National Highway Traffic Safety Administration (NHTSA) Notes

Commentator

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EMS System Performance-Based Funding and Reimbursement Model¹

[National Highway Traffic Safety Administration. EMS system performance-based funding and reimbursement model. Ann Emerg Med. 2012;60:799-800.]

The National Emergency Medical Services (EMS) Advisory Council (NEMSAC), formed in 2007, is a statutorily authorized federal advisory committee that provides advice to the US Department of Transportation and to the Federal Interagency Committee on EMS. The NEMSAC comprises 25 members representing different sectors of EMS, eg, Kenneth Miller, MD, PhD, represents the emergency medicine sector. The members are appointed by the Secretary of Transportation and serve on the council for 2 years. The Finance Committee was one of several standing committees of the NEMSAC from 2010 to 2012, with members from the Advisory Council, supplemented by "at large" subject matter experts, all of whom serve pro bono. "EMS System Performance-Based Funding and Reimbursement Model" is an Advisory article prepared by the Finance Committee and approved by the NEMSAC.

Ambulance services, a part of the EMS systems, have historically been funded by user fees and, in some locations, local tax subsidies. Although many EMS systems provide advanced life support to ill and injured patients, the Centers for Medicare & Medicaid Services recognizes ambulance service solely as a transportation benefit and does not provide reimbursement for care provided in the out-ofhospital setting. Generally, an ambulance must transport a patient to a hospital emergency department (ED) for the EMS agency to receive compensation from federal payers and most commercial insurance companies. For example, if an EMS agency responds to a law enforcement request to assess an injured patient at the scene of a motor vehicle crash and the patient is not transported to a hospital ED, the EMS agency receives no reimbursement from government or private insurers. Policies vary among EMS agencies about whether it is appropriate to bill patients for a response without transport.

A significant portion of the operating expenses of EMS systems is related to the cost of achieving and maintaining a state of readiness to respond to emergencies in a timely and effective manner. According to the Institute of Medicine, "EMS costs include the direct costs of each emergency response, as well as the readiness costs associated with maintaining the capability to respond quickly, 24 hours a day, 7 days a week." Those costs

include continuous staffing levels based on call demand, response time reliability, level of service provided, competency training, costs of equipment and supplies, and administrative expenses. They are inherent in the delivery of service and must be adequately accounted for in the reimbursement models. The failure to provide reimbursement to EMS agencies for assessments and treatments that do not result in transport to a hospital ED may contribute to ED crowding by putting financial pressure on EMS agencies to transport all patients regardless of patient acuity.

The NEMSAC reviewed the literature on EMS systems and EMS reimbursement to develop a proposed list of 12 key functions performed by EMS systems and developed a matrix to indicate how these functions are typically funded. According to figures derived from its review of the literature, the NEMSAC estimated that the cost to EMS systems in the United States of uncompensated care (charity care plus undercompensated care) is nearly \$2.9 billion each year, more than half of the \$5.2 billion paid to ground ambulance services by Medicare in 2010.^{3,4}

The NEMSAC outlined a pathway to move EMS response to a more sustainable readiness-based funding and reimbursement model that takes into account the significant effect that ambulance services and EMS systems have on public health and safety. The individual steps along this pathway include (1) developing and adopting a comprehensive list of EMS functions and activities; (2) standardizing the language used to define EMS functions, specifically as they relate to EMS finance; (3) developing a national set of performance standards for ground and air ambulance minimum levels of service in urban, suburban, rural, and remote regions, taking into consideration factors such as varying levels of response and demographic distribution; (4) developing economic models to determine the cost of the defined EMS functions at a level necessary to achieve the identified performance standards; (5) developing sustainable funding models that incorporate all of the EMS functions and that adequately recognize the contributions of EMS systems to health care, public health, public safety, and emergency medical preparedness; and (6) identifying necessary actions to effectively implement funding models based on performance.

Copies of the 33-page report "EMS System Performance-Based Funding and Reimbursement Model" can be obtained from the Office of Emergency Medical Services, NHTSA, 1200 New Jersey Ave, SE, Washington, DC 20590 or downloaded from the ems.gov Web site at http://ems.gov/pdf/nemsac/may2012/Finance_

Committee_Interim_Advisory-Performance-Based_ Reimbursement.pdf. Questions about the information presented in this article can be directed to Cathy Gotschall at cathy.gotschall@dot.gov or Noah Smith at noah.smith@dot.gov.

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COMMENTARY: IF WE SHOOT OURSELVES IN THE FOOT, WILL EMS BE THERE TO RESPOND?

[Ann Emerg Med. 2012;60:800-802.]

Emergency medical services (EMS) systems have been part and parcel of emergency medicine since their mutual inception in the 1960s. We take pride as emergency physicians in knowing that we are part of the front line of medicine, a line that starts in the alleys, homes, bright rooms, and dark corners of our society and extends, through our professional EMS colleagues, directly to our doors. It's not uncommon for our residents to have started their interest in emergency medicine in the back of an ambulance, and with the new certification of EMS as a subspecialty of emergency medicine, we are better defining and promoting how we as physicians can enhance EMS. As proud as we are of the good work that we do, none of us would presume that the safety net we provide to each member of our communities could withstand the dismantling of out-of-hospital care. Unfortunately, as budget cuts continue to threaten almost every municipality and health care payers fail to keep up with the advances made in out-of-hospital care, we find ourselves in the untenable position of having to face a world in which sick and injured patients have difficulty reaching us because of an overtaxed and underfunded EMS system.

The May 2012 report from the National EMS Advisory Council Finance Committee describes challenges to continued funding of EMS systems and suggestions for addressing the looming shortfalls that threaten to curtail service. Before we address those, however, we should take a look at how we got where we are.

EMS began in the 1960s in response to advances in cardiac resuscitation (such as the invention of defibrillation and the advent of cardiopulmonary resuscitation) and was further pushed forward by the 1966 white paper titled "Accidental Death and Disability: The Neglected Disease of Modern Society."2 These initial efforts were supported by hospitals and a few forward-looking municipalities that saw the benefit in a more capable system of out-of-hospital care than ambulance attendants who had little equipment and no training beyond first aid. After the 1966 white paper, which corroborated findings from other recent reports, the Highway Safety Act of 1966 was passed, creating the Department of Transportation and granting it oversight of EMS activities. State and regional EMS systems were supported by matching funds from the government, with more than \$142 million in investment from 1968 to 1979. The EMS Act of 1973 provided more than \$300 million in funding to encourage communities to develop EMS systems, with the idea that they would become capable of supporting themselves financially after being given startup funds from the federal government; these funds were phased out in 1982. Additional funding came from the Robert Wood Johnson Foundation in 1974, which provided a \$15 million donation divided among 44 areas to support their EMS system development.

Since that time, federal funding for EMS was consolidated into other programs and eventually ceased. Little progress was made in securing a funding stream for EMS until the Health Care Financing Administration began to develop the National Ambulance Fee Schedule in 1999, which was ultimately published in 2002. Most EMS programs now are supported by municipal funding, with incomplete reimbursement from health care payers and occasional subscription fees.

As the National EMS Advisory Council report illustrates, many changes in EMS have occurred and are occurring, making previous payment models dangerously obsolete. We now know that not every patient needs to be transported to the hospital; for example, a diabetic patient might be unharmed after administration of dextrose, a patient with heroin overdose may require no further treatment after naloxone administration, and a patient with an ankle sprain might do just as well to travel by private vehicle to his or her regular physician. Also common are emergency responses in which no patient is treated either because of the call being canceled after a precautionary dispatch or because treatment was refused by the patient. However, despite each of these calls having at least 1 ambulance with 2 personnel responding—and perhaps 6 personnel on an ambulance and a fire engine—few insurers will pay for this evaluation or treatment because only transportation to a hospital is covered. This leaves patients with a bill they did not expect and likely cannot afford. It also leaves EMS agencies with significant costs for maintaining response readiness and heading out to these calls, despite the general inability to be reimbursed.

Even when EMS services are reimbursed, the compensation often falls short of actual costs (never mind the issues involving