Emergency Room Coverage for Orthopaedic Injuries: A Solution is Needed at all Levels

Emergency department (ED) coverage has become an increasing concern for both orthopaedic surgeons and hospitals. The American Association of Orthopaedic Surgeons (AAOS) produced a position statement on the topic, noting the need for surgeons, the government, hospitals, policymakers, and payers to work together to improve call coverage.[1] A position statement by the Orthopaedic Trauma Association (OTA) also addressed these concerns, noting both the need for adequate coverage by trained orthopaedic surgeons as well as the need for shared responsibility among hospitals, the public, and physicians in facilitating provision of this care.[2] The issue of ED coverage is even more germane for the pediatric orthopaedic subspecialists who in some regions feel the pressure of referrals for nearly all pediatric fractures from nonpediatric orthopaedic subspecialists. This was addressed at the 2009 meeting of the Pediatric Orthopaedic Society of North America, where solutions presented were generalized to all ED coverage.[3] Despite a variety of organizational guidelines, a clear nationwide solution has not been established. This article reviews factors contributing to the problem and offers options that have been effective in addressing ED coverage issues.

Although the Level I trauma center with multiple urgent surgical cases each night is the dramatic picture of an ED for the public, it is the quieter but more common Level III or IV center where better solutions are needed. In many tertiary care trauma centers, particularly with established trauma networks, effective systems are evolving or already in place in response to the call coverage problem. Failure to solve the problem at the grass roots level of smaller community hospitals, however, continues to place the tertiary system at risk as well. Seeking to minimize inappropriate referrals to higher-level trauma centers, the OTA produced guidelines for appropriate transfers.[4] Yet despite these recommendations, many EDs do not follow these recommendations. A paper presented at the 2010 AAOS meeting[5] found that 52% of 216 orthopaedic transfers to their institution were inappropriate based on their criteria. Perhaps not surprisingly, a lack of insurance coverage was an independent factor leading to inappropriate transfers. Additionally, inappropriate referrals increased during evening/night and weekend periods. Instead of appropriate treatment at a Level III or IV center, these patients create a situation where they drain resources needed for true orthopaedic emergencies as well as increasing costs associated with evaluation at both facilities.

How big is this problem? ED directors around the country are challenged by inadequate specialty coverage, varying from 59% in the north–central United States to 71% in the southern part of our country. Reasons given by surgeons unwilling to cover the ED vary. Economic concerns are a strong leader, but some surgeons cite less concrete issues, including lifestyle and lack of competency in orthopaedic trauma skills. A 2005 poll by the American Orthopaedic Association questioned its members as well as OTA members on the topic of ED coverage.[6] Both professional societies overwhelmingly feared a looming crisis of emergency access to orthopaedic care with strong majorities favoring all orthopaedic surgeons maintaining competence in general orthopaedic trauma care. The majority of both groups agreed that coverage of ED call is part of a social contract that started in medical school, yet the community surgeons in private practice, that cover the Level III and four EDs, expressed a disconnect from the OTA and American Orthopaedic Association membership (73% and 70% in academic practices, respectively) who made

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these recommendations. Community surgeons felt that coverage of the ED in an academic center with residents and fellows sharing the load differed significantly from the experience of the single practitioner who manages these cases in isolation. Furthermore, some perceive the assumption that ED call should be construed as a fulfillment of a social contract as archaic in a healthcare system where overregulation and a litigation lottery can stifle the humanity of the patient–doctor relationship.

Several factors have combined to produce this crisis. Marked increases in ED use strain the system. In 2002, Americans visited hospital emergency rooms 110.2 million times, a 23% increase over the 90 million visits made in 1992. During the same period of time, hospital EDs decreased in number by approximately 15%[7] Emergency Medical Treatment and Active Labor Act (EMTALA) created a mandate for hospitals to provide coverage in specialty call, but there is no corresponding requirement for these specialists to join the call schedule for their hospital. Additionally, although ED coverage was once a practice builder for young surgeons, it has now become a combination of high risk and low or no compensation. For example, in southern California in 2008, one in four ED visits was by an uninsured patient. The lack of compensation for providing care to the uninsured likely drives the inappropriate referral patterns with inappropriate referrals two times as likely to be uninsured.[5] To address this, many hospitals provide compensation for on-call services independent of cases treated. Even with coverage of the direct cost of professional time while on call, indirect costs are borne through the increased litigation risk in the trauma population and disruption of elective practice on the day of and after ED call. Furthermore, the indirect cost of sacrifices to personal and family life should be considered, especially when it is disproportionate and not shared by all active departmental staff members.

Beyond the financial and risk concerns, recent generations of surgeons have entered the workforce with a work attitude that differs from prior generations based on the 80-hour work week. Limited hours during residency may make this generation feel less comfortable with the historic model of providing emergency care all night and then working the next day to meet the obligations of both office practice and elective surgery necessary to generate revenue. Studies on the adults born from 1965 on, including Generations X, Y, and Millenials, suggest these emerging groups value a balanced life more than the Matures and Baby Boomers born before 1965. As these newer generations mature into practicing orthopaedic surgeons, we can expect an attitude shift in those providing emergency orthopaedic care to the nation as well.[8] If observations about the expectations of these younger adults proves true, orthopaedic surgeons may be less willing to sacrifice family and personal well-being to provide ED care to fulfill a social contract that interestingly is applicable to physicians but apparently not to hospital administrators, lawyers, or insurance carriers. The effect of magnification of inappropriate referrals to Level I centers during night and weekend periods noted by Thakur et al[5] may be a reflection of a population of orthopaedic surgeons less willing to sacrifice personal time for ED coverage.

Possible solutions have been proposed by various entities, including the OTA, AAOS, American Orthopaedic Association, and the American College of Surgeons. Perhaps motivated by the EMTALA requirements, suggestion for ED specialty coverage can be found in hospital administration literature as well. These have been implemented in many communities around the country. Various solutions to address the financial, liability,[9] and lifestyle aspects have included the following:

1. Change the reimbursement structure for ED coverage. This can be a set stipend for on-call coverage or with an agreement for the hospital to pay agree-on rates for service. Across the country, some hospitals are reimbursing at Medicare rates and others at Medicare plus 20% to 30%[10] A large survey of payments for orthopaedic ED coverage showed a median per diem compensation or $1000 in 2008.[11]
2. Allow deduction or offset for uncompensated care provided by a surgeon covering the emergency room. Bill HR 1678 was developed to address this, proposing a bad debt tax deduction for uncompensated EMTALA care. However, since the introduction in March 2009 and referral to the House Ways and Means Committee, there has been no further action. The California Orthopaedic Association has established a work group with California OTA members to explore legislative avenues to provide a stable economic support for the state's trauma care access problems.
3. Give increased protection to physicians providing EMTALA-related services by protecting them as federal employees under the Public Health Service Act. Bill HR 1998 proposed by the AAOS would provide some liability protection for EMTALA services. Currently, this Bill is in the House Education and Labor Committee but has not had action since introduction in April 2009. Similar legislation (HR 2989) awaits further consideration in the House Ways and Means Committee.
4. Improvement in hospital resources for trauma cases. Based on the OTA's recommendation,[4] necessary resources include adequate daytime operating room access, personnel, equipment, instrumentation, and radiology support. Adopting this "best practice" can allow efficient delivery of trauma care by a team performing at peak effectiveness without the need for middle-of-the-night surgery on a routine basis.
5. Eliminate mandated ED coverage for community surgeons with hospitals obtaining their own emergency room coverage through various mechanisms:

a. More applicable hospitals in Level I or II systems, "orthopaedic hospitalists" could be full-time employees of the hospitals, providing the necessary coverage of the ED, ideally with the resources described for a trauma service.
b. Alternatively, companies have formed that will contract directly with the hospital to provide subspecialty ED coverage on a "locum tenems"-type model. The companies hire surgeons with an agreement to cover an ED for approximately five 24-hour shifts per month, covering their salary and malpractice. Although

California and Texas still have laws that forbid hospitals to directly employee physicians, contracting with a third-party locum tenens company has been effective in California communities unable to recruit orthopaedic surgeons.

6. Other creative solutions for physician compensation have been described in the healthcare management literature,[9] including:

a. payment of funds for the call providers into deferred compensation plans (457[f]) by hospitals or hospital-owned life insurance funds;

b. payment of the physicians' malpractice premium;

c. technology solutions. Although effective for radiology, efficacy has more limited for orthopaedics. However, ability for a community surgeon at a Level III or IV ED to review x-rays and cases with an experienced orthopaedic trauma surgeon or fellows could improve his or her confidence in management of cases, potentially decreasing inappropriate transfers.

7. Orthopaedic groups in a community can provide their own orthopaedic hospitalists, chosen with skills and interest to provide ED coverage. Groups could hire their own trauma specialist or form a coalition of smaller groups. Recognition that the hospitalist is fulfilling the on-call obligation for the entire practice would need to be considered when arranging compensation for the trauma specialist. Existing examples include "salary" in which the hospitalist is guaranteed a salary by the group or "percentage" with income determined as a percentage of the overall practice income. Within an orthopaedic practice, the surgeons providing required call duties (particularly overnight) could have "comp" time for these hours of service, addressing concerns about excessive work hours.

Within these solutions, negatives exist. In some communities, where emergency room coverage represents an important source of patients and revenue for community orthopaedic surgeons, problems have emerged. Hospitals outsource the ED coverage through a contract with one group, excluding surgeons who have provided call services to the hospital for years from another group. Hospitals looking toward profits may seek a convenient, cost-effective answer over loyalty to surgeons who have provided service in the past.

Patients with acute musculoskeletal issues need to be evaluated and treated by orthopaedic surgeons with appropriate skills. The system to support the delivery of trauma care to patients must be sustainable for each individual community, both the hospitals and physicians. Each surgeon makes an individual decision about his or her ability to provide ED coverage, but changes in both the healthcare system and personal expectations of current and future orthopaedic surgeons have made the classic system of ED coverage untenable for many. Creativity in coverage options can facilitate provision of quality, timely orthopaedic trauma care to patients from Level IV to Level I EDs without requiring excessive personal or financial sacrifices from orthopaedic surgeons.

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