Pediatric Anesthesia

Response to Pediatric Sedation Research Consortium and the Society of Pediatric Sedation

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In Response:

Dear Pediatric Sedation Research Consortium and the Society of Pediatric Sedation:

Thank you for your very thoughtful letter in response to my editorial. As you acknowledge much of this discussion and likely the founding of your consortium and society are based in part on my research and that of my collaborators. I feel that these 20+ years of work have perhaps been my most important contribution to the healthcare of children. Now the standards for safe sedation are being raised to the level of safety in anesthesiology practice. I view my role in these discussions as an instigator of controversy. I am delighted that I have once again stirred the pot and that your society and consortium is now beginning to reinforce our daily practice with science by collecting a large cohort of outcome data. Perhaps your efforts will put an end to editorials (and publications) full of bluster with safety claims based on underpowered and poorly structured studies.

You have however taken a few of my words somewhat out of their intended context or perhaps I did not make myself clear. What I wanted to say in the editorial is exactly what you ask for, i.e., that anesthesiologists take a proactive and central role in training sedationists. If we train sedation providers and retain some degree of oversight (direct or indirect) then we can feel comfortable that safe practice will continue. Oversight can take the form of well designed quality assurance conferences, case specific presedation discussions, consultations for difficult patients, and the development of screening methods and triage for children who would be best cared for by an anesthesiologist. It can also take the form ongoing education, simulation of adverse but uncommon adverse events, and regular hands-on experience with airway management in a controlled setting like the operating room. All of these activities can and should be conducted with the cooperation of the department of anesthesiology but not necessarily controlled by the department of anesthesia. I agree that there are many sedation models for sedation services and that many of these services are an overall improvement in the safe care of children. Several models that come to mind include: 1) all sedation provided by anesthesiologists (ideal from my perspective but not realistic in most hospitals), 2) sedation provided by sedationists who work under the direction and supervision of the anesthesia department (my second choice), 3) sedation services provided by Intensive Care Specialists (also a good option since these individuals are trained in airway rescue), 4) sedation services provided by Emergency Medicine Physicians (again a good option since these individuals are also trained in airway rescue) 5) sedationists from other specialties (Radiology, Gastroenterology, Hematology-Oncology, etc) who are independent and unsupervised (much less ideal. How do they learn? On the job training? Hit and miss??) 6) chaos with anyone giving sedation who wishes (the state of the art 20 years ago).

Why do I feel so fervent about keeping anesthesiologists as an essential part of sedation services? The reason for my strong feelings is constant mission creep. First of all, more and more new drugs (propofol, propropofol, remifentanil, dexmedetomidine, and others in the future) find their way to the sedation services. Unlike other specialties, most anesthesiologists have gained extensive experience with these drugs in well-controlled settings (with secure airways and full hemodynamic monitoring) and only then will they expand the use of these drugs to off-site locations. Most other specialties have limited or no experience but are eager to adopt the

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techniques used by their anesthesia colleagues. Without proper training and ongoing discussions, training programs, or quality assurance programs, sedation providers will rely on "learning by doing" which in my view is not exactly safe practice. Another area of concern is the increasing number of procedures, traditionally scheduled for the operating room with anesthesia services that are now shifted to other venues where sedation/anesthesia is provided by other specialties, e.g., neonatologists providing "anesthesia" for a laparotomy in a preterm infant for NEC, fracture reductions in the ER with less than adequate analgesia or a state of general anesthesia with a full stomach and no endotracheal tube. Will the seditionist who provides "anesthesia" for the cerebral angiogram in interventional radiology be able to provide safe anesthesia for the emergency craniotomy if things go wrong?

Our efforts to improve sedation for children have decreased the complication rate to a degree that some practitioners now feel encouraged to experiment with new models. One hospital I know of established a sedation service where the child is sedated in the ICU with a propofol infusion and then the child is sent to various off-site locations with a nurse, a propofol pump, and a two-way radio! Once again, not what I consider safe practice. Finally I am worried about the quality of so-called "credentialing courses" organized by nurses and physicians with questionable qualifications (one nurse described among her credits an acting career!) and award a "sedation certificate" after the attendees listen to a few lectures (and pay a large tuition fee) without any hands-on experience or simulation training. One cannot become a sedationist after taking a correspondence course!! With this type of reasoning I could go out and perform surgery because my medical license states that I am a "physician and surgeon", but I doubt that the victim would like the outcome. For all these reasons I will continue to say that anesthesiologists need to "own it" in order to assure and maintain a safe practice of sedation throughout their hospitals. It has to be part of our job to establish teaching programs, credentialing and quality assurance committees and to check that the training, credentials, and scope of practice are appropriate for the skills of the individuals involved.

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Regarding the reimbursement issue I agree that there are sedation specific billing codes for minimal and moderate sedation but there are no specific codes for deep sedation thus forcing the sedation providers to use Anesthesia billing codes. On the other hand as a Board Certified Anesthesiologist after years of anesthesia residency and fellowship, I fear we are sending the wrong message to our trainees. Why bother to go through a vigorous and exhausting training if I can make the same money running a sedation service? And there is an additional concern, especially in the United States where the specialty of Anesthesiology is already struggling with public recognition, i.e., calling every sedation "anesthesia", even if it is intended only for billing purposes, further obscures the image and definition of our specialty and endangers our future. We need strong anesthesia departments willing to take a leadership role in training and continuing education of sedation providers without alienating them yet maintaining our integrity as specialists.

Obviously I am preaching to the choir here because those of you who belong to this society and this consortium are the converted and provide very safe sedation. What I am worried about are those that have not yet heard "the word" and need to be converted!! I am on your side and have always been on your side but I will not back off from my strong conviction that my specialty needs to be intimately involved at all times to prevent chaos. I congratulate you with your

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society and consortium and I look forward to the wonderful projects you will devise in the future to further improve the safety and efficacy of sedating children by many types of practitioners. In fact with evidence-based science you will eventually be able to re-define essential monitoring, safety profiles of drugs, the necessary skills for safe practice, and hopefully even reimbursement issues.

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