Taking on national issues one (or more) at a time

The nation’s hospitals and medical practices have always faced complex issues. From managing delivery and process challenges, to identifying new evidence-based treatments and improving access, health-care professionals were on the front line of health-care reform long before it became a national debate.

In this issue of Physicians Practice, we share with you examples of how Swedish Medical Center is answering the call to action for physicians and hospitals to address the increase in unintended deaths from Schedule II drugs, the management of sepsis patients, the importance of finding new and faster ways to treat stroke, and patient access to care close to home.

Saving lives by creating oxy-free EDs

Russell Carlisle, M.D., Medical Director
Swedish Cherry Hill Emergency Department

Swedish Medical Center emergency medicine physicians have made a bold and calculated move to address the near epidemic abuse, addiction and unintended deaths from prescription narcotics, in particular Schedule II drugs. They have declared their emergency departments oxy-free. This new approach to the treatment of pain in all four Swedish EDs (Ballard, Cherry Hill, First Hill and Issaquah) is not meant to be punitive – nor is it meant to deprive patients with legitimate pain symptoms access to treatment. Rather, it better defines ED practice guidelines (continued on A2)
and a rational approach to prescribing pain medication.

A new study by the Centers for Disease Control and Prevention (CDC) and the Substance Abuse and Mental Health Services Administration reported the estimated number of ED visits involving non-medical use of prescription opioids increased 111 percent from 2004 to 2008. Oxycodone, hydrocodone and methadone products were most frequently involved in these visits — with increases of 152 percent, 123 percent and 73 percent respectively. The report, which also showed a significant increase in the prescribing of these drugs, led the CDC to call for urgent action to ensure the proper and safe use of prescription opioids.1

Several other alarming statistics helped put this issue into proper perspective for Swedish ED physicians.

In 2006 the number of deaths in the United States from unintentional drug overdose from opioid analgesics was greater than the number of overdose deaths from heroin and cocaine combined.2

In that same year, Washington’s overall drug overdose death rate was significantly higher than the national average.3

In Washington in 2008, 97 percent of all unintentional or accidental poisonings was due to drug overdose.4

Since 2006 these deaths have exceeded the number of motor vehicle-related deaths in Washington.5

**Drug monitoring**

A state prescription drug monitoring program (PDMP) can be a valuable tool for EDs and medical practices. PDMPs track and monitor prescriptions, help identify ED “shoppers” and protect physicians from inadvertently aggravating potential drug-abuse situations.

**Time for action**

The actions of Swedish ED physicians are directed at the opioid naïve patient, as much as the intentional abusers. Patients with chronic back or dental pain, for example, often don’t realize their pain medication can be addictive. Swedish ED physicians are no longer willing to be part of that unintentional cycle of medical use – extra-medical use – abuse – addiction; and, in general, will no longer prescribe Schedule II drugs.

The physicians have created an algorithm for the rational use of scheduled drugs. The algorithm categorizes patients presenting with acute pain as opiate naïve versus opiate tolerant, and sets parameters for prescribing pain medication. Opiate-naïve patients receive the lowest effective dose and amount to relieve their pain. Opiate-tolerant patients, as well as patients with exacerbated chronic pain, already have prescribing physicians managing their pain and may be on pain contracts. These patients are treated conservatively in the ED and referred back to their personal physicians. This approach ensures the opiate-tolerant patient is linked with one provider and one pharmacy to help prevent abuse or escalation of dependency.

Source: Washington State Department of Health, Death Certificates & Drug Enforcement Administration, ARCOS

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A hospital quality improvement process doesn’t sound too exciting, unless it’s clearly designed to protect patients from an under-recognized – but often deadly – medical condition.

Sepsis, which compromises end-organ perfusion, is just such a medical condition. It poses a considerable threat to hospitals because it is difficult to diagnose, demands collaboration among multiple care providers and requires a complex treatment algorithm.

There are approximately 750,000 new sepsis cases annually in the United States, with at least 210,000 confirmed fatalities. The death rate associated with severe sepsis and septic shock is 50-60 percent.

“Although Swedish had a sepsis identification and treatment protocol in place, the consensus was that there needed to be an even greater focus on transitioning septic patients faster from the Emergency Department to the ICU,” said Eric Wolak, R.N., nurse manager of the Cardiovascular Intensive Care Unit at Swedish/Cherry Hill and chairman of Swedish’s Critical Care Quality Collaborative. “For nearly two years, a dedicated team has been working on this issue. We are also part of a consortium of 11 other hospitals outside the Pacific Northwest addressing this cryptic killer.”

Code Sepsis reduces mortality rate

In January of this year Swedish rolled out its new Code Sepsis and began treating sepsis as an emergent situation. The code page includes Environmental Services (in case a bed needs a stat clean), the nursing house supervisor, ICU nurse manager, and Quality and Patient Safety.

“We are challenged as a care team to accurately identify ‘cryptic shock’ patients,” says Renae Hawkins, R.N., nurse manager of the First Hill ICU. “These patients may have minimal alteration in vital signs, and an elevated lactic-acid level may be the only sign of their cryptic shock. They are difficult to identify and can decline rapidly if they don’t receive early treatment.”

The goal is to identify and appropriately begin treatment for a septic patient in the ED, and then promptly transfer the patient to an ICU bed for more advanced care and treatment in no more than 1.5 hours. This new approach has dramatically improved sepsis survival rates. During

**Unintentional drug overdose death rates & sales of Rx painkillers in U.S.**

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**An International Sepsis Campaign**

The Surviving Sepsis Campaign aims to:

- Build awareness and educate healthcare professionals
- Improve diagnosis
- Increase the use of appropriate treatment
- Improve post-ICU care
- Develop guidelines of care
- Facilitate data collection for audit and feedback

For more information, go to [www.survivingsepsis.org](http://www.survivingsepsis.org).
Desmoteplase may hold the key to extending the stroke treatment window

Dan Rizzuto, Ph.D., Research Manager, Swedish Neuroscience Institute

Acute stroke is the third leading cause of mortality and the major cause of long-term disability in the developed world. Ischemic strokes account for about 85 percent of all acute strokes and are caused by clots that block blood vessels in the brain, stopping the flow of blood to crucial brain areas.

The main approach to treating acute ischemic stroke is thrombolysis, which degrades the clot causing the stroke and potentially provides significant clinical improvements. The only thrombolytic intervention for acute ischemic stroke that is currently approved by the U.S. Food and Drug Administration (FDA) is alteplase. However, alteplase must be administered within three hours after symptom onset to avoid the risk of inducing a hemorrhage in the brain. (More recent evidence supports delivering alteplase up to 4.5 hours.) Because of this time limitation, it is estimated that alteplase is currently administered to less than 5 percent of acute stroke patients. Although this time limitation is a significant factor, a sizeable proportion of patients who arrive within the appropriate time window still do not receive alteplase due to contradictions (e.g. age, severity of conditions, hypertension, etc.) or the unfavorable risk/benefit ratio.

Will vampire bat protein be the answer?

Recently a new thrombolytic agent, desmoteplase, has been developed that is based on a protein found in the saliva of the Desmodus rotundus, better known as the common vampire bat. Studies conducted so far suggest desmoteplase breaks down clots efficiently and elicits few side effects, indicating the potential for better clinical outcomes. Importantly, it is possible to administer desmoteplase up to nine hours after symptom onset. Swedish Medical Center is participating in DIAS-4, a new study to assess the safety and effectiveness of desmoteplase.

“This new agent holds great promise,” said William Likosky, M.D., principle investigator for the clinical trial and medical director of the Swedish Acute Telestroke Program. “Currently, we are fortunate to have a network of emergency departments in which alteplase can be administered within an early window. If stroke patients have an initial treatment window up to nine hours, however, we can consider transferring them to medical centers that can provide thrombolysis beyond that available for alteplase.”

This clinical research study to test desmoteplase is being carried out under strict oversight by the FDA. By participating in this study, Swedish continues its tradition of offering the most advanced therapies available to patients who have few other options and the Swedish Acute Telestroke Program can offer this trial to patients outside the Seattle area who are brought emergently to Swedish for treatment.

Sepsis

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phase II of the project’s pilot period (January through June of this year), Swedish identified 55 cases of sepsis at the First Hill campus, with an aggregate mortality rate of only 18 percent.

Physicians invested in success

Swedish found that early and frequent education, identifying physician champions, active interdepartmental collaboration, and transparency about outcome metrics were important to ensuring physicians were on board and invested in the success of the effort.

“Sepsis care is a huge priority at Swedish. Because we saw an opportunity to make a big impact, we put significant resources toward it,” said Swedish-affiliated critical-care specialist Derel Finch, M.D. “Sepsis kills about the same number of people each year as heart attacks. In non-cardiac ICUs, it’s the leading cause of death. We presented the physicians relevant data, let them own their processes, frequently shared outcome metrics and agreed to regularly update the protocols.”

The entire health-care team agrees that it has been hard work, but extremely satisfying to see how this effort has positively affected patient outcomes.
Improving access for Ballard and nearby communities

New construction, remodeling projects and removal of a concrete edifice with a little-known purpose have signaled Swedish Medical Center’s renewed commitment to one of Seattle’s oldest communities.

Ballard has been a close-knit community for years. Today it is characterized as much by its vibrant downtown area and neighborhoods filled with young families, singles and seniors, as it is by its maritime industry.

In the late 1920s Ballard guaranteed access to local medical care for its residents by opening Ballard Accident and General Hospital. In 1950 the community again made a statement about the importance of local medical care by raising enough money to replace their original hospital. In 1992 Ballard became part of Swedish Medical Center.

More recently, after hearing from residents that many of them were unaware of Swedish’s presence in the community, the medical center embarked on a massive rebirthing of the Ballard facilities and surrounding campus – and made a commitment to its neighbors that Swedish was “Here for Good.” The plan was multi-faceted: upgrade existing facilities, build new medical office space, expand services, recruit additional physicians, and modernize and upgrade emergency and imaging facilities.

Most importantly, the goal was to integrate more fully with the surrounding neighborhood and better serve the communities of Ballard, Queen Anne, Magnolia, Wallingford, Phinney Ridge and Greenlake.

“Like any relationship, our relationship with the communities we serve needs to be nurtured,” said Ballard Nurse Executive Jennifer Graves, R.N., M.S., ARNP. “Many of our employees live nearby. This is a fun, active community and we are committed to being part of it.”

A new five-story medical office building is scheduled to open the first week of November. The Tallman Building will house a new emergency department and medical imaging suite, and clinic space for primary care (Swedish Physicians Ballard Clinic), obstetrics and midwifery, and orthopedics medical practices. It will be connected via skybridge to the Main Building for convenient access by physicians and patients alike.

“The new building will make life easier for everyone,” said Amy Deans, M.D., medical director of the Swedish Physicians Ballard Clinic. “It will help the community realize we want to provide them quality care that is close to home. Patients will find it more convenient because of the close proximity to parking, improved access to imaging and the addition of more specialty services. Our providers are looking forward to having more clinic space so more of (continued on A7)
Clinical Neurophysiology Lab receives accreditation

The Laboratory Accreditation Board of the American Board of Registration of Electroencephalographic and Evoked Potential Technologists (ABRET) has granted the Clinical Neurophysiology Lab at the Swedish Neuroscience Institute a five-year accreditation. The lab is the first and only lab in Washington, and one of only 10 labs west of the Mississippi, to receive accreditation.

“We are proud of this accomplishment,” said Colleen Douville, director of Cerebrovascular Ultrasound and program manager for Clinical Neurophysiology. “In this age of quality, safety and outcome measurement, this is an important step in the right direction.”

ABRET based its award on the lab meeting strict standards, as well as the technical quality of the EEGs performed in the lab and the excellence and competency of the Swedish technologists.

“This accreditation reflects the work of many people,” said Jehuda Sepkuty, M.D., medical director of the Swedish Epilepsy Center and Clinical Neurophysiology. “It is a personal accomplishment for each of us, and underscores the exceptional diagnostic service we are able to provide physicians caring for patients with epilepsy.”

Clinical Neurophysiology Lab
Annually the lab provides long-term video EEG-monitoring for more than 700 adult and pediatric patients, and diagnostic EEG and EP studies for more than 1,800 patients.

To refer a patient for testing at the Clinical Neurophysiology Lab, please call the clinic at 206-386-3880 or lab at 206-386-2178.

Swedish adds a third da Vinci Si HD robot

One year ago, Swedish upgraded its da Vinci® robot equipment and purchased two of the latest generation da Vinci robotic-assisted surgical systems to help surgeons perform minimally invasive procedures in the operating room. The medical center also opened the world’s first integrated operating room specifically outfitted for the da Vinci Si HD robot. Swedish has now added a third da Vinci Si HD robot to advance its pioneering use of robotic-assisted surgery for patients.

Swedish has been utilizing robotic-assisted surgery since 2005, and was one of the first medical centers in the region to perform this type of surgery. Since then, Swedish-affiliated surgeons have performed more than 3,000 procedures, including minimally invasive cancer surgeries of the prostate, kidney, colorectal, uterine, cervical, ovarian and lung, as well as complex gynecologic reconstruction, non-cancer colorectal and bariatric surgeries. Most recently, doctors came to Seattle to learn about a thoracic surgeon’s use of the da Vinci robot in chest surgeries.

The new robotic-assisted surgical system features a dual-console set-up, which allows for greater collaboration among surgeons and enhanced training capabilities. The Robotic Surgery program at Swedish is also among the first in the region to create a robotic-assisted training program for fellows.

For more information go to: www.swedish.org/Services/Robotic-Surgery-(1)
Improving access

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them can practice here full time.”

As part of the revitalization of the Ballard campus, Swedish has also renovated areas in the hospital, created a public garden, which is decorated with sculptures by local artists, and broken ground on the new 4,000-square-foot Swedish Cancer Institute Radiation Treatment Center, which features TomoTherapy® for cancer radiation treatment.

“For many years we’ve supported the community through our outpatient and hospitals services. We also offer several specialized programs, such as the Employer Medical Assistance program, which helps employers who need screenings, testing or treatment for employees, and we provide one of the area’s oldest inpatient addiction recovery programs,” said Rayburn Lewis, M.D., executive director and senior medical director of Swedish/Ballard. “Our recent facility renovations and new medical office building and Radiation Treatment Center offer a great opportunity for physicians who want to practice in this area. It also will allow us to support the medical needs of the community for many years to come. Residents really can plan on us being here for good.”

### CME Course Listing
**November 2010 – February 2011**

Physicians from across the region and around the world come to Swedish Medical Center’s Continuing Medical Education (CME) courses to learn about new research and innovative treatment techniques.

For times and locations, go to www.swedish.org/cme or call 206-386-2755.

- **Second Annual Anticoagulation Symposium: A Multi-Disciplinary Approach to Anticoagulation Therapies and a Case-Based Approach to Problem-Solving**
  - Friday, Nov. 5, 2010

- **Congestive Heart Failure Symposium**
  - Friday, Feb. 11, 2011

- **Multi Modality Treatment of Spine Tumors**
  - Friday, Feb. 25, 2011

- **Sweedish Admissions Call Center**
  - 866-470-4BED (4233)
  - 206-320-2700

- **Swedish Physician Division**
  - 600 University St., Ste. 1200
  - Seattle, WA 98101-1169
  - 206-320-2700

- **Swedish Visiting Nurse Services**
  - 6100 219th St. S.W., Ste. 400
  - Mountlake Terrace, WA 98043
  - 425-778-2400

- **Swedish Physician Recruiter**
  - Mike Waters
  - 206-320-5962 (office)
  - 206-327-2790 (cell)
  - mike.waters@swedish.org

Swedish Medical Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.