North Pacific Surgical Association: Presidential Address

Establishment of an acute care surgery program in a community hospital

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I would like to thank the association for the honor of serving as the 99th president of the North Pacific Surgical Association. I had the privilege of joining the North Pacific in 1997 and have found it to be a truly unique organization. The combination of a high-quality, relevant scientific program; the international perspective of our Canadian colleagues, and the fellowship of this association is unmatched by any other surgical group.

I would like to take a few moments to pay tribute to the person most instrumental in my career as a surgeon. Chadwick F. Baxter was an Ohio native who received his medical degree from Western Reserve University in Cleveland, Ohio (Fig. 1). Chad attended several universities while completing his premedical requirements but never received an undergraduate degree before accepting a medical school position. After graduation, he completed 2 years of surgery residency at Western Reserve before fulfilling his military obligation at Camp Hanford, Washington. From that experience, he fell in love with the Pacific Northwest. Chad completed his surgical residency at Ohio State University under Dr Robert Zollinger and thereafter completed his pediatric surgery fellowship at that same institution under Dr H. William Clatworthy.
Chad relocated to Spokane, Washington in 1962, where he served much of his career as the sole pediatric surgeon between Minneapolis and Seattle. For reasons that are still not clear, he took an active interest in me and allowed me to attend rounds with him, observe surgery, and then assist in surgery during my undergraduate years. These clinical moments were essential to maintaining my enthusiasm for medicine and surgery during the drudgery of premedical education. It grieves me greatly that young persons interested in medicine or nursing are now totally excluded from any preprofessional clinical experience by the plethora of regulations and administrators overwhelming our health care. I fear the medical profession is losing potential students because they are no longer allowed to observe firsthand the experience of the passion and privilege of caring for our fellow human beings.

Chad taught me that a career in surgery required sacrifice—both personal and from our families. He taught that a surgeon took on a personal commitment to care for each person until they had returned to health and that commitment took priority over everything else. Finally, I observed that meticulous preoperative evaluation, technical excellence, and personal postoperative care were the best way to minimize complications and achieve excellent outcomes. I fear that personal ownership of our patients’ care is being replaced by ever increasing “documentation,” the latest technology, and the belief that population-based algorithms can replace a surgeon’s commitment to their patient. However, my group of surgical colleagues continues to incorporate these time-honored surgical principles into our formation of an acute care surgery service.

Spokane, Washington is the tertiary care center for the Inland Northwest. This region encompasses the area east of Washington’s Cascade Mountains to the western border of the Rocky Mountains in Montana and is bordered by Canada to the north and Oregon to the south. Approximately, one and a half million individuals live in this large geographic area, where agriculture, mining, lumbering, and light manufacturing predominate. Before 2009, 2 downtown hospitals held a joint level II trauma designation and alternated weeks as the major receiving hospital. Additionally, 2 smaller hospitals held level III trauma designations. After 2009, hospital ownership changed and a single 644-bed downtown hospital became sole level II trauma center in Eastern Washington. The 2 smaller hospitals continue to maintain their level III trauma status. The level II trauma center enters 1,600 patients annually into the Washington state trauma registry, with the typical 93% blunt and 7% penetrating trauma distribution. Additionally, the emergency department sees approximately 80,000 patients annually, and the hospital serves as a major tertiary care center for referrals.

Our group of 11 surgical partners (8 general and 3 colon and rectal surgeons) had been investigating an acute care surgery model as we sought to integrate surgical subspecialty practice with general surgery practice encompassing trauma and acute care. None of us wanted to give up our elective practices to become a full-time acute care surgeon. With the designation of a single hospital as the sole level II trauma center, our group contracted to provide surgical coverage for the trauma center, the emergency department, inpatient consults, and outside transfers to this facility. Additionally, we also contracted to cover one of the level III hospitals.
Unlike academic medical centers, our group is not composed of full-time trauma surgeons; we are instead experienced general surgeons who each have an active elective surgery practice. Therefore, we did not need a mechanism to maintain our operative skills in the face of low operative trauma volume nor was our intent to concentrate or increase the volume of acute surgical cases.\textsuperscript{1,2} Instead, we were looking for a model that would provide excellent trauma and acute surgery care while freeing the partners not on call to have an uninterrupted elective practice.

We discussed several priorities in establishing our call rotations. First, we believed that continuity of care was a very important component of quality. Therefore, we rejected 24-hour continuous call rotations in favor of a single surgeon clearing his or her schedule of any elective activity and providing care during the day for the entire week. We then rotated different on-call night surgeons. Night-call surgeons were expected to complete any acute surgical operations during their shift, but the patients they operated on, as well as any nonoperative admissions, then became part of the acute care service to be cared for by the day surgeon.

Another priority was to minimize the number of weekends that each partner worked. Initially, the day surgeon would cover the weekdays from 7 AM to 5 PM and then cover the entire weekend from 7 AM Saturday until 7 AM Monday. At my urging, we have recently modified this to have a night-call surgeon begin at 5 PM Sunday. Remembering that we have a second partner cover the level 3 trauma center, we had approximately 86 call shifts to cover monthly and approximately 11 call shifts per partner each month. This has resulted in an acute care service that averages 25 patients per day and consists of trauma patients, acute care surgical patients, and consults.

Financially, the acute care service is responsible for about 20% of our group’s revenue, whereas 80% is generated from our elective practices (Fig. 2).

Our group believes we are unique in providing an acute care surgery and trauma service as a private practice surgery partnership. Each partner had at least a decade of experience in covering a level II trauma center before formation of our dedicated service. Our trauma quality indices continue to be excellent, but the provision of continuity of care has subjectively improved patient quality and cost-effectiveness. We believe that we are able to detect the early, subtle changes in patient condition that are only possible with the same physician caring for the patient daily. Additionally, the acute care service has been very well received by the emergency department and those physicians seeking inpatient consultations or transfers. From the hospital standpoint, the stipend they pay our group is significantly less than they would expend to have 8 to 10 surgeons employed, and they do not have to recruit or manage the group. Finally, this system does allow the surgeons not on call to have the opportunity to practice their elective practices without unscheduled interruptions.

There are also several disadvantages to our system. First, it requires significant financial support from the hospital to allow a surgeon to stop his or her elective practice for a week and provide full-time trauma and acute care surgery. Whether the hospital will have the ability to provide this financial support in the future is in doubt. Second, the initial 8 general surgeons were inadequate to cover this many calls when considering vacations and the various ages of our group. We were told by a number of residency directors that none of the graduating residents or fellows would consider such an arrangement. We therefore added 2 surgeons to maintain some balance to each of our lives. However, we require more surgeons to cover the call burden than we need to cover the elective surgery volume. Thus, despite the financial support from the hospitals, the group still assumes a negative financial impact from additional surgeons needed only to cover the call burden. Also, the acute care surgeon misses a week of clinic, which eventually impacts their elective schedule after their call week. Finally, as our group ages, the physical and mental toll of this level of call burden is increasingly difficult.

Our group strongly believes that an acute care and trauma surgery model that provides continuity of care delivers optimal patient care and cost-effective care for larger institutions. As the United States looks to centralize acute care and trauma, we believe this model will become more common outside of academic institutions. However, long-term financial support of the workforce required to staff such a service and the recruitment of surgeons to a practice model that still produces “disproportionate demands on lifestyle”\textsuperscript{3} and in which the “majority of these surgical emergencies consist of draining soft tissue infections and excising necrotic gastrointestinal structures”\textsuperscript{3} will continue to be a challenge.

Again, thank you for the privilege of serving as your President this past year.

References