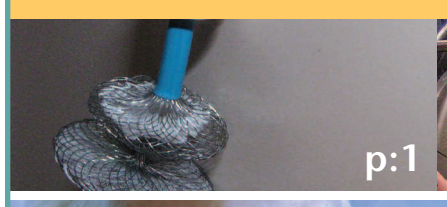
ISSUE PREVIEW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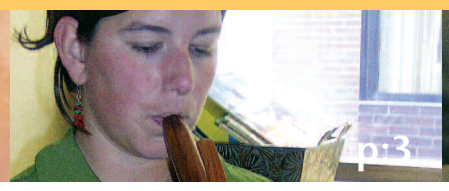
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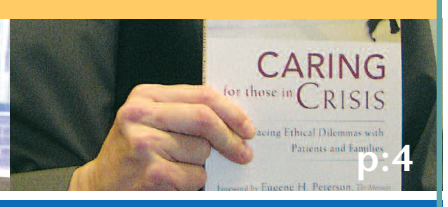

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HEALTH NEWS

Bozeman Deaconess HOSPITAL

THE MARVELS OF MODERN MEDICINE

AUGUST ISSUE—2007

BOZEMAN DEACONESS IMPLEMENTS SMOKE FREE CAMPUS POLICY

PATIENTS AND EMPLOYEES will now be able to take a deep breath on the Bozeman Deaconess campus. That's because on August 1, Bozeman Deaconess implemented its smoke-free campus policy.

Tobacco use is the number one cause of preventable death in the United States. According to the Centers for Disease Control and Prevention, cigarette smoking is responsible for about one in five deaths in the United States annually, or about 438,000 deaths per year.

"Tobacco products have been shown to have devastating effects, not only for the tobacco user, but also for their families, friends and the community as well," said John Nordwick, President and CEO of Bozeman Deaconess Health Services. "This policy is a step in the right direction—reduced secondhand smoke exposure will ultimately save lives."

Effective August 1, 2007, smoking is prohibited on Bozeman Deaconess property and in buildings. The policy includes all buildings, parking lots, driveways, sidewalks and walkways on Bozeman Deaconess property. Those asked to comply with the new policy include: employees, medical staff and medical office staff, volunteers, patients, contractors, vendors, and visitors. The policy expands the current smoking restriction inside buildings. All Bozeman Deaconess employees are authorized to communicate the new policy with courtesy, respect and diplomacy.

Bozeman Deaconess will post signs in and on buildings and parking lots throughout the property to alert individuals to refrain from smoking while on campus. The website will also alert patients and visitors of the policy.

For more information, call the Health Information Center at 522-1644 or logon to the website at www.bozemandeaconess.org.

Bozeman Deaconess Offers Minimally Invasive Procedure to Correct Heart Wall Defect

CARDIOLOGIST DANE SOBEK, MD, of Cardiology Consultants of Bozeman is a physician on medical staff at Bozeman Deaconess Hospital. Recently he performed the first two catheter-guided procedures at Bozeman Deaconess to correct the congenital heart defect that, if left undiscovered or untreated, can cause strokes. Only two Montana hospitals offer the minimally invasive Patent Foramen Ovale (PFO) closure. Until recently, open-heart surgery was the only repair option.

The foramen ovale is a flap between the two atria of the heart. In most cases, the flap closes naturally at birth. By age 2, flap fusion is complete in 75% of children. If the opening remains open or partially open, blood that isn't yet filtered by the lungs can seep through. A 'hole in the heart' is sometimes an inherited condition; others only learn they have the opening, or patent, when they suffer a stroke.

While causes of patent (open) foramen ovale are unknown and the condition is mostly asymptomatic, an increase of PFO is seen in patients with cryptogenic stroke (stroke of indeterminate origin). Additionally, migraine is found to be more common in cryptogenic stroke patients with PFO.

Cardiologists diagnose PFO in stroke patients, after ruling out other causes and risk factors. Sobek confirmed through ultrasound of the heart that both his patients—one age 35, one 45—had an open flap.

During the less invasive PFO closure procedure, a thin catheter tube is threaded to the heart from blood vessels in the groin area. Using x-ray and intravenous contrast dye, the catheter is guided to the heart where the PFO is measured. Once fitted for size, the closure device is placed on a separate delivery catheter and advanced across the PFO, placed to cover both sides of the hole and then released. The device—two nickel and titanium mesh/polyester fill patches—is implanted permanently, stopping the abnormal flow of blood between the two atria chambers of the heart.

Benefits of percutaneous closure include avoiding surgical repair—longer hospital stay and recovery time, surgical scar—and possibly eliminating the need for lifelong drug therapy to prevent strokes.

The Cardiac Cath Lab procedure usually takes 2 hours; it takes 4–8 hours for the vein to seal. Most patients go home the day of the heart wall defect procedure, others the next morning. Jennifer Kack, RN, Manager of the Bozeman Deaconess Cath Lab, says follow up involves six months of medication to prevent blood clots, antibiotics for certain medical procedures for six months, and a repeat echocardiogram at six months.

For more information about Cardiac Cath Lab services for adults at Bozeman Deaconess, contact Jennifer Kack at 522-1685. Charitable contributions have largely funded the expansion of Cardiovascular Services.

Bozeman Deaconess
915 Highland Boulevard
Bozeman, MT 59715

BOZEMAN DEACONESS HEALTH GROUP OFFERS HOSPITALIST PROGRAM

IN THE "OLD" DAYS the hospital relied on the entire medical staff to cover Emergency Services. It wasn't until the mid-90s that the ER at Bozeman Deaconess was fully covered by emergency medicine physicians. The specialty, then in its infancy, is now widely accepted by primary care physicians and patients alike.

Another new specialty, hospital medicine, is emerging. Just as emergency medicine doctors take over for primary care physicians during an ER stay and turn patients back over to their primary care physician when the patient leaves the ER, hospitalists have a similar role in caring for inpatients who return to their regular doctor after discharge.

Hospitalists—usually internal medicine physicians with specialty training who work exclusively with inpatients—now care for some patients of Bozeman Deaconess Health Group clinics (Internal Medicine Associates, Robert A. Hathaway Internal Medicine and Bridger Internal Medicine) at Bozeman Deaconess Hospital. Bozeman Deaconess Health Group launched the hospitalist program in April last year, hiring Kari Ritter, MD, a board certified internist who specializes in inpatient medicine.

John Robbins, MD, Medical Director of Bozeman Deaconess Health Group, says quality analysis studies show hospitalists improve patient outcomes and satisfaction. Bozeman Deaconess Health Group recently added a second hospitalist, Jim Attarian, MD, to the program.

With the new system the hospitalist assesses and admits patients, freeing up emergency beds and ER doctors for incoming patients. The new system also provides immediate coverage for post-op patients who develop urgent medical problems.

Bozeman Deaconess Health Group primary care physicians in clinical practice appreciate the hospitalist model. While it means they can better focus on office practice, "that's not the only reason we're making this change," says Pam Hiebert, MD. "If we ask ourselves, how can we improve the quality of patient care, the answer is to adopt a hospitalist model." She says hospitalists have expertise in complex medical care, managing post-surgical complications and inpatient disorders like sepsis and congestive heart failure. Because they don't care for patients in the clinic, hospitalists are available to write timely admissions and orders and provide smooth coordination between consultants, lab results, x-ray data and ancillary staff. There are specific core indicators that are proven to improve patient outcomes. These include providing aspirin to patients for acute myocardial infarction within 24 hours of arrival and antibiotics to patients with pneumonia within four hours. "The hospitalists provide and monitor care in real time and that helps improve quality and consistency of care," she said.

Robbins says communication is key to the success of the hospitalist program. Hospitalists have access to a priority dictation line with standard formats; same day transcription and immediate transmission of notes to the primary care physician which fosters seamless follow up.

Most hospitalist programs are subsidized. Communities who invest in the model do so because they recognize the connection between having "specialists in inpatient care" and improved quality and patient safety. "Community expectations are that we provide care commensurate with urban medical centers," said Robbins. "Having physicians dedicated to hospital care is one more way our growing community is keeping up with advances in medicine."

In 1996, Robert M. Wachter, MD, first used the term "hospitalist" to describe the few hundred physicians whose primary role was caring for hospitalized patients. In less than 10 years the number of hospitalists has grown to 12,000. By 2010, that number is expected to grow to 30,000, according to the Society of Hospital Medicine. A core curriculum for hospitalists, with a focus on teamwork, palliative medicine, medical consults for surgical admissions and knowledge about hospital systems, premiered in internal medicine residency programs in January 2006.

Patients, cared for by hospitalists, receive direct and immediate round-the-clock attention to changing medical status, full-time accessibility for family questions and conferences, reduced morbidity and mortality and improved experience and satisfaction, say proponents.

"Patients are adjusting to this change," notes Hiebert. "When they go in for hip surgery or to Billings for specialty care I don't necessarily see them daily or participate. It's also rare for primary care physicians to see their patients daily due to vacations, weekends and days off."

HYPERBARIC MEDICINE NOW OFFERED AT BOZEMAN DEACONESS WOUND CLINIC

"I HOPE IT REALLY WORKS ON ME, I really do," said Wound Clinic patient Don Suhr, a double amputee whose diabetes makes a pinch sore he got during wheelchair transfer very difficult to heal. If his ulcer heals, he'll be able to get out of a wheelchair and back on his prosthetic legs. Suhr is referring to his series of 90-minute treatments in the new hyperbaric chamber at Bozeman Deaconess.

According to Wound Clinic Medical Director Jon Robinson, MD, studies show that hyperbaric oxygenation therapy (HBO) stimulates blood vessel growth in injured tissues. "Our new hyperbaric medicine program is used for patients fitting very strict criteria—in conjunction with the progressive wound care they're already receiving at the Wound Center here at Bozeman Deaconess," he said. Dr. Robinson is with Bridger Orthopedics & Sports Medicine and physician on medical staff at Bozeman Deaconess.

What sets the Bozeman Deaconess Wound Clinic apart is its coordinated approach to patient care. People with wounds that aren't healing need to be seen daily and the Center is set up to do that. "Primary care physicians are able to refer problem wounds here, even before they become problem wounds," Robinson notes. "Since the Wound Clinic opened in August 2005, we've done half as many amputations," Robinson said. "We're not just healing sores, we're saving limbs. And that is a huge difference in quality of life."

Wound Clinic Manager Caryl Perdaems, OTR, CLT-LANA, CWS, says "we offer the most up-to-date equipment in our facility. By providing hyperbaric oxygen as an adjunct, we continue to expand our limb preservation program." The HBO program, launched in April, will largely be used to treat diabetic leg and foot ulcers, certain life-threatening tissue infections, traumatic crushing wounds, frostbite and burns, tissue damage caused by radiation and failure of skin grafts. Jon Robinson, MD and Bill Robinson, MD both have certification in hyperbaric medicine and see patients for their 90-minute treatments. The monoplace hyperbaric chamber is located in the new Perioperative Services unit on the second floor of Highland Park 4. Respiratory therapists who have training in hyperbaric medicine provide operational support—and TLC.

How does a hyperbaric chamber work?

While there's a limit to how much oxygen the blood can take in at room atmosphere, increased pressure in the chamber increases the amount of oxygen that dissolves in the blood. It's like being anywhere from 33 to 66 feet underwater where the pressure is 2-3 times greater than normal.

Before patients are selected for the relatively risk-free treatments—in addition to Suhr, a patient with radiation tissue damage is being treated—they are given a complete history and physical. Some patients report difficulty equalizing their middle ear during treatment and Bill Robinson says that if decongestants don't help, an ear, nose and throat (ENT) physician can place tubes that resolve the problem.

Suhr, who can communicate with medical staff during treatments through a telephone, says it's kind of like being in an airplane. "You yawn until they bring you to pressure," he said, noting that, even though the chamber is clear plastic, you don't want to be claustrophobic. Patients enter the chamber with no-vent sippy cups of juice. They breathe pure oxygen while in the chamber; some take 'air-breaks' every half hour, breathing regular air—with 21% oxygen—through a mask.

While Suhr receives his high-tech therapy, he's watching a black-and-white western on the digital flat screen TV monitor. He likes that John Wayne "always shoots the bad guys, always gets the girls."

For more information about the hyperbaric medicine program and the Wound Clinic contact Caryl Perdaems at 556-5512.

Respiratory therapist Alesha Rate talks to patient Don Suhr during his hyperbaric medicine treatment

STRESS IN THE WORKPLACE

Bryan McDaniel, PA-C

By Bryan McDaniel, PA-C, Certified Physician Assistant with Absaroka Emergency Medicine, and Bozeman Deaconess Occupational Health Services

A DEADLINE LOOMS. A disagreement with a co-worker ensues. You were supposed to leave 15 minutes ago to pick up your child from daycare but the boss needs you to stay late. Your New Year's resolution to lose those extra pounds seems impossible—you can't seem to make it to the gym after an exhausting day at work. Sound familiar? Are you energized by the prospect of these challenging situations? If you're like most of the American workforce, you probably experience stress when faced with any of these 'stressors.'

Stress is defined as an interaction between individuals and any source of demand within their environment. A stressor is the object or event that the individual perceives disruptive. Stress results from the perception that the demands exceed one's capacity to cope.

Studies identify numerous organizational factors that contribute to stress. The most common are job insecurity, shift work, long work hours, role conflict, physical hazard exposures and interpersonal conflicts with coworkers or supervisors.

It's well documented that elevated stress levels within an organization contribute to increased turnover, absenteeism, sickness, reduced productivity and low morale. There is a strong relationship between work stressors, depression, anxiety, mental distress symptoms, heart disease, ulcers and chronic pain.

In a 1991 Journal of Social Behavior and Personality article "Psychological stress in the workplace" R. Lazarus identified three main strategies for reducing workplace stress:

1. *Alter the working conditions so they are less stressful.*
2. *Help individuals adapt by teaching them better coping strategies for conditions that are difficult or impossible to change.*
3. *Identify the stressful relationship between the individual or group and the work setting. Intervention strategies might include better person-environment fit or teaching coping strategies like relaxation skills.*

In the event these strategies aren't realistic or are cost prohibitive, yoga has been well documented to reduce the deleterious effects of stress on the body through meditation, physical postures and breathing exercises.

Understanding and identifying your work-related stressors is an important step in confronting stress in your workplace. How you choose to deal with stress should be liberating and energizing but not a new source for stress.

Recommended Reading:
The Four Agreements, Don Miguel Ruiz; *Learn to Relax—a Practical Guide to Easing Tension and Conquering Stress*, Mike George; and *Learn to Balance Your Life*, Michael Hinz, PhD and Jessica Hinz, PhD.

Bryan McDaniel is a physician assistant at Bozeman Deaconess Occupational Health Services. The employee health clinic at Bozeman Deaconess helps businesses manage health care needs, from preplacement physical exams to comprehensive drug testing and wellness screening. In addition to health screening and diagnostic testing, Occupational Health Services provides a whole menu of educational and preventive services, including nutrition counseling and weight management. For more information about Bozeman Deaconess Occupational Health Services, call 556-5565.

MID LEVEL PRACTITIONERS

THEY'RE OFTEN CALLED PHYSICIAN EXTENDERS, non-physician providers or midlevel professionals. Some, advanced practice registered nurses (APRNs), are registered nurses who went on to complete specialized training at a master's degree level. They include licensed nurse practitioners, clinical nurse specialists, nurse anesthestists and certified nurse midwives. Others, physician assistants (PAs), are those with previous health care experience, mostly as emergency medical technicians, who attended university-affiliated physician assistant programs.

The role midlevel professionals' play at Bozeman Deaconess is varied and according to Liz Lewis, Senior VP of Operations/Legal, "largely physician driven." She says each of the 25 PAs and APRNs who have hospital privileges at Bozeman Deaconess are either employed by or have an association with an active medical staff member. Bylaws require medical staff 'Health Professionals' meet credentialing committee qualification criteria before they may see patients and keep charts at Bozeman Deaconess.

What's the difference between a physician assistant and nurse practitioner? Do they fill the same role in clinical settings? The biggest difference is that nurse practitioners are licensed by the Montana Board of Nursing and can go into independent practice. PAs are trained in a medical model and always deliver care in partnership with a physician. The role of both is often the same in similar clinical settings. Both can and do write prescriptions and all medical staff midlevels at Bozeman Deaconess always communicate with the primary physician about care issues.

In the 1960s, a shortage of physicians and a need to increase rural access to health care was mitigated when condensed medical training was offered to highly skilled military paramedics. Physician assistants spend 2 to 2 1/2 years studying a mostly generalist curriculum that includes 2,000 supervised clinical rotation hours. They must pass a national exam, after which they're required to complete 100 hours of CMEs every two years and retake exams every six years. Though PAs always practice medicine in partnership with physicians, they diagnose and treat patients independently. Today, close to 55,000 PAs 'extend' the physician role by staffing rural satellite clinics, filling in where teaching hospitals must now honor limits on residents' hours and, increasingly, they partner with primary care physicians in busy office practices.

Advance practice registered nurses (APRN) are registered nurses who have advanced education—entry level is a master's degree—and clinical training. Nationwide there are 140,000 advance practice registered nurses. APRNs are board certified (and reapply every five years) in their practice area and must take continuing education for practice and prescriptive authority. They are skilled in performing primary health services, particularly screening and prevention. APRN training is often more specialized than PAs. For example, many APRNs concentrate on women's health or family or adult medicine.

"We were initially slow to adopt the midlevel model here in Bozeman," said Mike Herring, MD, internist at Bozeman Deaconess Internal Medicine Associates. However, as physicians become overbooked and overworked, they find sharing patients with midlevels works well. "As example, Heather Hart, PA, is invaluable in helping us achieve our goal of instant access. We try to keep slots open for acutely ill patients, but they fill up quick." Heather Hart is a 1982 graduate of the University of Wisconsin-Madison Physician Assistant Program. She also earned a master's degree in Health Risk Management and Preventive Medicine for Physician Assistants at University of Chicago Medical School. She ran an acute care center at Northwestern Hospital and was in an internal medicine practice in Winnetka for eight years before she and her family moved back to Montana. During her four years in family practice in Three Forks, Herring reviewed charts and admitted Hart's patients to the hospital when needed.

At Bozeman Deaconess Internal Medicine Associates, Hart (along with three other midlevels) sees acutely ill patients along with her own caseload. She's very comfortable with procedures and is a good listener. "Sometimes," she says, "patients have fears and concerns about their health but aren't able to articulate them." She asks a lot of questions, provides counseling and is very careful with follow up.

Keven Comer, MN, RN, CS-FNP, was a certified critical care nurse in the Bozeman Deaconess ICU for 20 years. She attended the nurse practitioner master's program at Montana State University in 1995, when the program was just a year old. Her practice, Highland Family Clinic, recently joined the practice of Timothy Adams, MD, Bozeman Deaconess Bridger Internal Medicine. Comer provides primary care to 3,000 patients and makes rounds at nursing homes and precepts nurse practitioner students. "Not all patients need to see a physician," she said. When her patients need it, Comer consults or makes a referral.

The Emergency Services group of nine physicians hired four midlevel professionals who now provide 16-hour emergency department coverage daily. "We're seeing more minor, acute problems in the ER and having midlevels available allows us more time with complicated patients. But if we're real busy, they can stabilize a complex patient and get things in motion for us, saving time," said Jim Majxner, MD, Medical Director of Bozeman Deaconess Emergency Services and manager of Absaroka ER Physicians. He credits midlevel professionals with allowing Emergency physicians to see more patients more efficiently.

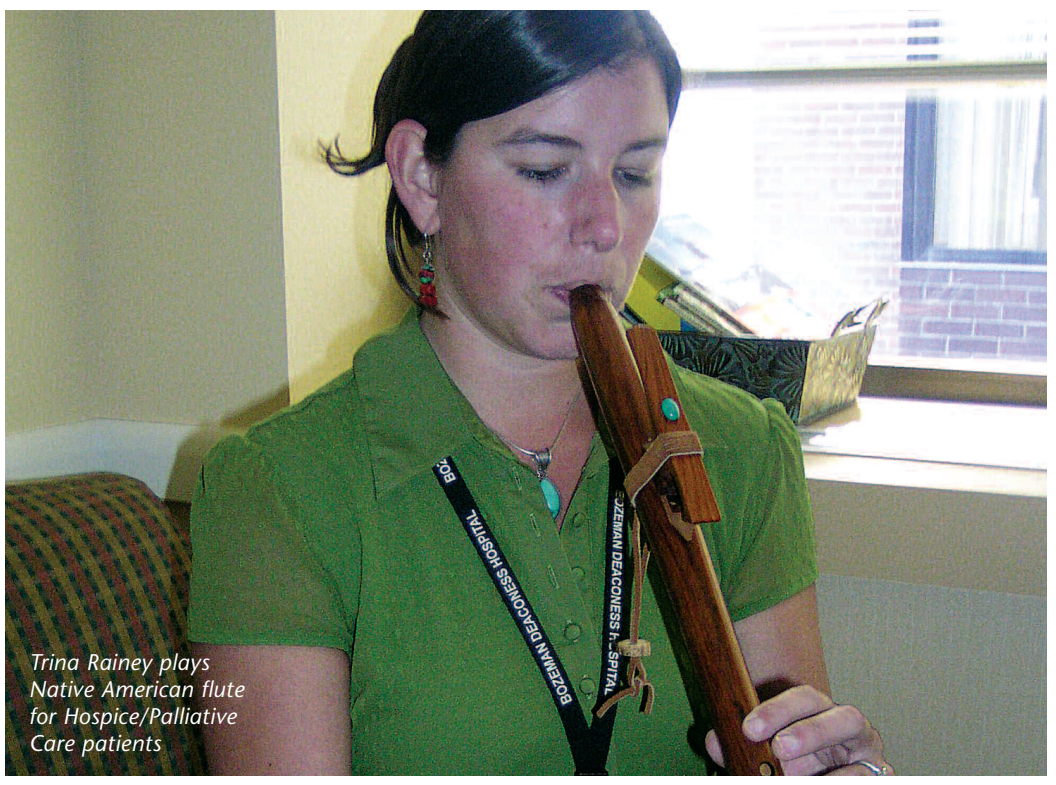
Eric Scranton, PA-C, one of the Emergency department midlevel clinicians, was a medic with an ambulance service in Vermont. He is a graduate of the Duke University Medical Center (birthplace of the physician assistant program, 1965) Physician Assistant Program. Scranton says his classmates were people with lot of life experience and, for the most part, had excellent people skills. "During clinical rotations we were treated more like interns than medical students," he recalls. He says the level of acuity a PA treats is dependent on the supervising physician/PA relationship and on the individual PA or NP level of competency. In the Emergency Services department, he tailors his approach to that of each physician. "We're not scheduled as heavily as the physicians, and they can take that extra minute to explain a test and connect with patients."

Mary Beth Siewert, NP, is one of two midlevel professionals who works in Bozeman Deaconess Occupational Health Services, a clinic supervised by Absaroka ER Physicians. She is a 1998 graduate of the Seattle Pacific University nurse practitioner master's program. She says the program helped her develop critical thinking skills, and although she had to seek out and arrange for the clinical skills training she needed, the program provided that flexibility.

As our population ages, we're going to see more and more chronically ill patients," said Comer. "Midlevels play an ideal role in helping care of patients with diabetes, hypertension and heart disease. People with chronic illness need education and that takes time." Having midlevels on the medical team, she says, frees up physicians to see the most complex and serious patients, "the sickest of the sick."

Currently, out of the approximately 50 midlevel professional PAs and APRNs in our medical community, 25 are credentialed 'Health Professionals' at Bozeman Deaconess. Those who have hospital privileges, in addition to Hart, Comer, Scranton, and Siewert are: **Patricia Cantrell, PA-C**; **Karen Claes, PA**; **Timothy DeVries, PA**; **Brian Frykman, PA-C** and **James Wiley, PA** of Bridger Orthopedics; **Rebecca Kane, FNP** of Bozeman Deaconess Cancer Center; **Karen Izbicki, PA-C** and **Joan Spannring, FNP** of Bozeman Deaconess Robert A. Hathaway Internal Medicine; **Deb Cades, PA-C**; **Brian Hood, PA-C**; **Bryan McDaniel, PA-C** and **Melissa Wolfson, PA** of Absaroka ER Physicians; **Christene McDonnell, PA-C**; **Lori Newman, FNP** and **Pat Oriet, NP** of Bozeman OB/GYN; **Blythe Lindsay, PA** and **Peter Gray, PA**; of Alpine Orthopedics and Sports Medicine; **David Jenkins, PA-C**, SW MT Plastic Surgery and **Sebastian White, FNP** and **Ted Preiss, PA**, Bozeman Deaconess Internal Medicine Associates.

HEALING HARMONY MUSIC THERAPY



Trina Rainey plays Native American flute for Hospice/Palliative Care patients

MUSIC THERAPY. It's a certified health care specialty and it's being offered at Bozeman Deaconess. Certified Music Therapist Trina Rainey works with Hospice and Palliative Care patients, providing assessment based goal-oriented treatments. Rainey completed her internship at Scripps Health in LaJolla, CA, and is a board certified music therapist. The daughter of a music teacher and psychologist/minister, she heads the referral-based business 'Healing Harmony Music Therapy.' In addition to serving diverse populations throughout the community—children with disabilities, older adults and professional groups—she sings or plays her Native American flute or guitar for hospice/palliative care patients. Currently, Rainey is an independent consultant with Hospice/Palliative Care; she sees the potential of using this therapy in other areas such as ICU, Maternal-Newborn and Cancer Center at Bozeman Deaconess.

"This is not entertainment, it is clinical therapy," says Rainey. "In the ICU I watch the heart rate monitor slow while I play. Research shows that music therapy done specifically for relaxation before surgery helps patients respond to medication faster and then, in recovery they heal at a faster rate, length of hospital stay is reduced and patients need less medication."

Rainey, who always plays live (not recorded) music so she can vary the tempo and lyrics, asks patients to select a song. "I've played Meatloaf to Frank Sinatra. The song they pick opens a door. I talk as little as possible. Music is another element that goes deeper than words," she says. Music, a whole brain activity, can bring a patient to a place of relaxation or provide a diversion from pain. "Or, a patient in hospice may need to hear that one song that makes them cry, allowing for emotional expression or release. I tell my patients that music is powerful and can make us laugh or cry and whatever it is they need to bring out, let's welcome that," she explains.

Hospice is sustained by generous donations through Bozeman Deaconess Foundation.

SAFER HOSPITAL PRACTICES SAVING LIVES

IN 1999, HEALTH CARE PROFESSIONALS and consumers alike were shocked to learn the extent of medical error related deaths throughout the nation's hospitals. The release of the alarming Institute of Medicine report "To Err is Human" brought an intense focus on quality and patient safety issues. "Throughout the country, hospitals are putting measures into place to prevent obvious errors. The emphasis is on evidence-based medicine and reducing medical errors by looking at more effective systems," says Bill Robinson, MD, Bozeman Deaconess Hospital Chief Medical Officer.

Robinson says studies prove that with specific interventions, deaths from medical error can be prevented. What is Bozeman Deaconess doing to prevent avoidable medical error and death? In 2005 it joined the Institute of Healthcare Improvement (IHI) 100K Lives Campaign that challenged 3,000 of the nation's hospitals to make health care safer to achieve the best possible outcomes for all patients.

Bozeman Deaconess implemented and monitored best practices models in five clinical areas—heart attacks, central line infections, surgical site infections, ventilator associated pneumonia and rapid response teams. "In five high risk clinical areas, we implemented a 'care bundle' of interdependent, scientifically grounded steps to prevent infections and death," reports Robinson. "Bozeman Deaconess received the 2006 Improvement Recognition Award from VHA Mountain States for our outstanding results in preventing healthcare associated infections."

Transparency plays a large role in reducing medical error. Any medical errors that occur, whether they cause harm or not, are openly discussed and analyzed in depth through a process known as root cause analysis to make sure that they will not happen again. Bozeman Deaconess now posts quality data—areas where the hospital is doing well and those it is trying harder in—on its own website located at **www.bozemandeaconess.org.**

Evidence-Based Measures Reduce Medical Error

Bozeman Deaconess has new safety and quality initiatives, technologies and reporting/monitoring systems:

- ***State-of-the-art medication delivery.*** Automated medication dispensers were recently placed in patient areas throughout the hospital. Omnicell dispensers and accompanying computer software facilitate patient profiling—a patient specific medication review by a pharmacist.
- ***"Time Out" before surgical procedures.*** Hospitals nationwide are now mandated to communicate verbally to double-check patient identity, surgery and surgical site; Bozeman Deaconess takes it a step further with visual boards.
- ***Hospital-wide handwashing campaign.*** Studies show hospital-acquired infection rates can be reduced by half when people who come into contact with patients regularly clean their hands. Germ-busting hand gel dispensers are now available at the entrance of every patient room.
- ***Developing an electronic health record system.*** The system will 'talk' to local physician practices so important clinical data will be available to the Emergency department when needed. Electronic health records, along with a new radiology image storage and distribution system, are tools that increase patient safety; both feature patient privacy protection.
- ***Online incident reporting system tracks actual and near misses.*** Patient safety depends on a hospital's knowing what's wrong so it can be fixed.
- ***Unsafe abbreviations initiative.*** Charts listing abbreviations no longer allowed in orders and medication-related documentation are posted throughout the hospital. They explain how 'don't use' abbreviations can lead to error and 'use instead' wording is made clear.
- ***Rapid assessment teams.*** A novel clinical approach to recognizing warning signs of inpatient cardiac arrest before an actual code, are available 24/7. Intensive care nurses and respiratory therapists assist bedside staff in identifying signs and symptoms of deterioration. The collaborative intervention saves lives—patients get quality assessment and an impending heart attack is thwarted.

IN MEMORY OF DR. GEORGE SAARI

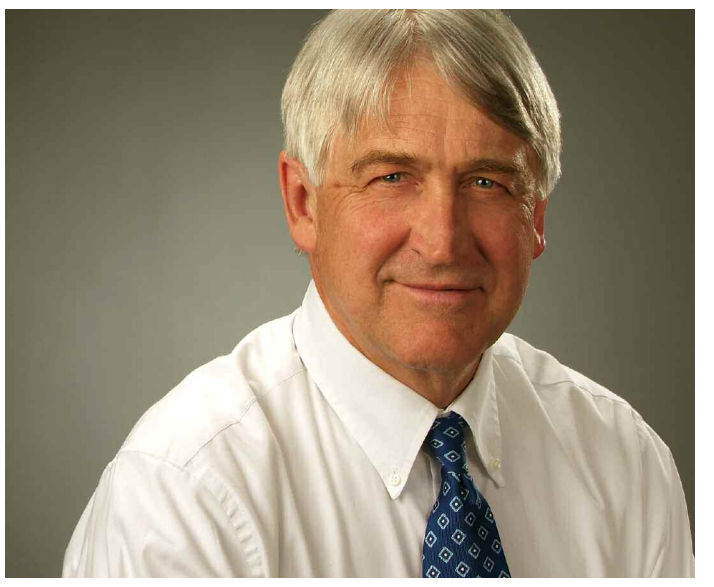
"Dr. Saari was highly respected as a physician and very well liked by his colleagues, patients and everyone who came in contact with him. He was unfailingly respectful, kind and a gentleman in every situation in which I saw him. Dr. Saari will be greatly missed by everyone who knew him."
—John Nordwick, CEO & President, Bozeman Deaconess Hospital

IT IS WITH GREAT SADNESS that we offer our condolences to the family of Dr. George Saari, a friend and longtime colleague. Dr. Saari died suddenly while skate skiing in Yellowstone on Saturday, March 24.

George Saari joined the medical staff at Bozeman Deaconess Hospital in 1985. A graduate of the Columbia University College of Physicians and Surgeons, he interned at Harborview in Seattle and completed residency in internal medicine at the University of Washington. Before moving to Bozeman, Saari researched immunology and rheumatology at the national hospital of Norway in Oslo and also served with the Indian Health Service in Washington and New Mexico.

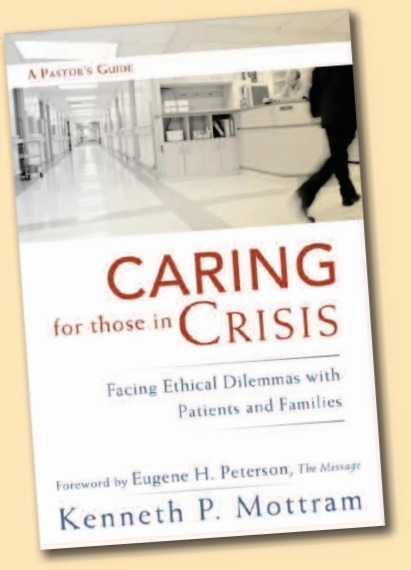
Saari taught first year medical students through the University of Washington regional WWAMI program. He was awarded the WWAMI Distinguished Teacher of the Year in 2003 and became associate director of the WWAMI program at Montana State University in 2004. Dr. Saari was board certified in internal medicine and a Fellow of the American College of Rheumatology.

Last year Saari refocused his Internal Medicine Associates practice to the evaluation of new rheumatology patients and supervision treatment of his long-term rheumatology patients.



Bozeman Deaconess Hospital Chaplain Writes Book on Medical-Ethical Decision Making

MANY FAMILIES TURN to their pastor for counsel when they face difficult medical-ethical decisions. While hospital chaplains receive clinical pastoral education, community pastors often have little training in this aspect of ministry. Kenneth Mottram, D-Min, Manager, Spiritual Care Department at Bozeman Deaconess, says values can and often do clash when families face multiple options of treatment. He leads the team of six 24/7 on-call hospital chaplains who are available for area patients and families when they are faced with ethical dilemmas. Hospital chaplains offer spiritual care interventions including patient family visitation, emergency/crisis support, advanced directive education, cardiac support.



Bozeman Deaconess Hospital Spiritual Care Department Manager Kenneth Mottram, D-Min wrote Caring for Those in Crisis: Facing Ethical Dilemmas with Patients and Families. *The book—available in bookstores nationwide—offers advice to ministers and health care providers on helping families face mortality and make difficult ethical decisions. Mottram is a board certified chaplain.*

Total Joint Education Camp Prepares Patients for Upcoming Surgery/Recovery

THIS PROGRAM TAKES THE MYSTERY out of joint-replacement surgery. This class gives an overview of what to expect—from presurgical education and surgery to recovery, rehabilitation, and discharge. Every aspect of your total joint replacement is covered.

Before Rehabilitation Services launched weekly Total Joint Education Camp sessions in March, much of the total joint replacement experience was an unfolding mystery to patients. "Since we've started boot camp sessions, patients who participate are clear about what they can expect—both in the hospital and when they return home," says Colleen Hatcher, PT, Rehabilitation Services manager. The multidisciplinary two-hour education program features discussion on all aspects of the total joint patient care experience.

Patients learn the difference between general anesthesia and spinal blocks, and review femoral nerve catheters, use of pain medications and PCA pumps. All aspects of nursing care are explained, including IVs and drains, use of sequential pumps on legs after surgery, how often vitals will be assessed, pain medications and anti-nausea drugs. Physical therapists describe what will take place each day in the hospital and what to expect mobility-wise from the physical therapists as well as what they will expect of the patient.

Discharge planners give patients and their families an idea of what support systems they'll need to arrange ahead of time for their homecoming. In addition, patients hear from a pharmacist from the Bozeman Deaconess Anti-Coagulation Clinic and an occupational therapist. Finally, a question and answer session follows a review of rehabilitation exercises and demonstrations on maneuvering stairs.

Hatcher says the goal of Total Joint Education Camp is two-fold. "We want to answer any and all questions patients have before surgery," she says. "Knowing ahead of time what's going to happen can decrease pre-surgery anxiety. We also expect to decrease length of stay by having patients plan ahead for what they need at home after discharge and being aware of average length of stay." Patient satisfaction with the free pre-surgical sessions will be measured.

Contact Rehabilitation Services at 585-1002 for more information.

Disabled Driving Evaluations Now Available

BOZEMAN DEACONESS Occupational Therapy is now offering driver evaluations and training for people with temporary or permanent disabilities. The confidential evaluation determines the extent of the disability as well as how it impacts the ability to drive safely. It will also address the needs of clients with a wide range of physical, visual and/or cognitive impairments. Recommendations will include a determination of equipment or training available to allow clients to compensate for deficits to keep them driving or to learn how to drive. The program offers comprehensive driver training (behind the wheel instruction) on how to use modifications or adaptive equipment. Lessons emphasize defensive driving, with training on a closed course, in a safe area, progressing to residential, city and highway driving. To begin the program you must have a physician referral and a valid driver's license or learner's permit. Contact Rehabilitation Services at 585-1002 for more information.

Obstructive Sleep Apnea: Common Sleep Disorder Often Goes Unrecognized

PEOPLE WITH SLEEP APNEA don't have trouble breathing—they have trouble getting a breath. That's because during sleep their upper airway becomes obstructed. An obstructed airway during sleep results in a reduction of airflow. In response to a sensation of suffocating, the brain signals the body to arouse briefly. Once aroused, the airway opens and adequate air is restored. When the person returns to sleep the obstruction—whether it's from the tongue, tonsils or the soft tissue in the back of the throat—recurs and the pattern is repeated. The apnea can interrupt sleep hundreds of times a night.

Obstructive Sleep Apnea (OSA) affects more than 12 million Americans. Snoring is a sign of the disorder. Most people aren't aware that they snore—they're asleep after all. The repeated sleep interruptions are brief, people with OSA often don't remember them. That's why it's usually a bed partner, or in the case of a child, a parent, who recognizes the sleep disorder.

Repetitive interruption of sleep can cause morning headaches, daytime sleepiness and reduced ability to concentrate. OSA is associated with inattentive driving and increased risk of car accidents. Untreated sleep apnea also can lead to mood disorders, hypertension and coronary artery disease. Children whose sleep is disrupted often have behavior issues. Like adults, children who are overweight or have enlarged tonsils are more prone to sleep apnea. Alcohol and sleeping pills can increase the risk of sleep apnea.

An overnight sleep study is used to diagnose OSA. Sleep specialists measure oxygen saturation, heart rhythm, breathing effort and airflow, duration of sleep stages, body position and limb movements. Treatment can prevent or reverse the risks of sleep apnea. Weight loss can increase the size of the airway. Some people only have sleep apnea when sleeping on their back.

Enlarged tonsils can block the entrance to the airway during sleep. According to Virginia Pascual, MD, sleep specialist and medical director of the Bozeman Deaconess Sleep Disorders Center, 95% of OSA cases in children are corrected with tonsillectomy.

In adults, continuous positive airway pressure (CPAP) is a treatment that gently forces air into the space between the tongue and the back of the throat, reproducing the size of the opening of the throat when awake. A pneumatic splint worn during sleep, CPAP keeps the airway open for adequate airflow.

Pascual says when appropriate, some people with the disorder are fitted with oral appliances that reposition the mandible so the tongue doesn't obstruct the airway during sleep.

The Bozeman Deaconess Sleep Disorders Center, now located on the second floor of Highland Park 4, specializes in evaluation of all sleep disorders. For more information contact Merle Phipps, supervisor, Sleep Disorders Center, 585-5058. Dr. Pascual, of Sleep Montana, is an independent practitioner on medical staff at Bozeman Deaconess Hospital.

New Hours at Bozeman Deaconess Pharmacy at Highland Park

WHEN YOUR DOCTOR CHECKS you out of Bozeman Deaconess Hospital with a prescription in hand, the easiest place to fill it is Bozeman Deaconess Pharmacy at Highland Park.

Our pharmacy is also a quick, convenient place to pick up medication after a visit to your doctor's office. Now, with extended hours—weekdays 8:00 am to 6:00 pm, Saturdays 8:00 am to 1:00 pm—it's more convenient than ever. And, all major insurance plans are honored.