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Equity Concerns in Market-based Control Schemes for Patient Safety

Marshall H. Chin, MD, MPH^{1,2,3} and Abigail E. Wilkes, MPH^{1,2}

¹Section of General Internal Medicine, Department of Medicine, The University of Chicago, Illinois

²Diabetes Research and Training Center, The University of Chicago, Illinois

³Robert Wood Johnson Foundation Finding Answers: Disparities Research for Change National Program Office, The University of Chicago, Illinois

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Coiera and Braithwaite suggest market-based controls for improving patient safety in their thought-provoking exploratory essay,¹ but potentially adverse effects on equity of care for vulnerable populations must be addressed. The authors identify the key components of market-based controls as decentralization and “individual agents making local decisions about allocation.” The invisible hand of Adam Smith represents the view that the free market maximizes overall effectiveness and efficiency.² The market will have winners and losers, but overall utility is maximized. However, the classic critique of market-based approaches is that they ignore externalities, that is, costs or benefits that affect third-parties who cannot directly impact the business transaction. For example, equity of care for vulnerable populations may suffer. While Coiera and Braithwaite argue that market-based controls are a specific mechanism rather than an ideological philosophy, free market principles are cornerstones of the plans.

We highlight and discuss the critical equity issues in the market-based control schemes proposed by Coiera and Braithwaite. While we are unaware of any prior studies on market-based controls in patient safety, an extensive literature from the global warming, emissions trading, and carbon tax fields inform us about concerns to address and pitfalls to avoid. We summarize the main equity concerns of economic and regulatory experts,³ and scholars from the “development critique” school of thought that criticizes modern colonialism.⁴ We discuss the applicability to patient safety of these critiques of emissions trading approaches. We then conclude with several principles on how equity should be addressed in market-based control schemes to improve patient safety.

New strategies to reduce global greenhouse gas emissions have adopted the structure of market-based control in place of command-and-control regulations or taxation of emissions.^{3,4} For example, a framework proposed in the Kyoto Protocol, an international global climate change accord, outlines emissions trading.³ Kyoto describes a cap and trade system, where industries buy and sell government issued permits/credits to emit set quantities of carbon dioxide. Combined, the total amount of carbon dioxide emissions

Address correspondence and requests for reprints to Dr. Chin: Marshall H. Chin, MD, MPH, The University of Chicago, Section of General Internal Medicine, 5841 South Maryland Avenue, MC 2007, Chicago, Illinois 60637, (773)702-4769 (telephone), (773)834-2238 (fax), mchin@medicine.bsd.uchicago.edu.

allowed through permits will be equal to a set target lower than current emission levels. Entities emitting below individually set targets may sell excess credits to industries exceeding their targets. The limited availability of permits over time results in gradual emission decreases with minimal cost to industries and flexibility to choose whether to invest in technical modifications or to buy extra permits to cover current production. Coiera and Braithwaite's proposal incorporates elements of "cap and trade" as well as "baseline and credit". In the latter scheme, individual entities are given specific emission targets. Entities under the target may sell excess credits and those over the targets must purchase credits.

The equity concerns for market-based control mechanisms relevant for patient safety fall under the "rich get richer" umbrella. They are composed of four specific issues related to differential power that are discussed in more detail below: 1) Lobbying to influence the regulatory overlay of the market-based scheme. 2) Resources to make patient safety system reforms. 3) Ability to pass through or shift costs. 4) Gaming of the system. While these equity concerns are relevant for most countries, they are particularly serious in the United States because of fundamental differences in the structure of its health care system for poor and rich persons. In contrast to countries with universal health insurance, 45 million Americans have no health insurance,⁵ and the 55 million indigent Americans who qualify for state Medicaid insurance often have limited access to quality care because of underfinancing of those programs and subsequent refusal of many providers to see Medicaid patients.⁶ In addition, the care of vulnerable populations is frequently concentrated among specific providers and health care organizations. For example, 80% of African-Americans with Medicare insurance for persons 65 years or older are cared for by 22% of America's primary care physicians.⁷ Thus, because of limited resources devoted to health care for the poor and de facto segregation of much care for vulnerable populations, the United States is at higher risk of increasing health inequity than most other developed countries using policy schemes that potentially pit different hospitals and health care organizations against one another.

Lobbying to influence the regulatory overlay of the market-based scheme

Developed nations choosing to participate in emissions trading have more international power and influence than developing countries.⁴ Resource-rich nations can afford to send many representatives to international policy-forming meetings armed with extensive written reports and complex proposals. Outside of government, these nations foster powerful private advocacy and lobbying groups that also strongly influence policy. In the context of global warming, when African representatives arrived at the Buenos Aires Conference on Climate Change without these assets, they had limited bargaining power compared with Western nations.⁴ In addition, politically powerful industries frequently are grandfathered into the system with more lenient standards.³

To gain sufficient political support to enact a market-based control scheme for patient safety, compromises are likely and thus the influence of highly resourced and for-profit health care organizations is of concern. Critical decisions are necessary regarding the power of the governmental regulatory body for these schemes and how the patient safety target levels are determined for individual health care organizations, a complex task under the best of circumstances. Health care organizations serving the poor may have less political influence than more affluent health care entities.

Resources to make patient safety system reforms

Developing nations frequently lack skilled human resources and informational technology for emissions trading, crippling timely responses to fast-paced trade markets.⁴ Similarly, many under-resourced public hospitals and clinics in the United States have difficulty

meeting overwhelming demands for basic care,⁸ and thus have more limited infrastructure and resources to address fundamental patient safety reform. If the target patient safety levels for individual hospitals are not wisely chosen, then a vicious cycle is possible in which under-resourced hospitals do not meet targets, they are then punished financially and have fewer resources to work on quality improvement, and then are even less likely to meet future safety targets.

Ability to pass or shift costs

Many industries in developed nations have the capability of passing the costs of not meeting emission targets, such as costs of purchasing emissions credits or paying a fine, on to the consumer.³ In much the same way, hospitals with well-reimbursing patients are more likely to be able to shift costs of a market-based control system for patient safety to consumers compared to hospitals with large numbers of uninsured or underinsured patients.

Gaming of the system

During Phase I of the European Union Emissions Trading System, the over allocation of emission “allowances” distributed to industries resulted in little to no production changes, cheap emissions credit prices, and windfall profit.³ Developed countries have the capacity to overestimate production growth in order to game target-setting formulas to acquire excess emission credits.³ If well-resourced hospitals and health care organizations are more likely to be able to hire analysts, lawyers, and negotiators to help game the system, then they will have a comparative advantage over less wealthy provider organizations that care for a disproportionate share of the indigent.

Empirical experience with the effects of market-based controls in emissions trading is limited. However, in the United States, the Title IV Acid Decomposition Control Program has improved the environment by reducing sulfur dioxide emissions at low costs.⁴ It is important to note, however, that electric utilities affected by Title IV tend to serve a broad section of the public and are less prone to the segregation of services for the poor frequently seen in American health care. Thus, equity problems within a nation from market-based control schemes might be more likely in health care than in emissions trading unless safeguards are taken.

Recommendations

Market-based controls to improve patient safety are a new concept in health care. Coiera and Braithwaite have outlined general principles of this approach, but the thorny details of implementation and operationalization are largely missing. We have several recommendations to increase the chances that equitable outcomes occur and that especially vulnerable populations do not suffer.⁹ The first two are consistent with Coiera and Braithwaite’s comments:

1. Measure patient safety.
2. Hold health care organizations accountable in a fair manner for the consequences of their actions on patient safety.

Our third and fourth suggestions, however, specifically address equity concerns, issues likely to suffer if they are not explicitly planned for:

3. Address equity concerns directly in the design of market-based control schemes. Anticipate the effect of these policies on organizations caring for many vulnerable patients. Recognize that these organizations are frequently under-resourced and have limited political power because they serve the disenfranchised.¹⁰

4. Increase resources to organizations serving a disproportionate number of underinsured and under-resourced patients. These organizations will need additional assistance to compete against richer organizations in their efforts to improve patient safety.

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