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# Anesthesia Preoperative Evaluation Clinic: I

To the Editor: - Stanford's Anesthesia Preoperative Evaluation Clinic (APEC) was only possible with significant financial commitment by the parent institution, funds not forthcoming in all practice settings. 1 The "study hypothesis" asked whether "APEC could reduce preoperative testing, surgical cancellations and hospital costs"-isolated events! Reducing laboratory testing and surgery cancellations specifically via effects of APEC appears questionable, because the study lacked a blinded design comparative to any concurrent "gold standard." Although cost effectiveness was repeatedly stressed, there was little evidence that overall reduced costs (sum of all spent dollars, materials, and worker and patient hours) or improved patient care resulted, making "cost effectiveness" relatively meaningless. The supportive editorial recognized that "Little in this report is new or unique."2 Both articles read as advertisements for the "new," timeconsuming, and expensive method, founded on incomplete and very circumspect calculations by protagonists.

Is APEC really a financial albatross? What did the renovation of the unit, material overhead, and personnel costs (98% of operating costs!) of the APEC amount to in absolute and relative dollars spent? To what degree are the reported financial benefits a result of a self-fulfilling study design? Is the reduction in ordered tests due to APEC, the use of the Nelcor HealthQuiz, modernization, education, or mind-set? Inappropriate "Shotgun" testing (costs) to satisfy outdated "anesthesia department standards" may have been replaced with "Shotgun" examinations (costs). Was the reduced cancellation rate by design?: ". . . we structured an 'informal assurance' that if a patient was evaluated by . . . the APEC, the case would proceed to surgery without cancellation or delay . . ."

Adverse outcomes apparently resulted from implementation of the APEC, yet received little regard: "long patient-waits for evaluation occurred." Anesthesia personnel were "assigned to the OR and were unavailable for the APEC"-and vice versa? At critical moments? Negative occurrences were inadequately evaluated using only one, wall-mounted "patient suggestion box"!

The single most cost-effective preoperative evaluation likely occurs when competent surgeons thoroughly evaluate and prepare their

patients regarding perioperative needs, including appropriate consultation. APEC assumes this role completely, necessitating large numbers of clearly healthy (ASA physical status 1 and 2) patients to undergo expensive (unnecessary?) APEC procedures. Will Stanford's surgeons never develop necessary skills, necessitating the APEC in numerous "satellite" private practices at great cost? Are patients or third party payors really served?

It appears that Registered Nurse Practitioners (RNP) play the primary beneficial role in the APEC system, not anesthesiologists. Why should patients "cleared" by the RNP in the APEC be automatically assumed suitable for surgery, whereas Stanford's patients cleared by primary care physicians were not? Why is an RNP better (cheaper?) than a surgeon or family practice physician at this duty? Are increased nursing interactions and basic patient education the key? Is algorithmic nursing evaluation superior or adequate, relative APPROPRIATE medical preparation? Which preoperative measures are clearly worth the cost, in what volume and setting? Are Fischer's findings useful and fiscally feasible in the described practice of residents needing guidance, yet detrimental to surgical education and responsibility? Finally, what are ALL costs/benefits of anesthesia, assuming this surgical duty?

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## Anesthesia Preoperative Evaluation Clinic: II

To the Editor: — Fischer¹ recently described the Anesthesia Preoperative Evaluation Clinic at Stanford, in which the unavailability of anesthesia attendings or residents for preoperative visits led to the delegation of many responsibilities to a nurse practitioner. At Stanford, the *nurse* "determines the suitability of the patient's condition for anesthesia and surgery," "performs a complete preoperative phys-

ical examination," and "informs the patient about options for anesthesia and postoperative pain control."

Last year, and in many prior years, the American Society of Anesthesiologists prevailed upon the U.S. Congress to leave intact the Medicare rules of participation that address the essential elements of an anesthesiologist's care. The leaders of our specialty successfully ar-

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gued that these elements represent the practice of medicine. The elements prescribed by law\* (and outlined in our Society's Guidelines on the Ethical Practice of Anesthesiology) include the preanesthetic examination and evaluation, and the prescription of the anesthetic plan.

Deutschman and Traber<sup>2</sup> editorialize that anesthesiologists are "unrecognized or misunderstood by our patients, our colleagues, and the public." I would agree entirely with this assessment, but conclude that the practices described by Fischer undoubtedly exacerbate these problems and make it impossible for anesthesiologists to argue that perioperative care is the practice of medicine. Fischer and his colleagues at Stanford have delegated to nurses precisely the tasks that federal statute and our code of ethics define as the physician's responsibility. To establish our credentials as perioperative physicians, pa-

tients and our colleagues must see our involvement in these aspects of care on a regular basis.

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### Anesthesia Preoperative Evaluation Clinic: III

To the Editor:—The preanesthetic clinic described by Fischer<sup>1</sup> highlights how anesthesiologists have played a key role in redesigning and developing more effective systems to manage elective surgical patients. In the current trend of delivering cost-effective, customerfocused, and evidence-based practice in Australia, we developed a Perioperative Service. Integral to this service is the referral of highrisk patients to a preanesthetic clinic. We highlight important differences between the two systems and report on preliminary results on 4,707 elective surgical patients (June 1995 to February 1996).

In our approach, a proportion of patients (31%) are referred to a clinic using a predefined criteria (major surgical procedure, patient health questionnaire identified a potential problem, surgeon's request, or patient's request). Irrespective of the patient's American Society of Anesthesiologists (ASA) physical status, all patients attending our preanaesthetic clinic are reviewed by an anesthesiologist, with nursing support for patient education. We emphasize that the clinic assessments, usually scheduled 2 weeks before surgery, are complementary to, and do not replace, the traditional preanesthetic visit.

Recent developments in our service include obtaining information from the patient's general practitioner about recent laboratory tests (to prevent duplication) and how well chronic medical conditions have been under control. Discharge arrangements with community nurses, general practitioners, and ancillary services are also planned before admission to our hospital. These steps ensure continuity of patient care after hospital discharge.

Although preanesthetic clinics have been established in various institutions, <sup>1-3</sup> the outcome of patients after a clinic intervention has not been examined. Our preliminary data suggest that patients who are not referred to the clinic were 1.64 (95%CI: 1.15-2.38) times

more likely to be inadequately prepared for surgery than patients referred to the clinic. However, clinic patients were 1.44 (95%CI: 1.20–1.73) times more likely to experience an intraoperative event than nonclinic patients after adjusting for patient admission category, level of preoperative preparation, anesthetic technique, and ASA physical status. The implication of these results is that anesthesiologists still need to be vigilant, even after a patient has been assessed at a preanesthetic clinic.

Meaningful comparisons of the efficacy of preanesthetic clinic between institutions will require the use of risk adjustment methods and clearly defined outcomes. There is accumulating evidence to suggest that preanesthetic clinics are associated with decreased length of hospital stay, <sup>2,4</sup> lower hospital costs incurred, <sup>4</sup> decrease in laboratory tests performed, <sup>1</sup> reduction in the number of cancellations on the day of surgery, <sup>1–3</sup> and improved operating theatre efficiency. <sup>1–3</sup> Although anesthesiologists have focused on the above process indicators to support the existence of preanesthetic clinics, the question "Does the preanesthetic clinic make a difference to patient outcome" remains to be fully explored.

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<sup>\* 42</sup> CFR 405.552