“Cloud Computing” is a phrase we hear thrown about constantly in the technology industry these days. To the casual observer, it can be synonymous with the internet or perhaps used to identify a specific program available over the web. Large organizations such as hospitals typically understand the nuance that exists when discussing and integrating cloud computing concepts, but since many anesthesia practices must double as their own internal IT departments, confusion may arise as to what cloud computing is and how it affects your business.

Many tout the cloud as the next evolutionary step to the traditional software and support models but fail to evaluate the true benefits and costs. As this software and platform model continues to mature, we must ask, “How will cloud computing affect my practice and how can I benefit?”

**What is Cloud Computing?**

This seems to be an ever evolving answer. While many industry experts expected to have a standardized definition by this time (Klein, 2011), the scope and
Continuing to Reach for Quality and Efficiency in Ways Old and New

Health information technology has become the colossus of high quality, high-efficiency medical practice. Anesthesia Business Consultants continues to expand our resources in the area of HIT – as do all of you. With the lead article in this issue of the Communiqué, we introduce to you a major new resource: Bryan Sullivan, Director, EMR and Clinical Integration. Bryan’s article on cloud computing explains an important direction in which HIT is moving.

Anesthesiology is on its way to becoming a complete perioperative discipline – as it must, in an environment that will be dominated by integrated, accountable healthcare delivery systems. Richard P. Dutton, MD, MBA, Executive Director of the Anesthesia Quality Institute, describes the role of the AQI in pre- and post-anesthesia assessment in his latest article. In the write-up of his interview with Parish Management Consultants’ Al Patin, “Anesthesia Leadership in the Preoperative Clinic,” ABC Vice President of Client Services Bart Edwards shares what he recently learned about launching a preoperative evaluation service.

The role of first-rate preoperative anesthesia assessment assumes even greater importance as more and more surgery moves to the office setting. Fred E. Shapiro, D.O. co-founded the Institute for Safety in Office-Based Surgery (ISOBS) to raise the standard of quality of anesthesia provided in the office setting. Only 23 states regulate office-based anesthesia, so there is certainly a need for voluntary safety efforts like the ISOBS. One of the major contributions made by this new organization to date is the Safety Checklist discussed in Dr. Shapiro’s article. The Safety Checklist is also referenced in “Putting Your Anesthesiology Practice on Wheels,” an account by Shawn Michael DeRemer, MD and Gregg M. White, CRNA, MS of how their company in Portland, OR created a successful mobile anesthesia service.

In the final article of this issue, our legal contributor, Neda Mirafzali, Esq., takes up the controversial matter of the targeting of anesthesia supervision in CMS’ Plan for Retrospective Review of Existing Rules.

As the number of articles contributed by anesthesiologists, lawyers and other independent professionals grows, the range of opinions is more obvious in its width. Perspectives on the autonomy of nurse anesthetists, on the safety of certain procedures or sites of service, and yes, on how the law might apply to a given set of circumstances differ. Our role is to provide you, the reader, with information, and information includes the opinions of others. We do not edit and nor do we necessarily endorse the general tenor or any bias of third-party articles, although we do edit for factual accuracy. You are certainly capable of evaluating the information offered for yourselves. If you agree or disagree with something that you read in these pages strongly enough to write us a letter or perhaps even an article of your own, we will be pleased to consider publishing your response in the next issue of the Communiqué, if it adds new information to the topic. For that matter, if you would like to submit an article introducing a new topic, we would be very happy to hear from you.

With best wishes,

Tony Mira
President and CEO
Electronic capture of patient information before and after surgery is an essential component of an effective anesthesia quality management program.

- Postoperative data are the outcomes of our work. These include rare safety issues related to intraoperative care, but not always apparent in the OR or PACU: events like neurologic injury, myocardial infarction, aspiration pneumonia or complications of pain management. More common, and increasing in importance, are the “patient-centered” outcomes which will be used by external regulators to judge us: the occurrence of nausea and vomiting, the adequacy of pain management, and overall patient satisfaction.

- Preoperative information, on the other hand, is the substrate for understanding anesthesia risks. Comparison of outcomes across institutions will require careful risk adjustment, and electronic capture of pre-existing conditions, chronic medications and pertinent diagnostic studies will enable this process. Even information as simple as the ASA physical status can be a powerful tool for understanding anesthesia outcomes across broad populations.

As proprietor of the National Anesthesia Clinical Outcomes Registry, the Anesthesia Quality Institute is a strong proponent of electronic data capture in all phases of anesthesia care. The more practices can make preoperative and postoperative data available, the sooner we will have robust national benchmarks for anesthesia performance. The good news is that there are a number of companies and products emerging to fill this need, as well as a variety of innovative solutions. Many vendors of Anesthesia Information Management Systems (AIMS) have been offering PACU record keeping for years, often including a Quality Management form to capture outcomes and complications. Many of these forms now follow the categories and definitions established by the ASA Committee on Performance and Outcome Measures, freely available on the AQI website (www.aqihq.org). The 26 adverse outcomes established by this committee appear in Table 1. A sample definition from the same committee report is in Figure 1 (shown on page 15).

The more foresighted AIMS vendors are expanding even further, to include modules

### Table 1

<table>
<thead>
<tr>
<th>Outcome Measures for of Anesthesia Established by the ASA Committee on Performance and Outcome Measures, 2009</th>
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<tbody>
<tr>
<td>1. Death</td>
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<td>2. Cardiac arrest</td>
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<tr>
<td>3. Perioperative myocardial infarction</td>
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<td>4. Anaphylaxis</td>
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<td>5. Malignant hyperthermia</td>
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<td>6. Transfusion reaction</td>
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<td>7. Stroke, cerebral vascular accident, or coma following anesthesia</td>
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<td>8. Visual loss</td>
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<tr>
<td>9. Operation on incorrect site</td>
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<td>10. Operation on incorrect patient</td>
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<tr>
<td>11. Medication error</td>
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<tr>
<td>12. Unplanned ICU admission</td>
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<tr>
<td>13. Intraoperative awareness</td>
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<tr>
<td>14. Unrecognized difficult airway</td>
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<tr>
<td>15. Reintubation</td>
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<tr>
<td>16. Dental trauma</td>
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<tr>
<td>17. Perioperative aspiration</td>
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<tr>
<td>18. Vascular access complication, including vascular injury or pneumothorax</td>
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<tr>
<td>19. Pneumothorax following attempted vascular access or regional anesthesia</td>
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<tr>
<td>20. Infection following epidural or spinal anesthesia</td>
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<tr>
<td>21. Epidural hematoma following spinal or epidural anesthesia</td>
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<tr>
<td>22. High spinal</td>
</tr>
<tr>
<td>23. Postdural puncture headache</td>
</tr>
<tr>
<td>24. Major systemic local anesthetic toxicity</td>
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<tr>
<td>25. Peripheral neurologic deficit following regional anesthesia</td>
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<tr>
<td>26. Infection following peripheral nerve block</td>
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</tbody>
</table>

Continued on page 15
HOW DOES CLOUD COMPUTING FIT INTO ANESTHESIA?

Continued from page 1

breadth of the cloud model continues to develop.

At its core, cloud computing refers to the availability of software applications, data storage, and even identity management services through online resources in a public or private network. These resources are made available to the end users using an “on-demand” or “pay-as-you-go” model.

To better understand this, think of a water utility company providing water to your home. As a consumer, you aren’t interested in whether the water you use comes from a local reservoir or from a nearby water tower. You only care that water is available to you when you turn on the faucet. Additionally, you won’t leave the water continually running either. You decide when and where you want water and achieve this by turning on the faucet.

This is essentially the same idea when it comes to a software product or system available “in the cloud.”

You may have also heard the term “Software-as-a-Service (SaaS)” which refers to a specific application such as Google Docs™ or Yahoo Mail. The only requirement to use these applications is a computer, access to the web, and an internet browser.

It should be noted that in many instances, cloud computing and software-as-a-service are used interchangeably. This is not correct. According to the Gartner definition, SaaS is software that is “owned, delivered, and managed remotely by one or more providers.” In simpler terms, SaaS is the specific application you intend to use while cloud computing refers to the larger picture where Saas applications reside.

WHY IS CLOUD COMPUTING GARNERING SO MUCH ATTENTION?

Money. That’s the simple answer. The more complex answer is that cloud computing offers organizations the potential to convert capital expenditure budgets over to operational expenditures. Organizations do not have to set up an entire server infrastructure to support a SaaS application as with traditional on-premise software purchases. The hardware to support these applications is typically located in third-party facilities and does not require up front purchase by the hospital or anesthesia practice. Almost as important, the funding to support these systems is no longer needed as the software is maintained by the application vendor.

More than just the financial benefit, cloud computing offers organizations the ease of increasing capacity and quickly deploying new features on the fly. Since end users are not required to install any software other than an internet browser, organizations are freed from the typical “down-time” periods necessary to perform an upgrade in a traditional hospital setting. The required changes and updates are applied directly to the SaaS provider’s end and are immediately available.

According to a survey conducted by SnapLogic, in the past two years, 64 percent of companies have implemented at least one software-as-a-service (SaaS) application. That number should rise during the next two years, as 77 percent of companies expect to implement at least one SaaS application. (Preimesberger, 2011) This rapid adoption has allowed organizations to become more familiar with the technology and comfortable with the security and dependability questions that plagued this architecture since it was first adopted.
**How is HIPAA affected by the Cloud?**

Many conversations are taking place concerning how the cloud complies with HIPAA privacy rules. All healthcare organizations that handle protected health information (PHI) must comply with HIPAA. The new model that the cloud offers forces all consumers of cloud services to ensure compliance as well. This includes not only the end users, but also the SaaS providers.

In addition to protecting PHI, you must ensure that SaaS providers do not ship any data out of the U.S. to an off-shore data center. If this were to occur, the data may be subject to international laws which could force the SaaS provider to make changes that put them out of HIPAA compliance.

There are many issues currently exposed when it comes to HIPAA compliance and a cloud computing model. This requires diligence on the anesthesia practice’s or partner’s part to ensure that any systems to be deployed that contain PHI comply with HIPAA and that contracts are in place to ensure this. In today’s healthcare environment, it is simply not sufficient to have a great software application in the cloud. It needs to be a great, secure, and HIPAA compliant application.

**What is the Cloud’s impact on anesthesia?**

Many contracted anesthesia groups currently work under the model of a hospital or facility bearing the financial and operational burden of a software purchase. This has led to slow adoption of Anesthesia Information Management Systems (AIMS) as well as other packages around provider’s quality of care, anesthesia scheduling, and even preoperative portals. The promise of cloud computing makes these systems more attractive to implement due to the lower costs around installation and maintenance. However, it still requires an administrative component that anesthesia groups may not currently be able to support.

New product offerings are continually entering the anesthesia technology market and many have adopted a SaaS architecture. The effort required to evaluate, recommend, and implement these solutions by the anesthesia practices may be reduced by the new cloud platform, but the effort exists nonetheless. This leads to one of the major issues facing anesthesia groups today when it comes to new technologies: How to combine the functionality of a “best of breed” system with the integration value of an enterprise system?

Pursuing an answer to this question will be critical as the requirements on anesthesia practices around efficiency, productivity, and cost-effectiveness continue to increase. It may be beyond the current capabilities of a single anesthesia practice to answer this question and the collaboration of an existing partner may make the difference.

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**References**


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**Bryan T. Sullivan, PMP**, serves as the Director of EMR and Clinical integration for ABC. Mr. Sullivan came to ABC from Merge Healthcare where he managed and delivered Anesthesia EMR solutions to the healthcare market. He focuses on providing anesthesia and pain providers with clinical and operational systems as well as integrating existing EHRs. He can be reached at Bryan.Sullivan@AnesthesiaLLC.com.
Anesthesia Leadership in the Preoperative Clinic

Bart Edwards, MBA, MHS
Vice President of Client Services, ABC

Anesthesia practices looking to optimize their value proposition at their respective facilities have sought a greater role in the preoperative preparation of their patients. The emphasis on efficiency and the continuity of care in recently suggested models of healthcare reimbursement, including Accountable Care Organizations, have drawn renewed attention to opportunities within the preoperative clinic. The economic reality is that providers and facilities are not getting paid to provide those services under current reimbursement rules. Preoperative clinics can provide benefits in quality of care and cost reduction, in addition to the significance of improving patient and surgeon satisfaction. Anesthesia practices are in a unique position to develop the preoperative clinic into a valuable resource.

The expenses of a poorly performed preoperative assessment are borne by both the surgical department and anesthesia provider (as well as by the patient) in the form of poor utilization. Patient satisfaction and outcomes are affected by delays and improper risk minimization strategies. The increased costs of surgical setup, sterilization, and vacant room time for each delay or cancellation are measurable and significant. Reduced productivity for ancillary staff, surgeons and anesthesia providers may be the most painful financial consequence of poor preoperative preparation.

Parish Management Consultants’ Preanesthesia Clearance and Evaluation (PACE) Clinic

Parish Management Consultants, LLC is one of many anesthesia practices that are seizing the opportunity to improve the surgical care experience for its surgeons and patients. Several Louisiana hospitals have approached Parish for assistance in reducing same day cancellations and improvement in on-time starts by initiating or improving preop clinics. Parish has partnered with multiple facilities in Baton Rouge, Lafayette and New Orleans to establish a Preanesthesia Clearance and Evaluation (PACE) Clinic.

Al Patin, RN, MBA, Regional Vice President for Parish Management Consultants admits, “We had a huge issue getting patients to the room on time.” The facility at which the first PACE was developed and the practice set to work. They selected increasing the number of on time starts as the primary metric to monitor progress. Other indicators include surgeon satisfaction surveys and cancellation rates. Mr. Patin indicates, “The goal is to keep patients and surgeons happy, and efficiency does that.”

There is some debate regarding the type of provider to staff the PACE clinic. While an RN can perform many of the necessary functions, Parish recommends a nurse practitioner as the manager of its PACE clinic. Parish Management Consultants signs a Collaborative Practice Agreement, accepting the opportunity along with its hospital partner to guide the nurse practitioner in this role. Another Parish facility is considering a CRNA in that position, which is higher from a cost perspective. “Some facilities will pay the premium to place a CRNA in that role, either as an employee or out of subsidized dollars.” The benefits of increased efficiency and increased user...
satisfaction are not hard dollars, but the cost of the provider is black and white. This is compounded by decreasing reimbursement opportunities overall, and for preoperative evaluation services in particular.

Most facilities will provide surgical schedulers with a telephone guideline to select the patients who must present for personal preop screening prior to the day of surgery, often based on ASA Physical Status. Other practices have triaged the scheduled patients into tiers based on co-morbidity, age and planned procedure. At one facility, one hundred percent of the surgical patients come through its PACE clinic. “All patients come through the PACE, but anesthesia does not touch them all.” The Parish doctors set up an algorithm based on the ASA guidelines for the preoperative assessment. The nurse practitioner calls in an anesthesiologist for sicker patients, but the hope is that even this can be reduced with greater experience.

With the training and process in place, “We let her go,” said Mr. Patin. In many cases, the nurse practitioner is able to provide a more detailed history and physical to supplement that provided by the surgeon. This is of significant value to the anesthesia provider. Evidence-based algorithms for necessary preoperative testing are used instead of standing orders for routine exams to tamp down overutilization and expenses. The results of the assessment are recorded in the patient’s electronic medical record (EMR).

The long list of items that needs to be coordinated prior to surgery can include evidence-based lab testing, EKG, radiology study, informed consent, and patient education. Further challenges for preoperative assessment include risk identification, stratification and reduction. The PACE clinic collects and maintains these results and reviews them in a single location prior to the schedule procedure date. The complete preop workup is then made available on the day of surgery to the assigned anesthesia provider and the entire perioperative team within the EMR.

The impact of the increased attention to the preop clinic has been positive. In the first three months one Parish facility has seen the percentage of its on time starts improve 25%. In fact, most delays are now surgeon driven. “We learned that we had trained our surgeons to be late,” said Mr. Patin. The clinic is a first step, “it starts with the process – not people or supplies.” The hospital performs annual surveys, and it is expected that the increased efficiency will yield higher surgeon satisfaction scores. Regarding the goal of the program, Mr. Patin stated “Ultimately efficiency dictates whether the surgeon will be comfortable coming back.”

Increased anesthesia direction in the preoperative clinic can reduce stress and provide a more streamlined experience for patients. The better trained and monitored clinic providers can correctly identify and accommodate co-morbidity in advance of the scheduled procedure.

For the anesthesia practice, fewer delays and cancellations decrease the unused operating room time and drive up utilization. More work can be done by each scheduled provider, with higher efficiency and a better return per hour worked. The increased responsibility and integration through the clinic strengthens the relationship with the facility. The further benefit will be to demonstrate anesthesia’s added value in the preoperative clinic when discussing non fee-for-service reimbursement models.

Bart Edwards, MBA, MHS serves as Vice President of Client Services for ABC clients in the Eastern US. After receiving an MBA and MHS from the University of Florida, Mr. Edwards spent twelve years providing management expertise to hospital based physician practices. Since joining ABC, he has worked with anesthesia practices to demonstrate their value in and outside the operating room. Mr. Edwards gratefully acknowledges the expertise shared by Al Patin of Parish Management Consultants in this article. He can be reached at bart.edwards@anesthesiallc.com.
In recent years, the economic pressures of medicine have incited a paradigm shift in health care delivery, such that surgical procedures are moving from the hospital to the office-based setting. Often called the “wild west of health care,” office-based procedures continue to increase at a rapid pace, with an estimated more than 10 million procedures performed in 2010. A growing body of literature calls for greater leadership in the field of office-based surgery, and for leaders who are educated in all facets of quality improvement. In addition, a recent study found that a comprehensive checklist used in an interdisciplinary, team-based setting resulted in a reduction in surgical complications as well as cost savings.

Development of such a checklist and education of practitioners, patients, and office personnel is the mission of the Institute for Safety in Office-Based Surgery. An independent, non-profit 501(c)(3) organization, ISOBS has developed a safety checklist for use in the office-based setting. The checklist, shown in Figure 1, calls on engagement from RNs, MAs, PAs.
PUTTING YOUR ANESTHESIOLOGY PRACTICE ON WHEELS

Shawn Michael DeRemer, MD
Gregg M. White, CRNA, MS
Anesthesia Associates Northwest, LLC (AANW), Portland, OR

Health care delivery has gradually shifted from in-hospital to outpatient settings, most recently to physicians’ offices. In fact, in 2009 the number of office-based procedures in the United States numbered 12 million. Nevertheless, though outpatient surgery may be more convenient and financially beneficial for both doctors and patients, many physicians are not taking advantage of the full realm of possible procedures that could be offered in an office setting.

In 2010, we decided to expand our own anesthesia management and staffing services business by helping physicians expand their practices. Our idea was to bring the surgical suite to physicians’ offices via a fully equipped van that would deliver all necessary resources — and also foster a “culture of safety.”

WHAT WE NEEDED

We went to task outfitting a slick-looking van with everything a physician might need to ensure efficiency and safety during the delivery of anesthesia for office-based surgery. After months of labor pains, the AANW mobile anesthesia van service was born in January 2011.

The process of purchasing and equipping a van started by identifying our requirements, choosing a vehicle manufacturer and comparison-shopping for vans. We also worked closely with vendors to get the best deal on equipment. In addition to monitoring equipment, oxygen, supplies and drugs, we bought battery back-ups to cover power outages.

We also drew up a safety checklist and maintenance schedules for the van and equipment. Lastly, we procured a parking space, with special lights and camera surveillance, outside our business office.

Altogether the start-up costs totaled well beyond the six-figure mark.

WHAT WE PROVIDE

Sticker shock aside, we ended up with a sleek Mercedes Sprinter van with state-of-the-art anesthesia equipment. The intent is to bring all-inclusive anesthesia resources/equipment/supplies, along with pharmaceuticals and anesthesia clinicians. This eliminates all financial and many of the legal burdens on the surgeon/physician. Additionally, the surgeon can do what he does best. Instead of monitoring the patient before, during and after receiving anesthesia, the doctor can concentrate on the procedure at hand.

We work flexibly with our client medical practices to provide a staffing model that suits their needs — whether an MD-only model, a CRNA-only model, or a combination of the two. Our Quality Assurance/Safety Director and our Director of Practice Management collaborate with the medical team to ensure best business and safety practices and provide recommendations when needed.

Some of our regular clients have blocked days where they schedule and then notify us of the cases. Others call to check for availability and we coordinate times with their offices. Paperwork is faxed over and folders are prepared, which our anesthesia providers collect the day of the procedure for transport.

Appointments are confirmed one business day prior to the scheduled time. We arrive approximately one hour prior to the procedure to set up and do intake with the patient, including pre-anesthesia evaluation, vital signs, answering questions, etc. The average case time is one to two hours, and we remain with the patient until he/she is fully recovered.

Continued on page 10
(approximately 20 to 25 minutes).

All equipment and supplies are removed and returned to the office for documentation and are cleaned and checked for the next scheduled case.

All mobile cases are billed by time to the physician’s office. The physician collects from the patient. If the patient has insurance they can submit the invoice for reimbursement.

**Safety first**

Highly publicized fatalities such as the death of Kanye West’s mother have drawn attention to the safety of office-based procedures, which are unregulated in all but 23 states. Moreover, a vast majority of medical practices lack accreditation by one of the major accrediting agencies (AAAHC, AAAASF, JCAHO). With or without an anesthesia care team such as the one we provide, safety is a critical issue we knew we had to address.

With this in mind, we collaborate with office-based practices to create a “culture of safety.” (We use a safety checklist similar to the one developed by the Institute for Safety in Office-Based Surgery, which appears on page 8 of this issue of the Communiqué.)

The safety checklist gives our clients details on what to expect and familiarizes them with our specialized anesthesia service, including perioperative management; complications and recovery; medications and sedation. We assess the facility itself to ensure it is up to par and help with patient and procedure selection. Before surgery we also contact the patient by phone to answer questions and further assess suitability.

Monitoring during the recovery period is perhaps the most important service we provide. One study showed that 46% of adverse office-based incidents leading to an ASA claim were deemed preventable by better monitoring—e.g., by pulse oximetry in the postoperative setting. *(Source: Domino KB. Office-based anesthesia: lessons learned from the Closed Claims Project. ASA Newsletter 2001;65(6):9-11, 15)*

**Whom we work with**

When we launched our mobile service, the majority of our cases were at small dental/endodontic offices and orthopedic practices. Today, we are working with all types of practices (ophthalmologists, podiatrists, dermatologists, endoscopists, cosmetic and plastic surgeons, and others), and we are called on to provide anesthesia for a wide variety of office-based procedures, including hysteroscopies, LEEP procedures and sterilization, cone biopsy, endometrial ablations, etc.

**Marketing 101**

In developing the marketing materials for our mobile services, we focused on several messages and how these messages can be translated to the patient, including:

- *We’re there so the doctor can do what he does best.* Few patients really warm up to the thought that their surgeon is multi-tasking during an operation. The presence of an anesthesia clinician allows the doctor to do the procedure in the office and make himself or herself look good at the same time. It also enables the surgeons to focus on what they do best.
• More revenue for the doctor; less cost for the patient. In today’s economy, all of us are trying to find ways to increase revenue. This is one way a doctor or dentist can do so while also saving the patient and/or insurance company money. (By the way, cost containment for the patient is a significant, though often overlooked, benefit. Many patients pay 20% of medical costs out of pocket, and many procedures (dental, cosmetic) aren’t covered by insurance at all. Eliminating the hospital facility fee greatly reduces the patient’s bill.)

• The advantages of our mobile service also centers on convenience and efficiency, both for the surgeon and for the patient. By using our services, the surgeon has the potential to see patients in between procedures. There’s no time wasted driving offsite to a hospital or surgical facility. And, patients enjoy the safety and convenience of a hospital in a familiar office setting with experienced board certified anesthesiologists or AANA-certified nurse anesthetists by their side.

• Up-to-date equipment and knowledge benefits everyone. In the past two years anesthesia has evolved; huge technological advances have been made. Surgeons can’t be expected to keep up. Those practices that have purchased anesthesia equipment often have an outdated, hodge-podge solution that won’t meet the needs of all patients and all procedures. A mobile anesthesia service like ours mitigates all these factors.

LESSONS LEARNED

From a service provider’s perspective, under-utilization is the biggest risk and a lesson we quickly learned. Our van is in service an average of 3.5 days a week (with an average of 2 cases per day), which means it is parked in our garage at our facility, not earning any revenue for the rest of the week.

To ensure the van doesn’t break down on the way to a procedure, we purchased full service maintenance contracts from the van manufacturer, and we follow preventive maintenance cycles to minimize wear and tear and reduce the risk of breakdowns.

In addition to the up-front costs of establishing a mobile anesthesia service, a provider has to bear the ongoing costs of doing business. Vehicle maintenance and equipment refurbishing costs are a major expense, and there are other ongoing costs that are unique to a mobile service. For example, we need medical and equipment-related insurance, as well as insurance on the vehicle, both for the van and the contents inside.

Though it’s too early to project profitability, the mobile anesthesia service has grown steadily since its inception in January 2011. It has expanded our customer base into places we never could have serviced had we maintained only our outsourced labor services.

Even with less than maximum utilization, the bottom line in terms of community response and customer satisfaction has been positive for us. Doctors and patients alike appreciate the convenience of having the equipment and technical staff come to them. It has given us a leg up on competition and an image that is helpful in branding ourselves.

In summary, there is definitely a market and need for mobile services such as ours, but start-up costs are high and profitability won’t be immediate. Nonetheless, we believe this is an opportunity to be in on the ground floor of an industry that is just beginning to take shape.
On August 22, 2011, as a result of a directive from President Obama, the US Department of Health and Human Services (“HHS”) issued its Plan for Retrospective Review of Existing Rules (“Plan”). The Plan includes a review from all HHS operating and staff divisions (e.g., the Centers for Medicare and Medicaid Services (“CMS”)) that establish, administer and/or enforce regulation. HHS’ Plan aims to review “existing significant regulations to identify those rules that can be eliminated as obsolete, unnecessary, burdensome, or counterproductive or that can be modified to be more effective, efficient, flexible, and streamlined.” While, on its face, a review of unnecessary regulations appears to be beneficial, looking below the surface reveals that the review may create fundamental changes in medical and anesthesia practice. CMS is contemplating reviewing the conditions of participation (“CoPs”) for anesthesia services (42 CFR 482.52) to eliminate the certified registered nurse anesthetist (“CRNA”) supervision requirement, which could significantly impact anesthesiologists, CRNAs, their practices and their patients.

Current Hospital CoPs for Anesthesia Services

As a preliminary matter, it should be noted that for the purposes of the hospital CoPs for anesthesia services, CMS considers the areas where anesthesia services are furnished and may include operating room suite(s), both inpatient and outpatient; obstetrical suite(s); radiology departments; clinics; emergency departments; psychiatry departments; outpatient surgery areas and special procedure areas (e.g., endoscopy suites, pain management clinics, etc.). Moreover, administering anesthesia must only be by:

i. A qualified anesthesiologist;

ii. A non-anesthesiologist MD or DO;

iii. A dentist, oral surgeon, or podiatrist who is qualified to administer anesthesia under State law;

iv. A CRNA who is under the supervision of the operating practitioner or of an anesthesiologist who is immediately available if needed; or

v. An anesthesiologist’s assistant who is under the supervision of an anesthesiologist who is immediately available if needed.

These requirements concerning who may administer anesthesia do not apply to the administration of topical or local anesthetics, minimal sedation, or moderate sedation.

The CRNA supervision requirement (number (iv), above) applies in States that have not opted out of the requirement. States may opt out of the CRNA supervision requirement by sending a letter, signed by the State’s governor, to CMS concluding that it is in the best interest of the State’s citizens to opt out.
of the physician supervision requirement (42 CFR 482.52(c)). According to CMS, as of October 2010, sixteen (16) states have chosen to opt out: California, Iowa, Nebraska, Idaho, Minnesota, New Hampshire, New Mexico, Kansas, North Dakota, Washington, Alaska, Oregon, South Dakota, Wisconsin, Montana and Colorado. Notably, this rule does not require hospitals to allow CRNAs to practice unsupervised; this rule merely exempts those States that have opted out from requiring supervision of CRNAs as a condition to Medicare reimbursement.

For those remaining thirty-four (34) states that have not opted out, the requirement that the operating practitioner or anesthesiologist be “immediately available” is satisfied if the operating practitioner or anesthesiologist is “physically located within the same area as the CRNA, e.g., in the same operative/procedural suite, or in the same labor and delivery unit, and not otherwise occupied in a way that prevents him/her from immediately conducting hands-on intervention, if needed.” This supervision requirement is intended to ensure the safety of the patients while also allowing the anesthesiologists to simultaneously tend to multiple patients, thus providing for more efficient delivery of care.

HHS’ Plan for Retrospective Review of Existing Rules Targets Anesthesia

However, these rules may change with HHS’ and CMS’ upcoming review. As part of its Plan, HHS agencies identified regulations that that will be reviewed over the next two years. One of CMS’ areas of review includes the hospital CoPs. Specifically, CMS will be reviewing the CoPs for anesthesia services (42 CFR 482.52) in response to the following comment:

Many regulations requiring a “physician” to perform procedures or at least supervise them are called unnecessary by commenters because oftentimes the work can be done just as easily by Certified Registered Nurse Anesthetists (CRNAs) and other Advanced Practice Registered Nurses (APRNs).

Similarly, this commenter wrote that current regulations, 42 CFR part 482.52(a)(4) require unnecessary supervision by an “operating practitioner or an anesthesiologist” upping costs by increasing staff members but not safety. This commenter summed up these particular concerns by, “suggest[ing] that all regulations and interpretive guidelines issued by CMS be reviewed with the intent of removing restrictions concerning anesthesia services provided by nurse anesthetists.”

CMS argues that the purpose of reviewing the hospital CoPs would be to “remove or revise multiple requirements that are inconsistent with other requirements or impose unnecessary burdens to increase flexibility.” CMS indicates that the review of the hospital CoPs would result in an estimated $600 million in savings, annually.

According to the American Society of Anesthesiologists (“ASA”), while CRNAs are certainly valuable, they are only qualified to perform some anesthesia services and are not qualified to perform all anesthesia services. In other words, a CRNA does not equal an anesthesiologist. The ASA contends that CRNAs should supplement an anesthesiologist’s practice by performing services under that anesthesiologist’s supervision, pursuant to the current regulations. The AANA categorically disagrees.

The ASA also takes the position that when anesthesiologists are involved in procedures, the anesthesiologist plays the role of the perioperative physician in which s/he is solely responsible for providing comprehensive care to the patient during the entirety of the procedure. Moreover, the ASA states that it is because of the anesthesiologist’s over twelve (12) years of formal training that s/he is knowledgeable enough to evaluate all aspects of a patient’s condition, taking
Anesthesiologists Targeted in CMS’ Review of Existing Rules

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As stated above, lifting the requirement that CRNAs be supervised when performing anesthesia services would affect Medicare Part B payment policies, but lifting the requirement does not necessarily imply that CRNAs will immediately begin providing services independently. CRNAs can only perform services independently if the hospital in which they perform those services embraces a supervision-free environment. The ASA urges anesthesiologists to continue working with their local and national anesthesia associations and lobbying organizations to encourage CMS to reject the commenter’s suggestion. The American Association of Nurse Anesthetists has worked long and hard to eliminate the supervision requirement, and it will also urge its members to use the HHS-CMS review of the CoPs to further its professional goals. No one can predict the outcome, but everyone who wishes will have a chance to be heard, directly or indirectly. 

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The Institute for Safety in Office-Based Surgery (ISOBS)

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and physicians to ensure safe care. Perhaps most important, the checklist is fully customizable to a variety of office-based settings, from elective plastic surgery to ophthalmology. ISOBS recently completed a retrospective chart review using the checklist, and is now proceeding to the prospective phase of checklist deployment. In addition, ISOBS is developing web-based educational modules for practitioners on using the checklist.

The need for leadership in office-based procedure performance is clear. Without tools to aid patient safety, neither practitioners nor patients will have the security they deserve. Using a comprehensive safety checklist as well as associated educational modules, ISOBS aims to fill this void and supply practitioners with innovative yet common sense tools to protect their patients. For further information, see Shapiro FE, Durman RD. Office-Based Anesthesia and Surgery: Creating a Culture of Safety. ASA News. 2011; 75(8):10-12. ISOBS also publishes a complimentary electronic newsletter to which you may subscribe through the organization’s website, www.ISOBS.org. ISOBS will host a reception at the ASA Annual Meeting in Chicago on Friday, Oct. 14, 2011 honoring Atul Gawande, MD and Mark Warner, MD, for their contributions to the field of patient safety.

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Pre- and Post-Anesthesia Assessment: Role of the AQI

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that can be used by anesthesiologists and their facilities to record post-discharge follow-up. Traditional barriers to this effort are slowly eroding. Concern with legal discovery has led to systems that route QM forms to a different database from the AIMS medical record; the need to submit requests for reimbursement promptly has led to partition of postoperative records within the global EMR, so that the case can still be “closed out” in a timely fashion. And the difficulty of interfacing the AIMS with the institutional EMR is moderating with the general growth in interoperability across healthcare information technology, and with the evolution of local data repositories that aggregate information from multiple platforms.

For practices not yet using an AIMS, there now exist a variety of stand-alone preoperative and postoperative data capture systems. Notable among these is ePreop, which draws on the AQI schema and definitions to provide a “one-stop shop” for coordinating the care of perioperative patients. ePreop software now extends to cover the capture of outcome and satisfaction information as well. Other programs, such as Fides, are designed to make it easy to enter patient feedback from postoperative phone calls into a database that links to the original case. No one technical solution will be right for every practice situation, but it is encouraging that software now exists to enable the basic steps of: 1) gathering outcomes from patients, 2) linking those outcomes to records of the surgery itself, and 3) reporting that data in digital form on both the local and national level.

Every anesthesia practice needs to understand the outcomes it achieves, and that AQI exists to aggregate those outcomes and create national benchmarks. Eighty-three percent of AQI participants collect and report some outcomes from their cases, and already benefit from an improved understanding of their own practice. ABC and ePreop are committed to facilitating this advance in care, and to the general improvement of safety.

ABC is proud to be an AQI Preferred Vendor and a partner of ePreop.

Richard P. Dutton, MD, MBA is Visiting Professor of Anesthesiology, University of Maryland School of Medicine and AQI Executive Director. To contact Dr. Dutton or the AQI, visit www.aqihq.org
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<td>October 15–19, 2011</td>
<td>American Society of Anesthesiologists Annual Meeting</td>
<td>McCormick Place Chicago, IL</td>
<td><a href="http://www.asahq.org">www.asahq.org</a></td>
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<td>November 12, 2011</td>
<td>Midwest Anesthesiology Conference—Illinois Society of Anesthesiologists</td>
<td>Chicago Mart Plaza Chicago, IL</td>
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<td>December 14, 2011</td>
<td>Webinar: Revenue Opportunities for Anesthesia Practices Jointly sponsored by ABC with the Tulane University School of Medicine, Department of Anesthesiology and the Center for Continuing Education, Tulane University Health Sciences Center</td>
<td>Webinar</td>
<td><a href="http://www.anesthesiallc.com/industry-info/webinars">http://www.anesthesiallc.com/industry-info/webinars</a></td>
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<td>Advanced Techniques for Acute and Chronic Pain Management</td>
<td>Motor City Casino Hotel Detroit, MI</td>
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