

ACADEMIC EMERGENCY DEPARTMENTS: MENDING THE HOLES IN THE UNITED STATES HEALTH CARE SAFETY NET

by Teri Lynn Hinds

As managed care and increasing health care costs continue to squeeze hospitals' bottom lines, the institutions charged with maintaining the safety net of our health care industry are beginning to show signs of wear. Nonfunded mandates, an increase in the number of uninsured, and crowded emergency rooms are only part of the problem facing our nation's emergency departments as they struggle to find balance between costs and quality of care. While additional funding may be one answer, an argument for improved delivery of social services is also presented.

*T*HE BIGGEST PROBLEM FACING EMERGENCY DEPARTMENTS (EDs) TODAY is finding that delicate balance point between the multitude of forces pulling in all directions. If balance is not found, those forces, including managed care, the rise in the number of uninsured, governmental mandates, and overcrowding of EDs, have the potential to pull apart the safety net of the American health care system. A review of the literature and a May 22nd, 2001, interview with Michael Koetting, Vice President for Planning, Hospitals and Health Systems at the University of Chicago Hospitals, show that the biggest issue of balance appears to occur between the cost of providing emergency care and the quality of emergency and social service care delivered in the ED.

Balance issues exist for all EDs in the country, however, they are especially prominent in academic EDs, which are emergency departments attached to teaching hospitals. This is due to the disproportionately large number of uninsured persons served by academic EDs (M. Koetting, personal communication, May 22, 2001 [Koetting, 2001]; Derlet and Richards, 2000b; Cetta et al., 2000). Academic EDs also are charged with teaching future doctors, which adds to the average treatment time per patient, exacerbating both quality and cost issues (Koetting, 2001). As a result of the ever-present nature of emergencies, there do not appear to be major differences between the Chicago market

and the rest of the country, therefore much of my research and discussion will be generalized from national studies and samples.

COST ISSUES IN THE ED

It is no secret that the ED is a “loss leader” in the medical field (Koetting, 2001; Henry, 2001). The ED is the only medical sector federally mandated to provide service to anyone presenting with an emergency condition (Cetta et al., 2000). Hospitals are required under the Emergency Medical Treatment and Active Labor Act (EMTALA) to provide care to anyone regardless of insurance status or ability to pay (Derlet and Richards, 2000b). Any specialty available in the hospital must also be available in the ED (Johnson, Taylor, and Lev, 2001). On-call lists must be maintained by the hospital, however doctors are not required to participate in on-call lists (Johnson et al., 2001). This creates an unsteady and uneasy alliance between doctors and hospitals to provide mandated care.

The EMTALA is unfunded; neither hospitals nor doctors are reimbursed for the services they provide unless the patient is insured (Carpenter, 2001; Johnson et al., 2001). Even then, in the era of cost containment, many insurance companies, including government sponsored insurance programs, are tightening reimbursement levels for emergency care. As the baby boomers age, Medicare patients make up larger and larger portions of people presenting to EDs (Carpenter, 2001; Reeder et al., 2001). Medical technology has led to people living longer, but they are often more frail in old age and need increased emergency care (Derlet and Richards, 2000b). Pharmaceutical advances have led to more medical management, which means people are not in hospitals already when crises occur (Derlet and Richards, 2000b). Medicare has lowered the reimbursement rate for Medicare-dependent hospitals and for graduate medical education, leaving academic hospitals reeling from a double blow (HHS, 1997; HHS, 2000; Oliver, Grover, and Lee, 2001; Cetta et al., 2000; Koetting, 2001).

Additionally, the insured portion of the population is declining. Changes in welfare have led to fewer adults being enrolled in Medicaid (Ellis, Smith and Rousseau, 2000; Eberhardt et al., 2001; Koetting, 2001). Enrollment has rebounded somewhat since 1998 lows; however numbers are still below or at 1996 highs (Ellis, Smith and Rousseau, 2000; Eberhardt et al., 2001). The cost of health insurance has left many middle-income Americans unable to afford premiums, and employers are not required to offer employer-based health insurance in many areas. The uninsured are likely to use the ED for primary care services because they are unable to pay for services elsewhere.

The idea of increased nonemergency visits by uninsured populations in the face of declining health care coverage is the current favorite among economists and administrators (Koetting, 2001; Viccellio, 2001), however, it does not take into account many truths about EDs. EDs must be prepared for any situation, and, therefore, have telemetry units and monitors at every bed (Derlet, Richards, and Kravitz, 2001). The costs of maintaining such a high level of technology is often cited as a reason that treatment in an ED is more expensive than treatment by primary care physicians (PCPs) for nonemergent patients. However, one must consider that the technology must be there even if EDs eliminated nonemergent patients from treatment. The costs are sunk, which makes the marginal cost of treating patients in the ED no more than treatment by PCPs (Koetting, 2001; Prochazka, 1998). EDs are mandated to be staffed and operational 24 hours a day, 365 days a year. If there are not “enough” emergencies to utilize those resources during all their operating time, the average cost of treating emergent patients will increase because they will have to factor in dead-weight loss time. There is also a social welfare loss if medical resources are available in EDs but not utilized.

The profitability of available inpatient hospital beds is also a concern for ED doctors and staff (Derlet and Richards, 2000b). Many ED patients do not have insurance, and there is an incentive not to admit uninsured patients to the hospital. (Koetting, 2001; Sox et al., 1998). Insurance status has been shown to correlate with admission, even when controlling for severity of illness (Sox et al., 1998). Uninsured patients often cannot afford to pay for the care they receive out-of-pocket. Admitting an uninsured patient takes up a bed that could conceivably be used for an insured patient that would make money for the hospital (Koetting, 2001).

Some have raised concerns that by not admitting uninsured patients, their health status is adversely affected. There is some question about whether the decision not to admit an uninsured patient is based solely on the hospital's finances (Asplin et al., 2001). Patients may work out arrangements with doctors not to be admitted because they do not want to have to be faced with excessive debt (Sox et al., 1998). Uninsured patients may have other limiting circumstances, such as the inability to take time off work, which would further strain their finances if they were admitted (Cetta et al., 2000). A simple correlation does not prove that the decision not to admit is wrong; hospitals could be over admitting insured marginal patients as a profit maximizing technique (Sox et al., 1998). If an insured patient is not likely to require expensive interventions for a high paying DRG, a hospital may choose to admit that patient to recoup some of the “loss” of more expensive patients.¹

TOO MANY PATIENTS, TOO LITTLE CARE

Complicating cost issues is an increase in demand for emergency services that is resulting in overcrowded EDs. As in the late 1980s and early 1990s, hospital overcrowding is again becoming a national concern (Derlet and Richards, 2000b; Derlet et al., 2001). The causes of overcrowding are varied. Not only is the number of patients seeking emergency care increasing, medical technology and an increasingly litigious society have led to longer work up times (Derlet and Richards, 2000b), which require doctors to spend more time with each patient.

As managed care takes over as the predominant instrument for health insurance, both public and private, more and more people are presenting to the ED with nonemergent conditions as a result of lack of access. Many patients complain that they are unable to get appointments with their primary care physicians on a timely basis (Derlet and Richards, 2000b). This means that people delay seeking care, so when they do finally seek care, they are sicker. People learn not to work within the system, knowing they can simply report to the ED and be seen within a few hours.

Managed care has also placed pressures on hospitals to reduce overhead costs. In many cases, this leaves hospitals without adequate reserves, since they have been forced to cut staff as close to expected or predicted utilization as possible in order to contain costs. Patients that need to be admitted often have to wait hours or days in the ED before an inpatient bed is available (Henry, 2001). Nursing staff is especially affected by this practice since they are expected to maintain both their ED cases and the “admitted” cases that are on the ED ward (Derlet and Richards, 2000b). In order to avoid admitting patients in overcrowded EDs due to unavailability of beds or lack of insurance coverage, doctors are treating and releasing borderline patients that previously would have been admitted (Derlet and Richards, 2000b). Further complicating this issue, more and more patients are relying on EDs for their primary care or are foregoing primary care and reporting to the ED when their condition is worse (Conn et al., 1999).

Savvy hospital administrators have taken to using the ED as “flex” space instead of increasing the size or capacity of an Intensive Care Unit (Zwemer, 2000). Hospitals are placing inpatients in the ED to take advantage of the equipment investment there (Derlet et al., 2001). Obviously, this reduces the number of beds available to ED patients and reduces the ability of the ED to respond to emergencies. While many hospitals have now established observation wards, these wards are still most often within the physical space of the ED and are staffed by the same doctors and nurses.

Follow up in the ED is also difficult. Patients who are insured are often referred to their PCP for follow up, however they may not make the appointment or be able to get an appointment at a time they are able to attend. ED doctors are required under EMTALA to make adequate provisions for follow up, which means that if they think patients will not or cannot report to their PCP, they must make arrangements to run tests while the patient is in the ED or make arrangements to see patients themselves for follow up, often pro bono (Derlet and Richards, 2000b).

Overcrowding has impacts throughout the ED and changes many of the assumptions about incentives and costs stated earlier. If hospitals are overcrowded with emergent cases, nonemergent cases may be gumming up the works. Although all EDs in theory treat patients in order by severity, if there are more people in the ED needing to be triaged, it will take longer to ascertain which patients need help sooner than others (Krakau and Hassler, 1999; Sarver and Cydulka, 2001; Bhimani et al., 2001). A patient who may simply need to have a small but bleeding injury stitched up may at first present as a more severe case than a patient who is experiencing myocardial infarction. Many physicians have horror stories of horrendous treatment conditions in overcrowded EDs. The health and cost impacts are exacerbated if there are long waits and crowded waiting rooms, causing insured nonemergent patients to leave, effectively taking their business elsewhere, or delaying needed care (Derlet and Richards, 2000a; 2000b).

When hospitals are overcrowded, they are also more likely to go on ambulance bypass (Derlet et al., 2001). Bypass is a situation in which an ED essentially closes to incoming ambulance patients; the ED must still treat patients who walk in, but refuses additional ambulance arrivals. Bypass is an important concept especially in the Chicago market. In Chicago, an ambulance is required to take emergency patients to the nearest hospital, regardless of insurance or patient preferences, unless the patient is considered a Level 1 trauma case, in which case they are brought to the nearest trauma center (Koetting, 2001). If hospitals are over-capacity and do not have the resources to continue taking emergency patients, they go on bypass (Koetting, 2001; Vilke et al., 2001). Ambulances are then routed to the next nearest hospital, and it is not difficult to see that this may overwhelm that hospital as well, causing it to go on bypass. In some extreme cases, entire neighborhoods and cities have been on bypass, leaving ambulances chasing in circles and significantly delaying emergency care to patients (Vilke et al., 2001). While it is clearly illegal for hospitals to turn away uninsured patients under EMTALA, if an ED is full and on bypass, it may reduce the number of uninsured patients in the ED.

Hospitals that fill their EDs with inpatients are more likely to “dump” unwanted patients on other hospitals. Decisions to keep EDs small also open hospitals to criticism. Critics claim both of these practices have been observed in hospitals in Chicago (Koetting, 2001).

STRATEGIES FOR IMPROVEMENT

If there were an easy way to stop and reverse the deterioration of our health safety net, it would undoubtedly have been put in place long before now. The political concerns of modern health care include insurance companies, hospitals, doctors, patients, employers, unions, and a multitude of other players. There is no answer that will please everyone. One thing is certain: whatever is to be done must have broad support or it will not survive the challenges of the other effected groups (Leifer and Scott, 1997).

One option is obvious: money. EMTALA is contentious largely because it leaves up to the hospitals how to pay for emergency, and in many cases primary care for the uninsured. Funding EMTALA would solve some of the problems (Derlet and Richards, 2000a; Carpenter, 2001). Because doctors are not paid by hospitals directly, they are not under the control of the hospital administration. Added to this lack of control is a mandate to maintain what amounts to pro bono on-call lists. Hospitals are subject to fines for noncompliance with EMTALA, that is, if they fail to provide lists of specialists who are on-call to the ED, doctors are subject to fines if they sign up for being on-call and fail to show up when called in (Johnson, 2001). Hospitals often call on doctors' professional ethics to sign up for on-call lists, however, as the need for specialist care in the ED rises, doctors are less and less willing to sign up (Johnson, 2001). Some hospitals and professional groups arrange deals with doctors to provide a stipend or subsidy for working on-call shifts (Johnson, 2001). Doctors' costs are rarely covered by the stipends, and they are seen more as a goodwill gesture than any real financial incentive. Hospitals and professional groups are not reimbursed for the stipends and must juggle their budgets, often taking money away from other emergency resources, to pay doctors. Although a workable compromise in the short term, this solution is unlikely to last in the face of increasing use and decreasing payment for emergency services.

Another monetary option, aimed at a different part of the problem, is to provide additional funds directly to hospitals for capital and service improvements in their EDs and inpatient wards (Derlet and Richards, 2000a). Building new wards to hold inpatients is expensive and, in the current age of managed care, risky. If the average daily census should fall and the ward is left

empty, the hospital will lose money. If additional wards are added, they must also be staffed, costing more money. However, building funding capital improvements could be combined with mandates or requirements by the Joint Commission that inpatients no longer be housed in the ED. Freeing up beds in the ED would allow more patients to be seen faster, shortening wait times and decreasing the general level of stress and chaos in the ED. Additionally, freeing up beds would decrease the necessity for EDs to go on ambulance bypass, creating a more responsive emergency system for the whole community. Capital improvements to EDs would also help to improve quality and timeliness of service to patients (Derlet and Richards, 2000b).

Service improvements could be aimed primarily at those patients who are nonemergent. Studies show that efforts in EDs to increase enrollment in Medicare, Medicaid, and state CHIP programs have promise for raising the number of insured (Carpenter, 2001; Johnson, 2001; Gordon and Depuie, 2001).² Similarly, targeted programs that focus on social service needs of indigent and poor patients may help to reduce nonemergent visits to the ED. One study of heavy users of EDs suggests that although the patients may have legitimate health concerns, those concerns are not the primary reason for their visits to the ED (Malone, 1998). The provision of “almshouse” services, such as sandwiches, a warm place to rest, or even a place where they are recognized as human, may be the driving factor behind recurrent visits to EDs (Malone, 1998). These patients may be better served by referrals to community centers where they can rest or obtain food. Many community centers, however, are seen as degrading and dehumanizing. An indirect option for decreasing ED use by these patients may be to provide better social service options in the community. Addressing just the health and access needs of these patients may not decrease their usage of the ED (Prochazka, 1998), which they identify as a safe and respectable institution (Malone, 1998).

Many of the ED patients in inner-city EDs are also substance abusers, or alcoholics or suffering from mental illness (Chan et al., 2001). Addressing the underlying problem of drug addiction, instead of simply providing a place to detox, may decrease ED usage by these patients (Chan et al., 2001). Quality referral networks must be in place in order to assist such patients; again, this must be addressed as a community problem, not just a hospital or health problem. However, an argument cited against increasing the social services provided ED patients is that the number of patients will increase in response to the services, a version of “if you build it, they will come” (Koetting, 2001; Derlet and Richards, 2000a).

These last two suggestions rely on resources in addition to money: social

service workers. Chicago is a city populated with at least four graduate level social work schools; academic hospitals are almost always paired with universities that have quality clinical social work programs. With a minimum of full- time staff and a commitment to teaching and learning, hospitals could provide quality social service support in their EDs at low cost. Even if the studies prove to be wrong and the conventional wisdom of “if you build it, they will come” right, the net benefit to the community and the students working in the ED cannot be discounted. If academic hospitals are truly as committed to teaching and learning as they pretend, they will be hard pressed to turn away enthusiastic, willing, and able workers from a population much in need of social services.

BALANCING THE SEESAW

Children learn many basic lessons in physics on the playground, but the concept of balance taught by a seesaw is also applicable in policy and business. Rarely is a seesaw held in stasis; it is constantly rocking back and forth as momentum and gravity exert their forces. Unlike a child’s seesaw, hospital administrators and politicians at the local, state, and federal level must strive to find a way to make the seesaw stop. Our nation’s health care safety net is dangerously close to annihilation, and only by working together to balance the costs and benefits can we expect to right it. This is no easy task, but it is an essential and urgent one. In the words of one doctor, it would indeed be ironic if we were the next ones requiring emergency care from the floor of the a crowded ED. ■

FOOTNOTES

¹Diagnostic related groups (DRGs) comprise the base for the Medicare prospective payment reimbursement methodology. Many states also base Medicaid reimbursement on DRGs. DRGs allow for the linkage of reimbursement to a patient’s diagnosis and a reimbursement level considered appropriate for that diagnosis based on an average base payment adjusted to provider location, wages, and medical education, rather than providing reimbursement for services actually provided.

²The State Child Health Insurance Programs (CHIP) were passed in 1997 by the federal legislature as a means to provide health insurance coverage to low income children, and in some cases their families, that has more generous eligibility requirements than traditional Medicaid programs. States were allowed to either create new CHIP programs or to expand their Medicaid programs under CHIP legislation.

REFERENCES

- Asplin, B., Copps, S., DeFor, T., Hayward, R., & Goold, S. (2001). "Appropriateness and Payment Decisions about Emergency Use: Who Decides?" *Academic Emergency Medicine* 8 (5), 480-481 [Abstract].
- Bhimani, M., Li, G., Chanmugam, A., Scheulen, J., Liang, H., Tang, N., & Kelen, G. (2001). "The Impact of a Physician Rapid Assessment Program at Triage on ED Overcrowding." *Academic Emergency Medicine* 8 (5), 578 [Abstract].
- Carpenter, D. (2001). "Our Overburdened ERs." *Hospitals & Health Networks* 3/01, 45-47.
- Cetta, M., Asplin, B., Fields, W., & Yeh, C. (2000). "Emergency Medicine and the Debate over the Uninsured: A Report from the Task Force on Health Care and the Uninsured." *Annals of Emergency Medicine* 36 (3), 243-246.
- Chan, T., Vilke, G., Bender, S., Saldamando, V., Smith, J., & Dunford, J. (2001). "Effect of a Multi-disciplinary Community Homeless Outreach Team on Emergency Department Visits by Homeless Alcoholics." *Academic Emergency Medicine* 8 (5), 486 [Abstract].
- Conn, A., Shimkus, G., & Inbornone, R. (1999). "Eyeing the ED's Open Door." *Nursing Management* 99 (June), 40F-40H.
- Derlet, R., Richards, J., & Kravitz, R. (2001). "Frequent Overcrowding in U.S. Emergency Departments." *Academic Emergency Medicine* 8 (2), 151-155.
- Derlet, R. & Richards, J. (2000a). "Emergency Department Overcrowding." *Annals of Emergency Medicine* 36 (3), 279-280.
- . (2000b). "Overcrowding in the Nation's Emergency Departments: Complex Causes and Disturbing Effects." *Annals of Emergency Medicine* 35 (1), 63-68.
- Eberhardt, M., Ingram, D., Makuc, D. et al. (2001). *Health, United States, 2001*. Hyattsville, MD: National Center for Health Statistics.
- Ellis, E., Smith, V., & Rousseau, D. (2000). *Medicaid Enrollment in 50 States* (Kaiser Family Foundation Publication). Washington, D.C.: The Kaiser Commission on Medicaid and the Uninsured.
- Gordon, A., & Depuie, T. (2001). "Child Health Insurance Outreach through the Emergency Department: A Pilot Study." *Academic Emergency Medicine* 8 (5), 571-572 [Abstract].
- Health & Human Services, Department of (HHS). (1997). "Medicare Freezes Hospital Payment Rates" [Press Release; On-line]. Available: <http://www.hhs.gov/news/press/1997pres/970828.html>.
- . (2000). "A Profile of Medicaid: Chartbook 2000" (HHS Publication). Washington, DC: Health Care Financing Administration.
- Henry, M. (2001). "Overcrowding in America's Emergency Departments: Inpatient Wards Replace Emergency Care." *Academic Emergency Medicine* 8 (2), 188-189.
- Johnson, L., Taylor, T., & Lev R. (2001). "The Emergency Department On-call Backup Crisis: Finding Remedies for a Serious Public Health Problem." *Annals of Emergency Medicine* 37 (5), 495-499.

- Krakau, I., & Hassler, E. (1999). "Provision for Clinic Patients in the ED Produces More Nonemergency Visits." *American Journal of Emergency Medicine* 17 (1), 18-20.
- Leifer, D. & Scott, G. (1997). "Overcrowding Crisis Leads to Historic Decision." *Nursing Standard* 11 (44), 12.
- Malone, R. (1998). "Whither the Almshouse? Overutilization and the Role of the Emergency Department." *Journal of Health Politics, Policy and Law* 23 (5), 795-832.
- Oliver, T., Grover, A., & Lee, P. (2001). *Variations in Medicare Payments for Graduate Medical Education*. Oakland, CA.: California HealthCare Foundation.
- Reeder, T., Tucker, J., Cascio, E., Czaplinski, T., Benson, N., & Meggs, W. (2001). "Trends in Emergency Department Utilization: Effect of Changing Demographics." *Academic Emergency Medicine* 8 (5), 577 [Abstract].
- Sarver, J., & Cydulka, R. (2001). "Emergency Department Provision of Nonurgent Care and Waiting Time to See a Physician." *Academic Emergency Medicine* 8 (5), 576 [Abstract].
- Schull, M., Szalai, J., Schwartz, B., & Redelmeier, D. (2001). "Ambulance Diversion and Emergency Department Overcrowding before and following the Systematic Restructuring of Hospitals." *Academic Emergency Medicine* 8 (5), 574-575 [Abstract].
- Sox, C., Burstin, H., Edwards, R., O'Neil, A., & Brennan, T. (1998). "Hospital Admissions through the Emergency Department: Does Insurance Status Matter?" *The American Journal of Medicine* 105 (December), 506-512.
- Viccellio, P. (2001). "Emergency Department Overcrowding: An Action Plan." *Academic Emergency Medicine* 8 (2), 185-187.
- Vilke, G., Simmons, C., Brown, L., Skogland, P., & Guss, D. (2001). "Approach to Decreasing Emergency Department Ambulance Diversion Hours." *Academic Emergency Medicine* 8 (5), 526 [Abstract].
- Zwemer, F. (2000). "Emergency Department Overcrowding." *Annals of Emergency Medicine* 36 (3), 279.

ABOUT THE AUTHOR

TERI LYNN HINDS is a second-year student in the master's program at the School of Social Service Administration in the Graduate Program for Health Administration and Policy and a recipient of the 2001 Arthur Quern Fellowship. She is interested in working to improve the quality, affordability, and availability of health and social services through applied research and evidence-based public policy initiatives. She graduated from Cornell University with a B.A. in government in 1997. After living in Seattle for several years, she returned to Chicago to pursue her A.M. Upon graduation, she plans to move to Madison, Wisconsin.