Reducing Medical Waste to Improve Equity in Care

See also Magnan and Teutsch, p. 1731, and the *AJPH* Wasteful Medical Care Spending section, pp. 1730–1759.

The longstanding problem of medical waste continues to bedevil our nation's health care system. Although defined narrowly as "inefficient and wasteful spending," medical waste encompasses a wide range of complex and interrelated issues: clinical inefficiencies, missed prevention opportunities, overuse, administrative waste, excessive prices, and fraud and abuse. The economic costs associated with medical waste are staggering, ranging from $760 billion to $935 billion, which accounts for approximately 25% of total US health care spending.[1] Yet, the United States continues to rank last in life expectancy among high-income countries.

Medical waste affects every American. It is a major driver of rising health care costs, which, at an individual level, translates to increased premium contributions and out-of-pocket medical expenses. At a population level, medical waste crowds out resources that could be repurposed to support other high-value priorities. One obvious example is public health, which continues to be grossly underfunded; public health expenditures are projected to fall from 3.0% of total health expenditures to 2.4% by 2023.

On its own, medical waste warrants greater attention and action. However, within the context of the COVID-19 pandemic, attacking and rooting out medical waste has become even more urgent. The pandemic is not a distraction but rather a painful reminder of the gross inequities that persist in this nation and the medical community's failed attempts to eliminate them. Medical waste is a major contributor to health inequities, as measured by preventable illness, low-quality care, and reduced life expectancy in disadvantaged groups. New efforts to tackle medical waste should prioritize interventions that can mitigate such inequities.

IMPACT OF MEDICAL WASTE ON EQUITY

Health equity is defined as "the absence of avoidable, unfair, or remediable differences among groups of people" (https://www.who.int/topics/health_equity/en), such as minority and low-income groups. Numerous studies have demonstrated that multiple categories of medical waste can lead to or exacerbate health inequities.

Clinical Inefficiencies

Clinical inefficiencies include adverse medical events, the inefficient use of caregivers, and unnecessary office visits and hospitalizations. As one example, minorities face higher hospital readmission rates, reflecting lower quality inpatient care, poor care coordination, and ineffective discharge planning. Furthermore, up to twice as many elderly Blacks and Hispanics are treated at low-quality, high-cost hospitals, leading to significantly increased chances of dying.[2]

Missed Prevention Opportunities

Despite some progress, minority Americans are less likely to benefit from preventive care across a range of conditions and diseases. For example, although colorectal cancer screening reduces incidence and increases survival, studies have found that screening among adults older than 50 years varies by race and ethnicity, with Hispanics (47%) having the lowest rate compared with non-Hispanic Whites (62%) and Blacks (56%).[3]

As a second example, Blacks aged 35 to 64 years are 50% more likely than are Whites to have high blood pressure. Despite an abundance of evidence demonstrating that blood pressure control significantly reduces the risk for major cardiovascular disease, Black males on antihypertension medications are the least likely to have their blood pressure controlled.[4] This lack of control contributes to Black adults being twice as likely as Whites to die from heart disease.

Fraud and Abuse

Providers who commit fraud and abuse target vulnerable patient groups when engaging in egregious activities, including reselling Medicare-reimbursed prescription drugs, performing unnecessary procedures, and using untrained personnel. In one study, the patients most likely to be treated by such providers were significantly more likely to be non-White, dually eligible for Medicare and Medicaid, and disabled.[5]

Overuse

The most significant source of medical waste is overuse, defined as care that is provided without supporting evidence or when the risk for harm exceeds the potential benefit. Not surprisingly,

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one systematic literature review found significantly greater overuse of care among Whites and underuse in minorities, such as pain medications.[6] Yet, overuse can still contribute to health inequities because its remedies are broadly applied. As one example, payors often impose regressive medical management techniques to discourage excessive health care utilization, including greater cost sharing through high deductibles, coinsurance, and copayment. Such tactics disproportionately burden lower income populations and could lead to the avoidance of care. Other strategies, such as value-based insurance design, may offer a more equitable approach.

AN EQUITY APPROACH TO REDUCING MEDICAL WASTE

Given the association between medical waste and health equity, it is incumbent on policymakers, payors, and providers to adopt a health equity lens when designing and implementing interventions to reduce medical waste. We recommend the following actions:

First, policymakers and providers should prioritize interventions that target categories of medical waste disproportionately affecting minority and low-income populations. Such interventions may need to be tailored to specific disadvantaged groups.

Second, when evaluating medical waste initiatives, racial, ethnic, and other demographic data should be collected to ensure equitable benefits across populations and avoidance of harm. This is particularly important for interventions addressing overuse, which could lead unintentionally to greater underuse among vulnerable populations and exacerbate existing disparities, as we have described.

Third, there is an increased need for multidisciplinary care teams and approaches to reduce medical waste. Greater investment in care coordinators, social workers, and community health workers, among others, could help to improve quality and cut costs.

Fourth, when tackling the largest categories of waste—administrative waste and overuse—policymakers should align budgets so that any savings from effective interventions can be captured and reinvested into programs and policies that foster health equity. Targeting administrative waste offers the additional benefit of avoiding the reduction of services perceived to be of value.

Fifth, and most critical, we need to adopt a public health mindset to reduce medical waste. Specifically, the public health and medical community and other stakeholders must collaborate and focus on upstream community and policy interventions to create the conditions for people to stay healthy and avoid preventable illness.

CONCLUSIONS

The nation is in the midst of the COVID-19 pandemic, which is forcing a national reckoning of the disproportionate coronavirus-related illness and death in communities of color and other inequities that persist in this nation. In this moment, we must rethink and newly define the challenge of medical waste as a health equity issue, which in turn should inform and prioritize actions to address it. AJPH

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CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

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