

BEAUMONT DOCTOR

QUARTERLY

Study: Radiation for heart test can be cut more than half

The radiation dose for a diagnostic scan of the heart and blood vessels was cut on average by more than half for almost 5,000 patients with no effect on image quality, during a Michigan quality improvement project. Doctors and hospitals statewide have helped protect patients from the potential risks of radiation exposure as a result.

Details of the project – a quality improvement initiative funded by Blue Cross Blue Shield of Michigan – were published in the June 10 issue of *JAMA*. The project was led by Gilbert L. Raff, M.D., medical director of the Ministrelli Center for Advanced Cardiovascular Imaging at Beaumont Hospitals.

In the first multicenter trial of its kind, the project involved 15 hospitals working together as well as heart specialists and radiologists working side by side.

Heart CT angiography has a 90-percent success rate in diagnosing heart disease. It is especially useful in identifying whether low-risk patients with symptoms do, in fact, have heart disease. It uses contrast in the arteries and high-resolution CT to get detailed images of blood vessels and the heart to identify possible blockages or structural problems. But the exposure of patients to ionizing radiation during the test is a barrier to its widespread use.

The project participants were able to reduce the radiation dose by an average of 53.3 percent, to about the equivalent of three years of background radiation. They were able to reduce the heart CT radiation dose through the use of seven risk-reduction protocols such as limiting



Dr. Raff led a study that cut the radiation exposure in half during cardiac CTs.

the area scanned and by adjusting the power of the scanner depending on the patient’s weight.

“The public should be reassured that Blue Cross and the participating hospitals are monitoring radiation doses and looking for ways to reduce them,” says Dr. Raff. “By doing this in a voluntary and collaborative way, we’ve been successful in improving health care overall, especially for those with medical conditions requiring frequent CT imaging.”

Data for the radiation-reduction project were collected on 4,995 patients at hospitals in the Advanced Cardiovascular Imaging Consortium. The consortium was organized in 2006 with ongoing financial support from Blue Cross Blue Shield of Michigan and Blue Care

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Physician awards honor colleagues, promote relationships

Ananias C. Diokno, M.D.

The Outstanding Physicians Awards Ceremony is nearly upon us. On July 27, we will honor the physicians you chose – the doctors you respect most.

In early spring, I asked all of you to submit nominations for physicians you believe should be recognized for humanitarianism, education, leadership, academics and research. The nominations you returned were outstanding. It is evident by the quality of the nominations that we have many highly respected physicians among us. I am sure the judges will have a difficult time choosing just one recipient in each category.

In addition to honoring our peers, we will also have a combined medical staff meeting. This is a new tradition at Beaumont and one worthy of continuation. The combined medical staff meeting gives us the opportunity to network with each other, meet physicians from the communities where we practice and build stronger relationships with each other.

Very often we forget to work on those relationships with each other. As colleagues, we have much to offer – best practices, business management advice, specialist information – the list goes on.

So, I encourage you to take full advantage of every opportunity a combined medical staff meeting offers you. The meeting is July 27 at Penna's of Sterling. I hope to see you there.

Ananias C. Diokno, M.D.

Executive Vice President and Chief Medical Officer

It's time to affect change

by Luke Elliott, M.D., president of the medical staff, Beaumont Hospital, Grosse Pointe



Dr. Elliott

There is no better champion for effective and efficient leadership in health care than physicians. We all need to take a more robust role in the governance of Beaumont and in health care.

To achieve this, we need collaboration, cooperation and communication between the medical staff and Beaumont administration. We need a shared vision that leads to accountable, fair and transparent outcomes.

Unfortunately, the needed changes cannot happen without improved relationships among the entire medical staff. Administration wants to reach out, but struggles to find the collective voice of the medical staff. We need to drill down to find what we desire for Beaumont. To accomplish this, we need more communication and we need to develop deeper relationships of trust with one another.

Moreover, we need to stop activities that lead to division among ourselves and we need to stop protecting "our turf." We need to knock down the silos that exist between private and employed doctors, between hospitalists and private staff and among different hospitalist groups, between surgeons and internists, between specialists and primary care, between departments – wherever separations exist. With agreed upon goals, we can become partners with administration and the Board to lead Beaumont and health care into a brighter future.

Remember, we need to succeed in providing good patient care while continuing to improve upon what has already been accomplished. But most importantly, we need to teach others to follow in our footsteps. And the only way to teach effective and efficient leadership is through honest communication.

It's time for action, not rhetoric. Please get involved by contacting your elected leadership. Your input will be taken to the Beaumont Leadership Council, the Corporate Medical Leadership Group and even the boardroom by your presidents and at-large members. Now more than ever, Beaumont administration is extending the right hand of fellowship to the medical staff. Let us reach out our hand in like manner.

Medical school update:

Physicians can have a piece of the legacy of the new medical school

Oakland University and Beaumont Hospitals have embarked on what I think is “the opportunity of a lifetime,” by partnering to open the area’s first new allopathic medical school in more than a generation. We use one very simple but profound idea in establishing The Oakland University William Beaumont School of Medicine: It will be innovative in its approach to training physicians and the men and women graduating from this school will be uniquely prepared to practice medicine for the 21st century.

In short, we are planning for an extraordinary school with an exceptional curriculum. **I fully expect that our school will become an example for others to follow.**

As such, we completed the first round of faculty appointments, which includes more than 400 employed Beaumont doctors in various specialties, and are now opening positions for private practice physicians. If you would like to teach at the Oakland University William Beaumont School of Medicine, please call Sue Terrien at 248-370-3631 or e-mail terrien@oakland.edu.

We are also nearing completion of the medical school space on OU’s campus. New classroom and administration space as well as student lounges and locker areas occupy O’Dowd Hall, where Beaumont doctors will teach future Beaumont doctors. We anticipate the renovations will be complete by the end of July, when we will start planning open houses where you can tour the space and meet the deans, faculty and staff.



Robert Folberg, M.D.

We are blending the cultures and immense strengths of the two founding institutions in this school. We have a strong vision for the Oakland University William Beaumont School of Medicine. This is an opportunity of a lifetime and our investment of time, energy and resources today will have an impact on Southeastern Michigan, the health care community and medical education for generations to come.

If you have any questions for the deans, please call the Dean’s Office at 248-370-3627.

Beaumont names corporate chief of Radiological Services



Duane Mezwa, M.D.

Duane Mezwa, M.D., was named corporate chief of Radiological Services for Beaumont Hospitals and chair of Radiology at Royal Oak.

Dr. Mezwa has been on staff at Beaumont for 27 years. In his most recent role, Dr. Mezwa served as interim chief of Radiological Services. In

addition to his responsibilities as medical director of Imaging for the Alternate Sites of Care division, he also served as vice chief of Diagnostic Radiology at Beaumont Hospital, Royal Oak and chief of Gastrointestinal Radiology for the department.

Currently, Dr. Mezwa is a trustee of the American Board of Radiology and is clinical professor and chair of Radiology at the Oakland University William Beaumont School of Medicine. He has been involved in resident education for more than 20 years as program director and as president of the Association of Program Directors in Radiology. He has an intense interest in organized radiology, in part due to his former role as president of the American College of Radiology, Michigan chapter.

A graduate of the Wayne State University School of Medicine, Dr. Mezwa completed his residency at Beaumont.

Beaumont Hospitals provides residency and fellowship training in more than 30 specialties and subspecialties. In fact, 144 physicians received certificates at this year's Convocation ceremonies in June.

Beaumont adds anesthesiology residency program

Roy Soto, M.D., Anesthesiology

Beaumont Hospitals added an anesthesiology residency, becoming the first hospital in the nation in four years to have a new program for this specialty approved. In May, the ACGME gave the program full four-year approval, which is the highest accreditation possible.

The anesthesiology residency program will have a class size of six residents per year. Recruitment begins this summer for the July 2010 internship class and residents will start their anesthesia training during the final months of internship, in the early summer of 2011.

As the second busiest hospital in the nation for surgeries, Beaumont, Royal Oak is an excellent location for an anesthesiology residency. We'll be able to offer the students a full spectrum of educational experiences.

The internship year will be similar to a traditional transitional year, but will include introductory rotations on anesthesiology and pain services, and place an emphasis on critical care. Resident rotations at the Royal Oak and Troy hospitals will allow for a breadth of experiences in a combined academic and private setting. The presence of the residency program will enhance the medical student experience once students start rotating through the service during their first clinical year.

The advantage we have here is we don't need the residents in Anesthesiology for manpower. All of them will be able to take full advantage of simulator sessions, lectures, seminars and research programs.

Beaumont's anesthesiology program becomes the fourth in the state (others include Henry Ford, University of Michigan, and Wayne State/DMC). Beaumont anesthesiologists have a wealth of academic and clinical experience, with researchers, academicians and leaders in organized medicine within their ranks.

We welcome your thoughts and concerns

Beaumont Doctor Quarterly welcomes your thoughts and concerns. To submit a letter to the editor, please e-mail rcalappi@beaumonthospitals.com or mail your letters to: Rebecca Calappi, Beaumont Hospitals, 3601 W. Thirteen Mile Rd., 112 ABE, Royal Oak, MI 48073.

Letters must be signed, so accuracy can be confirmed. However, letters will be printed anonymously if requested by the author, but the specialty of the physician will still be included. While opposing viewpoints could be printed, letters with defamatory or inflammatory content will not be considered. Letters may be edited for size.

Using Toyota’s quality principles can make health care better

It might sound odd at first, applying Toyota principles to health care. But there’s no arguing with the successes the automaker’s concepts are beginning to bring to Beaumont.

Jidoka, kaizen, stand in the circle, and just-in-time are a few of the philosophies that Beaumont has adopted from Toyota to improve health care. One definition of Jidoka is “quality in station.” This means getting the process right the first time and avoiding time-consuming workarounds. Kaizen means “continuous improvement,” using small steps driven by front-line workers.

The practice many administrators, including Sam Flanders, M.D., Beaumont’s chief quality and safety officer, have employed recently is “stand in the circle.” “When you stand in the circle, you look at a process and deeply observe,” said Dr. Flanders. “You watch each interaction, step, bit of paper, everything it takes to do the job. Then, you figure out how to improve the process for better outcomes.”

To put this principle into action, Dr. Flanders asked chart auditors to cut back on the number of retrospective audits they do, so they can take time to observe how a chart is used on the inpatient unit. Because the auditors were able to stand in the circle, improvements were made to chart tagging and, for heart failure patients’ charts, a CHF clinician trained to look for proper documentation now takes a last look at the charts before sending them to auditors. The result was a better relationship between the unit and the auditors as well as more complete charts.

“Problems are little golden nuggets. They give us the opportunity to find out why something went wrong, and what countermeasures we can take to prevent it from happening again,” says Dr. Flanders.

Toyota’s concepts have also helped improve Beaumont’s



Patient Safety Quality Improvement (formerly called variance) reporting. In the past, employees

Kaizen: the Japanese philosophy for improvement.

would fill out a paper report and submit it for review. The process was long and burdensome and the employee rarely received any feedback.

PSQI reporting has been moved online for faster processing, but groups at Royal Oak and Troy are experimenting with another Toyota concept: “andon.” Andon is the famous “stop the line” concept that allows any worker to point out a quality issue so it can be immediately addressed. Rapid action groups meet every

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 morning to review PSQI reports from the previous day and select reports that need immediate action. The first step is thanking the employee for filing the report. “Taking the time to thank the person has huge benefits. It makes him less afraid and more apt to file a report when necessary,” said Dr. Flanders. “It’s the first step Toyota leaders make because it makes a lasting impression on the employee. Remember, we’re trying to fix problems, not point fingers.”

Other areas around Beaumont have adopted Toyota’s ways as well. For example, Beaumont Hospital, Grosse Pointe has long used just-in-time delivery for inpatient medications and many floors keep certain supplies for patients within the room for easy access.

To learn more about the concept of kaizens, four Beaumont employees and several administrators traveled to a factory in Versailles, Ohio. “At Midmark, our experiences have really opened our eyes on process improvement,” says Dean Caputo, R.N. “We discovered that small, simple improvements done on the spot can make a huge impact on process improvement.”

“There’s a whole culture around identifying and solving problems that involves having realistic ideas and solving the problems a little at a time,” said Dr. Flanders. “I hope to get that culture started at Beaumont.”

Beaumont responds to NIH Challenge with 33 grant requests

David Felten, M.D., Ph.D., vice president, Research; and Mary Thill, administrative director, Beaumont Research Institute



As part of the American Recovery and Reinvestment Act of 2009, the two-year Challenge grant request for proposals from the National Institutes of Health was issued in early March 2009.

With a limited seven weeks to prepare and submit a full application, Beaumont investigators rose to the challenge and developed compelling

proposals in response to a range of priority topics identified by the NIH.

Topics focused on specific knowledge gaps, scientific opportunities, new technologies, data generation, or research methods that would benefit from an influx of funds to quickly advance the area in significant ways. The 15 defined broad Challenge Areas included: Behavior, Behavioral Change, and Prevention; Bioethics; Biomarker Discovery and Validation; Clinical Research; Comparative Effectiveness Research; Enabling Technologies; Enhancing Clinical Trials; Genomics; Health Disparities; Information Technology for Processing Health Care Data; Regenerative Medicine; Science, Technology, Engineering and Mathematics Education; Smart Biomaterials – Theranostics; Stem Cells; and Translational Science.

A total of 33 grant requests (29 Beaumont-led proposals and 4 subcontracts) were submitted for the April 27, deadline, amounting to a \$24.4 million funding request. Beaumont divisions and departments that led proposals included: the BioBank, Cardiovascular Disease, Fetal Imaging, Infectious Diseases, Integrative Medicine, Medical Education, Neurosurgery, Nuclear Medicine, Oncology (Cancer Genetics), Pediatrics (Center for Human Development), Radiation Oncology, Radiology, General Surgery, Thoracic Surgery, Peripheral Vascular Surgery, Surgery Research Laboratory, Surgical Learning Center and Urology.

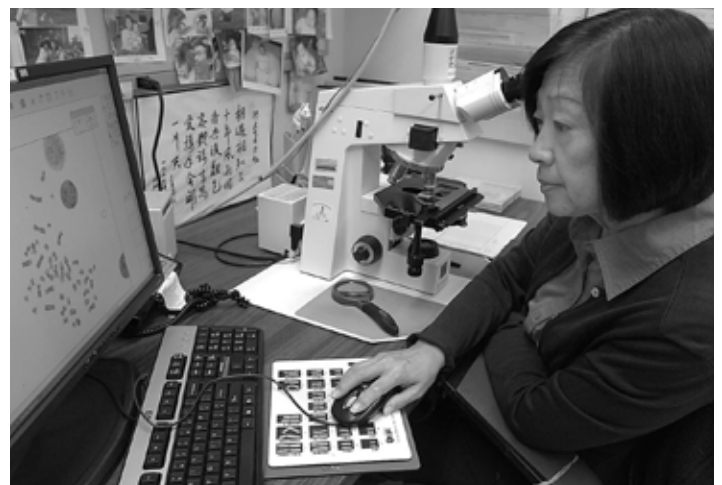
For many of the 33 submissions, Surgical and Medical Services came together to propose compelling projects

that emphasize a multidisciplinary perspective to advance how health care is approached and delivered. Representation from participating departments across Beaumont, such as Anesthesia and Pain Management, the BioBank, Cardiovascular Disease, Infectious Diseases, Medical Education, Medical Informatics, Nutrition and Preventive Medicine, Nuclear Medicine, Outcomes Research, Pharmacy, Research Services, Surgical Services, Surgical Learning Center and the Surgical Clinical Trials Office helped develop and support the numerous submitted proposals.

Collaborators also participated from regional institutions such as Oakland University, Wayne State University, University of Michigan, Henry Ford Health System, Detroit Medical Center, and Lawrence Technological University as well as organizations nationwide including Emory University, Massachusetts General Hospital, Harvard University, SUNY Buffalo, Columbia Presbyterian, Lenox Hill Hospital, University of Wisconsin, and University of Toronto. These are in addition to partners including Blue Cross Blue Shield Michigan and Siemens, as well as several small businesses.

Overall, the proposals submitted demonstrate the role Beaumont can play in developing and supporting new industries to diversify Michigan's economy and illustrate how we can take a lead in reducing health care expense through improved delivery.

If you are interested in learning more about research funding opportunities available through ARRA or other sources, please contact Pam Sims, Grants Development at 248-551-5071.



FDA issues warning on Botox usage, adverse effects

Neal Alpiner, M.D., *Physical Medicine and Rehabilitation*

On April 30, the FDA requested safety label changes for all Botulinum Toxin products. Among the changes was the inclusion of a boxed warning outlining adverse effects. The investigation emphasized the possible distant spread of BTx to non-affected body regions which may cause dysphagia, aspiration and possible respiratory suppression.

Background

In 1973, Scott, et al published a study outlining the beneficial effects BTx has on ophthalmologic conditions, specifically strabismus. Over the next 30 years, the use of BTx has been widely used throughout the world to treat various neurological and non-neurological disorders ranging from spasticity to hyperhidrosis. BTx has gained much coverage in the lay press for its use in the field of cosmetics. Although highly effective, there are currently only a handful of approved indications including: blepharospasm, hyperhidrosis, cervical dystonia, moderate/severe glabellar lines and strabismus. Numerous studies have been published documenting the benefits of BTx for children and adults with spasticity and muscle spasm.

How it works

The primary mechanism of action is the inhibition of Ach release at the neuromuscular junction via disruption of regulatory protein, SNAP 25. This causes the desired effect of ineffective muscle fiber contraction and weakness.

What the clinician needs to know

As with any injection, systemic absorption will occur to some degree. Clinicians familiar with intra-articular steroid injections are aware of the possibility of transient blood glucose dysregulation due to the steroid systemic affect. Similar possibility occurs with BTx, resulting in more distant neuromuscular weakness.

Key determinants to the safe use of BTx in the clinical setting are:

- administering clinician should have a thorough knowledge of the medication and proper training
- understanding that BTx clinical efficacy may exhibit a dose/response curve unique to each patient and BTx should be administered with minimal dosing and increases based on patient responses



Neal Alpiner, M.D., works with a patient in the Botox Clinic to improve muscle use.

- the use of BTx and local adverse effects will be more likely to occur depending on site administered (calf versus neck muscles)
- BTx can have a cumulative effect, and if administered too often will increase risk for systemic response and side effects

Summary

BTx has been used for more than 30 years safely and with high efficacy. Many patients have benefitted physically, socially and psychologically from the proper use of BTx.

Beaumont's Botox Clinic opened 1995 and continually strives to maintain the highest standards in clinical care. The most recent care initiative is the use of a CT-Guided Botox Technique, one of the first in the country. This technique allows our physicians to increase accuracy and minimize side effects by allowing for lower dose per injection.

The Botox Clinic works with Beaumont Children's Hospital to provide care to children as well as adults.

Common conditions requiring Botox treatment include: spasticity, muscle spasm, dystonia (cervical torticollis, writer's cramp), blepharospasm, hyperhidrosis and chronic muscular pain syndromes.

For more information on the Botox Clinic, please call 248-898-2238 or e-mail Dr. Alpiner through GroupWise at Neal.Alpiner@beaumont.edu.

Study: Radiation for heart test

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Network to provide administrative, logistical, statistical and analytical support for the quality improvement work.

“The coronary CT angiography initiative is one of our organization’s Value Partnerships – a collection of collaborative initiatives among Blue Cross Blue Shield of Michigan and hospitals and physicians throughout the state,” says David A. Share, M.D., M.P.H., senior associate medical director, Blue Cross Blue Shield of Michigan. “Each initiative brings health professionals together to carefully examine health care practice, generate new knowledge about which practices yield the best outcomes, and systematically apply that knowledge so that quality of care improves, health care costs are lower and patients receive the best care possible.”

Heart CT angiography has a 90-percent success rate in diagnosing heart disease. It is especially useful in identifying whether low-risk patients with symptoms do, in fact, have heart disease.

Participating hospitals ranged in size from small community hospitals to large university and community hospitals with more than 1,000 beds. The project was carried out from July 1, 2007, to June 30, 2008.

The patient database assembled to support this quality improve-

ment work represents the largest registry in the world of information about coronary CT angiography.

The protocols developed for this project can be used by other hospitals and imaging facilities to reduce radiation exposure for their patients. There is also potential to apply the same dose-reduction strategies when scanning other parts of the body.

In addition to Beaumont, the hospitals in the project during the time of this reported quality improvement were: Borgess Medical Center; Henry Ford Hospital; Hillsdale Community Health Center; Lakeland Regional Health System; Marquette General Health System; Mercy Health Partners-Hackley Campus; Mercy Memorial; Oakwood Hospital; Pontiac Osteopathic Hospital; St. John Hospital and Medical Center; St. John Macomb; St. John Oakland; St. John Providence Hospital; Sparrow Health System; and University of Michigan.

The project has since grown to include 35 participating hospitals and five physician practices.

Physician Leadership

Elected Medical Staff Leaders

Beaumont Hospital, Grosse Pointe

President: Luke Elliott, M.D., *Family Practice*
313-343-1618

Secretary/Treasurer: Ted Jeffries, M.D.,
Orthopedic Surgery

Members-at-large:

Matthew Voci, M.D., *Neurology*

George Ghafari, M.D., *Cardiovascular Medicine*

Donald Moore, M.D., *Internal Medicine*

Queresh Khairullah, M.D., *Nephrology*

Kevin Embach, M.D., *Internal Medicine*

Michael Taylor, M.D., *Surgery*

Beaumont Hospital, Royal Oak

President: Gary Chmielewski, M.D.,
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Jason Batke, M.D., *Primary Care*

James Carney, M.D., *Internal Medicine*

Stephen Driker, M.D., *Ambulatory*

Nicholaos Makris, M.D., *Internal Medicine*

James Robbins, M.D., *General Surgery*

Brad Walters, M.D., *Employed Physician*

Beaumont Hospital, Troy

President: David Forst, M.D., *Cardiology*
248-964-8509

Members-at-Large:

Betty Chu, M.D., *Ob/Gyn*

Blaine Dennis, M.D., *Emergency Medicine*

Prem Khilanani, M.D., *Hematology and Oncology*

Bruce McIntosh, M.D., *General Surgery*

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