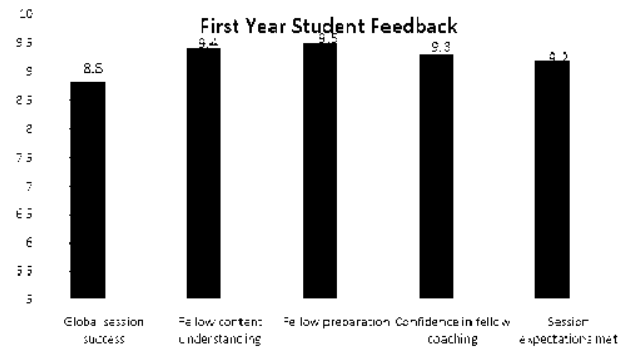


Figure 2.
Students rated their experience in five specific areas on a scale of 1 to 10, with 10 being the best. Data have been averaged for all respondents across the fall 2007 semester. Student feedback participation ranged from 58-60% (55-57 reporting) over the three sessions rated.

clinical skills. (Figure 2) First-year students rated aspects of their experience on a scale of 1 to 10 (10 being the best), as well as provided written feedback.

Comments of first-year students demonstrate special appreciation for several aspects of the Teaching Academy experience:

- the additional opportunities to practice clinical skills;
- the individual on-the-spot feedback they receive;
- the specific and practical nature of their peers' suggestions;
- the ability to organize and integrate the various components of the physical exam and medical interview.

As one first-year student remarked, "I feel as though I present to the patient as an approachable and naturally empathetic interviewer. I am also pretty confident in the way I organized the different components of taking a patient's medical history. It allows for a clear and complete interview with transitions that make sense. This is largely thanks to my teaching fellow."

Journal reflections from Teaching Academy fellows demonstrated a thoughtful approach to coaching. A teaching fellow said: "While I might have my ideas of how to perform a physical exam or how to conduct a good interview, being forced to clearly provide feedback to students allowed me to fully shape my own approach and style." Another student who just started her core clerkships commented: "… participating in the Teaching Academy has given me good insight into how to learn effectively during my clerkships. Working with first-years has allowed me to be more mindful of what's involved in teaching in a clinical context, and as a result, I feel like I'll be much more efficient when it comes to learning and dealing with feedback from the residents and attendings on my rotation."

Common concerns for fellows included some initial uncertainty about their own clinical skills and inadequate familiarity with the evolving first-year curriculum. However, fellows recognized their unique vantage point as peers of the first-year students and took the opportunity to provide practical advice.

Second Year: Role of the Teaching Fellow in Anatomy

In the second year of implementation, the Teaching Academy fellows also coached first-year students in the anatomy course. In the first dissection laboratory session, the teaching fellows provided hands-on assistance with dissection: the teaching fellows uncovered the cadaver and made the first cut; they provided useful tips on utilizing the scalpels and scissor spread; they introduced general dissection techniques.

Anatomy examinations consist of both a written portion and a lab portion. In the lab practical exam, students have approximately a minute to identify an anatomical feature on a cadaver. They may be asked to interpret x-rays as well. First-year students also answer conceptual questions that integrate the lecture material with their laboratory work. In helping first-year students prepare for the lab portion, the teaching fellows held a mock practical examination.

During the mock practical, the teaching fellows introduced first-year students to the types of questions they would encounter and discussed test-taking techniques. They also helped first-year students "talk through their thought process" in answering the questions. Thereafter, before each subsequent anatomy exam, the teaching fellows held weekend review sessions—going over the materials to be covered on the written portion

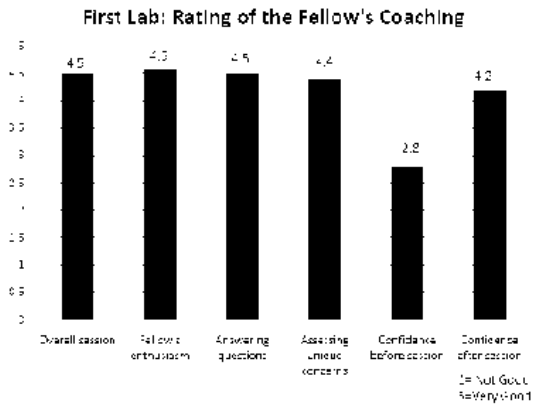


Figure 3. 72 of 96 first-year students rated the performance of their fellow during the first day of lab as very effective in answering their questions and concerns, providing practical advice and learning strategies, and building their confidence in performing dissection in the lab.

and the anatomical features or concepts to be covered on the practical exam.

First-year students reported that the teaching fellows helped them undertake the first day of dissection and prepare for their first practical examination. (Figure 3) First-year students noted that the fellows taught them "practical how to do things, and how to review/study as you go along, especially how to ID structures and take lab notes." The fellows also provided emotional support—they were "friendly," "reassuring," and "gave us confidence." In fact, the first-year students' confidence level—in terms of feeling able to work in the lab productively—rose from a 2.8 to a 4.2 (1= not good and 5= very good) after the fellows had coached them.

The mock practical session evoked similar positive evaluations. The first-year students rated the overall session as a 4.6—or very good. A first-year student felt that the fellow's "testing techniques were very good." Another student thought the fellow's "way of reasoning through the questions was helpful." A third student reported that the mock practical was a "good simulation of the testing environment."

Program Strengths

In terms of both peer coaching in Doctoring and in Anatomy, three themes emerged from first-year student and fellow feedback:

- the benefit of immediate and effective feedback,
- the value of extra time to practice,
- the creation of a comfortable and open learning environment.

Overwhelmingly, first-year students felt comfortable expressing their strengths and weaknesses, because of the smallness of groups and the relationships they established with their second- year fellows. Students' willingness to admit their challenges, coupled with the fact that second-year fellows related to their struggles, resulted in more specific and effective feedback from fellows that is rare in other settings. Almost universally, first-year students expressed their appreciation for the opportunity for more practice and more interaction with the teaching fellows.

Limitations

This program reflects the experience of students at the Alpert Medical School over two years, which may limit the possibility of generalizing from our experience. One factor that may decrease the effectiveness of this successful peer tutoring/coaching program is the challenge of coordinating all the faculty and students and ensuring that all parties are delivering a clear, consistent message to first-year students about content, and communicating with each other about logistical concerns. Similar to other major curriculum innovations involving many faculty and students, this problem can be better managed but never entirely solved.

References

1. Holmboe ES. Faculty and the observation of trainee's clinical skills. *Acad Med* 2004;79:16-22.
2. Benbassat J, Baumal R, et al. Viewpoint. *Acad Med* 2005;80:1121-6.
3. Barely GE, Fisher J, et al. Teaching foundational physical examination skills. *Acad Med* 2006; 81(10 Suppl):S95-7.
4. Nestel D, Kidd J. Peer tutoring in patient-centered interviewing skills. *Med Teach* 2003;25:398-403.
5. Topping K. The effectiveness of peer tutoring in higher and further education. *Higher Education* 1996; 32:321–345.
6. Cornwall MG. 1980. Students as teachers. *Peer teaching in higher education*. Amsterdam: Centrum Onderzoek Wetenschappelijk Onderwijs.
7. Lockspeiser TM, O'Sullivan P, et al. Understanding the experience of being taught by peers. *Adv Health Scie Educ Theory Pract* 2006. published online 24 Nov 2006.Available at http://www.springerlink.com/content/q15691344t18n555/fulltext.pdf

Steven Rougas, Jack Rusley, Beverly Young and Carmelle Romain, MD 2009, served as student coordinators on the executive committee of the Teaching Academy in academic year 2006-2007.

Jason Lambrese, MD 2010, served as a student coordinator on the executive committee of the Teaching Academy for academic year 2007-2008.

Richard Dollase, EdD, is Director of Curriculum Affairs, and founding faculty member of the Teaching Academy.

Alicia Monroe, MD, is the Doctoring course leader and Associate Dean for Diversity. She is a founding member of the Teaching Academy.

Dale Ritter, PhD, is manager of the morphology laboratory.

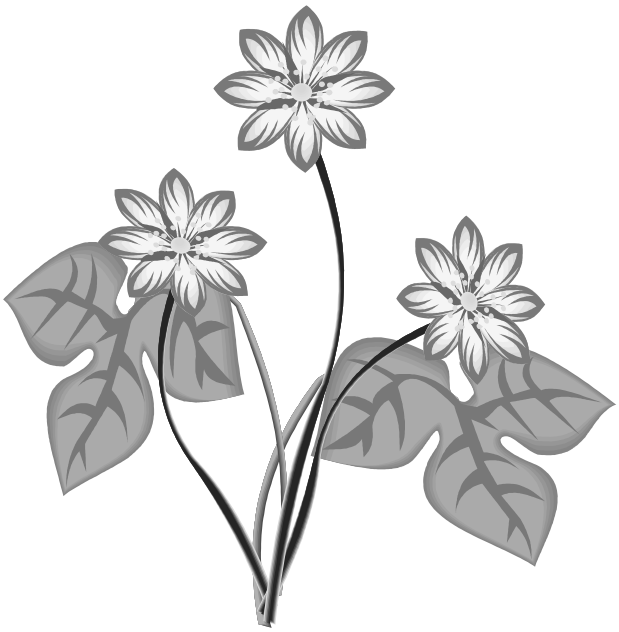
All are with The Warren Alpert Medical School of Brown University.

Disclosure of Financial Interests

The authors have no financial interests to disclose.

Correspondence:

Richard H. Dollase, EdD
Box G-B215
Brown University
Providence, RI 02912
phone: (401) 863-3198
E-mail: Richard_Dollase@Brown.edu



Increasing Post-partum Depression Detection In Rhode Island: Targeting Pediatric Providers

Elizabeth M. Strawbridge, MD, Margaret Howard, PhD, Patricia Nolan, MD, MPH, and Edward Feller, MD

Post-partum depression (PPD), describing a continuum of depressive symptoms occurring in the first year after childbirth, has been termed "the most under-recognized and under-treated obstetrical complication in America."[1] Although as many as 1 in 5 new mothers in **Rhode Island (RI)** suffer from perinatal depression,[2] the number detected and treated is much smaller. The consequences of untreated PPD may be severe, potentially impairing infant cognitive and behavioral development,[3] as well as wreaking havoc on the mother and family. Early detection of symptoms and timely intervention can improve outcomes.

In RI, we need to increase recognition of PPD among physicians and patients. Current screening practices are inadequate Some, but not all obstetrical providers will screen for mood symptoms at the 6-week post-delivery visit. For many women, depressive problems manifest beyond 6 weeks postpartum. This visit may be the only first-year contact a new mother has with her obstetrician The timing misses the majority of women who may develop symptoms much later in the 1st postpartum year. Pediatric and family practitioners, who may see a new mother as many as 7 times during her first postpartum year, are an untapped resource. We describe an intervention for primary care providers using a simple screening tool to enhance identification of suffering mothers.

Background

Common practice defines the post-partum period as lasting up to one year after childbirth; PPD symptoms may not emerge until 3-6 months after delivery. Complaints include depressed mood, loss of interest in activities, and at least 4 of the following: changes in appetite, weight, sleep, decreased energy, feeling worthless or guilty, difficulty making decisions, and recurrent thoughts of death or suicide.

Physicians may misinterpret mothers' symptoms as the 'baby blues.' Experienced by as many as 50-80% of women, this phenomenon may mimic or mask PPD, but is milder, shorter and generally resolves without treatment. In most cases, 'the blues' peak by day 5 post-delivery and resolve by day 10. Unlike PPD, 'the blues' do not cause either short or long-term impairment. Baby blues can progress to major depressive episodes in a quarter of cases. The most severe, albeit rare, pregnancy-related syndrome is post-partum psychosis. This psychiatric emergency is commonly of acute onset with overt psychotic symptoms within days of delivery.

Why Pediatric Providers?

Pediatricians or family physicians may be the only medical providers encountered routinely and repetitively by mothers during the 1st postpartum year. Obstetricians, the obvious candidates for PPD screening, see mothers usually once at 6 weeks after delivery, commonly before the onset of PPD. A depressed mother is less likely to schedule an appointment for herself than she is to follow through on well-baby care. (Table 1) Frequent visits or calls for minor complaints rather than well-baby visits, poor adherence to recommendations, frequent "firing and hiring" of pediatricians may be clues to PPD. Children's physicians are good candidate to assess PPD. They are trained to consider the impact of family environment on children. While the mother is not the pediatrician's patient, her depression can have serious consequences for her child. Screening for maternal depression is comparable to a pediatrician inquiring about smoking or violence in the household. Each factor can impair a child's well-being.

Physician Barriers to Detection

Attitudes and behaviors of health professionals may impede PPD diagnosis. In an anonymous national survey, 508 randomly selected primary care pediatricians self-reported their attitudes towards recognition and management of PPD, including confidence in their skills and willingness to implement new strategies to improve care[5]. Only 57% of respondents felt it was their responsibility to recognize maternal depression. When maternal depression was suspected, additional assessment was done by a disappointingly low 48%; none used a specific screening tool. Major barriers to PPD identification were: [1] lack of time for adequate history (73%) or counseling/education (70%); [2] insufficient training/knowledge to diagnose (64%); [3] poor confidence in the ability to diagnose (31%). Only 27% reported that they would change their practice approach in order to recognize more cases of PPD. An additional impediment is failure to use validated screening instruments.

Table 1. Barriers to detection or intervention

Patient-related
- Unarticulated or unrecognized symptoms
- Fear of psychiatric medication
- Gulit ("I should be happy)
- Stigma (" I'm a bad mother")
- Reluctance to accept diagnosis

Physician-related
- Timing of post-natal OB visit
- Inadequate training and experience
- Non-specific symptoms
- Failure to discuss psychiatric issues
- Lack of time / reimbursement
- Fear of legal responsibility

System-related
- Stigmatization of mental illness
- Reimbursement
- Insurance limits treatment options
- Inadequate management resources

Table 2.Risk Factors

- Prior psychiatric history
- Lower socioeconomic status
- Life stressors
- Poor social support
- Poor marital relationship
- Infant illness
- History of "the baby blues"
- Single marital status
- Severe PMS
- Family history of depression
- Unplanned pregnancy
- Prior stillborn
- Failed breastfeeding

Edinburgh Postpartum Depression Scale (EPDS)

A simple, easy, and inexpensive screening tool has been validated in diverse populations and translated into over 25 languages: **The Edinburgh Postnatal Depression Scale (EPDS)**. The 10-item questionnaire takes fewer than 5 minutes to complete; mothers in the waiting room can fill it out; office personnel can score it. (Figure 1) The sensitivity in detecting PPD has been shown to be between 89-100% with a specificity as high as 95 % Detection of PPD increased from 1.6% to 8.5% using EPDS vs. routine care.[9] Even simpler is a less well-validated 2-question screen endorsed by the **US Preventive Task Force (USPTF)** to detect adult depression: 1) During the past month, have you often been bothered by: feeling down, depressed or hopeless? 2) During the past month have you had little interest or pleasure in doing things? The sensitivity of this screen is 89-96%, specificity, 51-72%[8]. The latter tool was not designed specifically for PPD. An algorithm can be provided for doctors that contains instructions on scoring and interpreting EPDS screening, and what to do with a positive score.

Red Flags: Recognizing at-risk women

Any woman may develop this disorder after giving birth. Symptoms can be subtle and non-specific even to the trained clinician. Thus, population-based screening is preferred to targeted screening. Understanding risk factors is important. Physicians must be vigilant when dealing with a mother having any predictors for PPD. (Table 2) Some of the most important are: a history of psychiatric illness, especially during pregnancy; previous PPD; poor social support including single marital status; and an infant with a difficult temperament. Physicians must be aware that <u>any</u> post-partum woman can develop PPD; thus, screening should not target only those mothers with risk factors.

... screening should not target only those mothers with risk factors

What to do with a positive screen?

If the pediatric provider suspects PPD in a new mother, either clinically or by a positive screen , the provider should refer her to her primary provider. The mother's personal physician has a formal relationship with her, knows her medical history and can assess for other medical conditions with similar manifestations. If a new mother does not have a primary provider, other resources are available. Emergencies should be referred to a hospital or community mental health center. In Rhode Island, The Women & Infants Day Hospital offers a specialized program for moms and pregnant women suffering from depression. Patients or physicians who have questions regarding a patient with PPD may contact the Day Hospital for information. (Figure 1)

Future Directions

Awareness and education are key components to improve the recognition and care of PPD. Education efforts are vital to sensitize primary care providers to their potential impact in identification. Action is needed to provide reimbursement incentives and standards of care for physicians to help detect the 20% of RI women who may suffer from PPD after

SCREENING NEW MOTHERS FOR POSTPARTUM DEPRESSION (PPD) AT WELL CHILD VISITS

Screen new moms with the following two questions (endorsed by USPTF) at well child visits from one month to one year.

During the past month, have you often felt down, depressed, or hopeless?
During the past month, have you often had little interest or pleasure in doing things?

If the answer to each questions is NO – there is little clinical suspicion for PPD, no further screening is indicated.

If the answer to EITHER question is YES – further screening is required.

Use the modified Edinburgh Postpartum Depression Scale (adapted from Hirsa & the Edinburgh Postnatal Depression Scale. Cox, Holden, & Sagovsky (1987). Detection of Postnatal Depression. Development of the 10-item Edinburgh Postnatal Depression Scale. British Journal of Psychiatry, 150: 782-870).

Ask mom to respond: YES or NO.
For most days during the past 7 weeks, have you:

- ☐ been unable to laugh and see the funny side of things
- ☐ not looked forward to things you usually enjoy
- ☐ blamed yourself unnecessarily when things went wrong
- ☐ been anxious or worried for no good reason
- ☐ felt scared or panicky for no good reason
- ☐ felt like things have been getting the best of you
- ☐ been so unhappy that you have had difficulty sleeping
- ☐ felt sad or miserable
- ☐ been so unhappy that you have been crying
- ☐ had any thoughts of harming yourself, your baby, or others

If the answer to the last question is YES – screen for suicidal or homicidal plan; if YES – immediately refer her to the nearest emergency room.

If the answer is YES or SOMETIMES to 3 or more questions – she may be suffering from PPD. Please have someone from your office call Women & Infants' Day Program at (401) 274-1122, ext. 2870. Our staff is prepared to address any questions you may have regarding the health and safety of a depressed mom.

If the answer is YES to fewer than 3 questions – there is a low risk for depression; no further evaluation is needed unless your clinical judgment deems otherwise.

What You Can Do For Mom

Provide direct, non-judgmental education.

Suggested approach to talking to mom: "Many new moms experience some of the feelings you are describing. I think it might be helpful for you to talk to a mental health professional about it. Postpartum depression is the most common complication of childbearing. With early detection and treatment, you can feel better."

Remind her that this is not her fault, and that she is not a bad mother.

Validate her feelings. This is a real disorder that requires treatment, not a mood swing that will pass in a few days.

Provide more frequent follow-up (phone calls or visits) for infant and any other affected children in the household.

Infants of depressed mothers may need more frequent weight checks. Poor growth, as well as personal, behavioral, and cognitive impairments, are identified risks to infants of mothers with depression.

Inquire about other children in the household – if there are any signs of disturbance in behavior, school performance, or sleep, address these topics directly with mom and induce the involved child in follow-up.

Ensure that mother is seeking help from her health care provider or another resource.

Provide a list of resources for mother

Postpartum Support International: 1-800-944-4773, **www.postpartum.net**

U.S. Dept of Health & Human Services: 1-888-ASK-HRSA **www.mchb.hrsa.gov/pregnancyandbeyond/depression**

National Institute for Mental Health, www.medeppd.org

Books: *Beyond the Blues*, by Shoshana S. Bennett & Pec Indman, *Behind the Smile: My Journey Out of Postpartum Depression* by Marie Osmond

Women & Infants Day Program
2 Dudley Street,
First Floor
Providence, RI
(401) 274-1122, ext. 2870

For current PPD research and management guidelines, visit **http://www.medeppd.org**. This website was developed for health care professionals with the support of NIMH.

Figure 1.

delivery.

The RI Maternal Mental Health Coalition is attempting to unite insurers, health care professionals, and psychosocial programs to streamline physician access to statewide resources, to enable the state to manage more cases. Illinois' 2004 initiative could serve as a model. The Illinois Department of Public Aid created a task force on perinatal care focused on making screening for PPD a component of well child visits. Illinois' medicaid program reimbursed physicians who screened using the EPDS. Physicians were also supplied with:[(1] a copy of the EPDS and scoring guide; [2] the phone number for a consultation service to speak directly with a psychiatrist regarding the management of patients with PPD; [3] a phone number that provided physicians with local mental health professionals to whom they could refer a woman suffering from PPD; [4] a guide for pharmacological treatment of PPD. A laminated card has been created for Rhode Island providers to assist in PPD identification. (Figure 1)

Conclusions

By encouraging maternal screening using the Edinburgh scale as part of an overall risk-assessment for infants during well-child visits, we can increase the rate of PPD detection in Rhode Island. Pediatricians and other primary care providers for newborns are an underutilized resource to detect PPD. If pediatric providers undertake this responsibility, the health care community must provide guidance and support including resources, efforts to increase reimbursement, referrals and advocacy efforts. In order to combat PPD, identification tools must be available and utilized; physicians must be vigilant in screening efforts.

References

1. Logsdon, Wisner. Raising the awareness of primary care providers about postpartum depression. *Issues Mental Health Nurs* 2006; 27:59-73.
2. USA Center for Disease Control & Prevention. Perinatal Depression. *RI Pregnancy Risk Assessment Monitoring System Newsletter*. 2006; 1(2)..
3. Weinburg, Tronick. Emotional characteristics of infants associated with maternal depression and anxiety. *Pediatrics* 1998; 102: 1298-300.
4. Yawn. Postpartum depression. *The Female Patient* 2006; 31: 1-6.
5. Olson, Kemper, et al. Primary care pediatricians' roles and perceived responsibilities in the identification and management of maternal depression. *Pediatrics* 2002;110:1169-76.
6. Currie, Rademacher. The pediatrician's role in recognizing and intervening in postpartum depression. *Pediatric Clin N Am* 2004; 51:785-801.
7. Cox, Holden, Sagovsky. Detection of postnatal depression. *Brit J Psychiatry* 1987; 150:782-6.
8. Whooley, Avins, et al. *J Gen Int Med* 1997; 12: 439-45.
9. Chaudron, Szilagyi, et al. Detection of postpartum depressive symptoms by screening at well-child visits. *Pediatrics* 2004; 113:551-8.

Gaynes, Gavin, Meltzer-Brody. Perinatal depression. *Agency for Healthcare Research Quality*. 2005. Number 119.

10. Van Landeghem. Financing strategies for Medicaid reimbursement of maternal depression screening by pediatric providers. *Nat Acad State Health Policy* April 2006.

Acknowledgement: This project was completed as part of a clerkship in community health.

Elizabeth Strawbridge, MD, is an intern in family medicine at the Maine Medical Center in Portland.

Margaret Howard, PhD, is Director, Postpartum Depression Day Hospital, Women & Infants Hospital, and Clinical Associate Professor of Psychiatry and Human Behavior, The Warren Alpert Medical School of Brown University.

Patricia Nolan, MD, MPH, is Adjunct Clinical Associate Professor of Community Health, and Executive Director, Rhode Island Public Health Institute, at The Warren Alpert Medical School of Brown University.

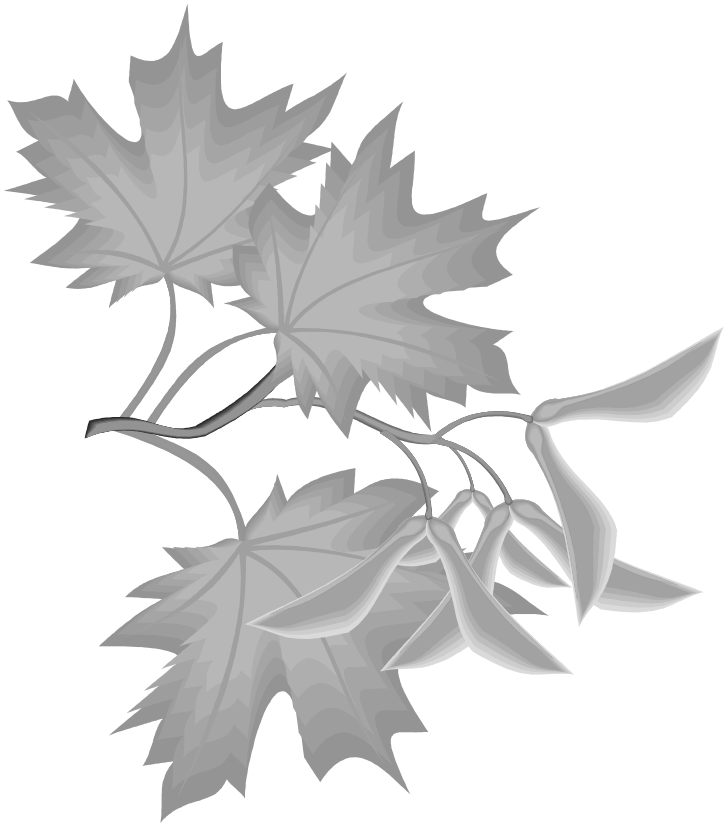
Edward Feller, MD, is Clinical Professor of Medicine and Community Health, and Co-director, clerkship in Community Health, at the Warren Alpert Medical School of Brown University.

Disclosure of Financial Interests

The authors have no financial interests to disclose.

Correspondence:

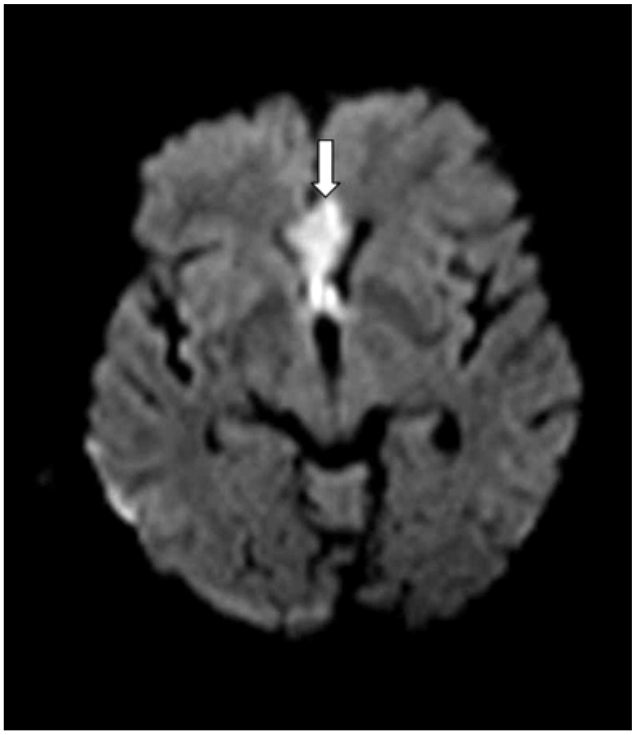
Edward Feller, MD
e-mail: Edward_Feller@brown.edu

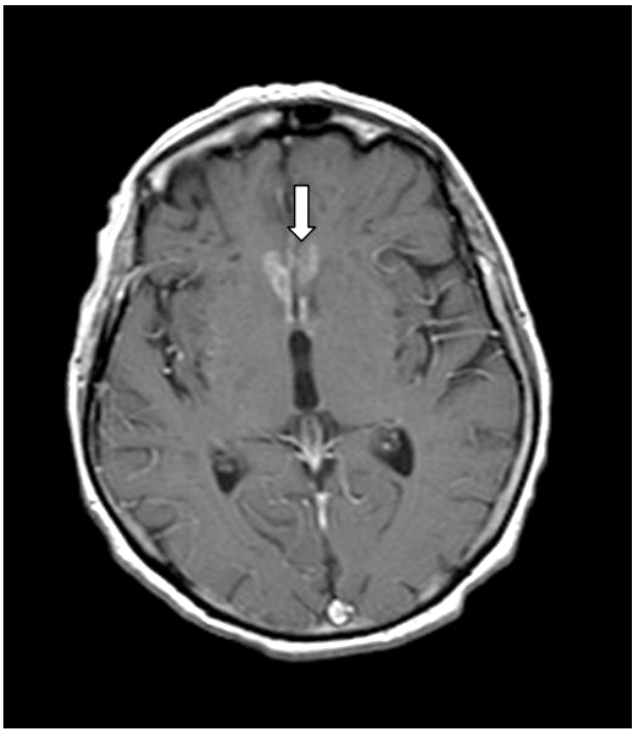


Images In Medicine

Anterogade Amnesia and Fornix Infarction

James Y. Chen, MD, Vlad Zayas, MD, and Richard Gold, MD





A 72 year-old right handed woman with long-standing poorly-controlled diabetes, hypercholesterolemia, hypertension, and coronary artery disease presented with weakness and numbness of the right arm. She had significant memory deficits and was oriented to self only. Her long term memory was intact, but she was unable to learn any new information. She also had psychomotor retardation, mild right facial droop, right arm weakness, dyssynergia and numbness. The remainder of her neurologic examination was unremarkable. MRI of the brain (Figure 1: diffusion-weighted image with restricted diffusion in the region of the fornix) revealed an acute infarction of the fornix. Follow-up imaging showed contrast-enhancement of the infarcted fornix. (Figure 2: Post-contrast T1 MRI).

From neuroanatomic studies and studies of patients with bilateral forniceal injury following surgical resection of colloid cysts, the fornix was established as a key structure in memory formation. The fornix is one of the structures involved in memory and emotion formation called the Papez circuit and the limbic lobe. It serves as an efferent tract connecting the hippocampus with the diencephalic nuclei including the mammillary bodies. The anterior cerebral and pericallosal arteries provide the blood supply to the fornix. Patients with bilateral and unilateral forniceal damage exhibit anterograde amnesia with greater impairment in learning tasks of recall than in recognition. However, most of the cases reported in published cases were bilateral.

James Chen, MD, formerly a resident in the Department of Diagnostic Imaging, is a neuroradiology fellow at the University of Pennsylvania.

Vlad Zayas, MD, is an Associate Professor in the Department of the Neurosciences, The Warren Alpert Medical School of Brown University.

Richard Gold, MD,. is a neuroradiologist in the Department of Diagnostic Imaging, The Warren Alpert Medical School of Brown University.

References

1. Aggleton JP, McMackin D, et al. Differential cognitive effects of colloid cysts in the third ventricle that spare or compromise the fornix. *Brain* 2000; 123:800-5.
2. Gilboa A, Winocur G, et al. Hippocampal contributions to recollection in retrograde and anterograde amnesia. *Hippocampus* 2006;16: 966-80.

Correspondence

e-mail: RGold@lifespan.org

Health By Numbers
RHODE ISLAND DEPARTMENT OF HEALTH • DAVID GIFFORD, MD, MPH, DIRECTOR OF HEALTH
EDITED BY SAMARA VINER-BROWN, MPH

Patterns of Health-Related Quality of Life and Associated Health Risks Among Rhode Island Adults in 2004

Jana Hesser, PhD, and Yongwen Jiang, PhD

Health-related quality of life (HRQOL) is important in assessing the impact of chronic disease on individuals. Along with mortality, it has become a key indicator in assessing population disease burden. HRQOL refers to an individual's perception of his/her own physical and mental health and ability to react to factors in his/her physical and social environments.[1]

Indicators have been developed to assess multiple dimensions of HRQOL. However, using multiple HRQOL indicators to assess overall quality of life is cumbersome. We sought to develop summary measures to characterize and quantify HRQOL in Rhode Island's population and to identify groups at greatest risk for compromised HRQOL.

METHODS

Rhode Island's 2004 **Behavioral Risk Factor Surveillance System (BRFSS)** data were used for this analysis. The BRFSS is a state-based telephone survey of randomly selected non-institutionalized adults (ages 18 and older). The BRFSS monitors certain health conditions, access to health care, and behavioral risks. Funding and methodological specifications for the BRFSS are provided to the states by the **Centers for Disease Control and Prevention (CDC)**.[2] From January through December 2004, the Rhode Island BRFSS conducted 3,999 interviews with RI adults.

Nine questions on RI's 2004 BRFSS measure multiple dimensions of HRQOL: self-rated general health status, number of healthy/unhealthy days in the past 30 days for physical health, mental health, health related activity limitations, pain related activity limitations, depression, anxiety, lack of sleep, and lack of energy.[3] Responses were dichotomized into 0 to 13 unhealthy days (infrequent) and 14 to 30 (frequent) unhealthy days. The cut-off of 14 or more days vs. 13 or fewer days is a common convention used in analyzing BRFSS HRQOL data.[4,5]

A **latent class regression (LCR) analysis**, using these 9 indicators, was used to determine latent classes of HRQOL for RI adults and to model the relationship between latent class membership and covariates. A "latent" trait or class is one that cannot be measured directly. The LCR model aims to identify latent classes from multiple observed discrete variables.[6] In the LCR model, the unit of analysis is the response pattern, e.g. the set of responses given by an individual to a set of indicator questions. In our study, there are nine indicators of HRQOL with a total of 512 possible response patterns. The LCR model groups these 512 patterns into a much smaller "best fit" number of HRQOL classes.

The LCR model is specified in two parts: (1) a model for the relationship between the latent classes and the observed indicators; (2) a regression model for the relationship between covariates and latent class membership. Results of the modelling for the relationship between the latent classes and the observed indicators are expressed as: marginal probabilities that tell what proportion of the population is located in each class; and conditional probabilities which tell the class-specific response probabilities of each indicator variable.

The regression model for the relationship between covariates and latent class membership examined twelve covariates: age, sex, race/Hispanic ethnicity, income, employment, asthma, diabetes, obesity, physical disability, smoking, chronic alcohol use, and no leisure physical activity. Results are expressed as odds ratios. This analysis is unique to Rhode Island; no comparable analysis is available for the nation or New England.

Table 1.
Estimated parameters for the 4-class model of HRQOL in the Rhode Island Population, 2004.

Indicator	Healthy people (Class 1)	Physically unhealthy people (Class 2)	Mentally unhealthy people (Class 3)	Both physically and mentally unhealthy people (Class 4)	Overall population prevalence
Marginal probability (Proportion)	0.759	0.090	0.108	0.042	
Conditional probability					
Poor/fair general health	0.062	0.682	0.081	0.749	.148
Activity limitation	0.000	0.383	0.054	0.658	.067
Physically unhealthy	0.017	0.641	0.061	0.702	.105
Pain related activity limitation	0.013	0.515	0.130	0.631	.097
Lack of energy	0.166	0.703	0.588	0.890	.288
Lack of rest/sleep	0.162	0.247	0.615	0.724	.238
Worried/tense/anxious	0.021	0.134	0.605	0.889	.132
Mentally unhealthy	0.017	0.122	0.430	0.866	.105
Sad/blue/depressed	0.002	0.037	0.336	0.936	.082

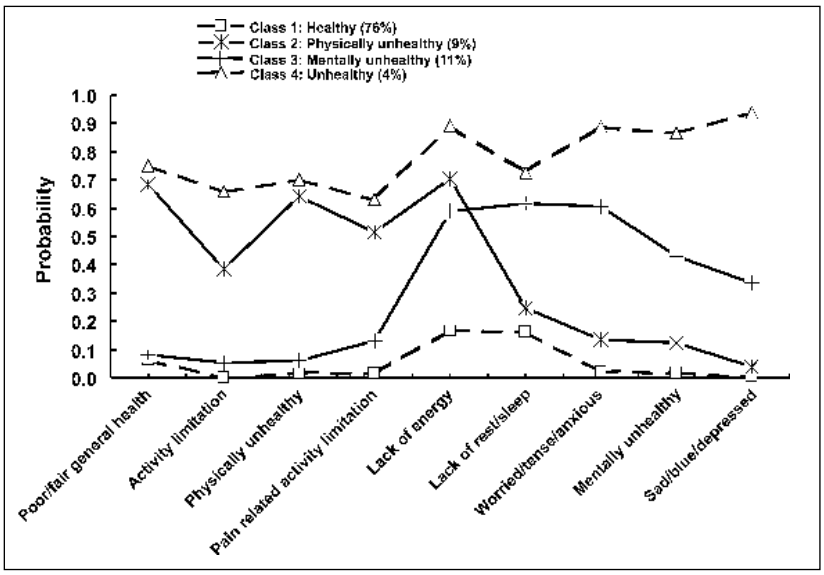


Figure 1. HRQOL latent class membership of Rhode Island adults in relation to HRQOL indicators, 2004.

Table 2.
Odds Ratios for demographic characteristics and risk factors regressed on three classes of HRQOL

Covariates		Class 2 -- Physically related poor HRQOL	Class 3 -- Mentally related poor HRQOL	Class 4 -- Physically and mentally related poor HRQOL
Age group	18-44 years	Reference	Reference	Reference
	45-64 years	**1.75***	0.72	1.12
	65– years	**2.39***	**0.22*****	**0.29***
Gender	Men	Reference	Reference	Reference
	Women	**1.57***	**1.63***	**2.15****
Income	<$25k	1.56	1.90	**3.67****
	$25k-49,999	0.97	1.53	1.39
	$50k –	Reference	Reference	Reference
Employment	Unable to work	**6.35*****	0.80	**12.34*****
	Unemployed	**2.25***	1.67	**4.70****
	Employed	Reference	Reference	Reference
Current smoker	Current smoker	1.19	**1.93****	**3.26*****
	Not current smoker	Reference	Reference	Reference
Activity	Leisure time activity	Reference	Reference	Reference
	No leisure time activity	**3.04*****	1.20	**4.22*****
Asthma	Asthma	**2.44****	**1.94***	**4.99*****
	No asthma	Reference	Reference	Reference
Diabetes	Diabetes	**3.00*****	0.82	**3.68*****
	No diabetes	Reference	Reference	Reference
Disability	Have disability	**21.43*****	**3.34*****	**19.16*****
	No disability	Reference	Reference	Reference

*: Data are reported as adjusted odd ratios (AORs) by all other variables in the model. Race/ethnicity, chronic drinking, obesity were included in the model but were non-significant and have been removed from the table for space reasons.
*: Statistically significant, ***p<0.001; **p<0.01; *p<0.05.

Results

The "best fit" LCR model was one with four HRQOL classes. Table 1 presents estimates of (1) the marginal probability (proportion) of each of the 4 latent classes and (2) the conditional probabilities of each HRQOL indicator for each latent class. Table 1 also provides the prevalence of each HRQOL indicator for the population overall. Class 1, accounting for 76% of the population, was characterized by good physical and mental HRQOL; Class 2 (9% of the population) was characterized as having physically related poor HRQOL; Class 3 (11%) was characterized as having mentally related poor HRQOL; and Class 4 (4%) as having both physically and mentally related poor HRQOL.

People in Class 1 have low conditional probabilities (less than 17%) for each of the indicators of poor HRQOL. Conversely, people in Class 4 have large conditional probabilities (larger than 63%) for each of the poor HRQOL indicators. People in Class 2 have high probabilities for the physical health indicators and low probabilities for the mental health indicators; conversely, people in Class 3 have low probabilities for the physical health indicators and high probabilities for the mental health indicators Figure 1, a diagrammatic representation of RI adults in latent classes 1–4, shows the unique divergence between Classes 2 and 3 and the magnitude of the difference between Classes 1 and 4.

The LCR model was used to determine the significant correlates of latent class membership, when adjusting for all other variables in the model. Odds ratios are presented in Table 2. In general, women, people with asthma, and people with disability have significantly greater odds in each Class of poor HRQOL than men, people without asthma, and non-disabled people. People with disability have exceptionally high odds ratios for each class of poor HRQOL, e.g. Class 2 OR=21.43, Class 3 OR=3.34, Class 4 OR=19.16.

Being unable to work, unemployed, having no leisure time physical activity, and having diabetes were associated significantly with Classes 2 and 4 of poor HRQOL.

Current smokers had 1.93 times the odds of non-smokers of belonging to Class 3, and 3.26 times the odds of

non-smokers of belonging to Class 4. Those 65 and older have significantly increased odds for membership in Class 2 compared with younger age groups, but decreased odds for membership in Class 3. The lowest income category had 3.67 times the odds of the highest income group for membership in Class 4. The odds for any class of poor HRQOL were not significantly increased for race/ethnicity, chronic drinking, or obesity.

Discussion

There are limitations to our study. The cross-sectional design of the BRFSS means the temporal relationship between classes of poor HRQOL and any of the risk factors cannot be determined. Second, because the BRFSS excludes households without land-line telephones and adults living in institutional settings the proportion of adults with poor HRQOL could be underestimated. Finally, the BRFSS does not assess some conditions that may compromise quality of life, such as heart disease or cancer.

Using a LCR model we found four distinct classes of HRQOL amongst RI adults and quantified the prevalence of each. The largest class, representing 76% of adults, has good HRQOL; the remaining 24% of adults belong to three smaller classes of poor HRQOL. We identified the demographic characteristics, health conditions, and health risks having significantly increased odds, independent of one another, of being associated with one, two, or all three classes of poor HRQOL. Our results indicate the need for interventions that target both mental and physical health needs among identifiable high-risk subgroups. Targeting interventions towards these groups with poor HRQOL can reduce the burden of poor HRQOL for the RI population overall, and may help reduce the total economic cost of health care in the state.

Acknowledgement. Data Source: Rhode Island Behavioral Risk Factor Surveillance System, 2004, Center for Health Data and Analysis, Rhode Island Department of Health, and supported in part by the National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention Cooperative Agreement U58/CCU122791.

Jana Hesser, PhD, is Program Manager, Health Surveys and BRFSS Project Coordinator, Center for Health Data and Analysis, Rhode Island Department of Health, and Clinical Assistant Professor in Community Health, The Warren Alpert Medical School of Brown University.

Yongwen Jiang, PhD, is Public Health Epidemiologist, Center for Health Data and Analysis, Rhode Island Department of Health, and Clinical Assistant Professor in Community Health, The Warren Alpert Medical School of Brown University.

References

1. US Department of Health and Human Services: Healthy People 2010: understanding and improving health. 2nd ed. Washington, DC: 2000.
2. CDC's Behavioral Risk Factor Surveillance System Website [http://www.cdc.gov/brfss/]
3. Centers for Disease Control and Prevention. Health-related quality of life and activity limitation—eight states, 1995. *MMWR* 1998; **47**:134-40.
4. CDC's Health-Related Quality of Life Website [http://www.cdc.gov/hrqol/]
5. Jiang Y, Hesser JE. Associations between health-related quality of life and demographics and health risks. Results from Rhode Island's 2002 behavioral risk factor survey. *Health Qual Life Outcomes* 2006, **4**:14.
6. McCutcheon AL. Latent class analysis. Newbury Park, Calif.: Sage Publications; 1987.

Disclosure of Financial Interests

The authors have no financial interests to disclose.

Prescribing for Self and Others

Robert S. Crausman, MD, and Bruce McIntyre, JD

In 2007 the Rhode Island **Board of Medical Licensure and Discipline** (**BMLD**) was notified by the Massachusetts Board of Registration of a public order regarding a Massachusetts-based academic physician who also held a Rhode Island license.

The Massachusetts Board alleged that this physician was asked by a fellow [trainee] under her supervision to write a prescription for medications to treat symptoms of congestion and sinusitis. The fellow reportedly had recently come from California and had not established primary care locally.

The Massachusetts Board concluded that the alleged conduct would be a violation of the standards of good and accepted medical practice. In order to achieve a fair resolution to this matter the academic physician, without admitting guilt, entered in to a voluntary "assurance of discontinuance" agreement to guarantee that she would "maintain a medical record for each patient [under her care] that is adequate to enable the physician to provide proper diagnosis and treatment" as required by state regulation.[1]

The Rhode Island BMLD has received numerous similar complaints regarding physician prescribing outside the context of a legitimate physician-patient relationship. As in Massachusetts this practice can technically constitute unprofessional conduct and be cause for an adverse license action. These complaints have frequently involved the treatment of a physician's immediate family member or close personal acquaintance.

Most often investigation of these complaints reveals general ignorance of the prohibitions or a failure to fully consider the ramifications of such inappropriate practice. Expedience and acquiescence to family pressure are also recurrent themes.

The opinion of the American Medical Association is that physicians "… generally should not treat themselves or members of their immediate families…" They cite the potential loss of professional objectivity by physicians and potential discomfort by patients as being very problematic. Of note, they further state "… except in emergencies, it is not appropriate for physicians to write prescriptions for controlled substances for themselves or immediate family members..." [2]

In 2007 the BMLD endorsed this AMA opinion as a formal position statement.[4] It is good medical practice and acknowledges an important professional boundary that should not be crossed. Unfortunately the AMA opinion is somewhat ambiguous with its use of the word "generally". The Board's prior case-related decisions, however, consistently apply the standard that prescribing should not occur outside of a legitimate physician-patient relationship. Of note, the Board opinion regarding cross coverage situations is that the physician-patient relationship does exist.

In practice, a RI physician will not likely be subject to a Board sanction for the occasional refill authorization or prescription of a legend, the pharmacy term for a non-control, medication for self or to a family member. However, chronic medication prescription and any prescription of controls must occur in the context of a physician-patient relationship documented by a genuine medical record. A RI physician must not self-prescribe for control medications under any circumstances.

Although our Board's approach is generally with education first, in 2007 one physician was suspended from practice for one year after having been found to have fabricated a medical record to justify his treatment of a family member with controlled substances[3] and another voluntarily surrendered his license after having been found to have purchased over 50,000 Vicodin 10/325 tablets over a two year period for personal use.[4]

The Board attempts to clarify the gray areas of practice for RI physicians as they arise in the context of complaint investigation. Position statements of the Board are posted on our website and physicians must review then as a condition of electronic license renewal, thus insuring widespread dissemination.[5]

References

1. Disciplinary actions of the Rhode Island Board of Medical Licensure and Discipline. http://www.health.state.ri.us/hsr/bmld/actions/C07-153.pdf
2. AMA policy E-8.19 Self-Treatment or Treatment of Immediate Family Members. http://www.ama-assn.org/apps/pf_new/pf_online?f_n=browse&doc=policyfiles/HnE/E- 8.19.HTM&&s_t=&st_p=&nth=1&prev_pol=policyfiles/HnE/E-7.05.HTM&nxt_pol=policyfiles/HnE/E-8.01.HTM&
3. Disciplinary actions of the Rhode Island Board of Medical Licensure and Discipline. http://www.health.state.ri.us/hsr/bmld/actions/mimless_lorin.pdf
4. Disciplinary actions of the Rhode Island Board of Medical Licensure and Discipline http://www.health.ri.gov/hsr/bmld/actions/C07-221.pdf
5. RI Board of Medical Licensure and Discipline position statements. http://www.health.state.ri.us/hsr/bmld/positions.php

Robert S. Crausman, MD, MMS, is Chief Administrative Officer, RI Board of Medical Licensure and Discipline.

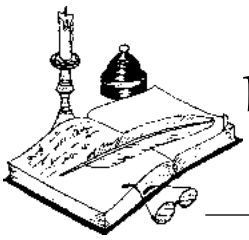
Bruce McIntyre, JD, is Deputy Legal Counsel for the Rhode Island Department of Health.

Disclosure of Financial Interests

The authors have no financial interests to disclose.

Correspondence:

Robert S. Crausman, MD MMS
Chief Administrative Officer
RI Board of Medical Licensure and Discipline
3 Capitol Hill #205
Providence RI 02908
Phone: (401) 222-7888
e-mail: RSCrausman@aol.com



Physician's Lexicon

The Dilemma of Multiple Meanings

The English language, an amalgamation of many tongues, is accused of permitting multiple meanings, many contradictory, derived from the same word or word-root. Scientific terminology, it is claimed, offers a more precise, more inflexible meaning to the elements of its vocabulary. Yet medical idiom, typically arising from borrowings from Greek and Latin, sometimes offers its own dismaying collection of ambiguities. Consider the following Classical roots:

The word myelin, from the Greek root, *myelos,* means marrow [that is, the softer interior of bones.] The root was employed to define two structurally separate forms of vertebrate tissue. On the one hand it describes many words pertaining to the spinal cord [eg, poliomyelitis, myelopathy] and more specifically, the tubular lipoprotein sheath surrounding the axons, myelin [and associated chemical names such as sphingomyelin]. On the other hand, it defined soft tissues associated with bone marrow, words such as myelogenous.

A Latin word, *venter,* defines the belly. It gave rise to cognate words such as ventral [pertaining to the belly or the body-surface closest to the belly] and ventricle [literally, little belly, but then any defined anatomic cavity whether within the heart or the central nervous system.] Yet other words related to *venter* include ventriloquism [talking from the stomach], eventration, ventilate [the expelling of air from a cavity] and event [a breaking forth].

The word, plague, a word describing an epidemic pestilence, is yet another term that has given birth to words of widely different meanings. Plague descends from a Greek word meaning to strike or to wound and is related to the Greek *plagio-* meaning oblique, damaging or plundering [as in words such as plagiary, the act of kidnapping. The English word, plagiarism, comes from the same Greek source, meaning literary plundering.] The same Greek word evolves into *–plegia*, an English root meaning to strike down or paralyze, as in words such as hemiplegia or diplegia. Its Latin equivalent is *plagere*, to strike or lament [as in words such as plangent, apoplexy and complain.]

There are yet other clusters of medical terms that reflect the linguist's inadequate information of human anatomy or physiology and serve, etymologically, to confuse - words such as calcification, calcium, calculate, calculus.

– Stanley M. Aronson, MD

Rhode Island Department of Health
David Gifford, MD, MPH
Director of Health

Vital Statistics

Edited by Colleen Fontana, State Registrar

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

Underlying Cause of Death	Reporting Period			
	August 2007	12 Months Ending with August 2007		
	Number (a)	Number (a)	Rates (b)	YPLL (c)
Diseases of the Heart	201	2,739	256.0	3,749.0
Malignant Neoplasms	208	2,287	213.8	5,817.5
Cerebrovascular Diseases	28	392	36.6	612.0
Injuries (Accidents/Suicide/Homicde)	54	550	51.4	8,665.5
COPD	22	426	39.8	350.0

Vital Events	Reporting Period		
	February 2008	12 Months Ending with February 2008	
	Number	Number	Rates
Live Births	995	13,093	12.3*
Deaths	952	9,935	9.3*
Infant Deaths	(12)	(101)	7.7#
Neonatal Deaths	(6)	(76)	5.8#
Marriages	259	6,749	6.3*
Divorces	210	2,980	2.8*
Induced Terminations	394	5,217	398.5#
Spontaneous Fetal Deaths	36	880	67.2#
Under 20 weeks gestation	(33)	(804)	61.4#
20+ weeks gestation	(3)	(76)	5.8#

(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 1,067,610

(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.*

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

THE RHODE ISLAND MEDICAL JOURNAL

The Official Organ of the Rhode Island Medical Society
Issued Monthly under the direction of the Publications Committee

VOLUME 1
NUMBER 1

PROVIDENCE, R.I., JANUARY, 1917

PER YEAR $2.00
SINGLE COPY, 25 CENTS

Ninety Years Ago, August 1918

John Chalmers Da Costa, Surgeon, USNRF, read "Medical Activities of the Navy," before the RI Medical Society on June 6, 1918. Dr. Da Costa was "under orders from the Surgeon General of the US Navy to address this society." Formerly a civilian, he urged members to consider the career of Navy surgeon.

The Honorable S.H. Davis, Westerly, in "The American Flag," noted: "As I approached your attractive new building [106 Francis St.] this afternoon, I saw floating from its staff the most beautiful banner that was ever unfurled over any building, state or country." He anticipated the day when "a million American mothers' sons will carry Old Glory through the streets of Berlin." The author repeated the rumor that Germans were castrating American prisoners. "Men, if that is true, this war should not end, the American flag should not be furled as a war flag until every man in Germany shall be castrated, until his seed has banished from the earth." The author praised the contributions of American physicians, citing a Red Cross hospital in France that treated 46,000 soldiers for gas gangrene. "Every one of these cases would have been fatal without treatment, and there was less than 400 out of 46,000 lost."

An Editorial, "The State's Care of the Mentally Sick," lamented the poor care often given for mental illness. "The man with a sick body was gladly received into a hospital for general diseases. The man with a sick mind was a perplexing problem—he was sent more often than not to a jail. It was inhuman and irrational, of course, but it was a practice born of the conviction that somehow the mentally sick man was not in the same category with other sick men." The Editorial called the construction of the hospital for the mentally sick beside the prison at the Howard complex an "initial error" "You cannot mix the medical and penal problems and get anything but confusion."

In a Presidential Address, Dr. John Champlin, Westerly, said that the war had kindled "…patriotic fire in every man, woman and child in this country. Today the blood of every American tingles with pride at the first strain of the Star Spangled Banner."

In "Child Care," the US Department of Labor Bulletin noted that one-third of men "examined for military service in the first draft were found to have physical defects which rendered them unfit. Many of these defects might have been overcome if they had been recognized and dealt with in early childhood…"

Fifty Years Ago, August 1958

Daniel Blain, MD, Medical Director, American Psychiatric Association, delivered the 7th Annual Arthur Hiler Ruggles Oration: "The Peaks of Vision in American Psychiatry: A Personal Reminiscence." Among the peaks were the launch of the National Institute of Mental Health and the inclusion of psychiatry in medical education.

Donald L. De Nyse, MD, in "Clinical Evaluation with Serum Concentration Studies of Chlorothiazide (Diuril) described serum concentration studies that gauged absorption rate on 97 patients: 88 lost weight (5 lbs in a week to from 192-140 lbs in 15 days). Patients showed a "gradual sustained lowering of systolic readings." The author concluded: "Serum concentration studies revealed rapid absorption from the GI tract, but the amount absorbed varies from patient to patient without any apparent influence on clinical effectiveness."

A.A. Savastano, MD, Louis A. Sage, MD, and Vincent Zecchino, MD, in "Study of Fresh Femoral Neck Fractures Treated with Intramedullary Stem Prostheses," described the results from 62 patients treated at Rhode Island Hospital.

An Editorial, "Naïve and Unrealistic Show Men," argued against Congressman Aime J. Forand's support of national health insurance for the elderly, over a "voluntary system."

Twenty-Five Years Ago, August 1983

An Editorial, "More on DRGs," noted that Blue Cross and Blue Shield of Kansas, following Medicare's example, would use DRGs (467 of them) starting January 1, 1984.

Seebert J. Goldowsky, MD, in "Uniform Determination of Death," cited a 1982 Rhode Island General Assembly amendment to the State Medical Examiner Law that allowed 2 simple definitions: "irreversible cessation of circulatory and respiratory functions;" or "irreversible cessation of all functions of the entire brain, including the brain stem." The author noted such complicating problems as drug intoxication, hypothermia, and metabolic disturbance.

Anthony F. Merlino, MD, in a Commentary, "The Medical Malpractice Crisis in RI: A Call for Action," described the increasing number of claims, the "skyrocketing" premiums.

James P. Crowley, MD, in "The Diagnosis and Treatment of Thrombocytopenia with Intravascular Coagulation in Late Pregnancy," called for "prompt and accurate identification and correction of the underlying problem."

In a Letter to the Editor, James E. Myers, Principal Wildlife Biologist, RI Division of Fish and Wildlife, reported sighting of "an unengorged female tick, later found to be infected with spotted fever group rickettsiae." The Lone Star tick (*Amblyomma americanim*) was removed from the pant leg of a woman in Newport county.

The Name of Choice in MRI

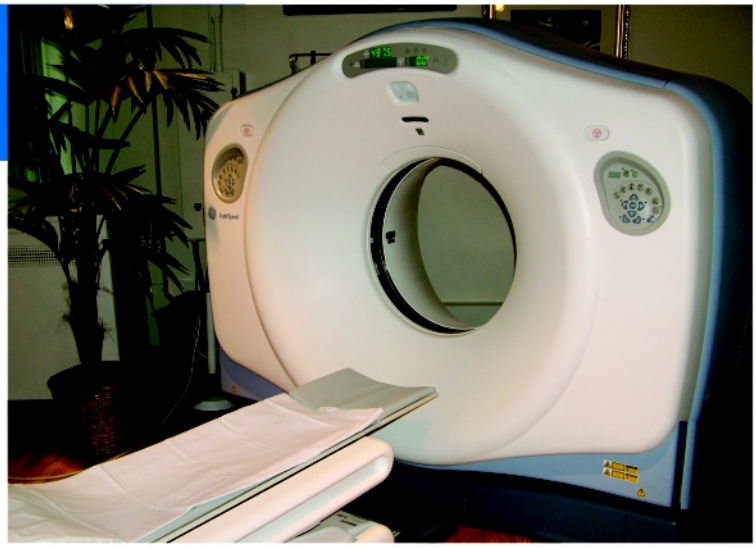
Open MRI
of New England, Inc.

- Open-Sided and 1.5 Tesla High Field Systems
- Fast appointments and reports
- Instant internet access to studies
- Locations in Cumberland, East Providence, North Smithfield, Providence, Warwick & Westerly

Open MRI *of New England, Inc.*

ADVANCED
Radiology, Inc.

- "Multislice" CT systems by GE
- Digital xray, bone density and ultrasound
- Fast appointments and reports
- Instant internet access to studies



ADVANCED *Radiology, Inc.*

525 Broad St • Cumberland
Tel. 725-OPEN (6736) Fax 726-2536

1002 Waterman Ave • East Providence
Tel 431-5200 Fax 431-5205

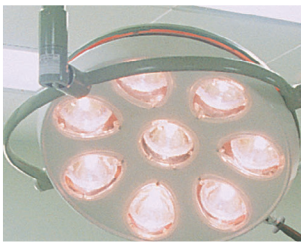
148 West River St. • Providence
Tel. 621-5800 Fax 621-8300

501 Great Road • North Smithfield
Tel 766-3900 Fax 766-3906

335 Centerville Rd • Warwick
Tel. 732-3205 Fax 732-3276

101 Airport Rd • Westerly
Tel 315-0095 Fax 315-0092

integrity



whatdrivesyou?

A commitment to excellence.
A passion for the art of medicine.
A basic desire to heal.

Whatever it is that sustains you through the daily challenges of your profession, know that you have an ally in NORCAL.

NORCAL
Mutual Insurance Company

(800) 652-1051 • www.norcalmutual.com

Call RIMS Insurance Brokerage Corporation at (401) 272-1050 to purchase NORCAL coverage.