

**Resource Utilization in the Emergency Department:  
The Duty of Stewardship  
*Policy Resource and Education Paper (PREP)***

This policy resource and education paper (PREP) is an explication of the policy statement  
“Emergency Physician Stewardship of Finite Resources”

## INTRODUCTION

Over the past century, health care in the United States has undergone a fundamental transformation. In the early decades of the 20<sup>th</sup> century, health care was largely a cottage industry in which physicians provided limited, inexpensive, and “low-tech” treatment to patients in patient homes or physician offices. Patients usually paid for their care in cash or in kind.<sup>2</sup>

In the years after the Second World War, public faith in the benefits of science triggered great increases in public and private investment in biomedical research, and that research produced multiple new and effective treatments in virtually every medical specialty. American workers and their families gained access to these new medical treatments by means of employer-provided health insurance, and the public Medicare and Medicaid health insurance programs established in 1965 enabled access to care for elderly and indigent patients. To accommodate the growing demand for health care, public funds also supported construction of community hospitals and major expansion of medical education.<sup>2</sup> The development of the modern hospital emergency department (ED) and of the specialty of emergency medicine during this period are additional examples of efforts to increase access to more intensive and more effective treatment. By 1980, when *New England Journal of Medicine* editor Arnold Relman proclaimed the emergence of a “new medical-industrial complex,” American health care had become a leading, high-technology, multi-billion-dollar industry.<sup>3</sup>

The remarkable success and rapid expansion of the U.S. health care system during the last third of the twentieth century came at a considerable price, namely, steady and significant growth in health care spending. During this period, the major payers for health care services, both private employers and government, made repeated attempts to control their health care spending, including wage and price controls in the 1970s, prospective payment systems in the 1980s, President Bill Clinton’s federal health care reform proposal in 1994, and a variety of managed care strategies in the 1990s.<sup>4</sup> None of these efforts, however, had a lasting impact. With the failure of regulatory and market strategies to control health care costs, commentators and professional societies proposed that physicians should accept responsibility for the prudent use of health care resources. These proposals recognize that physicians’ decisions, about diagnostic testing, treatment, referral, and hospitalization, are major determinants of the use and the cost of medical care.

In what is probably the first professional medical association endorsement of a duty of resource stewardship, the American College of Emergency Physicians (ACEP) in 1997 adopted a set of ten “Principles of Ethics for Emergency Physicians” that included the following statement: “Emergency physicians shall serve as responsible stewards of the health care resources entrusted to them.”<sup>5</sup> The

American College of Physicians recognized a duty of resource stewardship the following year, and the American Medical Association followed suit in 2012.<sup>6,7</sup>

What motivated ACEP's early endorsement of a professional duty of resource stewardship? For many, if not most patients with acute illness or injury, the ED is the point of entry into the health care system. In the ED, emergency physicians (EPs) make crucial decisions about how much and what kind of health care these patients will receive. EPs, therefore, act as stewards in allocating the resources of the ED and in determining which patients require hospitalization in the United States. In making these decisions, EPs must also attend carefully to the best medical interests of their patients - beneficence is a fundamental moral principle of medicine. This paper will examine the meaning of resource stewardship, the rationale for a duty of stewardship, and the scope of this duty, focusing on resource use in emergency medical care.

## THE CONCEPT OF STEWARDSHIP

The term 'steward' has multiple meanings in different contexts - think, for example, of wine stewards in fine restaurants, cabin stewards on cruise ships, and the now-archaic references to "stewardesses" on airline flights. What sense of this term is best suited to its use in health care? The *American Heritage Dictionary* offers a generic definition of a steward as "one who manages another's property, finances, or other affairs."<sup>8</sup> We submit that this definition accurately reflects the role of physicians in deciding what health care resources should be employed to address the medical needs of their patients. Aside from the time and skill of the physician, these resources are owned by multiple other entities, including both individuals and groups, and both public and private organizations. Acting as stewards of health care resources, then, physicians have a responsibility to employ these resources effectively to promote the interests and goals of their owners. In the ED setting, the duty of resource stewardship requires that EPs provide quality care for their patients through the prudent management of public and private resources. It implies continuing scrutiny of treatment protocols to assess whether they benefit patients, and elimination of treatments shown to be ineffective, harmful, or more costly than other, equally effective methods. Stewardship thus requires, at a minimum, an effort to prevent wasteful consumption of health care resources.

## Rationing

More controversial is the issue of whether stewardship also requires limiting the provision of beneficial treatment, or the rationing of care. The term 'rationing', in contrast to 'stewardship', can raise the ire of clinicians and the distrust of patients. Frequently hailed as a solution to current cost woes, rationing may be broadly defined as any method of distributing a good whose supply is limited. Three basic devices for health care rationing have been identified, and most countries use some combination of all three.<sup>9</sup> The first is rationing based on willingness or ability to pay for health care. This type of rationing, called rationing by cost sharing or price rationing, limits access to health services for patients who are unable or unwilling to pay for those services, either directly or via insurance premiums, deductibles, or co-payments. A second health care rationing device relies on explicit rules defining eligibility or priority for health care programs or services. Examples of this type of explicit rationing are the United Network for Organ Sharing's systems for allocating cadaver organs to waiting patients<sup>10</sup> and the comprehensive list defining which treatments are and are not covered by Oregon's Medicaid program.<sup>11</sup> The third health care rationing device establishes general spending limits, for example, through global budgets or capitation systems, and relies on individual and institutional health care providers to allocate services to patients within those limits. This type of rationing, which David Mechanic calls "implicit rationing," frees providers from externally imposed regulations, but makes them responsible for decisions to deny as well as to provide specific health care services for their patients.<sup>9</sup> Physician gatekeeping decisions within both

private organizations such as HMOs and public systems such as the United Kingdom's National Health Service are modern examples of implicit rationing.

### **Rationing as a Means to Responsible Stewardship**

Peter Ubel, an outspoken advocate for bedside rationing by physicians in the 1990s, revisits the topic in a 2015 *Hastings Center Report* article. In that article, Ubel argues that discussions of health care rationing have declined in the past two decades, due to the shift in health care policy from the strict cost control measures imposed on physicians and patients by managed care companies to the more modest efforts to control costs implemented under the Affordable Care Act (ACA).<sup>12</sup> Ubel goes on to argue that resource stewardship by physicians remains necessary, but that we should “rebrand” this activity, by abandoning the emotionally charged and polarizing word ‘rationing’ in favor of “pleasant new terms” like ‘parsimony’, ‘value’, and ‘comparativeness effectiveness research’.<sup>12</sup>

Whatever terminology is chosen, the issues of reducing health care waste and acting as stewards of societal resources persist. When resources are unavoidably scarce, as in organ transplantation and major natural disasters, limiting the availability of certain types of beneficial care is an essential feature of stewardship. Whether today's difficult economic circumstances compel austerity measures such as rationing is an important question. For most of the world's population, the answer to this question has long been an unequivocal *yes*; many types of technologically advanced and emergency health care services are simply unavailable outside the industrialized world. In the U.S., the growing mismatch between the cost of health care and the virtually limitless potential for at least marginal benefit from that care, on the one hand, and the limited resources payers are willing to commit to that care, on the other, makes clear that some limitation of beneficial care is necessary. The adoption of steadfast resource stewardship may avert the need for explicit rationing on a large scale; to accomplish that goal, triage-trained EPs will need to carefully manage the increasingly limited human and material resources at their disposal. As in times of disaster, EPs may refuse patient requests for unnecessary, marginally beneficial, and burdensome care.<sup>13,14</sup>

To the above point, the COVID-19 pandemic was, and in some cases continues to be, a period of resource scarcity.<sup>15</sup> It brings attention to some challenging ethical considerations regarding rationing and resource allocation. In the early months to years of the pandemic, EPs found themselves caring for patients during shortages of personal protective equipment (PPE). Gloves, face masks, air-purifying respirators, goggles, face shields, and gowns became a precious commodity in locations where physicians were treating highly infectious patients.<sup>16</sup> The lack of available ventilators for acutely ill patients at that time initiated a conversation about “saving the most life years” or “saving the most lives possible, although public opinion versus expert consensus differs.”<sup>17</sup> Moving forward, EPs must reassess how we approach resource allocation in periods when the healthcare system is overwhelmed, and resources are limited.

Market and disaster-related drug shortages are becoming increasingly frequent and prolonged. It is not uncommon to see over 100 drugs in shortage at any given time, with most being low cost sterile injectables and generics. Causes are multifactorial and include disruptions in supply of raw materials, economic disincentives, and regulatory challenges.<sup>18,19</sup> In the last decade, hurricanes have damaged two Baxter Manufacturing plants responsible for producing more than 60% of intravenous fluids in the United States; Hurricane Maria stalled production of the Puerto Rico plant in 2017 and Hurricane Helene shut down the North Carolina facility in 2024.<sup>20</sup> Additionally, during the COVID-19 pandemic, the unprecedented need for critical care services resulted in shortages in sedatives, opioids, and paralytics. While drug shortages strain prescribers across all health care settings, they are known to disproportionately affect EPs, leading to preventable medication errors, delayed care, increased costs, and unnecessary ED visits.<sup>21</sup>

When an essential medication or resource is in short supply, it must be rationed. Professional societies, federal agencies, and many healthcare systems implement policies and recommendations to help allocate any remaining supply for specific clinical situations or patient populations, where alternatives are not ideal. In unpredictable or disaster situations where supplies are scarce, treatment decisions are often left to bedside prescribers, necessitating thoughtful stewardship.<sup>19</sup>

## **WHY STEWARDSHIP?**

### **Economic Justification**

With only brief pauses, U.S. health care spending has increased steadily for the past half century. After a period of relative stability and slower growth in the mid-1990s, health spending began to accelerate again, reaching double-digit rates of increase by 2001.<sup>4</sup> The cost of health care in the U.S. grew 7.5 percent in 2023, reaching \$4.9 trillion, or \$14,570 per person. National health spending accounted for 17.6 percent of the 2023 U. S. Gross Domestic Product (GDP).<sup>22</sup> Per capita spending is 50 to 200 percent greater in the U.S. than in other 145 economically developed countries, despite ranking 26th in the world for life expectancy and poorly on other 146 indicators of quality.<sup>16,23</sup>

The reforms enacted by the 2009 Affordable Care Act (ACA) brought a decrease in the number of uninsured non-elderly Americans, from over 44 million (15%) in 2013 (the year before the major coverage provisions went into 150 effect) to 30 million in 2020, despite a rise of 4.6 million between 2017 and 2019 due to ACA and Medicaid related policy changes.<sup>24</sup> With efforts made to strengthen the ACA, including passage of the American Rescue Plan in 2021, Medicaid expansion, robust enrollment initiatives, and emphasis on preventative care, the uninsured rate continues to decline, with number of non-elderly uninsured dropping to 27 million (8.2 %) in 2024.<sup>25</sup> High cost, rapid growth, and increasing demand highlight the need for effective stewardship of our health care resources.

EPs must participate in efforts to provide high quality and affordable health care so that the emergency department (ED) can remain a viable source of health care for millions of needy Americans. Despite the still-common misperception that care in the ED is expensive and often unnecessary, the data strongly suggest that emergency departments provide timely, good quality care at a low marginal cost.<sup>19</sup> Unless EPs take an active role in providing a solution to the current cost increases, we will continue to be perceived as part of the problem. EPs serve as the key decision-maker for roughly half of all inpatient hospital admissions and serve as safety net providers for patients who lack access to care elsewhere.<sup>20</sup> As stewards of the health care safety net, EPs routinely make allocation decisions that set in motion the dominoes of diagnostic testing and treatment. Prudent decisions to pursue testing in the ED can, for example, prevent unnecessary hospital admissions and reduce the length of hospital stays. On the other hand, diagnostic testing accounts for more than 10% of healthcare costs, and it remains a challenge to determine which tests are being overused or underused. EPs must be cognizant of indirect costs arising from defensive medicine, algorithmic or efficiency-driven testing, and diagnostic uncertainty.<sup>28</sup> Dealing fairly and rationally with finite resources is an important skill for which EPs are specifically trained, whether planning for natural or manmade disasters, directing EMS, supervising triage, or orchestrating ED referrals and admissions.

## **ETHICAL JUSTIFICATION**

### **Non-maleficence and Beneficence**

Stewardship honors fundamental ethical principles of non-maleficence and beneficence. Physicians should, for example, refrain from overtreatment that is more likely to cause harm than benefit, such as medications with potentially severe side effects. Costly but unnecessary technologies (eg, nasal bone radiographs) do not improve patient outcomes, and the beneficent physician should not provide care without reasonable expectation of patient benefit.

### **Justice**

The concepts of justice and stewardship are complementary. Justice and stewardship both imply equitable, but not necessarily equal, care. Justice requires that resources be allocated fairly, rationally, honestly, and consistently.<sup>21</sup> Resource allocation based on individual judgments of worthiness, social standing, or ability to pay are not appropriate, since they disregard personhood, propagate distrust, and impede patient care.

Methods of stewardship are morally justifiable insofar as they strive to distribute health care resources equitably among all who need them and to achieve beneficial outcomes for individual patients. In some situations, stewardship may require physicians to prioritize distributive justice or property rights over optimization of patient benefits. In doing so, physicians may deny patient requests for treatments to which they are not entitled. As moral professionals, EPs' obligation to preserve societal trust and ultimately patient welfare is honored when they allocate resources wisely and equitably, guarding the good of the patient. As technologies advance, we will be challenged to balance possibly or minimally beneficial--but extremely costly--modalities against costs to both the individual and society.

In theory, providing just care may seem reasonable and obvious. In practice, it becomes much more difficult. Effective stewardship relies on the moral virtue *phronesis*, or practical wisdom. *Phronesis*, a central virtue in ancient Greek moral philosophy, connotes discernment, judiciousness, and proper discrimination. While guidelines certainly help physicians, such as using HEART scores<sup>22</sup> to guide care in chest pain, or Wells<sup>23</sup>/ PERC<sup>24</sup> scores to treat and evaluate for pulmonary embolism, there are numerous situations in which physicians must decide if a test or treatment is worthwhile. In making these decisions, risks and benefits to the patient are primary considerations. Thoughtful consideration of questions of

distributive justice is also required, especially in chronic or end-of-life care. Just how much does each patient deserve? Does the benefit one patient obtains through medical care outweigh the burden on others of treatment denial or increased health care costs? Provisions for the just distribution of care should be guided by expert consensus and not left entirely on the shoulders of the bedside physician, who face many conflicting pressures.

One way that EPs can allocate resources more justly is by following the recommendations of the Choosing Wisely Campaign initiated by the American Board of Internal Medicine in 2012. ACEP joined other specialty societies in 2014 to recommend avoiding low value interventions. The first five were avoiding CT scans of the head in patients with minor head injuries, avoiding urinary catheters in patients who could void, engaging palliative care, avoiding antibiotics and wound cultures in patients with successfully drained abscesses, and avoiding IV fluids in pediatric patients with mild dehydration who could be hydrated orally.<sup>33</sup>

Palliative care is a particular aspect that may yield significant resource savings while also improving quality. Clinical prediction tools such as PREDICT can reasonably predict with 95% specificity the likelihood of one year mortality incorporating palliative care consultation, ICU admission, cancer diagnosis, SNF residence, readmissions, and age.<sup>34</sup>

One study investigated the success of implementing Choosing Wisely Campaign initiatives to reduce unnecessary imaging in patients with atraumatic low back pain, syncope, and minor head injury. It found that a modest, yet significant reduction in rates of CT for syncope (56% to 48%) and CT for minor head injury (76% to 72%).<sup>35</sup>

## **STEWARDSHIP: MEETING THE CHALLENGE**

Cultivating the four cardinal virtues of ancient Greek moral philosophy—prudence, courage, temperance, and justice—may assist in making good stewardship choices. Plato and Aristotle both emphasized the importance of prudence or *phronesis*. This type of practical wisdom is essential to weigh properly the interests of multiple parties, as, for example, when the EP must apportion time in an ED bustling with patients. Balancing burdens and benefits, deciding where to triage, choosing whom to refer, and understanding the limits of technology are all manifestations of prudent stewardship.

A second important virtue in the exercise of stewardship is courage. Moral courage is a type of fortitude that helps physicians remain steadfast advocates for patients in responding to utilization reviewers, managed care gatekeepers, insurers, and others. Courageous stewardship also demands that we help patients make reasoned, socially responsible health care and lifestyle choices. Emergency physicians may, for example, have to stand fast in resisting the demands of insistent patients for inappropriate tests or treatments. We must have the moral resolve to consistently place patient welfare ahead of personal benefit, monitoring ourselves and resisting the temptation to blame society, attorneys, bureaucrats, insurers and others for our own moral blemishes.

A third cardinal virtue that guides effective stewardship is temperance. Temperance reflects the self-control necessary to employ therapeutic parsimony and self-restraint when tempted toward over- or undertreating a patient. Unbridled enthusiasm for or rejection of technology, arrogant proclamation or condemnation of new ideas, or too quick a rush to judgment of any sort serves neither the patient nor the profession. Temperance requires humility and self-control, without which proper ED stewardship could not be effectively practiced.

As noted above, another quality that helps EPs shepherd resources and employ therapeutic parsimony is justice. Justice is both a principle and a virtue, aligned with fairness. Justice is the central theme of Plato's

*Republic* and remains one of the four key principles of medical ethics today. With increasing attention to unequal access and runaway costs, questions of justice are becoming more and more pressing in both clinical and policy contexts. Although distributive and social justice may seem like more appropriate concerns for the electorate, we contend that EPs, acting as stewards of limited resources, should also refuse to provide ineffective or marginally beneficial medical care to some,<sup>25,26</sup> while providing a basic level of care to all, including palliative interventions when medically appropriate.<sup>27</sup>

Cultivation of the virtues bolsters the moral authority of physicians in their role as stewards of health care resources for both patients and the greater community of which they are a part. In making difficult allocation decisions at the bedside, EPs cannot shirk their responsibilities to patients, profession, and society. As just stewards, EPs must act as a fulcrum, balancing the obligations of society to the individual, on the one hand, and the obligation of the individual to society, on the other. Otherwise, EPs may be perceived as either wasteful providers or agents of social control, thereby undermining the trust of both patients and society.

## CONCLUSION

Health care expenditures comprised 17.6% of the U.S. GDP in 2023.<sup>22</sup> New fiscal constraints in health care challenge all physicians, including EPs, to do more with less. Projected shortages in the healthcare workforce will add new and significant challenges in the management of important resources.<sup>36</sup> Change and opportunity are invariably linked, and responsible EP stewardship provides an opportunity to benefit patients, the profession, and society. Resource scarcity demands prioritization of health services on a societal basis, and EPs can help distribute those services within the patient population they serve. EPs must remain advocates of both the societal need for universal access and the individual needs of patients. Although it is not possible to provide comprehensive protocols that address all the allocation decisions that EPs make on a daily basis, the prudent EP should make those decisions based on multiple considerations, including the likelihood, magnitude, and duration of benefits to patients, the urgency of the condition, and the cost and burdens of treatment to patients, payers, and society.

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