Evolution of a Patient Safety Program in Otolaryngology
Washington University Head and Neck Surgeon and Patient Safety Officer for the Department of Otolaryngology, Dr. Brian Nussenbaum, leads discussion at the monthly M&M Conference.
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Two seminal publications from the Institute of Medicine in 1999 (To Err is Human: Building a Safer Health System) and 2001 (Crossing the Quality Chasm: A New Healthcare System for the 21st Century) helped define the problem of preventable adverse events in the United States and set forth aims for globally improving healthcare. Chief among the recommendations was to create a culture shift to make patient safety a top priority.

In March 2009, I attended the Patient Safety Officer Executive Course at the Institute for Healthcare Improvement and was subsequently designated by Dr. Chole as the department’s patient safety officer. Under the direction of Dr. Chole, I am responsible for our department’s patient safety program, which includes 24 full time MD faculty, 3 fellows, and 29 residents. My responsibilities include analyzing adverse events, initiating process improvements, educating and engaging the faculty/fellows/residents, monitoring for changes, and acting as a liaison for other departments, Washington University School of Medicine, and Barnes Jewish Hospital and St. Louis Children’s Hospital administrations.

One effort that has made the largest impact on promoting a patient safety culture has been revising the process for our monthly M&M conference to emphasize a “Just Culture” approach during discussion of cases.

In otolaryngology departments, adverse events are usually reported through a monthly M&M conference, which has traditionally been an important cornerstone for surgical departments. Yet, these conferences are commonly riddled with incomplete reporting due to recall bias, reluctance of reporting due to a “blame and shame” culture, and ineffective outputs due to incomplete case analysis. This appeared to be an appropriate place to focus in order to drive the evolution of a supportive patient safety culture within our department. Elements of this conference that were counter-productive toward this goal were eliminated. Key elements were then identified to stimulate evolution of a supportive patient safety culture, including using standardized indicators for case reporting, stream-lining mechanisms for reporting, capturing near misses more effectively, implementing an algorithm for case selection at conference, and emphasizing a “Just Culture” approach during discussion of cases.

Most adverse events occur due to both human factors and complex systems. A Just Culture appropriately apportions responsibility to achieve a balance between a blame-free culture and punitive culture, such that individuals are held accountable for their actions, but not for system flaws. With the recognition of the importance of this process, the department can learn to proactively make changes to be preventative for similar events occurring in the future. Since July 2009, we have already acted upon 14 safety/quality improvement initiatives based on reporting and discussing cases at monthly M&M conferences. These initiatives resulted in changes in our delivery of medical care and real advances in patient safety.

One of our residents recently stated, “I think our department provides great care for our patients. We can always do better, though.” The culture of medicine traditionally supports the default belief that smart people working hard will not make mistakes. To set patient safety as a top priority however, we need to promote a supportive patient safety culture from which we can learn from previous events and implement proactive measures to prevent future events, rather than relying on the odds of best intention.

To continue to foster and strengthen the development of a safety and quality of care culture, the department has recently hired a full-time Patient Safety Coordinator, Janice Zerega, RN. Janice will work closely with School of Medicine and BJC Healthcare safety and quality initiatives to ensure the highest system-wide standard of care for otolaryngology patients.

— Brian Nussenbaum, MD, FACS
Associate Professor, Otolaryngology
Vice Chair for Clinical Affairs

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The KiDDOS Project
Enhancing safety through technology at St. Louis Children’s Hospital

One of the most dramatic changes at St. Louis Children’s Hospital in recent years has been implementation of the KiDDOS project, Komputerized inter-Disciplinary Documentation and Ordering for Safety. This portal contains all of the activities of our inpatients. Vital signs, medication administration, nursing interactions and the collection of laboratory specimens are all prompted and documented by the system. The system can group orders from multiple providers to increase efficiency, which can for example decrease the number of blood draws by recognizing similar requests. The system also produces a label for lab specimens which can be read by both humans and machines. I was loaned to the KiDDOS project at its inception and served as physician lead during implementation.

Authentication of orders and patient verification have also been enhanced by KiDDOS. Each patient has a unique barcode on their ID band. Both the patient’s armband and medication are scanned immediately prior to delivery. It is now possible for any provider to see each medication and it’s actual delivery history. As surgeons this is particularly helpful to us in understanding how a patient’s pain is being managed through PRN medications. Detailed onscreen reports which are customized for specific clinical settings and diagnoses are available. Trending of data is emphasized and providers can customize reporting to their needs. In the ICU and medical floors, rounding data are reported from roaming computers on wheels (COWS), which also allows printed copies of patient data at the push of a button.

One of the most beneficial aspects of the KiDDOS system is a ‘computer provided order entry’ (CPOE). In a traditional paper based chart the most current orders are often difficult to find and even harder to reconcile with the many separate additions and deletions common to a patient’s hospitalization. KiDDOS’ sophisticated filters now allow the review of orders by category and in correct temporal sequence, allowing the provider to focus on a patient’s current or impending orders if desired. Reconciliation of orders between multiple clinical situations is now also handled with much greater clarity since orders can now be viewed in terms of interaction with other services, including pharmacy, laboratory and nursing.

KiDDOS contains a wealth of information, including links to web pages of instructions and medical literature, all designed to enhance informed decision making. Each order prior to becoming active, is reviewed both by a set of computerized rules and the pharmacy staff. When first implemented, KiDDOS utilized a limited number of computerized rules and alerts, preferring to leave that role to the traditional call from pharmacy. Now that providers have become comfortable interacting with the system, we are providing alerts in real time and anticipate increasing this computerized screening significantly in the future.

In addition to continued updates of the KiDDOS system, we plan many new safety initiatives. These include automated anesthesia and peri-operative records, increased integration with Touchworks - our outpatient solution, allergy and problem management across information systems, enhanced use of computerized decision support rules, and a Pediatric Early Warning Score to identify at risk patients requiring additional clinical attention.

— David Molter, MD
Professor, Otolaryngology

Save the Date: Ogura Lectureship & Resident Research Day

The 31st Annual Ogura Lectureship will be held Friday, June 8th in Connor Auditorium at the Farrell Learning & Teaching Center on the Washington University Medical School campus. The guest speaker for this special event will be Jonas T. Johnson, MD, the Dr. Eugene N. Meyers Professor and Chairman of Otolaryngology at University of Pittsburgh School of Medicine. The 26th Annual Resident Research Day will be a highlight of the Ogura Lectureship and will feature presentations of original research by Otolaryngology alumni, residents and graduate students. For additional information, please contact:
carberyc@ent.wustl.edu / 314-362-7395 or
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Successful transformation of the VA Health Care System

There are very few examples of organizational transformation in healthcare and perhaps none as striking as what occurred in the Veteran Administration (VA) Health Care System. The VA is the largest healthcare system in the U.S. with 152 medical centers and nearly 1400 community-based outpatient clinics. More residents have been trained under the VA than any other healthcare system. I remember as a young trainee how the VA was stigmatized for poor care of our nations veterans, and how the newspaper headlines weighed the potential voucher system for veterans to purchase care elsewhere and the prospect of closing VA hospitals.

It was Dr. Ken Kizer, Under Secretary of VA, who changed the organizational structure to a decentralized system and installed management at the network level take responsibility for the new direction. He also supported the creation of a system wide electronic medical records system and the adoption of a new Resource Allocation System and Performance Measures.

This National Surgical Quality Improvement Program (NSQIP) was developed for the VA during the late 1980s and formally implemented in 1991. As testament to its success, the program was adopted in 2001 by the American College of Surgeons (ACS) for the private sector. Now known as VASQIP, the program provides data on surgical outcomes for almost all surgical subspecialties, including Otolaryngology-Head & Neck Surgery.

I currently serve as Chief Surgical Consultant for the Veterans Integrated System Network Region 11 (VISN11: Michigan, Indiana, Southern Illinois and northwest Ohio). My responsibilities include oversight of Surgical Services at seven hospitals and the evaluation of multi-million dollar operative expansions at several VA Centers. I lead site visits of the surgical programs at all our hospitals and provide recommendations to these facilities, which are forwarded to network leadership and VA headquarters in Washington, D.C. I also chair monthly VISN 11 Surgical Committee meetings, where we discuss directives, red flag events, performance and quality improvement results, ongoing system redesign, medical literature with best practices, and surveys and strategies to address current and future opportunities for improvement. I have led efforts in patient safety, operational efficiency and quality improvement. Our success in reducing Operating Room Cancellations at the Central Arkansas Veterans Healthcare System were recognized by inclusion in the book, Applying Lean in Healthcare (Productivity Press, 2009, available on Amazon.com). I have also shared best practices with the Patient Safety and Quality Improvement Committee in the American Academy of Otolaryngology-Head & Neck Surgery, other VA networks, Central Office and the VA National Center for Patient Safety. I believe it is important for clinicians to develop competencies in visionary leadership, systems redesign, quality improvement methodology and organizational behavior to ensure patient safety is maintained at the highest standards.

— Mimi S. Kokoska, MD, MHCM (residency graduate ’96)
Professor, Otolaryngology

New Faculty

Jeff Lichtenhan, PhD, is our newest member of the Research Faculty and started January 1, 2012. Jeff earned his PhD in Audiology from the University of Kansas and completed a postdoctoral fellowship in the Eaton-Peabody Laboratory at Harvard Medical School. He works closely with Dr. Alec Salt and has lab space on the 10th Floor of the McMillan Building.

Jason T. Rich, MD, will join the faculty on July 1st as a Head & Neck Oncologic and Microvascular Reconstructive Surgeon. Dr. Rich attended medical school at Ohio State University in Columbus, OH. After graduating from his residency here at WashU in 2011, Jason completed a fellowship in Head and Neck Surgery/Microvascular Reconstruction at the University of Toronto in Ontario, Canada.

Maithilee Menezes, MD, is a pediatric otolaryngologist who will be joining us October 1st of this year. Dr. Menezes attended the University of Iowa College of Medicine and served her residency in Otolaryngology at the University of Iowa Hospitals and Clinics. She has spent the past year in a Pediatric Otolaryngology Fellowship at Rady Children’s Hospital in San Diego, CA. She has also garnered considerable research experience, serving in NIH-sponsored research fellowships for several years during her residency.

David Leonard, MB, BCh, BAO, a pediatric otolaryngologist from Dublin, Ireland will also be joining the team at St. Louis Children’s Hospital this Fall. Dr. Leonard completed his medical training at University College Dublin School of Medicine and residency training in Otolaryngology at various sites in Dublin and Harvard Medical School. He recently completed a Fellowship in Pediatric Otolaryngology at Boston Children’s Hospital.
Next Steps for 2012 Graduates

Residents

Clint Allen, MD
Next steps: I have accepted a one-year fellowship in laryngology at the University of Washington in Seattle, Washington.
Highlights of residency: The highlight of my residency here at WashU has to be the feeling of growing as future leaders in the field of head and neck surgery with several of my classmates.

Robert Nason, MD
Next steps: A one-year fellowship in pediatric otolaryngology at Rady Children’s Hospital, associated with the University of California, San Diego.
Highlights of residency: Without a doubt, the highlight of my residency would be great friends, great teachers and great mentors.

Dan Sdrulla, MD
Next steps: I will be starting a two year neurotology fellowship at the Michigan Ear Institute.
Highlights of residency: The one incredible thing I am thankful for about this residency was the amazing surgical training we received.

Fellows

Nancy Solowski, MD
Next steps: I will be working with Dr. Greg Postma in a laryngology fellowship at Georgia Health Sciences University in Augusta, GA.
Highlights of residency: Working with Dr. Piccirillo’s team in the Outcomes Office and with the entire staff of Oto and the operating room.

Courtney Voelker, MD
Next steps: I will doing a neurotology lateral skull base fellowship at the House Clinic in Los Angeles, CA.
Highlights of residency: Working with an outstanding clinical and research staff to learn diagnostic and clinical skills and being trained alongside some very extraordinary colleagues.

Michael Stadler, MD
Next steps: Assistant Professor in the Division of Head and Neck Oncology at The Medical College of Wisconsin, in Milwaukee, WI.
Highlight of fellowship: Working with great residents and a tremendous staff in the Department of Otolaryngology.

Scott Walen, MD
Next steps: Pursuing an academic position in Facial Plastic Surgery at St. Louis University.
Highlight of fellowship: The opportunity to receive hands-on training in a variety of facial plastic surgery cases and the ability to teach residents.
special events

Awards & Honors

Tim Hullar, MD, Judy Lieu, MD and Bruce Haughey, MBChB, FACS, had theses accepted by the Triological Society. Dr. Lieu was honored as co-recipient of the Harris P. Mosher Award for her thesis, “Longitudinal Study of Children with Unilateral Hearing Loss.” Dr. Haughey received an Honorable Mention for Clinical Research for “Survival and Prognostic Factors Unique to Surgically-Treated p16 Oropharyngeal Cancer.” The title of Dr. Hullar’s thesis was “Frequency and Velocity Dependence of Temporal Integration of Auditory and Vestibular Stimuli.”

Brian Nussenbaum, MD was recently appointed to the Recurrent/Metastatic Disease Task Force of the NCI Head and Neck Steering Committee. The committee was formed in 2007 to promote the “best science” in head and neck clinical research.

Drs. Bruce Haughey and Parul Sinha received the Robert Maxwell Byers Award for best clinical presentation at the annual meeting of the American Head and Neck Society. The title of their presentation was “Extracapsular Spread Is Neither a Strong Negative Prognosticator Nor a Useful Adjuvant Therapy Determining Factor in P16+ Surgically Treated Oropharynx Carcinoma.”

Laura Holden, MA, Assistant Research Scientist in our Cochlear Implant Program has been selected to receive the Margo Skinner Award from the Missouri Academy of Audiology. The award will be presented at the Academy’s Scope of Practice Meeting in September.

Selected Publications


The Department of Otolaryngology has experienced another outstanding year, marked by numerous honors, awards and publications. Three additional faculty members have qualified for membership in the Triological Society, an elite group of practicing otolaryngologists. A full 60% of our current clinical faculty can now be counted as members, which is an outstanding level of participation and one probably unmatched by any other similar institution. Many other faculty have garnered awards and honors that are really too numerous to mention. It seems our faculty’s accomplishments are matched only by those of our support staff who continue to set higher standards for patient care and service. Yes, we did claim the top spot in eight of twelve categories in the 2011 Patient Satisfaction survey conducted by the Faculty Practice Plan. In addition, we can boast of two new recipients of the FPP’s Star Performer Award this past year: Mary Kay Piantanida and Kathy Slater.