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Medicine & Health
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COMMENTARIES

CONTRIBUTIONS

SPECIAL ISSUE: Collaboration for Quality
Guest Editors: Vera DePalo, MD, and Lynn McNicoll, MD, FRCPC

COLUMNS

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Commentaries

Non-motor Movement Disorders: Internal Tremor

I saw three patients in one week who had very similar symptoms, all "non-organic" in the sense that I had no physiological explanation for them and no accompanying objective signs. It got me wondering once again about psychogenic versus non-psychogenic disorders and that gray zone that is constantly expanding for me between neurology and psychiatry.

The patients' symptoms are simple. They feel movement in body parts when they are not moving. Two patients, a middle-aged man and a middle-aged woman, had felt that their head "wobbled" but when they looked in the mirror it was not moving. When they asked their spouses and friends, no one had noticed any movement even during the time when the patients felt their heads wobbling. The third patient, a middle-aged woman, experienced "internal tremors" of her chest and abdomen, as though she was shaking inside, but she saw no evidence of this, nor did her close associates. The syndromes had been present between one and five years. All patients had normal neurological exams.

A colleague wrote a paper in the 1990s called, "internal tremors", which described this syndrome in people with **Parkinson's disease (PD).** I haven't found any follow-up papers; as best I can tell, its prevalence in the general population is unknown. I have found "internal tremor" to be quite common in PD, although I haven't studied it. People with PD sometimes report that they feel tremors; but when they look at the body part, it's not shaking. The tremors may occur in parts of the body that actually do tremble from the PD, and the patients cannot tell simply by feel if the hand is shaking or not. They also feel tremors in parts of their body that cannot shake, like their abdomen or chest. A rare patient will describe vibrations in their internal organs. In the one paper describing the syndrome, there was a high incidence of anxiety in these patients, but it wasn't 100%, and in my experience that can't explain everything. After all, anxiety is common in the general population, and is much increased in PD.

Until I read the report on internal tremor I had thought that this sensation was a *forme fruste* of the resting tremor of PD. I had not picked up on the fact that many patients felt tremors in their chest or abdomen. I was aware of the disconnect between the perception of tremor and the actual thing, and had thought that an EMG would show that there was indeed a tremor but it was simply subclinical. Patients are, after all, usually better able to sense what's going on in their bodies than the doctor (not always true, however, especially in the movement disorders field). But it's become clear to me over the last decade that the perception of internal tremor was not premonitory. It did not metamorphose into the real thing. It was an unrelated phenomenon.

Now, having encountered a "slew" of cases, I am forced to wonder how common this is. I see only the patients who are worried that their perception of movement represents the beginning of PD. I am sure that some of these patients who were not referred are thought to have a psychogenic disorder, and, of course, that's why I'm writing this. What does it mean to have a psychogenic *perception*? Is this an oxymoron?

Restless legs is a syndrome that cannot be confirmed by physiological testing, and was, for many years deemed largely psychiatric in origin, until the association with periodic leg movements of sleep was made, which, occurring during sleep, could not be due to psychogenic forces and therefore must be organic in nature. Then, of course, genes were found which explain the problem, and the symptoms responded much better to tiny doses of dopamine agonists than to placebo, all supporting an organic explanation.

Phantom limb pain is a well-accepted syndrome, and there are occasional case reports of phantom limb movement disorders, that is, the perception of a dystonic or tremulous limb which is no longer attached to the body.

Some of these disorders have physiological correlates, changes in fMRI or other measures of brain activity. Some may not have been studied. And if a physiological correlate were found who's to say what's chicken and what's egg? While I am sure there are several questions that can be asked concerning classification of these syndromes, one is, what's the difference between feeling movement and having an actual movement if I believe the movement is not physiologically generated? We have fairly good criteria and fair agreement among movement specialists about what constitutes a psychogenic tremor but what would constitute a "psychogenic" perception of tremor, or "tremor sans tremor?" This would be a violation of all fundamental philosophical concepts. What if we were able to "cure" a patient of psychogenic tremor but the perception of tremor remained? This would be an "internal tremor" but how would it be classified? How would it be treated? Classification in my field determines treatment. Organic disorders get drugs or surgery; psychiatric disorders get some form of talk therapy.

At this point I've actually been quite helpful to the patients with internal tremor by reassuring them that this is not a *forme fruste* of PD or some other disorder, and that I have indeed seen this before in several people. Luckily, since this does occur in PD, I've followed many people with the symptom for many years and know that it doesn't lead to anything bad. It doesn't even seem to get worse and has no correlation with the typical tremor of PD. Luckily all of the patients have been so relieved that none have expressed interest in having it treated. I'm not sure what I'm going to do when the first person tells me that it's driving him insane and that I have to do something about it.

– Joseph H. Friedman, MD

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No Man Is an Island

There is something magical, irrationally intriguing, about islands. Indeed any land mass surrounded by water—whether verdant or barren, historically fascinating or bereft of meaningful history—beguiles continent-based observers who often endow the island with fanciful attributes.

Islands are sanctuaries of imagination. Somehow, in the creative fancy of those who dwell on land surrounded solely by still more land, an island becomes the site of mystery, the incubator of creativity, and for the romantically-inclined, a crucible for renewed youth and bliss. Shakespeare, for one of his last plays, foreswore the Italian peninsula and the dirty streets of London and based the dramatic action of *The Tempest* upon a mythical island.

Then, of course, there are celebrated islands such as Capri, Crete, Samoa, Pitcairn, Elba, St. Helena, Ellis, Monte Cristo, Ceylon and even, perhaps, Alcatraz: each evokes passions ranging from the ecstatic to the grim but rarely the mundane.

Consider two islands, one in the eastern Pacific Ocean, the other in the East Indies; each part of larger archipelagoes and each famous as the site of fundamental advances in the framework of evolutionary biology.

The first is Isla Isabela, the major landmass of the Galapagos, some 600 miles west of South America and virtually astride upon the Equator. Charles Darwin (1809 – 1882) explored the flora and fauna of these semi-desert islands and later used the variation in the shapes of the beaks of the local finches as evidence for his evolving theory of natural selection underlying the origin of species.

The second of these islands is tiny Ternate, a land mass of about 27 square miles dominated by an active volcano called Mount Gamalama, situated in the eastern Molucca archipelago of Indonesia. Alfred Russel Wallace (1822 – 1913), born in Monmouthshire, Wales, developed skills, as a youth, in land-surveying and field biology. Over the years, he became England's leading bio-geographer, explorer, social activist, field zoologist and proponent of Darwin's theory of evolution. The socially-conscious writers Thomas Malthus, Robert Owen, Thomas Paine and John Stuart Mill influenced the young Wallace who spent much of his productive life both in extensive exploration of the Amazon basin, the Malay Peninsula and neighboring Indonesian islands and in the advocacy of occasionally unpopular views such as women's right to vote.

While charting the numbers and geographic distribution of feral animals on Ternate in 1858, Wallace developed malaria requiring extended bedrest. During this recovery-interval his many observations on animal life coalesced into a theory that culminated in a broad overview of life, both botanical and zoological, as an unremitting struggle for survival such that the more fit within each species survived and furnished their hereditary material for the next generation more than the less fit, akin to some of Malthus's views on human population growth. Wallace however, went a critical step further, declaring that this struggle for survival favored variant offspring with attributes more uniquely suited for the random changes in the environment; and that the cumulative effects of these physical variations—generation by generation—would lead eventually to the creation of new species more adaptable to the new environment. This radical view, of course, was contrary to the prevailing belief that all species were permanently and divinely fixed, immutable in physical characteristics and subject neither to extinction on the one hand nor transformation into a new species on the other hand. In Wallace's words: "The problem then was not only how and why do species change, but how and why do they change into new and well defined species, distinguished from each other in so many ways; why and how they become so exactly adapted to distinct modes of life."

Wallace, 13 years younger than Darwin, summarized his beliefs, based on years of data-collection, and in February, 1858, sent his manuscript off to Charles Darwin in England. The manuscript ("On The Tendency of Varieties to Depart Indefinitely From the Original Type") arrived in June 1858. And while Wallace's paper did not employ the phrase "natural selection" it did nonetheless parallel Darwin's slowly evolving hypothesis that as environments change and as food supplies wax and wane, a struggle for existence ensues and evolutionary divergence is the consequence.

Darwin was so impressed with Wallace's conjectures that he arranged to have Wallace's paper—along with his own—presented before the Linnaean Society of London on July 1, 1858. Wallace was still working in the East Indies; only months later did he learn that Darwin had honored him as the co-discoverer of the theory of natural selection.

In the following decades, Wallace wrote a number of seminal texts including the "The Malay Archipelago" (1869), to this day the leading text on Malaysian ecology; "The Geographic Distribution of Animals" (1876); and in 1880, his great text, "Island Life," was finally published. In this illuminating book Wallace demonstrated that islands which arose in mid-ocean, usually from volcanic activity, but permanently separated from the continents, completely lacked both amphibians and terrestrial mammals. Islands that had once been connected to a continent such as Britain had a more versatile flora and fauna, but because of environmental conditions unique to the island developed variants of these mainland species.

Wallace survived until age 90, using his terminal years to warn the world about the hazards of deforestation and industrial pollution.

– Stanley M. Aronson, MD

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Spotlight On Quality In Rhode Island

Vera A. DePalo, MD, FCCP, and Lynn McNicoll, MD, FRCPC

The theme of this issue is "Collaboration for Quality".

Medical errors have been attracting increasing attention since the Institute of Medicine's initial publication in 1999. In this issue, Dr. Harry Sax discusses lessons learned from the aviation industry on checklists. Collaboration on checklist development and dissemination has brought these lessons to practitioners throughout the state.

Quality tools can aid in navigating the complexity of medical care. Information technology, such as the electronic health record, holds the promise of increasing the efficiency of healthcare delivery, reducing medical errors and improving outcomes through the incorporation of evidence-based guidelines. In this issue, Laura Adams, Chief Executive Officer of **the Rhode Island Quality Institute** (**RIQI**) advocates for Rhode Island physicians to become "meaningful users" of information technology which will improve outcomes for patients and financial incentives for the providers.

"Collaboration for quality" is the foundation upon which the RIQI was built. Founded in 2001, its mission has been to improve health care quality, safety and value in Rhode Island. It is a collaboration of health care providers, insurers, business leaders, academicians, and government agencies and officials.

The fabric of quality in Rhode Island is a complex network with many interlocking threads. Dr. Newell Warde tells of the commitment of the Rhode Island Medical Society to quality health care in RI. He describes the origin of **Quality Partners of Rhode Island** (**QPRI**), which had its beginnings under the nurturing support of the Medical Society. Over the years, the efforts and successes of QPRI have led to its recognition as a premier quality organization both statewide and nationally. QPRI is Rhode Island's Medicare Quality Improvement Organization and a node for the Institute for Healthcare Improvement.

The **Hospital Association of Rhode Island** (**HARI**) is another pillar of Rhode Island's quality platform. Founded more than a half century ago, this statewide trade organization assists member hospitals through advocacy, education and services. It has been an important collaborator in implementing evidence-based practices.

Through the years, RI's quality organizations have partnered with hospitals, nursing homes, and outpatient facilities to help providers bring better practices to all Rhode Islanders. At the core of all initiatives, organizations, and partners are individuals, "collaborators for quality," with a strong commitment to better outcomes in health care.

The Rhode Island Intensive Care Unit Collaborative represents one of the most successful collaborations between quality organizations, Intensive Care providers, and health insurers. This Collaborative was introduced in this journal in 2005 and now, in this issue, Dr. Lynn McNicoll and colleagues report on the fruits of this collaboration and outline the benefits.

Educational programs have responded in various ways to bridge the gap in performance improvement and quality. Dr. Troncales and colleagues outline their program at the Memorial Hospital of Rhode Island to bring the education of performance improvement processes into the Internal Medicine residency training experience. The program prepares residents with the skills necessary to obtain and implement up-to-date evidence-based knowledge.

These articles are but a small example of the "Collaborations for Quality" underway in Rhode Island. On a daily basis, care providers, administrators, health insurers and partners, with the support of Rhode Island's quality organizations, are working together for safer health care.

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Improving Patient Safety With the Use of Surgical Checklists

Harry C. Sax, MD

"In flying I have learned that carelessness and overconfidence are usually far more dangerous than deliberately accepted risks."

– Wilbur Wright in a letter to his father, September 1900

"Josie's death was not the fault of one doctor, or one nurse, or one misplaced decimal point; it was the result of a total breakdown in the system."

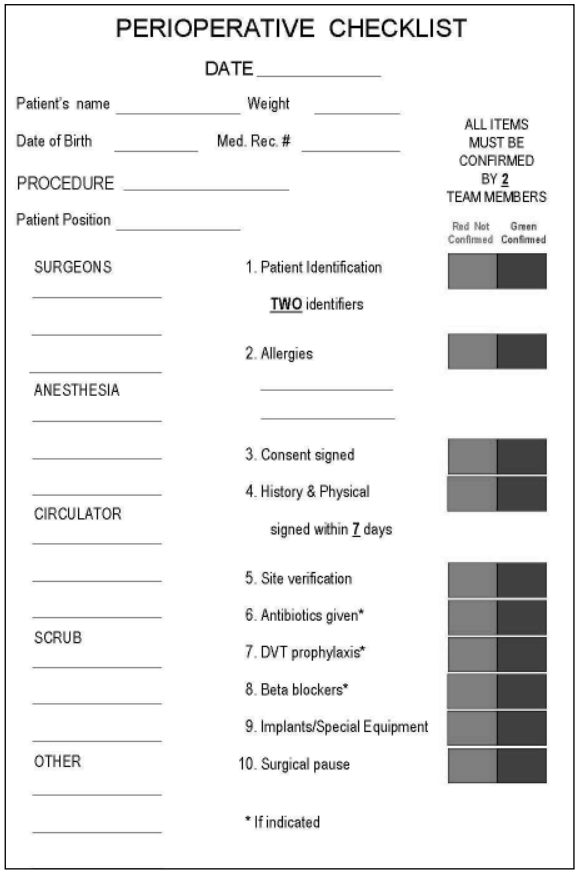
– Sorelle King, mother of 18 month old Josie King, who died at Johns Hopkins Hospital from medical error while recovering from burns.

Patient safety has come to the forefront as a major issue in medical care today. Since the Institute of Medicine's report, "To Err is Human," suggested that there were 100,000 deaths annually from medical error, physicians, nurses, and hospital organizations have worked to improve patient safety.[1,2,3] Medicine requires the integration of motivated, intelligent practitioners with highly complex, technical systems. A similar analogy exists within aviation. During the early days of flight, accidents were common and blame was placed on failure of the machine. Technical improvement ensued, yet accidents continued. Eventually researchers and practitioners recognized the role of human factors: the inherent fallibility of human memory may contribute to preventable mistakes[4,5] Checklists in aviation and other high risk fields were developed, allowing an organized review of specific items necessary for the safe completion of a task. These checklists follow a flow that took into account the switches, gauges and steps involved. Medicine is less organized and standardized. The "art" of patient care has allowed high variability, and with it, increased risk for error.[6,7]

Checklists are only effective when used appropriately and consistently.

Beginning in the late 1990s, medicine recognized analogies between aviation and medical interventions, especially in high technology, high risk areas such as surgery and obstetrics.[8] Process improvement ensued with an emphasis on standardization. Checklists that have been modeled after those used in aviation and other high risk industries were introduced into the medical field in the early part of this decade.[9,10] An example, used at The Miriam Hospital, is seen in Figure 1. Patient identification and operative site/side are primary. In recognition of the importance of all team members, their names are listed along the left side of the board, and introductions are encouraged. The checklist itself is designed with sliders beginning with everything in the red; as each task is completed the slider is moved to green. The "killer items" of antibiotics, DVT prophylaxis and beta blockade are included as a group, as is the identification of equipment that may be required for the procedure to be carried out successfully. When initially introduced, despite education, there was resistance: this was viewed as an additional delay to starting surgery.[11] The administration supported the checklist, however, and nurses were instructed not to hand the knife up until the checklist was completed. This, combined with the surgeon's realization that significant errors were caught, led to universal utilization. (Figure 2) Checklists will be important tools from an economic sense because CMS Pay for Performance will focus on process improvement including timing and type of antibiotics.

Checklists can also reduce morbidity and mortality and do not need to be overly complex. The World Health Organization's checklist (Figure 3) emphasizes briefings as well as antibiotic utilization.[12] The study was carried out in 8 countries and mortality fell from 1.5% to 0.8%. Serious complications fell from 11% to 7%.[13]



PERIOPERATIVE CHECKLIST

DATE _____

Patient's name _____ Weight _____

Date of Birth _____ Med. Rec. # _____

PROCEDURE _____

Patient Position _____

ALL ITEMS MUST BE CONFIRMED BY 2 TEAM MEMBERS

Red Not Confirmed | Green Confirmed

SURGEONS

ANESTHESIA

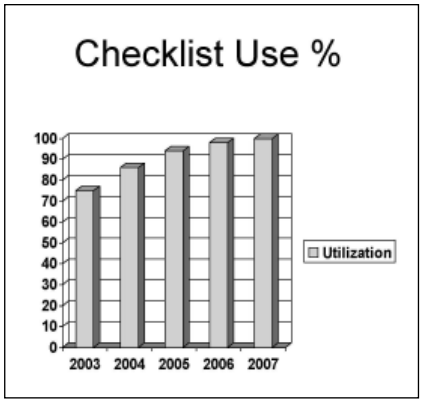
CIRCULATOR

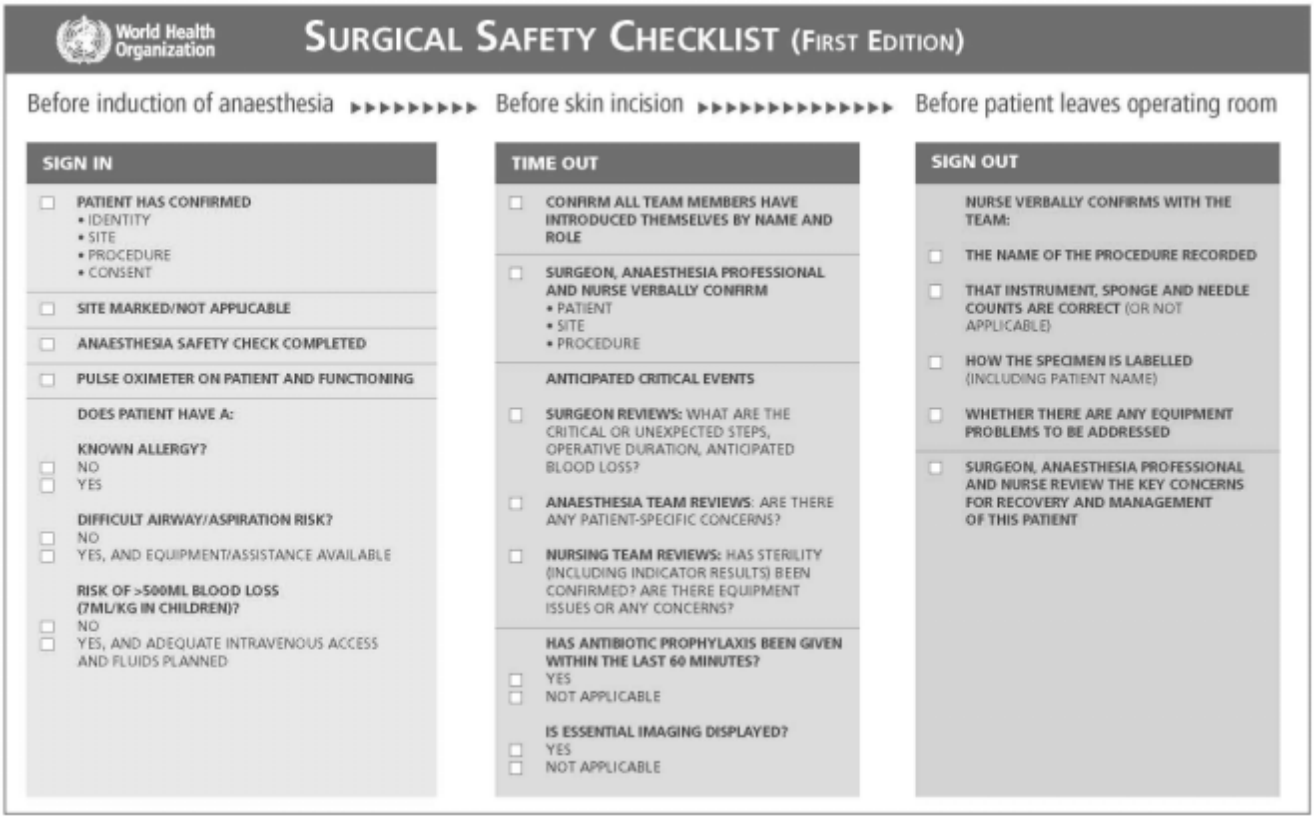
SCRUB

OTHER

1. Patient Identification — TWO identifiers
2. Allergies
3. Consent signed
4. History & Physical signed within 7 days
5. Site verification
6. Antibiotics given*
7. DVT prophylaxis*
8. Beta blockers*
9. Implants/Special Equipment
10. Surgical pause

* If indicated





World Health Organization

SURGICAL SAFETY CHECKLIST (FIRST EDITION)

Before induction of anaesthesia ▸▸▸▸▸▸▸▸▸ Before skin incision ▸▸▸▸▸▸▸▸▸▸▸▸▸ Before patient leaves operating room

SIGN IN

- ☐ PATIENT HAS CONFIRMED
  - IDENTITY
  - SITE
  - PROCEDURE
  - CONSENT
- ☐ SITE MARKED/NOT APPLICABLE
- ☐ ANAESTHESIA SAFETY CHECK COMPLETED
- ☐ PULSE OXIMETER ON PATIENT AND FUNCTIONING
- DOES PATIENT HAVE A:

KNOWN ALLERGY?
- ☐ NO
- ☐ YES

DIFFICULT AIRWAY/ASPIRATION RISK?
- ☐ NO
- ☐ YES, AND EQUIPMENT/ASSISTANCE AVAILABLE

RISK OF >500ML BLOOD LOSS (7ML/KG IN CHILDREN)?
- ☐ NO
- ☐ YES, AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED

TIME OUT

- ☐ CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE
- ☐ SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM
  - PATIENT
  - SITE
  - PROCEDURE

ANTICIPATED CRITICAL EVENTS

- ☐ SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?
- ☐ ANAESTHESIA TEAM REVIEWS: ARE THERE ANY PATIENT-SPECIFIC CONCERNS?
- ☐ NURSING TEAM REVIEWS: HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS?

HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?
- ☐ YES
- ☐ NOT APPLICABLE

IS ESSENTIAL IMAGING DISPLAYED?
- ☐ YES
- ☐ NOT APPLICABLE

SIGN OUT

NURSE VERBALLY CONFIRMS WITH THE TEAM:

- ☐ THE NAME OF THE PROCEDURE RECORDED
- ☐ THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT (OR NOT APPLICABLE)
- ☐ HOW THE SPECIMEN IS LABELLED (INCLUDING PATIENT NAME)
- ☐ WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED
- ☐ SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT

THIS CHECKLIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONS AND MODIFICATIONS TO FIT LOCAL PRACTICE ARE ENCOURAGED.

Despite the utilization of the checklists at The Miriam Hospital beginning in 2005, a wrong side surgery occurred in 2008. (http://www.ri.gov/press/view/8239) Multiple root cause analyses emphasized the importance of consistent instruction in scripting to eliminate ambiguity in the interpretation of the steps. In this specific case, providers interpreted step "Site and Side Verified" variably. Based on this, the checklist has been modified to include "Can everyone see the mark?" Specific scripting, monitoring and read-back are now integrated; and awareness, including reporting near-misses, has increased. In addition, the Hospital Association of Rhode Island in consort with the Department of Health has created a Universal Protocols Work Group to develop consistent site and side marking and time-out procedures. Yet there will always be situations where consistent marking cannot be achieved, as brought to light by the recent intraoral wrong side surgery at Rhode Island Hospital.

Checklists are only effective when used appropriately and consistently. They should be modified in response to near-misses, especially when a systemic latent error is recognized. All participants must receive instruction on checklist use, including active communication, primary source verification, and feedback.[14,15] Standardization of protocols has and will save lives. Although the checklist is an important component in creating an overall medical environment that encourages communication and patient safety, staff understanding and buy-in are key to success.

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Disclosure of Financial Interests

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The Role of Health Information Technology In Improving Quality and Safety In RI: Can New Money Solve Old Problems?

Laura L. Adams, MS

On February 17, 2009, President Obama signed into law the $787 billion **American Recovery and Reinvestment Act (ARRA)** of 2009. This legislation allocates approximately $34 billion dollars in stimulus money for health **information technology (IT),** the bulk of which will go to physicians and hospitals. Physicians who are "meaningful users" of **electronic medical records (EHRs)** by at least 2012 are eligible to receive incentive payments from either Medicare or Medicaid (not both). The Medicare incentive provides up to $44,000 each. If at least 30% of a physician's practice are Medicaid patients, the physician may opt for incentives from Medicaid instead, which will total $63,750 each. But the window of opportunity shuts relatively quickly soon after. Physicians who miss the deadline and aren't ready to start cashing in by 2012 will see the dollars slip away year by year, beginning with an initial reduction in the incentive of at least $18,000. Those who are not ready until after 2014 will not be eligible for an incentive payment. After 2016, the government will provide no further incentive payments. It's clear the president believes in the value of health information technology to improve the quality, safety, and value of health care. But do we in Rhode Island also believe in health IT; and if so, how well are we positioned to secure the federal funding for implementing it?

Background

In a 2000 World Health Organization study, the US health care system ranked 37 out of 191 nations in performance, placing us behind Costa Rica and just ahead of Slovenia.[1] The US spends more than twice per capita than any industrialized nation, yet our outcomes do not justify the expenditure.

Many ideas for reform of the system are being advanced such as the Patient-Centered Medical Home model of primary care delivery, public reporting of outcomes, application of evidence-based medicine, and pay–for–performance systems. Yet virtually none of these reforms can reach their full potential as long as health care remains mired in a paper-based system and decades behind other industries in the use of information technology. *The Economist* ranked health care second only to mining in lack of capital expenditures devoted to information technology. While health IT alone isn't the answer to our problems in health care, it is an essential foundation for almost all other promising reforms. Health IT's real value is as a key enabler in the improvement of health care quality, safety, and value.

The vision of currentcare is a secure electronic network that when fully built, and with consumer consent, allows medical professionals access to patients' most up-to-date health information in any provider location.

A RAND Corporation study suggested that full implementation of health IT with interoperability that allows sharing of personal health information across entities has the potential to generate $142 - $371 billion dollars annually in quality and safety improvements.[3] While critics of the RAND study cite the projections and extrapolated figures as significant weaknesses, we are slowly beginning to gather empirical evidence on the impact of health IT. A study of forty-one Texas hospitals reported that mortality rates dropped by 15% when computers replaced paper. This study found that hospitals with sophisticated **computer physician order entry (CPOE)** systems have a 55% lower rate of death for patients undergoing coronary artery bypass grafts, and that hospitals with high scores for CPOE were associated with lower average costs per admission and a 16% lower risk of developing complications across all reasons for admission.

Rhode Island's Positioning to Receive ARRA Funding for Health IT

Rhode Island has been in the forefront of the transformation. This is likely to pay big dividends, vis-à-vis the stimulus funding, as the criteria for receipt of the funding includes becoming "meaningful users" of health IT. The definition of "meaningful user" will evolve, but at this point includes use of certified technology, electronic prescribing, electronic **health information exchange (HIE)** that improves the quality of care, and the ability to submit information on clinical quality measures. RI has made tremendous progress on all fronts in this regard.

RI hospitals ranked #1 in the nation for adoption rates of health IT for medication safety. A recent study examined 4,561 hospitals and RI had the highest adoption rate per hospital—six times higher than the lowest.[5]

RI ranked #2 in the 2009 SafeRx™ Awards sponsored by the National Association of Chain Drug Stores, the National Community Pharmacists Association, and SureScripts. The award honors the top ten e-prescribing states in the nation who have demonstrated outstanding leadership and commitment to patient safety through their use of e-prescribing technology. RI has consistently ranked either #1 or #2 since the awards were initiated in 2006.

RI's work in advancing the adoption and effective use of EHRs has garnered

national attention. Organizations such as the **Rhode Island Department of Health** (**HEALTH**) and **Quality Partners of Rhode Island** (**QPRI**) have led efforts to measure and publicly report on the adoption and use of EHRs in the state. The nation's first-ever public report on the adoption of EMRs by physicians occurred in RI this year. HEALTH and QPRI worked with the **Rhode Island Quality Institute's** (**RIQI**) **Clinical IT Leadership Committee** (**CITLC**) to develop the measurement tool. The CITLC, formed by the RIQI in 2004 and chaired by Reid Coleman, MD, advises statewide efforts to advance EMR adoption. Blue Cross & Blue Shield of RI, a strong advocate for health IT adoption, turned to the CITLC for input in shaping their financial incentives for physicians to adopt EMRs.

The CITLC also initiated a study, done in partnership with COMSORT, which draws upon the scientific research done by Everett Rogers and others that focuses on diffusion of innovation and uses networking and the "communities of practice" theory to advance EHR adoption.

The RIQI study for EHR began in 2008 with an environmental assessment of health information technology innovation, communication channels, timelines, and social systems. Using a specially designed survey tool with RI physicians, quantitative baseline data was collected and analyzed. The results identified thirty-one physician leaders who are viewed as the "innovators" by their peers. The top 10 physicians on the leaders list are Drs. Albert Puerini, Jr., Reid Coleman, Yul Ejnes, Mark Jacobs, Cedric Priebe, Jonathan Bertman, Andrew Snyder, Michael Fine, Joel Kaufman, and Nathan Beraha.

The RIQI is now working closely with these "RI EHR Leaders," to develop strategies for advancing EHR adoption and effective use. The strategies include peer-to-peer sharing of fact sheets and case studies that highlight EHR benefits, costs, selection, purchase, and implementation; arranging for physician leaders to host open houses across RI; developing an EHR user community web site for physicians; hosting conferences, panels, and roundtable discussions to disseminate important information on EHR systems; and recognizing the positive impact that physician leaders make within their communities. The more RI prepares physicians to adopt EHRs now, the likelier that RI physicians will qualify as "meaningful users" to reap the full $44,000 per physician that will be available under the ARRA.

RI has also advanced the **health information exchange** (**HIE**), which will serve RI physicians well as they work to qualify as "meaningful users." In 2004, HEALTH secured a $5 million contract from the **Agency for Healthcare Research and Quality** (**AHRQ**) to begin building Phase I of RI's HIE. HEALTH sub-contracted with RIQI for community governance of this project. In 2008, RIQI was awarded the official designation as RI's Regional Health Information Organization, and the State began transferring authority and accountability to the RIQI for the HIE. RI's HIE is called **current*care***.

The vision of **current*care*** is a secure electronic network that when fully built, and with consumer consent, allows medical professionals access to patients' most up-to-date health information in any provider location.

The development of **current*care*** has been guided by very broad-based and deep community involvement. One of the first concerns to arise about the HIE was that of the privacy and security of consumer data. HEALTH and the RIQI brought the community together to address these issues. In 2008, the RI legislature was the first state in the nation to pass a strong set of consumer privacy protections specifically designed for the health information exchange. The *Rhode Island Health Information Exchange Act of 2008* also grants immunity to providers who rely on information from the web site that later proves to be incorrect and results in negative consequences.

For more information on **current*care***, go to www.currentcareri.org.

Conclusion

There is growing evidence of the worth of health information technology in improving the quality, safety, and value of health care. The availability of important clinical information anywhere and anytime is essential to high quality, safe medical care; so much so, that it is inevitable that the use of health information technology will soon be regarded as a community, and perhaps a national, standard of practice. RI is extremely well positioned to compete for the federal funding to implement that information technology infrastructure.

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A History of Quality:
The Rhode Island Medical Society's Commitment

Newell E. Warde, PhD

Before there was Evidence-Based Medicine or Comparative Effectiveness Research—indeed, before there was even medical licensure—there were medical societies. The **Rhode Island Medical Society (RIMS)** is one of the oldest continuously operating medical societies in North America, having been called into being by an act of the Rhode Island General Assembly in February 1812.

The legislature's rationale in issuing a charter for the formation of the Society was that "the medical art is important to the health and happiness of society, [and therefore] every institution calculated to further its improvement is entitled to public attention" and should be "encouraged by the patronage of the laws."

As the RIMS approaches its two hundredth anniversary, it is fitting to consider the role it has played and continues to play in the "improvement of the medical art" in Rhode Island. Has RIMS been faithful to the mission foreseen for it by the state legislature and by the Society's own 46 founding members back in 1812?

It will not surprise that as medicine has profoundly changed, so has RIMS continually evolved and reinvented itself over the past two centuries. At the same time, however, it is easy to discern a continuity of purpose that connects the RIMS of the early 19th century with the RIMS of the early 21st and integrates the earnest efforts of thousands of Rhode Island physicians and RIMS members throughout the intervening decades.

One unifying theme of RIMS' past and present is the commitment to quality. For at least the first century and a half of its existence, RIMS' concern for quality was mostly focused inward on improving the knowledge, skill and professionalism of its members. In granting the original charter, the General Assembly bestowed upon RIMS "full power and authority to examine all candidates for the practice of physic and surgery… respecting their skill in their profession; and if upon examination the said candidates shall be found skilled in their profession, and fitted for the practice of it, they shall receive the approbation of the said society in letters testimonial…" Not until eighty years later did Rhode Island institute medical licensure as a state function in order to better protect the public from "irregular practitioners." Medical licensure was at the top of RIMS' public policy agenda for decades during the 19th century before it finally became law.

"Fitness for practice" is another unifying theme of RIMS' perennial efforts to improve quality, elevate the medical profession and promote good patient care. Though the scope and substance have changed and expanded radically since 1812, the core mission of medical societies has always been defined by professional ethics, medical education, and peer review, all for the purpose of ensuring physicians' fitness for practice and their ability to provide the best quality patient care consistent with the state of medical knowledge at the time.

RIMS' evolving role in medical education illustrates the coexistence of profound change with continuity of purpose over time. The 19th century records of the Rhode Island Medical Society bear abundant witness to the optimistic strivings of RIMS' earliest members and their belief in the progress of medical science through observation, dissemination of scholarship and the vigorous exchange of ideas. Members of the Rhode Island Medical Society are seen engaging one another in mutual clinical education, presenting papers to one another, sharing professional insights and experiences, debating the efficacy of various remedies and attempting to define new standards of care. They collect and share books, subscribe to journals and quickly establish a growing medical library for their common edification. They stimulate research and discussion among themselves by sponsoring scientific essay competitions and prizes.

RIMS gave its educational mission a watershed boost in 1911, when it broke ground on Smith Hill in Providence to build a permanent home for the Society's wandering medical library collection. The handsome brick Federal Revival building, which still stands at the corner of Francis and Hayes Streets opposite the south lawn of the State House, served as the headquarters of the Rhode Island Medical Society for 90 years, from 1912 to 2002. With a collection that grew to over 50,000 volumes, a spacious, sunny reading room with individual study tables, a lecture hall that seated 200, and a staff of professional librarians, the RIMS building served as the state's principal center for continuing medical education for much of the 20th century.

With the growing specialization of medicine and the explosion of medical knowledge in the past fifty years, clinical education and continuing medical education naturally evolved away from state medical societies and became the province of specialty societies and academic medical centers. Accordingly, RIMS gifted its historic library collection to Brown University in 1987. The oldest and most notable parts of the RIMS collection as well as a number of antique medical instruments still reside together in the Lownes Room of Brown's John Hay Library.

RIMS still provides vital and unique educational services to the state today, for RIMS is the accrediting agency for the CME programs of all the hospitals in Rhode Island. The Society is recognized by the national Accreditation Council for Continuing Medical Education to perform this important function. The work of accreditation is carried out by RIMS' Committee on Continuing Medical Education, currently under the able leadership of Patrick J. Sweeney, MD, PhD, MPH.

Another RIMS educational contribution of long standing is the Society's monthly journal, *Medicine and Health Rhode Island*, known for most of its life as

the *Rhode Island Medical Journal*. Founded by the Providence Medical Association in the 1890's, the journal has been a RIMS publication since the era of World War I. Today it is a joint undertaking of RIMS with Quality Partners of Rhode Island, the Warren Alpert Medical School at Brown, and the RI Department of Health. The RIMS Journal has had a succession of distinguished editors, including the late Siebert Goldowsky, MD, and Brown's founding medical dean, Stanley M. Aronson, MD. The RIMS Journal is currently in the capable hands of Joseph H. Friedman, MD, Editor in Chief, and Joan Retsinas, PhD, Managing Editor.

So while much (indeed, everything) has changed in medical education, and while RIMS too has changed with the times, the fundamental objective of continuing medical education remains today what it so clearly was in 1812 for RIMS' founders: bringing the best of medical knowledge to the bedside.

Peer review is another enduring constant of RIMS' commitment to quality, and it too has evolved over time. For most of the 19th century, before the practice of medicine had a legal definition and a state licensure requirement, peer review was the only means for developing and enforcing standards of professional ethics, and it was virtually the sole corrective against such offenses as charging excessive fees, peddling nostrums and claiming to have exclusive, secret remedies.

In more recent times, RIMS has been a national leader in the kinds of peer review that focus most clearly on a narrow understanding of words that echo from the 1812 charter: "fitness to practice." In 1978, RIMS established the Physician Health Program (originally known as the Impaired Physicians Committee) when a series of three local physician suicides made clear the need for the physician community to take better care of its own. For thirty years now, RIMS' Physician Health Program has been preserving the reputations, careers, marriages and lives of Rhode Island physicians, dentists, podiatrists and Physician Assistants under the visionary leadership of Herbert Rakatansky, MD. It is a program that carries out its sensitive mission with great success, thanks to the leadership and hard work many individuals, including RIMS' own dedicated and skilled Rosemary Maher, ACSW, LCSW, CEAP, who provides administrative and professional support for the program, and her pioneering predecessor, the late William Moclair, RN.

Uniquely propitious for the RIMS Physician Health Program is the respectful and mutually appreciative relationship that has been carefully cultivated over the years between RIMS and the Board of Medical Licensure and Discipline, whose Chief Administrative Officers Milton Hamolsky, MD, and now Robert Crausman, MD, deserve great credit for helping to build and maintain an excellent and constructive relationship with RIMS since the Board's inception in 1987. (RIMS also had a good working relationship with the current Board's predecessor, the Board of Medical Review.) Analogous relationships in other states, in tragic contrast, tend to be characterized by mutual mistrust and political conflict, resulting in the waste of human and financial resources and poorer service to the public and the medical profession than is the case in Rhode Island.

RIMS remains a notable pioneer in inventing another peer review program that specifically identifies and addresses issues of competence in individual physicians. The Competency Committee was the brainchild of the same Dr. Herbert Rakatansky who has chaired the Physician Health Committee for thirty years. He inspired the establishment of the new Competency Committee during his presidency of RIMS in 1985-86; no other medical society in the US has a comparable program, with the qualified exception of the Oregon Medical Association.

RIMS maintains three other peer review committees, incidentally, one of which is the oldest continuously functioning Maternal Health Committee in the nation, established in 1931.

All of the programs and efforts noted so far were designed to promote quality in medical care by focusing on the qualifications, skill, knowledge, professionalism and well-being of the individual physician as the primary actor in providing and directing medical services for patients. Certainly that focus has always been appropriate for a medical society.

In 1995, however, under the presidency of Barbara Schepps, MD, RIMS took an unprecedented step outside of its traditional comfort zone, which had for the previous 183 years been circumscribed by the boundaries of the medical profession itself. This time RIMS, with the overwhelming majority of its members expressing their support for the venture through a RIMS mail survey, gave birth to a new kind of organization: Quality Partners of Rhode Island, the primary mission of which was to ensure that Medicare beneficiaries in Rhode Island receive the best care possible. RIMS founded and named Quality Partners in recognition of the fact that quality in modern medical care depends not only on individual professionals, but on systems and teamwork.

Early in 1996, RIMS installed the first three employees of Quality Partners in a neighboring frame building on Hayes Street that RIMS had acquired in 1978. By the turn of the century four years later, Quality Partners' staff and budget already dwarfed those of its parent, and Quality Partners was exerting an ever widening and deepening influence on the quality of medical care received not only by Rhode Islanders, but in some cases by patients across the country. The salutary influence of Quality Partners, though it is still nominally focused on Medicare patients, is happily systemic in Rhode Island, since caregivers obviously afford the same good care to every patient, regardless of payer.

Having proactively provided itself with a strong "quality arm" and despite its own modest size and resources, RIMS was well positioned to contribute disproportionately to the Quality Movement in American medicine, which received important impetus from the series of "Quality Chasm" reports by the Institute of Medicine, starting with the watershed publication of *To Err is Human* in 1999. The Quality Movement, in which Quality Partners is a national leader, continues to reshape American health care in progressive and exciting ways that are highlighted elsewhere in this edition of *Medicine and Health/Rhode Island*.

There are many more chapters to the story of RIMS' commitment to quality. Space permits the mention here of one more recent development that is notable for its symbolic as well as practical significance. In 2007, the Rhode Island

Medical Society agreed to support Quality Partners in its bid to change its tax status with the Internal Revenue Service so that Quality Partners could henceforth apply for philanthropic grants from corporations and foundations as well as compete for corporate, state and federal government contracts. The effort to transform Quality Partners into a 501(c)(3) was successful, but it required RIMS to relinquish the last vestiges of control over its daughter organization.

RIMS quickly and willingly agreed to do so. That demonstration of parental generosity, esteem and confidence affirmed once again the public-spirited priorities of the Rhode Island Medical Society and its enduring commitment to quality care over the past 197 years.

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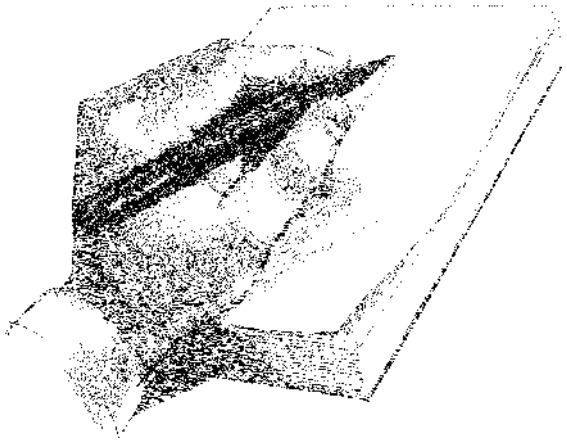

The Rhode Island ICU Collaborative: The First Statewide Collaborative Four Years Later

Lynn McNicoll, MD, FRCPC, Vera A. DePalo, MD, Margaret Cornell, MS, RN, Jean Marie Rocha, MPH, RN, Laura L. Adams, MS

Four years ago, we wrote in this journal about the development of the first statewide Critical Care collaborative in the nation, the **Rhode Island Intensive Care Unit** (**RI ICU**) Collaborative.[1] This article outlines the last four years of the RI ICU Collaborative and its accomplishments.

Key local health care leaders and the state's three quality organizations (the **RI Quality Institute** [**RIQI**], **Quality Partners of RI** [**QPRI**], and the **Hospital Association of RI** [**HARI**]) recognized an opportunity for continuing to improve the care provided in RI hospitals. Research shows that bundled interventions and efforts to improve the culture of safety in ICUs can reduce ICU complications.[2] Median rates of deadly and costly complications such as central line-associated blood stream infections can be reduced to '0'.[3] In early 2005, after surveying the hospitals for willingness to participate, the three quality organizations outlined the proposal, described in the 2005 article, to develop the RI ICU Collaborative to work collectively to foster a culture of safety and to implement bundled care strategies to improve ICU outcomes.[1] Funding to support the project management, speakers, and conferences was obtained from the Blue Cross Blue Shield of RI and UnitedHealthcare of New England, based on their market share. To date, their financial support has totaled over $2.4 million.

All of RI's eleven acute care hospitals, having one or more adult acute or intermediate-care ICUs, agreed to participate, representing 23 adult ICUs with the total capacity of 263 beds. The overarching aim of the Collaborative is to reduce ICU-related complications, such as **ventilator-associated pneumonia** (**VAP**) and **central line-associated blood stream infection** (**CLABSI**). In Phase II, the management of septic patients was added, with the aim of reducing mortality.

The statewide rate of CLABSI has been reduced by 45%...

Collaborative Design

The RI ICU Collaborative's leadership team included representatives from each of the quality organizations and a Critical Care physician consultant. The leadership team managed the funds, organized conferences, coaching calls, managed the contracts of consulting physicians and database vendors, and provided the oversight and strategy for accomplishing the goals. The use of this statewide leadership approach reduces the costs to each hospital for activities associated with the work, thus allowing for availability of these resources to all hospitals throughout the state. The RIQI remains the principal investigator in this project and is responsible for financial management, fundraising and other leadership responsibilities. HARI provides on-going support for hospital leadership. QPRI provided the bulk of the project management and real-time support for teams. The project manager met frequently with each team, to provide individualized assistance, training, and support.

In the first phase, the Collaborative partnered with the Quality and Safety Research Group at Johns Hopkins University under the leadership of Dr. Peter Pronovost to introduce and implement the **Comprehensive Unit-Based Safety Program** (**CUSP**) and VAP and CLABSI bundles. In Phase II, the faculty relied on local experts in Critical Care, including Dr. Mitchell Levy, currently the President of the Society for Critical Care Medicine and a world leader in the **Surviving Sepsis Campaign** (**SSC**). We embarked on the SSC in the spring of 2008. Engagement of all participants of the RI ICU Collaborative (senior executives, ICU directors, nurse managers, frontline physicians and nurses, pharmacists, respiratory therapists, infection control specialists, and quality improvement and support staff) have led to the success of the RI ICU Collaborative.

The application of the rapid-cycle improvement model, using the Plan-Do-Study-Act cycle, was instrumental in helping teams change processes in their units.[4] Training in the science of safety and improvement techniques helped teams integrate practical, low-technology tools into their daily practice. The Collaborative fostered a culture of shared

Table 1: Aggregated Statewide Results of RI ICU Collaborative.

Outcome	2005	2006	2007	2008	% Improvement	Goal
SAQ Safety Climate Score (mean)	43.8	44.3	44.7	47	+ 7%	60%
SAQ Team Work Score (mean)	46.3	45.5	47.8	50	+ 8%	60%
CLABSI/1000 catheter days (mean)	-	3.12	1.80	1.71	- 45%	< 1.0
VAP Bundle Compliance %	-	62%	69%	80%	+ 30%	> 90%
VAP/1000 ventilator days (mean)	-	4.03	3.38	3.28	- 18%	< 1.0
Sepsis Mortality %*	-	-	-	25.1%	n/a	National Standard 28.4%

VAP- Ventilator Associated Pneumonia; CLABSI Central Line-Associated Blood Stream Infection; SAQ – Safety Attitudes Questionaire.
*April to December data available only

Table 2: Statewide Lives Saved, Reduction in ICU Days, and Cost Savings Associated with RI ICU Collaborative Compared to 2006.

Year	Lives Saved	Days in ICU Reduced	Cost Savings
2007	19	958	$2,833,622
2008	26	1118	$3,086,589
Cumulative Savings	45	2076	$5,920,211

learning and mutual support . Team Leaders met bimonthly to share strategies, lessons learned, frustrations, and best practices in a safe, supportive environment. Face-to-face meetings, twice yearly, let teams showcase results and deepen their knowledge in Critical Care Medicine and Quality Methods.

Results

Culture Change

The implementation of the CUSP program early in the Collaborative helped integrate key principles important to bring about change. The CUSP program included: conducting a culture survey (the **Safety Attitudes Questionnaire (SAQ)**), educating staff on the science of safety, identifying staff concerns, establishing executive walkrounds, documenting results, and resurveying the culture. Following each SAQ survey, the teams are encouraged to develop and implement SAQ action plans.[5] After four annual SAQ surveys, the results are mixed. (Table 1) Several units demonstrated significant improvements, but overall these have been countered by units that have remained stagnant or worsened. We noted significant shifts in SAQ results with nursing or physician leadership changes. Units that developed a robust SAQ action plan demonstrated the greatest gains.

Reduction in ICU Infections (VAP and CLABSI)

Reduction in ICU-acquired infections was the focus of the first phase of the ICU Collaborative. The CLABSI bundle includes a catheter insertion checklist, which should be performed with every central line placement. The bundle included using a line cart, using chlorhexidine skin preparation, using full-barrier precautions, removing unnecessary lines, and using the subclavian site as the preferred site. The statewide rate of CLABSI has been reduced by 45% and continues to decline in the state.[6] (Table 1)

The VAP bundle implemented after the CLABSI bundle includes elements thought to contribute to optimal ventilator management. The bundle consisted of elevation of the head of the bed, establishing sedation and weaning protocols with daily assessment of ability to wean, providing peptic ulcer and deep vein thrombosis prophylaxes, and controlling glucose levels. Communication of the daily care goals for a ventilated patient can improve the efficiency of weaning and result in earlier extubation with a reduction in ventilator days. Three years later, VAP rates declined 18%.[6] (Table 1)

Over 2 years, we estimate 45 lives were saved.

Improving Sepsis Care – The Surviving Sepsis Campaign in RI

In Phase II, the Collaborative collaborated with Drs. Mitchell Levy and Sean Townsend of the Surviving Sepsis Campaign to improve sepsis identification and management, with the goal of reducing the sepsis mortality rate. Early identification of sepsis in the emergency room or on the medical floors with prompt and aggressive fluid resuscitation requires partnership of Emergency Department and Medicine colleagues. The teams are currently in the process of improving their compliance with the 10 sepsis processes of care which comprise the bundles.[7] The resuscitation bundle includes the measurement of serum lactate, blood cultures prior to antibiotic use, broad spectrum antibiotics, fluid resuscitation (and vasopressor use) using adequate central venous pressure (>8) and central venous oxygen saturation (>70%) as resuscitation targets, all within the first 6 hours. The maintenance bundle includes administering steroids or activated protein C according to unit protocol, controlling the glucose level, and avoiding excessive plateau pressures in mechanically ventilated patients, all within 24 hours.[7] Education began in the spring of 2008 and baseline data been collected since July 2008. RI's baseline mortality is lower than the national average but our compliance rate with process measures is slightly worse. (Table 1) Our goal is to reduce mortality by 25% by December 2009.

Cost Saving Estimates for Rhode Island

Using an opportunity calculator provided by the Johns Hopkins group, which incorporates cost and length of stay assumptions based on literature and national data, researchers can estimate the number of lives saved and the reduction of ICU days. [8] For 2007, a conservative estimate calculates that 19 lives were saved from VAP, BSI, and deep vein thrombosis complications. Over 2 years, we estimate 45 lives were saved, ICU days were reduced by more than 2000 days, and healthcare costs were reduced by almost $6,000,000 statewide.

Conclusion

Opportunities for improvement persist everywhere in healthcare, perhaps more so in the ICU where the stakes are higher. While hospitals in Rhode Island had already taken steps to improve care in the ICU setting, participation in the RI ICU Collaborative has enabled hospitals to learn from each other and other states that have demonstrated dramatic improvement in ICU care. It has allowed ICUs within the state to share best practices and lessons learned, and improve the quality of ICU care provided to Rhode Islanders.

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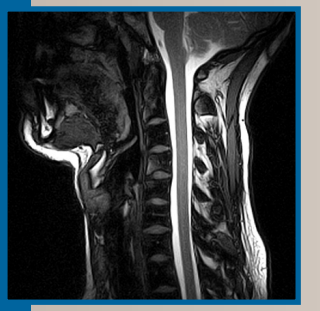

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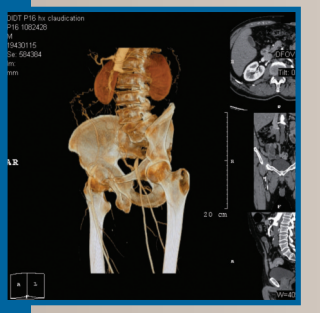

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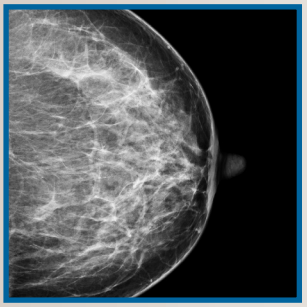

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Performance Improvement In Internal Medicine Residency Education: Memorial Hospital of Rhode Island Curriculum

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With the growing emphasis on patient outcomes and quality improvement within the United States healthcare system, medical schools and postgraduate training programs have been developing curricula to educate physicians in these areas.[1,2] Internists must now demonstrate incorporation of quality improvement into their practices **for American Board of Internal Medicine (ABIM)** recertification. However, most physicians have not had formalized training in this aspect of performance. To address this need, the Internal Medicine Residency Program at **Memorial Hospital of Rhode Island (MHRI)**/Warren Alpert School of Medicine of Brown University developed a quality improvement curriculum.

Our practical, "hands-on" **performance improvement (PI)** curriculum addresses three of the six areas of professional competency defined by the **Accreditation Council for Graduate Medical Education (ACGME)** Outcomes Project: Patient Care, **Systems-Based Practice (SBP)**, and **Practice-Based Learning and Improvement (PBLI)**.[3] As of July 2009, the ACGME has mandated that all Internal Medicine residency training programs involve trainees in performance improvement projects and develop formalized curricula.

MHRI Internal Medicine Performance Improvement Curriculum

The objectives of the curriculum are clear. Upon completion of training, residents will: 1) demonstrate an understanding of the healthcare quality improvement movement in the context of patient safety and the ACGME competencies, 2) be able to identify the major tenets of quality improvement, 3) utilize an evidence-based approach to determine best practice, 4) understand the application of the **"Plan-Do-Study-Act" (PDSA)** cycle for implementing quality improvement projects, and 5) demonstrate the ability to formulate and implement a PI project as part of an interdisciplinary team.

The curriculum utilizes different teaching approaches. These include didactic lectures as well as interactive small group seminars in which the major principles and concepts of quality improvement are discussed. One of these concepts is the PDSA performance improvement cycle. This cycle emphasizes 1) identification of changes necessary to bring about improvement (Plan), 2) an initial pilot trial of the proposed changes (Do), 3) measurement of results (Study), and 4) implementation of successful changes or additional cycles as needed to achieve the desired results (Act).[4] In addition, an evidence-based journal club helps residents critically appraise the literature and apply best practices to patient care. Finally, residents are given a syllabus of independent reading material pertaining to quality improvement and the role of PI in postgraduate medical education.

Each of our residents is engaged in at least one of four resident-driven projects. Two are multidisciplinary, involving collaborative efforts between residents, hospital administrators, and nursing staff. This resident-driven approach to institutional quality improvement is largely "bottom-up", but also incorporates some elements of the "top-down" strategy on the two multidisciplinary teams. Each strategy has strengths and weaknesses. "Bottom-up" approaches offer residents the opportunity to utilize their daily experiences in order to identify institutional or programmatic problems and develop realistic solutions. The potential downside to this approach is that without appropriate mentorship and institutional support, resident-led performance projects may be unsuccessful, or limited in focus. "Top-down" approaches are initiated by the institution, allowing residents to engage in quality improvement collaboratively with institutional leaders. This approach empowers residents by allowing them to develop working relationships with hospital leaders and administrators.[2]

Description of Performance Improvement Projects

The four residency PI projects include 1) inpatient sign-outs, 2) outpatient care of the vulnerable elderly, 3) evidence-based practice literature search for morning report, and 4) resident hand-washing practices on the inpatient wards.

I. Inpatient Sign-Outs

One method of improving communication among residents and ensuring accuracy of transmitted information is to standardize the sign-out process.[5-8] A variety of verbal, written, and web-based sign-out systems are currently used by residency training programs. These are not necessarily standardized. Shortened length of patient stays and ACGME duty hour requirements have resulted in multiple handoffs in a 24 hour period. This may contribute to increased frequency of medical error. Thus, the Joint Commission and IOM identified sign-outs as requiring increased attention.[9-10] Similarly, our residents recognized that the lack of a formalized sign-out tool could result in episodes of uncertainty for overnight, cross-covering residents, resulting in delayed or inappropriate patient care.

A team of eight residents and one faculty mentor piloted a standardized sign-out sheet. Team members first identified what patient information needed to be transmitted. A literature search and telephone survey of other residency programs were performed to identify processes developed by other programs. The team included the following information: 1) name, age, room number, and attending physician caring for patient 2) allergies 3) code status 4) medications 5) brief history of present illness 6) diagnosis and problem list 7) current and pending laboratory studies, and 8) a "to do" list for the covering resident. To close the communication loop, the covering resident is asked to confirm completion of actions on the "to do" list and to document unexpected events.

We piloted the form on the inpatient service for three months. Success will be judged by the results of resident surveys administered pre- and post-intervention. Informal feedback thus far indicates a high level of resident satisfaction with the form. However, adherence to standardization of the information required on the form appears variable and this may be an area to address in the next phase of the project.

II. Establishing a culture of best practice: the "Post-call Question"

The ACGME requires that residents must be engaged in appropriate learning activities that demonstrate an ability to appraise current medical evidence.[11] Training residents to seek evidence-based data is a key element of our curriculum. Competency in routine appraisal of the medical literature and its application to patient care is best developed when motivated and reinforced by relevance to daily clinical activity and integrated learning complements journal clubs and didactic sessions. [12] To support the development of habits that will encourage lifelong learning, the "Post-call Question," an educational tool developed at our sister Brown residency program at Lifespan, was introduced into our resident morning report in 2008.

An annual self-evaluation of incoming interns' skills and confidence in performing literature searches has consistently identified wide variability in expertise. Based on these surveys, a series of educational sessions that teach residents how to best utilize library and electronic resources was initiated in 2005. The post-call question requires that residents use these skills to formulate a clear clinical question, and to locate and document an appropriate literature search. Researched information is then interpreted in the approach to a particular patient case presented in morning report.

Initially, residents did not readily incorporate this tool in morning report. Thus, this area was identified for a resident-led performance improvement project. The members of this team are surveying residents to determine barriers to the use of the tool, and documenting frequency of use in morning report. An intervention plan will be made based upon results of the survey, and post-intervention improvement will be measured.

III. Care of vulnerable elders in the outpatient setting

In 2006, we enrolled as one of 24 participating sites in the ABIM and Josiah Macy Foundation-sponsored study "Improving Quality of Care for Elderly Patients in the Educational Setting."[13,14] The study was designed to assess the effectiveness of the ABIM **practice improvement modules (PIM)** in improving residents' knowledge and clinical skill when caring for at-risk elders in continuity practices. The PIM is based upon best practices as defined by the **Assessing Care of Vulnerable Elders (ACOVE)** project and was initially designed for use in the recertification process. [15,16] However, these modules may be a useful tool in residency education as well.[17] In the initial phase of the study, residents recruited 50 patients, and completed baseline patient and resident surveys, and chart audits. The data were used to target areas for the performance improvement project.

Although all residents were involved in the study, an eight member team led by two third-year residents spearheaded the planning of the actual PI project. In this project, members of the geriatrics faculty and nursing administration have participated. Of the four quality indicators for care of the vulnerable elderly included in the ABIM study, assessment for risk of falls and osteoporosis have been designated as the focus of our initial performance improvement project. The team modified validated screening instruments for the identification of elderly persons at risk for falls and osteoporosis. [15-19] These are being piloted in the resident practice. When a patient screens positive, a checklist based on best practice is followed. Of note, a miscommunication at the initiation of the pilot project resulted in failure to distribute the screening instruments to patients. This event emphasized the importance of on-going interdisciplinary communication. Adherence to the screening tools and checklists will be measured at three months with post-intervention survey and chart audit.

IV. Infection control through handwashing

While it is well-known that hand hygiene is the best method for preventing the spread of pathogens, lack of consistent adherence to appropriate hand washing techniques plagues many hospitals. In 2002, the **Centers for Disease Control and Prevention (CDC)** issued practice guidelines for hand hygiene in hospitals and other healthcare institutions. [20,21] Hand hygiene is a Joint Commission patient safety goal.

The residents' decision to include infection control through hand-washing as their fourth PI project was partially motivated by a recent hospital-wide initiative regarding handwashing. Direct observations on inpatient units has shown inconsistent compliance with guidelines. Our project, with input from the Infection Control department and quality improvement administrators, has provided an opportunity for residents to collaborate in a multidisciplinary quality improvement team. Residents have been incorporated into the routine surveillance monitoring of hand hygiene practice on the inpatient wards. Their perspective is likely to be a valuable element in achieving increased adherence to guidelines.

Conclusion

Medical educators must devise new teaching strategies to address the ACGME competencies of Systems-Based Practice and Practice-Based Learning and Improvement. In addition, we must prepare the next generation of physicians to function in interdisciplinary teams to improve the quality of healthcare delivery. Our Internal Medicine residency PI curriculum utilizes an active, experiential learning process to meet these needs. We have been impressed with resident enthusiasm for these projects and willingness to adopt leadership roles. We believe that the involvement of our residents in the PI process will help prepare them to become leaders in this process.

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Fall Prevention Interventions In Acute Care Settings: The Rhode Island Hospital Experience

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CASE:

Mrs. J, an 85-year-old independent woman, was admitted to the hospital with left arm cellulitis. In the emergency room a bladder catheter and **intravenous line** (IV) with normal saline running were inserted. She was given an antibiotic and an analgesic for pain and admitted to the medical service for treatment and monitoring. Upon arrival to the medical unit, she proceeded to get out of bed without assistance, became entangled in the bladder catheter and IV tubing, and fell. Mrs. J suffered a left hip fracture requiring surgical repair. On postoperative day 3, she developed a pulmonary embolus and died.

OVERVIEW OF FALLS

Older persons when hospitalized are at much higher risk of falls. Preventing falls and injury is not only important for improving the quality of care and keeping patients safe, but it is also part of a national patient safety initiative. The **Center for Medicare and Medicaid** (**CMS**) will no longer reimburse hospitals for hospital-acquired conditions, including falls and falls with injury.[9]

Falls in hospitalized persons are common, about 2% in the elderly population, or between 0.6 and 2.9 falls annually per bed.[5, 1] Hip fractures result in permanent disability in 20% of patients.[1] Many nationally recognized fall prevention guidelines include early and frequent mobilization as an important strategy to prevent deconditioning, orthostasis, falls, and injuries related to falls.[1, 2, 8, 6, 7] Immobility has been shown to be associated with increased fall risk and recommendations are to increase exercise and activity level.[5] Studies of fall prevention have not been successful in the hospital setting. Pooled effect of a meta-analysis showed no effect for randomized controlled trials but a 25% reduction in prospective cohort studies using historical controls.[8]

In any setting, falls and injuries related to falls, are more common than strokes and are the most preventable cause of admission to nursing homes.[10] Additionally, 30% of adults over the age of 70 will fall each year, 10% will suffer a serious fall injury, and falls cause over 90% of broken hips.[10] Older persons are at greater risk for osteoporosis, which markedly increases their likelihood of an injury even with falls from a low height. In 2000, the total direct cost of all fall injuries for people 65 and older exceeded $19 billion. The financial toll for older adult falls is expected to increase as the population ages, and may reach $54.9 billion by 2020.[9]

At **Rhode Island Hospital** (**RIH**) 36% of the patient population is 65 and over.

RIH's inpatient fall rates have been higher than the national average; for the last year RIH has focused on reducing patient falls, particularly falls with injury.

DEVELOPING A FALL PREVENTION TEAM

In our fall quality improvement initiative, we developed a team of registered nurses, certified nursing assistants, li-

Table 1. Risk Factors For Falls in the Hospital

Non-Modifiable	Modifiable
Age	Fear of Falling
History of Falls	Clutter in Room and Hallways
Dementia	Medications
Disease Process	Bedrest and Deconditioning
Alcohol or Drug Withdrawal	Bladder Catheters and Other Devices
	Delirium
	Hearing and Visual Impairment
	Urinary Urgency and Incontinence
	Use of Physical or Chemical Restraints
	Unsteady Gait
	Patient Room Layout

Table 2. Rhode Island Hospital Fall Risk Assessment Tool

Safety Risk Factor Assessment	
Confusion/Disorientation/Agitation	6
Unable to Rise From a Chair Independently	6
Altered Elimination Bowel/Bladder	5
Depression	1
Generalized Weakness	2
Prescribed Benzodiazepines/Antiepileptics	2
Dizziness/Lightheadedness	2
Sensory Loss – Hearing Loss	2
History of Falls (within last 6 months)	4
Potential Drug/Alcohol Withdrawal	1
Final Risk Score	

Risk Score Level Key: 0-5 points = Safety Level 1, >5 points = Safety Level 2

Table 3. Fall Precautions Protocol at Rhode Island Hospital Category Action

1. Identification	Placing a Falling star sign outside their door Placing a Falling star on the assignment board in order to see where the high fall risk patients are located A fall precaution arm band to notify other departments patient is a fall risk A fall precautions order entered into the computer
2. Monitoring	Hourly rounding to focus on the 3 Ps - Pain, Potty, and Positioning. Early and frequent ambulation to prevent deconditioning Encouraging patients to call for help Frequent toileting
3. Physical Environment	Call light within reach at all times Use of bed alarms or chair alarms Lowering beds
4. Patient Specific Interventions	Avoidance of using bladder catheters Double sided slippers at all times Remove intravenous lines when no longer medically necessary Using activity apron for patients with dementia Avoid sedative use Back rub and warm milk at bedtime to promote sleep

censed practical nurses, physical therapists, occupational therapists, ad hoc physicians including a geriatrician, and pharmacists.

The team reviewed a year's worth of occurrence reports to recognize trends. One major trend: a majority of the falls occurred in the context of toileting. Bladder catheters were a significant risk factor. Paradoxically, catheters often resulted in an increased urge to urinate, and seemed to confuse patients with mild cognitive impairment, dementia, or delirium.

A literature review on prevention of falls in acute care settings cited the common risk factors to consider when screening patients. (Table 1) Our aim was to minimize modifiable risk factors and identify patients at risk for falling.

Developing a Fall Prevention Intervention

The first task was to increase identification and communication of high-risk patients. A "falling star" (the symbol for our program) is posted on a sign at the entrance to patient rooms and on the assignment board. In addition, a nursing order protocol was developed in order for the staff to choose individual plans of care for their patients. These orders print three times a day and are reflected on the printable care plan, which the staff uses for change of shift report.

Every patient, on every admission and every shift, is screened to determine if they are at risk for falls. If the patient scores a six or higher on our assessment scale (Table 2), the patient will be placed on fall precautions. The team made several modifications to the previously used protocol. These modifications included developing 4 categories: (1) identification of high-risk patients, (2) monitoring, (3) modifying the physical environment, and (4) patient specific interventions. (Table 3)

In addition to the falling star sign, an armband is placed on a patient, and an order is placed in the computer order entry system to alert outside departments of the status. Once the patient has been identified, the staff implements multiple interventions; e.g., hourly rounding, repositioning, early and frequent ambulation to prevent deconditioning, encouraging patients and families to call for assistance, keeping all essential items within the patient's reach, and offering frequent toileting.

Additionally, the clutter is minimized or eliminated, and bed alarms and chair alarms may be utilized. Finally, patient-specific interventions such as removing bladder catheters, using double sided slippers at all times, and elimination of unused or unnecessary intravenous lines are implemented.

The team also recommended changes to the nurse documentation forms that helped cue staff on different interventions to use with a particular patient.

The educational rollout of the intervention consisted of fifty classroom classes, held at various times to facilitate attendance. Multimedia techniques, video, PowerPoint, music, and didactic presentations were used. Historically at RIH, new educational rollouts were presented only to the management team with the expectation that unit managers would then educate the frontline staff as effectively as the nursing education members. The message was not always consistent and the education of frontline staff was not always optimal, therefore we elected this new strategy of classroom education.

The new fall prevention intervention was implemented in June 2008 in the 14 medical-surgical units, followed by the 10 intensive care and step-down units in July 2008. Although the program is consistent across all units, the patient-mix and acuity varies across the critical care units as compared to the medical-surgical units, therefore, the education and rollout occurred separately.

Results

Although the fall rates initially rose slightly, the subsequent three months showed a significant decrease in falls, and falls with injury. Since then, the fall rates have had a minor increase, but falls with injury have decreased below the national average.

One specific unit whose patient population is mostly head trauma and the neurologically compromised had a higher fall rate going into the intervention. After implementation of the intervention, the unit has recently gone 27 days without a fall, a dramatic achievement, and demonstrated a decrease in fall average of 14.18 falls per 1000 patient days down to 2 falls per 1000 patient days.

Upon further evaluation of recent falls, it was determined that toileting continued to be a factor in patients' falling. This area of patient care will be the team's next intervention target.

Conclusion

The development and roll-out of a fall prevention program is only the beginning; constant monitoring and reassessment remains crucial. In order for a program to be successful, the staff, unit management, and senior leadership must remain

in alignment with the goals of the project and keep fall prevention as a priority for the long run.

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Screening Colonoscopy In the Underserved Population

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The **Centers for Disease Control and Prevention** (CDC) report that as many as 60% of deaths from colorectal cancer could be prevented if everyone age 50 and older were screened regularly.[1] Despite that, the **National Heath Interview Survey (NHIS)** showed that in 2005, only about half of US adults age 50 or older had undergone a sigmoidoscopy or colonoscopy within the previous 10 years or had used a fecal occult blood home test kit within the preceding year.[2] A 2004 CDC study found that about 41.8 million people of average risk for colon cancer aged 50 or older had not been screened for colorectal cancer according to national guidelines.[3,4]

In 2008 only 25 states mandated coverage of colon cancer screening; another 3 mandated insufficient coverage.[5] Compared to coverage for breast cancer screening, which is mandated in 50 states, the disparity is shocking, because mortality from colorectal cancer is higher. To Rhode Island's credit, the American Cancer Society has given our state a grade of "A" for legislation that requires insurers to cover accepted screening guidelines, including coverage of future advances in screening methods.[5]

Recent data put forward by the Department of Health demonstrate the great need for better colon cancer prevention in Rhode Island. This year's Rhode Island Cancer Registry's Cancer Surveillance Report points to 650 new cases of colorectal cancer diagnosed in 2008, and 190 deaths attributed to this cancer.[6] Rhode Island has a higher colon and rectal cancer incidence than does the general United States population.[6] In Newport County, there has been a gradual decline in the incidence in colorectal cancer: incidence was most recently reported as 33.8 cases per 100,000 in 2006, down from as high as 63 cases per 100,000 in 1996.[7] It is plausible that this decline has been the result of better screening of the population with the removal of colon polyps before they progress to cancer. This data would imply that screening efforts are working.

A recent study by Badalov et al., presented at the 2008 meeting of the American College of Gastroenterology, reports that their group in New York did 288 screening colonoscopies on eligible patients, with no insurance coverage. The average age was 55 years old. Five patients had early stage I or II cancer and twenty-two had polyps greater than one cm (at greater risk to become a cancer). The researchers estimated that if these cancers grew undetected until patients were 65 and covered by Medicare, treatment would cost $1,295,000. They estimated that a screening program for colon cancer in a patient population averaging 10 years prior to Medicare eligibility would save at least 2 dollars for every dollar spent.[8]

The Rhode Island Department of Health estimates that there are 9000 uninsured underserved patients aged 50 to 65 in Rhode Island.[9] In light of our serious economic downturn, this number is now undoubtedly higher. These patients, who struggle to meet their basic health needs, don't have ready access to screening tests and other preventative health measures. Since screening for colorectal cancer not only saves lives, but is cost effective to society, it is imperative that a program be established to provide screening colonoscopies for these patients.

In a recent survey of Rhode Island Health Center Association physicians, providers expressed frustration about obtaining screening colonoscopy for their patients under age 65. They reported the waiting list was so long, up to two years, that they often referred patients to emergency departments for care. This underlines the need and desire for a local colorectal cancer screening program.

In response to the great need for screening colonoscopy for the underserved population, a group of gastroenterologists, internists, and administrators has started an initiative, "**Screening Colonoscopy in the Underprivileged Population**" **(SCUP).** SCUP's mission is to provide free screening colonoscopy to Rhode Island patients between 50 and 64 years of age, who have no insurance coverage. The gastroenterologists and surgeons performing this prcoedure are participating pro bono, with no reimbursement. The colonoscopy will be performed at hospitals, outpatient endoscopy units, and ambulatory surgical centers throughout Rhode Island. The SCUP initiative addresses many of the barriers patients face in obtaining this care; i.e., patients' fear and misunderstanding of the procedure, primary care providers not suggesting or explaining the necessity of the test, cultural perceptions of medicine and screening, access to care, language barriers, and cost of procedure and preparation.[10-16]

SCUP is working to link volunteer gastroenterologists and surgeons with over 30 Rhode Island Community Health Association Clinics and the Rhode Island Free Clinic. Physicians at the healthcare clinics will identify patients who qualify, will discuss with the patient the need for colonoscopy, and will provide instructions and orders for cleansing. The community health center will then fill out SCUP intake forms and forward them to designated screening colonoscopy providers, who will initially do 5 cases per month per clinic.

Reports of the findings will be sent back to the referring community health center for evaluation and management, along with a copy of the report to the SCUP committee. The RI Health Department will be provided with annual reports on the SCUP activity.

SCUP initiated a pilot program on April 1, 2009 in the Newport area with intention to expand throughout Rhode Island. Thus far, it has served patients enrolled in seven community health centers. SCUP hopes to address the significant need for screening colonoscopy in this state and provide the underserved population with this vital, life-saving, cost-efficient screening.

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Disclosure of Financial Interests

The authors have no financial interests to disclose.

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2009 Tar Wars Rhode Island Statewide Poster Contest

At the Woodlawn Community Center in Pawtucket, RI, on May 9, 5th grade students from more than 25 Rhode Island elementary schools competed in the 16th Annual Tar Wars Rhode Island Statewide Poster Contest. Olivia Houston (The Pennfield School, Portsmouth) won the top prize, an all-expenses paid trip to the National Tar Wars competition in Washington, DC. Bianca Martin (Fallon Memorial School, Pawtucket) won second-prize, a $75 gift certificate to the Providence Place Mall. Olivia DeAngelis (R. C. LaPerche School, Smithfield) won third prize, a $50 gift certificate to the Providence Place Mall.

The judges included Dave Davignon, coordinator at the Woodlawn Community Center; Dr. Vera DePalo, President-Elect of the Medical Society; Dr. Patricia Flanagan, Board Member of the Rhode Island Chapter of the American Academy of Pediatrics; Amy McIntyre, Board Member of the Rhode Island Academy of Family Physicians; and Barbara Morse Silva, Channel 10 News Reporter. The Rhode Island Academy of Family Physicians, the Rhode Island Chapter of the American Academy of Pediatrics, the Rhode Island Medical Society Foundation, and Woodlawn Community Center continued to support this educational program.

The American Academy of Family Physicians developed Tar Wars in 1988. It is designed to teach children to think analytically about tobacco advertising, help them make informed choices, and resist peer pressure. Each year, RIMS member physicians volunteer their time to visit elementary schools, where they involve up to 2800 pupils in the program. "Having been a part of Tar Wars Rhode Island since its inception, I have seen first-hand the powerful impact this program has on children. From their classroom participation to their enthusiasm in creating unique poster designs, students are able to take what they learn in the classroom and apply it to their lives," states Arthur Frazzano, MD, chairperson of Tar Wars Rhode Island.

Much of the success is due to the commitment of the physician presenters. For anyone interested in participating in the 2010 Tar Wars program, contact Catherine Norton at 528-3286. Volunteer presenters are always needed, and no experience is necessary.

JUDICIAL DIAGNOSIS

The FTC Red Flags Rule
Requirements of Healthcare Providers For Compliance

Linn Foster Freedman, JD

On February 26, 2009, the Federal Trade Commission (FTC) reported identity theft as number one, for the ninth year in a row, on its list of top consumer complaints received in 2008. The FTC received over 1.2 million consumer complaints in 2008; the 313,982 identity theft complaints accounted for 26% of the total. The FTC has proposed identity theft regulations known as the Red Flags Rule that require mandatory compliance by healthcare providers no later than August 1, 2009. Although the **American Medical Association (AMA)** and other related entities have challenged whether or not healthcare entities are required to comply with the Red Flags Rule, in a February 4, 2009, correspondence to the AMA, the FTC declared that health care providers are subject to the Red Flags Rule.

The Red Flags Rule require physicians and hospitals to develop and implement written identity theft prevention programs to identify, detect and mitigate against theft when "red flags" are present by August 1, 2009. The purpose of the Rule is to try to prevent identity theft.

Health care providers must be concerned about medical identity theft, which is the misuse of another individual's personal information (such as a name, date of birth, social security number or insurance policy number) to obtain or bill for medical services or goods because the result can harm patient care, if a provider utilizes incorrect information to treat a patient. In addition, health care providers may be unable to bill and receive payment for services performed on a patient who is perpetrating a fraud.

To comply with the FTC Red Flags Rule, healthcare providers must develop and implement a written program with policies and procedures in place by August 1, 2009, to detect, prevent and mitigate identity theft, including policies to identify red flags and incorporate red flags into its compliance program, detect red flags that have been incorporated into the program, respond to any red flags that are detected to prevent and mitigate identity theft and ensure that the program is updated periodically. The Board of Directors or managers of the entity must approve the Red Flags Rule program. The program should be overseen, implemented and administered by a member of the Board or senior level management, should be updated and reviewed at least annually and employees should be trained with respect to what red flags are applicable to the entity and how to respond to those flags. In addition, any Business Associate Agreements must be amended to include that all business associates of the healthcare provider also comply with the Red Flags Rule.

What does this mean for small or large practices? It means that a written program must be developed and employees supervised on proper practices for authenticating every patient through obtaining corresponding forms of identification and responding to suspicious documents, inquiries or complaints. The Red Flags Rule Program developed for the practice should be tailored to the size and experience of the practice, and should not be burdensome to implement.

The Red Flags Rule went into effect for health care providers in Rhode Island on August 1, 2009. A non-complying entity may be subject to civil action by the FTC. In the case of knowing violations, fines of up to $2500 for each violation can be assessed.

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Doctors and Torture

Herbert Rakatansky, MD

The Obama administration has stated that persons who participated in torture will not be prosecuted if they believed in good faith the advice from senior officials that those activities were legal.

Reports suggest that up to 50% of victims report physicians serving in an oversight capacity. As members of a profession dedicated to upholding high ethical principles, however, physicians may not be excused from responsibility for unethical actions by a governmental statement that such activity is legal.

In the Nuremberg trials, many high-level defendants pleaded: "I was only following orders." It was not an acceptable defense. Nor was legality a defense: the horrific experiments done by the German doctors were legal in Nazi Germany. One characteristic of a profession is that it establishes standards of behavior for its members. In the US, indeed throughout the world, it is clear that doctors act unethically if they participate in torture.

The **American Medical Association** (**AMA**) Code of ethics unequivocally prohibits doctors' participation in torture. Notably, "participation" includes the monitoring of the victim so that the torture does not "go too far." The Code offers no reason that justifies torture. Physicians may treat prisoners who have been tortured after the fact and only if such treatment is not used as part of the process of torture.

> *Opinion E 2.067*
> *Torture refers to the deliberate, systematic, or wanton administration of cruel, inhumane, and degrading treatments or punishments during imprisonment or detainment.*
> *Physicians must oppose and must not participate in torture for any reason.*
> *Participation in torture includes, but is not limited to, providing or withholding any services, substances, or knowledge to facilitate the practice of torture. Physicians must not be present when torture is used or threatened.*
> *Physicians may treat prisoners or detainees if doing so is in their best interest, but physicians should not treat individuals to verify their health so that torture can begin or continue. Physicians who treat torture victims should not be persecuted. Physicians should help provide support for victims of torture and, whenever possible, strive to change situations in which torture is practiced or the potential for torture is great.*

When there is a conflict between the law and a "bright line" moral standard, such as torture, the moral standard must trump the law. For example, the state may not compel a physician to execute a person. The state may not compel a doctor to treat a person in a medically inappropriate manner. And the state should not compel a doctor to participate in torture. The AMA Code specifically recognizes the responsibility of the physician to uphold ethical behavior even if it violates existing law.

> *Opinion E 1.02*
> *Ethical values and legal principles are usually closely related, but ethical obligations typically exceed legal duties. In some cases, the law mandates unethical conduct. In general, when physicians believe a law is unjust, they should work to change the law. In exceptional circumstances of unjust laws, ethical responsibilities should supersede legal obligations.*
> *The fact that a physician charged with allegedly illegal conduct is acquitted or exonerated in civil or criminal proceedings does not necessarily mean that the physician acted ethically.*

Whether doctors who participated in torture will be subject to criminal prosecution under federal law is not clear, but I suspect it is unlikely. Doctors are licensed to practice medicine by each state, not by the federal government. Ethical behavior is a criterion for licensure in each state. The AMA Code of Ethics sets the generally accepted standard for ethical behavior. The AMA, however, is a membership organization without either the means or resources to determine the actual facts in these very difficult cases. Even if a doctor clearly participated in torture, the AMA's only power over that doctor would be termination of AMA membership if he/she were a member.

Support of a safe, supportive environment for victims, where they can report their experiences without fear, is critical. The **Physicians for Human Rights** (**PHR**) has advocated for victims and accountability for participants. Its Campaign Against Torture examines and treats victims as well as documents evidence of the torture. This evidence, gathered from a variety of sources in accordance with The Istanbul Protocol, can be used by victims who wish to pursue legal redress. The Campaign Against Torture, in an expansion of its role, would proactively present evidence of physician participation in torture to medical licensing boards (with the permission of the victim) if the identities of the participating doctors were known. The records, which so far have been available for review, however, have been redacted with names of the participants deleted. Information from observers of and other participants in the torture is critical. The government has this information. But it is highly unlikely that name-specific data will be released. Persons who offer such testimony would be at significant risk and must be protected from retribution and retaliation.

A broadly supported, independent commission sponsored by PHR, AMA and other medical organizations and dedicated

to the investigation and documentation of physician participation would reaffirm our Profession's dedication to the highest ethical standard. The commission would facilitate the use of this data so that such egregious lapses in physician behavior can be considered in the licensing process. Such a project is likely to encounter significant political opposition, though RI Senator Whitehouse is a leader in advocating for accountability in this matter. Funding for this effort could come from contributions from medical organizations, the public and grants.

Each licensing board then would weigh the evidence in each case relative to state law and in accordance with due process decide if the doctor should retain the right to practice. Since licensing boards have little or no experience in this arena, the national Federation of State Licensing Boards should promulgate guidelines to assist the state boards. One barrier to this process is the reluctance of licensing boards to tackle this issue. Public pressure, however, may play a role in forcing the process.

In a parallel situation federal policy requires government lawyers found guilty of professional misconduct by the **Department of Justice** (**DOJ**) Office of Professional Responsibility to be referred to their state bar disciplinary tribunal unless the guilty finding is overturned on internal DOJ appeal.[1]

Medical organizations also should educate their members about their ethical responsibilities and the consequences of ignoring them.

The argument that doctors who participate in torture are absolved of their ethical responsibilities and therefore do not deserve to suffer consequences, because the government declared these actions legal, is not valid.

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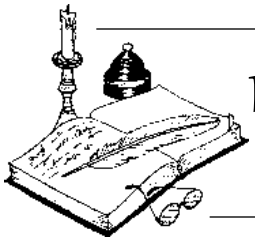

Physician's Lexicon

The Couched Words of Psychoanalysis

Greek mythology has provided the art of psychoanalysis with a multitude of metaphoric tales and immortal characters; and certainly the myths of Oedipus, Eros and Psyche must be preeminent amongst these wondrous stories.

The ruler of Thebes, Laius, and his wife, Iocaste, were childless. And so Laius sought guidance from the Delphic Oracle, who warned him that any son born to Iocaste would ultimately slay him. Iocaste then caused Laius to be intoxicated, Laius, in inebriated confusion, caused Iocaste to become pregnant. A son was born nine months hence and Laius had the infant abandoned on a mountain side but first Laius had the infant's feet pierced with nails. A shepherd found the helpless infant; and because of his injured and swollen feet, named him Oedipus [Greek for swollen, as in the word oedema; feet, as in pedal.] The adult Oedipus killed Laius in a roadside encounter, not knowing that the victim was his father; nor did Laius know his biological relationship to his slayer. Oedipus then married the widow of Laius, Iocaste, thus fulfilling the morbid incest prophesy of the Oracle, and, in passing, provided a core theme of modern psychiatry with a fitting mythic icon.

The other crucial terms in narrative psychiatry pale in vitality to Oedipus. The word, anxiety, is from the Latin, *anxietas*, meaning variously anguish or solicitude. Etymologists trace it further to the Latin, *angere*, meaning to press together, to throttle, and ultimately, the source of the English words, anger and angina. Depression descends from the Latin, *depressare*, meaning to press down, to plant deeply; and earlier, from the Latin *premere*, to squeeze, to weigh heavily upon.

Psyche, a maiden in Greek mythology was loved by Eros and became the earthly personification of the human soul. A psychiatrist, hence, is a healer of the soul. The Greek root, *iatros*, means physician [as in pediatrician, geriatrician and iatrogenic.]

Eros—while undeniably the Greek god of love—was never considered powerful enough to be amongst the twelve Olympian Board of Directors; still he was not to be denied a legitimate role in the creation of new English words such as erotic, erogenous and erotomania, and in the male name, Erasmus, meaning a loved one. The word, erosion, however, is derived from the Latin, *erodere,* meaning to gnaw or consume.

– Stanley M. Aronson, MD

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Fifty Years Ago, August 1959

Alton Ochsner, MD, Director of Surgery, Ochsner Clinic and Ochsner Foundation Hospital, New Orleans, won the 76th Caleb Fiske Prize Essay, with "Bronchogenic Carcinoma – Predisposing Causes." The Journal printed the essay. Dr. Ochsner cited the soaring incidence of lung cancer in the United States: in 1920, lung cancers comprised 1.1% of all cancers; in 1930, 2.2%; in 1959, 10%. He predicted that "unless something is done to prevent it, approximately 25 years hence cancer of the lung will represent 30% of all cancers today." In England in 1952, 26% of all cancers were lung cancer; but researchers ruled out smog as the key difference, because the incidence of lung cancer in Denmark was the same, yet Denmark had no smog. Dr. Ochsner blamed the American increase on cigarettes. Although Americans smoked more than the British, "we have done so for approximately only 9 years." Before then, more Britons smoked. Several studies supported the "obvious" link between cigarettes and lung cancer; specifically, the American Cancer Society prospective study of 20,000 men ages 50 to 70 over 5 years (the death rate in heavy smokers was 800% higher than in non-smokers), and a similar Veterans Administration study.

Rudolph W. Pearson, MD, in "The Surgical Approach to Improvement in Hearing," discussed the 15 year-old Stapes Mobilization procedure.

Robert W. Hyde, MD, Superintendent, discussed "The Butler Health Center – First Full Year of Operation." Most patients were admitted directly from the community: 85% of outpatients, 64% of day patients, 85% of residential patients.

An Editorial, "Physician Support of Medical Schools," noted that Rhode Island physicians contributed on average $43 annually to medical schools (either through alumni funds or through the American Medical Education Foundation), compared to a national average of $39.

Marc Woodward, Assistant Executive Director, Health News Institute, New York, addressed the 148th annual meeting, Rhode Island Medical Society. In "Detailing is also Public Relations," Mr. Woodward deplored the climate of mistrust: "Are we, the members of the health team, going to leave it to the self-seeking politicians who instigate inquiries for their own aggrandizement, to explain to their constituents the complexities of medical care…are we going to leave it to…a headline-seeking press to assess the costs of medication, hospitalization and doctors' fees?" He traced the genesis of the Health News Institute, geared to giving a "true picture." Given that 15,000 detail men, operating 5 days a week, making 5 calls a day, would make 18,750,000 contacts a year, Mr. Woodward praised their role in improving public relations.

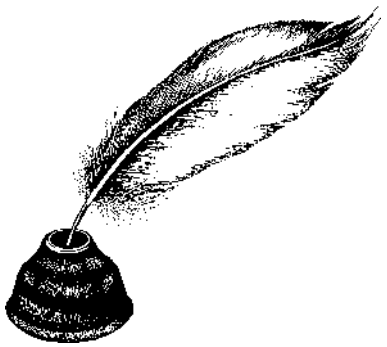
Twenty-Five Years Ago, August 1984

Annette J. Bicho and Richard A. Keenlyside, MBBS, in "Southeast Asian Refugees of RI: Health Screening," reported: "This tiny population of immigrants on arrival is basically healthy and free of communicable disease." Since 1981, 1650 Southeast Asian immigrants had settled in RI; 83% were screened. The most common findings were intestinal parasites (25.2% affected, 86% treated), a positive PPD (21.4% affected, 87% treated), and dental problems (16% affected, 38% treated).

William H. Hollinshead, MD, MPH, and John M. Migotsky in "Southeast Asian Refugees of RI: A Preliminary Analysis of Birth Records," reported that of 737 live births from 1978 to 1982, 427 were to Hmong parents; 192 to Cambodian parents; 118 to Laotian and other Southeast Asian parents. Many parents were opting for home deliveries.

James M. Nyce, MA, and William Hollinshead, MD, MPH, in "Southeast Asian Refugees of RI: Reproductive Beliefs and Priorities among the Hmong," noted: "…the lack of understanding of traditional beliefs and exclusion of family and clan may create difficulties with delivery of services." For instance, parents feared the loss of their child's soul; they preferred to deliver at home because "the infant's soul tends to remain at the place of birth." Anesthesia is "regarded as a poison…the longer the period of unconsciousness, the worse the memory loss will be." Hospitals bar families from the labor and delivery rooms – another fearful step for Hmong parents. Also, Hmong parents rely on a wide spectrum of herbal remedies. The authors urged physicians to adapt to patients' beliefs.

Michael A. Ingall, MD, in "Southeast Asian Refugees of RI: Psychiatric Problems, Cultural Factors and Nightmare Death, " discussed two cases of nighttime death, hypothesized in the literature as the sequelae of frequent nightmare psychic trauma, resulting from war, poverty and relocation. One patient died (the subsequent autopsy plunged the family into its own trauma); the other came to grips with his fears, using a combination of traditional beliefs and modern psychiatry.



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