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ASRA Looks To Push Ultrasound in Pain Management

Already firmly entrenched in the operating room, ultrasound is finding its way into virtually every tributary of anesthesiology.

One of the newer areas into which ultrasound has penetrated is pain medicine. In recognition of the increasingly important role of ultrasound in treating chronic pain, a leading anesthesia society has established a special working group to guide the development of this growing subspecialty, from training and education to best practices.

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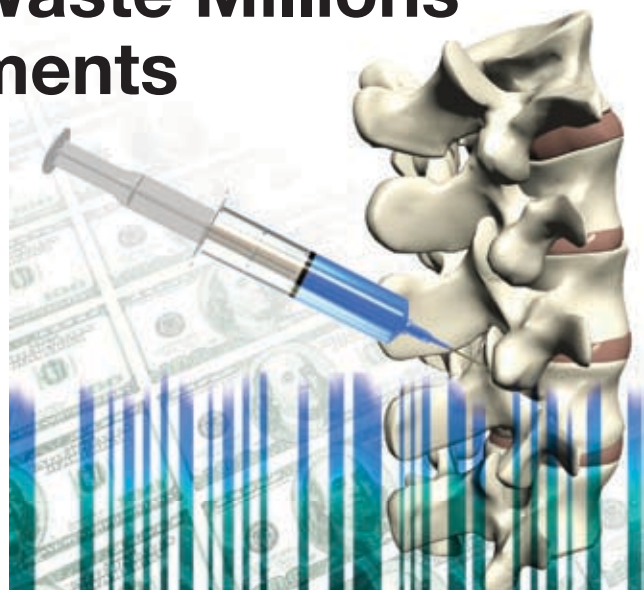
Coding Mistakes for Facet Joint Injections Waste Millions In Medicare Payments

Medicare overpays physicians by $96 million each year for facet joint injections, the result of inappropriate billing codes and insufficient documentation for the services, a new report has found.

The report says physicians fail to appropriately bill for facet joint injections more than 60% of the time—an error rate pain specialists fear could lead to a government crackdown on the field.

"This report puts [pain specialists] even more so on the radar screen," said Paul Dreyfuss, MD, president of the International Spine Intervention Society (ISIS). "It confirms that there may be inappropriate billing and, potentially, abuse of these procedures."



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Model Contract Gives Momentum To Interoperability Movement

The movement to create "plug-and-play" interoperability between medical devices is edging toward the long-sought goal of linking the plethora of proprietary equipment, sensors and other electronic technologies to increase patient safety, reduce costs and improve efficiencies in the operating room and other clinical settings.

Among the recent developments, three major health care delivery organizations have drafted and agreed to incorporate interoperability requirements in their contracts with equipment vendors and medical device suppliers. In addition, officials at the FDA, Veterans Administration and other federal agencies are evaluating various plug-and-play standards for possible promulgation. One such set of draft standards is being evaluated for possible dissemination internationally as early as next spring.

"We take plug-and-play functionality for granted when we connect a printer or digital camera to a personal computer. We need that kind of functionality in health care and the operating room where it's almost nonexistent or, if it exists, is proprietary," said Julian M. Goldman, MD, director of MD PnP, an interoperability collaboration based at Massachusetts General Hospital and the Center for Integration of Medicine & Innovative Technology (CIMIT), a

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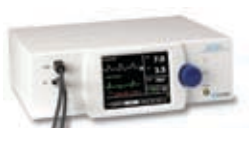
INSIDE

NEWPRODUCTS



ECOM™ Endotracheal Cardiac Output Monitor, from **ConMed Corporation,** see page 6.

AS3000 Anesthesia System, from **Datascope Patient Monitoring,** see page 10.

Arrow® StimuCath® Continuous Nerve Block Kits, from **Teleflex Medical,** see page 48.

SPECIALREPORT

The Use of Metaxalone in the Treatment of Low-Back Pain, see insert at page 34.

TECHNOLOGY

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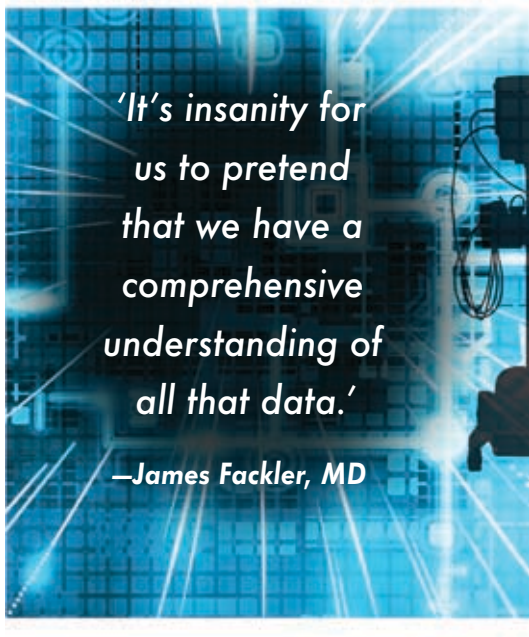
health care technology consortium of Boston-area hospitals and engineering schools.

Although many medical device manufacturers create networked solutions for their own equipment, most products cannot be linked to other equipment used in the OR. The benefits of doing so are tantalizing: The ability to synchronize an x-ray with the breathing of an anesthetized patient in surgery can produce better-quality images; an interoperable plug-and-play network could automatically shut down a laser used in airway surgery if sensors detected oxygen sufficient to pose a combustion threat (*Anesthesiology News,* January 2007, page 1).

Device integration and interoperability could also help physicians make sense of disparate patient data. Sensors and devices from a patient in the intensive care unit can generate up to 350 data elements, said James Fackler, MD, associate professor of anesthesiology and critical care medicine at Johns Hopkins University School of Medicine in Baltimore, and an MD PnP participant. "We ignore most of these data elements because cognitive psychology has demonstrated that humans can only handle up to seven things at once. Frankly, it's insanity for us to pretend that we have a comprehensive understanding of all that data," Dr. Fackler said.

At the 2008 American Society of Anesthesiologists (ASA) annual meeting in October, Dr. Goldman and his colleagues unveiled a white paper including model contracting language for use by hospitals, clinics, insurance companies and other health care organizations. The document, called MD FIRE (Medical Device Free Interoperability Requirements for the Enterprise), urges manufacturers and vendors create or adopt open interoperability standards and interfaces when they become available.



MD FIRE was crafted earlier this year by experts from Massachusetts General Hospital/Partners HealthCare, Johns Hopkins and Kaiser Permanente. The three organizations have agreed to incorporate these requirements into their own contracts and requests for proposals.

Kaiser, the nation's largest private nonprofit health care system, has been a leading proponent of interoperability, pushing for standards in electronic medical records and other technologies for the past several years.

"Our goal is plug-and-play. We want a seamless interconnection and data flow from biomedical devices to and from clinical information systems," said Zachary A. Zimmerman, MS, MD, chief of anesthesia at Kaiser Vallejo and chair of the chiefs of anesthesia for the Permanente Medical Group of Northern California. Since 2006, Kaiser, with more than 8.7 million members and 14,000 physicians nationwide, has required its vendors to comply with medical device and equipment interoperability standards when they are created.

FIRE and ICE

The counterpoint to MD FIRE is MD ICE—Integrated Clinical Environment—a set of interoperability standards being developed by ASTM

International, one of the world's largest voluntary standards development organizations. Dr. Goldman, who is past president of the Society for Technology in Anesthesia (STA), chairs the ASTM subcommittee on new specifications for equipment in the integrated clinical environment. Balloting on provisions of MD ICE closed Nov. 15 and the results will be available in the spring, he said.

Although the FDA does not regulate hospitals, it does oversee medical devices, so any interoperability system would likely need to pass regulatory muster or at least have gained the agency's tacit approval. In June 2007, the FDA took part in a two-day workshop on interoperability to "engage with academia, industry and clinicians in deciding how future medical device users might benefit from increased automation and information sharing," agency officials said.

"We have had expressions of interest from several health care organizations to collaborate on the MD FIRE shared interoperable medical device procurement terms, and we also expect similar interest from the federal government," said Dr. Goldman, a member of the editorial advisory board of *Anesthesiology News*.

If medical device interoperability becomes mandatory, it will be a big business. Companies will need to write new software for their equipment to meet plug-and-play standards. In December 2007, an earlier version of Dr. Goldman's standards failed to be approved by the Swiss-based International Organization for Standardization and its affiliated International Electrotechnical Commission.

One person familiar with the situation said major device makers feared that adopting the standards would cut into their profits by forcing them to cooperate with smaller companies.

MD PnP is not the only group pushing for interoperability standards. However, the majority of such efforts have revolved around electronic medical records. For example, 51 vendors and more than 74 clinical information systems participated at the Healthcare Information and Management Systems Society annual conference last March. And of the approximately 80 exhibits displayed at CIMIT's Innovation Congress in October, fewer than five focused on medical device and equipment interoperability, Dyke Hendrickson, a spokesman, said.

Still, progress continues; six clinical societies so far have endorsed medical device interoperability. In October, the ASA and STA adopted a position statement noting that "intercommunication and interoperability of electronic medical devices could lead to important advances in patient safety and patient care, and that the standards and protocols to allow such seamless intercommunication should be developed fully with these advances in mind."

Additional endorsements have come from the Anesthesia Patient Safety Foundation, the Society of American Gastrointestinal and Endoscopic Surgeons, the Massachusetts Medical Society and the World Federation of Societies of Anaesthesiologists.

—Ted Agres