Critical Opportunities for Public Health Law: A Call for Action

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Although legal interventions are responsible for many sentinel public health achievements, law is underutilized as a tool for advancing population health. Our purpose was to identify critical opportunities for public health lawmaking. We articulated key criteria and illustrated their use with 5 examples. These opportunities involve significant health problems that are potentially amenable to change through law and for which an effective legal intervention is available: optimizing graduated driver licensing laws, increasing tax rates on alcoholic beverages, regulating sodium in foods, enacting laws to facilitate reversal of opioid overdoses, and improving mental health interventions in the college setting. We call for a national conversation about critical opportunities for public health law to advance evidence-based policymaking. (*Am J Public Health.* 2013;103:1979–1988. doi: 10.2105/AJPH.2013.301281)

Many of the greatest public health achievements in the United States are the result of legal interventions.[1,2] From the control of infectious diseases, to the reduction of coronary heart disease, to improvements in maternal and child health, the law has exerted a powerful effect on environmental and behavioral health risks. Evidence continues to mount about law's effectiveness in addressing a gamut of health problems, with recent successes including prevention of childhood lead poisoning and workplace injuries.[3]

In light of such achievements, law's role in advancing public health is receiving greater attention by agenda-setting organizations such as the Centers for Disease Control and Prevention[4] and the Institute of Medicine (IOM).[5] Last year, an IOM committee recommended with "a sense of urgency" that government at all levels "make the most of . . . law and public policy to improve population health."[5(p14)] To advance this goal, the Robert Wood Johnson Foundation now supports a national program in Public Health Law Research,[6] focusing on evaluation of legal interventions to improve population health, and the Network for Public Health Law,[7] which provides legal technical assistance. The Centers for Disease Control and Prevention operates a Public Health Law Program[8] and the American Public Health Association recently elevated its Health Law Special Primary Interest Group to the status of a full-fledged Law Section.[9]

Despite this attention, law remains an underutilized resource in public health. Because of information gaps, opposition from industry, failure to capture lawmakers' attention, and other factors, there are legal interventions that could have powerful effects on a wide range of health threats yet are not widely disseminated or well implemented. Some interventions require new law, whereas others simply require stronger or more creative use of existing authority. At the same time, some laws with unintended adverse effects have not been amended, clarified, or repealed.

What are the most promising legal interventions to address important health problems? Where is the evidence for likely benefit most compelling and the barriers to policy change least formidable? Answering these questions successfully requires a framework in which researchers and policymakers can think strategically, apply common criteria, and bring evidence to bear to highlight the most fruitful areas of action. A national discussion to identify and prioritize critical opportunities for public health law is therefore needed.

We have aimed to stimulate such a conversation and offer a framework for organizing it. We have proposed criteria for identifying critical opportunities, illustrated with 5 diverse examples. Our purpose is not merely to advance these particular examples on the policy agenda but to encourage policymakers and scholars to further engage in a public dialogue about how legal authority can be used for maximum population health impact.

CRITERIA FOR CRITICAL OPPORTUNITIES

We use the term "critical opportunity" to refer to an important target for public health lawmaking—an area in which law is underperforming as a public health tool in relation to the problem of interest. Law may underperform because legal interventions to address a problem are absent, rare, or less widely adopted than they should be. Alternatively, law may have "misfired" by using the wrong design to achieve an aim, implementing an intervention poorly or incompletely, or causing unacceptable collateral effects, such as deterring socially desirable behaviors. The critical opportunities concept highlights legal interventions with a solid evidence base but also supports evidence-informed innovation and evaluation when uncertainty is higher.

A critical opportunity satisfies 3 straightforward criteria (Table 1). First, it addresses a problem of public health significance—a health condition involving a high burden of morbidity or mortality and thus a high social cost. Although not confined to measures targeting the top killers, critical opportunities target health problems that matter. Prevalence, severity of harm, and whether there are strongly disparate effects in a subpopulation are all relevant considerations.

Second, the mechanisms underlying the public health problem are sufficiently well understood to support a conclusion that it is plausibly amenable to change through law. It is causally linked to behaviors, environmental conditions, or other determinants that should be modifiable through the influence of legal

TABLE 1—Criteria for Identifying Critical Opportunities for Public Health Law

Criteria	Considerations
Addresses a problem of public health significance	Prevalence of the health condition Severity of harm (morbidity or mortality) Distributional effects (is a population subgroup disproportionately affected?)
The mechanisms underlying the public health problem are sufficiently well understood to support a conclusion that it is plausibly amenable to change through law	Health problem is causally related to behaviors, conditions, or other determinants that could plausibly be influenced by law
A plausible legal intervention has been identified	Intervention is likely to be effective Intervention does not face insurmountable legal barriers Political opposition, if present, could probably be overcome in time

interventions. We use the general term "legal intervention" to refer to the full range of ways the legal authority of the government may be brought to bear, including adoption of new law, modifications to existing legal rules or enforcement strategies, official statements clarifying existing law, and abandonment of law that has been shown to be ineffective or harmful. Legal interventions may take any regulatory form—for example, new statutes and regulations, better use of existing regulatory processes, even litigation—and may be deployable at any jurisdictional level.

Usually there is evidence about the etiology of the problem that can provide important insights concerning plausible legal interventions, even if direct evidence of the effectiveness of such interventions is lacking. Law works through generic mechanisms (e.g., deterrence), and analogous instances of the mechanism in other areas can provide insight into the possible effectiveness or implementation pitfalls of a law.[10] Where no directly applicable evidence base exists, intelligent prediction and public health need may justify an attempt to build one through initial demonstrations of a legal innovation.[5]

Third, 1 or more plausible legal interventions have been identified that could address the determinants of the problem but are not being used to maximum advantage. The notion of plausibility relates to the intervention's likely effectiveness as well as its legal and political feasibility. There must be good reason to think that the intervention will be effective in achieving its goal, although the level of direct evidence of effectiveness may range from high to nonexistent. In addition to considering the merit of the intervention itself, policymakers may need to consider whether it is so far out ahead of prevailing social norms that it may provoke backlash, such that the net effect is to set back the broader mission.

Although well-intentioned public health laws sometimes fail and are not without cost, we do not hold that lawmaking need always be reserved as an intervention of last resort. In pressing matters of population health and safety, there may be opportunities for legal reform that should be advanced even before voluntary best practices have been fully deployed. The government need not wait for a "market failure" before intervening with a law that is reasonably expected to prevent harm.

At the same time, the intervention must be something that policymakers could realistically hope to implement without encountering insurmountable constitutional or political barriers. The possibility that a law will be challenged in court is not necessarily a reason not to proceed, but such challenges add to the costs of an innovation in a way policymakers will want to consider. Similarly, an opportunity is illusory if there is no realistic prospect of giving it life, even over the long term. Legal and political barriers have played a large role in stymieing the progress of many otherwise promising public health legal interventions. Examples that currently fail the criterion of feasibility include proposals for far-reaching restrictions on advertising and many gun control laws.

Identifying critical opportunities for public health law provides pivotal support for evidence-based lawmaking—that is, lawmaking that draws priorities and designs interventions from the existing evidence and exhibits learning over time. Evidence-based policymaking does not always require a high level of evidence of a law's effectiveness to justify adoption. Some health problems require action too urgently to wait for more evidence, and evidence of an intervention's effectiveness cannot emerge until it is implemented. Fidelity to evidence-based lawmaking, then, simply requires a commitment to be led by the available evidence, evaluate new laws, and use additional evidence as it becomes available. This is the rationale of the critical opportunities approach.

On the basis of our own experience studying legal and policy interventions, we identified 5 exemplary critical opportunities (Table 2):

1. graduated driver licensing (GDL) laws to reduce motor vehicle crashes,
2. taxes to reduce alcohol-related morbidity and mortality,
3. regulation of sodium in food,
4. laws facilitating reversal interventions for opioid overdose, and
5. legal interventions to address mental health problems among college students.

These ideas by no means exhaust the range of critical opportunities in public health law, and there are undoubtedly others that eclipse them in public health significance. We selected them to illustrate the concept of critical opportunities and highlight a few intriguing and potentially impactful areas in which policymakers could focus. In the sections that follow, we briefly summarize the rationale for each of these exemplars.

GRADUATED DRIVER LICENSING LAWS

A critical opportunity may arise because a large number of state and local governments have tested different forms of a legal intervention and their cumulative experience shows

TABLE 2—Features of 5 Exemplary Critical Opportunities for Public Health Law

Opportunity	Legal Interventions	Distinctive Features
Graduated driver licensing laws	Strengthen existing state laws by adopting proven components across states, including: Driving and passenger restrictions for late evening hours Restrictions imposed from ages 16–18 years	Extensive, consistent, strong evidence that graduated driver licensing laws reduce crashes and that laws with extended learner periods and stringent nighttime and passenger restrictions are most effective Uneven diffusion of proven elements of laws across states
Taxation of alcoholic beverages	Double current state alcoholic beverage tax rates and include annual inflation adjustment	Alcohol taxes are widely in use, but tax rates have been allowed to decrease in real terms over time Extensive, consistent, strong evidence that higher alcohol taxes are associated with lower alcohol-related mortality, disability, and economic costs
Regulation of sodium in foods	Initiate GRAS process at the FDA to determine a safe use level for dietary sodium	The weight of the evidence from multiple studies links sodium consumption with increased risk of serious chronic disease Evidence is lacking on the magnitude of population risk at current consumption levels and the safe level of sodium consumption An existing administrative process can be used to determine a safe level and trigger product redesigns, improved labeling, and regulatory action
Laws facilitating opioid overdose reversal	Reform state law to: Distribute naloxone to opioid users and potential witnesses of overdose incidents Provide legal immunity or sentence mitigation to those who seek emergency assistance during an overdose incident	Existing studies support the effectiveness and low risk of lay administration of naloxone, although evidence is limited to simple, local, observational studies No evidence exists in the published literature concerning immunity provisions Law currently serves as an affirmative barrier to overdose reversal programs but could instead facilitate them
University-based mental health interventions	Adopt state-level reforms to enable colleges and universities to better identify and intervene with at-risk students, including: Laws requiring or encouraging colleges to implement threat assessment teams Laws requiring colleges to notify parents when students have dangerous mental health crises Clarification of relevant exceptions to federal privacy and disability laws to facilitate such measures	Extensive evidence for the efficacy of voluntary mental health treatment and the role of family social support in ensuring treatment adherence Strong face validity and expert consensus supporting the benefits of threat assessment teams and early parental notification Low uptake of these legal interventions by colleges and universities in part because of misperceptions about federal laws

Note. FDA = Food and Drug Administration; GRAS = generally regarded as safe.

which form is most effective, creating an opportunity to fine-tune existing laws for maximum effect. Such is the case for GDL schemes.

Public Health Significance

Every day, about 15 US adolescents die in motor vehicle crashes—more than from any other cause of death.[11–14] More than 2000 adolescents per day are treated for car crash injuries in hospitals.[14] Beginning drivers, particularly young males,[15,16] are especially prone to misjudge the risks of the road,[17] and fatal car crashes are 3 times more likely to involve adolescent drivers than older drivers.[18]

Adolescents have not fully developed the social and cognitive abilities required to comprehend and manage driving risks.[19] They have a greater tendency to speed and exhibit other unsafe driving behaviors.[17] Driving during nighttime hours and driving with passengers (especially young males) increase crash risks among the young.[16,20–22] By virtue of their inexperience and inclination to take risks, young people need sufficient time and practice to evolve into responsible drivers.[23] Creating the conditions for gaining such experience, with gradual exposure to more conditions of risk over time, has been paramount in efforts to reduce motor vehicle crashes.[24]

Role of Law

Law has played a crucial role in creating conditions for safe driver development through GDL schemes, which now exist in all US states.[25] GDL laws differ in their individual components, but all provide a 3-stage approach to granting full driving privileges.

During the learning permit stage, new drivers gain experience while under supervision. Next, drivers can operate their vehicles unsupervised but with restrictions (e.g., no

young passengers, cell phone use, or driving late at night). In the last phase, drivers receive an unrestricted license.[12,23,26]

Critical Opportunity

Not all states' GDL laws include the provisions that have proven most effective. The critical opportunity is for those states to fine-tune their laws to include the "whole optimal package" of provisions.[27] The age at which learner's permits can be obtained should be at least 16 years, with a minimum learning stage of 6 months. Nighttime and passenger restrictions should also be tightened. Numerous states restrict only intermediate drivers after midnight, but because the riskiest time period for adolescents is late evening, a nighttime restriction beginning at 9:00 PM or 10:00 PM is optimal.[24,28] All states should limit intermediate drivers to 1 passenger. Both sets of restrictions should remain until age 18 years.[27,28] To date, there is insufficient evidence to conclude that cell phone and texting bans targeting young drivers should be included in GDL laws,[29,30] although such measures appear promising and the area should be monitored going forward.

GDL laws have proven political feasibility, as evidenced by their universal adoption by states and widespread public support.[29] Because systems are already in place, modifying the restrictions imposes minimal new administrative or enforcement costs. The feasibility and effectiveness of the laws may depend in part on the degree of voluntary compliance, but a modest body of survey research has consistently shown that supermajorities of parents support strengthening nighttime and passenger restrictions. Only a third to a half of parents, depending on the state, support increasing the age of licensure beyond age 16 years, however.[29]

Evidence Base

Strong, consistent scientific evidence supports the effectiveness of comprehensive GDL laws. A review of 27 American- and Canadian-based studies of numerous laws showed that GDL schemes are successful in reducing adolescent crashes. The observed crash rate reductions for those aged 16 years varied considerably across studies but were in the 20% to 40% range.[12]

The evidence firmly supports each element of the "optimal package" we describe, and studies also demonstrate the largest reductions when these elements are combined.[26] In summary, by making modest adjustments to laws that are already in place and well accepted, state lawmakers could realize significant public health gains.

TAXATION OF ALCOHOLIC BEVERAGES

Taxation of alcoholic beverages is an example of a legal intervention whose effectiveness is amply supported by evidence. Yet because it has been poorly implemented, the full potential of the intervention has not been realized.

Public Health Significance

Injury and disease caused by excessive consumption of alcoholic beverages—either in a single episode or chronically—are the third leading preventable cause of death in the United States.[31] Each year, 80 000 deaths are attributable to alcoholic beverage consumption,[32] as are 1.6 million hospitalizations,[33] more than 4 million emergency department visits,[34] and more than $200 billion in health care and other social costs—equivalent to $1.90 per drink.[35] Alcohol is second only to tobacco on the scale of death and disability caused by a legal consumer product.[31]

Role of Law

Since the repeal of Prohibition—a failed social experiment with some forgotten public health benefits[36]—alcoholic beverages have been subject to a host of regulations limiting sales and access, restricting who can sell and serve, and maintaining a floor on retail prices (through either state-owned monopoly sellers or excise and sales taxes).

Price regulation through taxes has been a particularly important strategy; all states currently impose some type of tax. Taxes affect prices, consumers drink less when prices are higher,[37] and reduced drinking leads to reductions in population rates of alcohol-related diseases and injuries.[38,39]

Critical Opportunity

During the past several decades, real tax rates on alcoholic beverages have steadily eroded. This phenomenon occurred primarily because most alcohol-specific taxes are ad valorum (a set amount per gallon) and not automatically adjusted for inflation. Occasional legislated increases in alcohol tax rates have not compensated for inflation over the decades. In 19 states, real alcohol tax rates are less than half what they were when they were last raised (typically in the 1960s to 1980s), and in an additional 17 states, tax rates have decreased at least 25%.[40]

Doubling current alcohol tax rates would restore rates to the real levels operating a few decades ago. Including automatic annual adjustments for inflation in alcohol tax legislation would solve the rate erosion problem. Such a policy requires no new outlays, because the implementation mechanisms for alcohol-specific taxes are already in place. Alcoholic beverage sellers have successfully opposed tax increases in some states recently, but the strong evidence of health, safety, and economic benefits has carried the day in several others, clearly demonstrating feasibility of state alcohol tax increases. Although the lobbying power of alcohol sellers appears even more formidable at the federal level, the federal alcohol excise tax was nevertheless increased a half dozen times over the 20th century.[41]

Evidence Base

Voluminous, consistent evidence supports the expectation that increasing alcohol taxes would result in significant reductions in death, disability, and other health and social costs attributable to drinking. Scientific evidence on the public health effects of alcohol taxes spans half a century and numerous states and countries. A 2009 meta-analysis that summarized 112 studies containing 1003 estimates found significant ($P < .001$) inverse relationships between various measures of alcohol taxes or prices and consumption of beer, wine, or spirits.[37] Effects on indices of heavy drinking were also significant. Most of these studies used fairly extensive longitudinal or time-series observations, and the effects observed are quite large on a population basis—reductions in consumption of 5% or more associated with a 10% price increase.

A second, recent systematic review examined alcohol tax and price effects on alcohol-related morbidity and mortality, summarizing 50 studies containing 340 estimates.[39] Results

showed sizeable effects on a wide range of alcohol-related disease and injury outcomes. Many other reviews have reached similar conclusions.[38,42,43] In summary, a mature, robust evidence base makes the case for this critical opportunity.

REGULATION OF SODIUM IN FOODS

Regulation by government agencies also affords critical opportunities. In some cases, as with regulation of the sodium content of foods, there exist regulatory pathways that can be triggered in the face of new evidence to act on a problem.

Public Health Significance

Sodium consumption has increased in the United States since the 1970s and is now the second leading driver of cardiovascular disease. Research has found a dose-dependent relationship between sodium consumption and hypertension risk[44] and linked an increase in sodium consumption of 5 milligrams per day with a 23% increase in the risk of stroke and a 14% increase in the risk of heart disease.[45] Researchers estimate that a 9.5% reduction in sodium intake could prevent 513 885 strokes and 480 358 myocardial infarctions over the lifetime of adults aged 40–85 years, saving 2.1 million quality-adjusted life years[46] and $10 to $32 billion in health care costs.[46,47]

There is some debate over healthy consumption of sodium. Although a Cochrane review found insufficient power to determine a significant effect of reducing sodium,[48] national and international organizations have concluded that a reduction in sodium consumption would decrease cardiovascular disease.[49,50]

Role of Law

To date, law has not been used in the United States to reduce sodium in the food supply. However, many potential legal approaches exist. The Food and Drug Administration (FDA), state legislatures, or the Congress could require processed food manufacturers to reformulate food products and provide more meaningful disclosures about sodium content on labels. The FDA could also incentivize and coordinate voluntary action by food manufacturers—for example, by convening companies to agree on voluntary standards for sodium, as was done in Europe.[51]

Voluntary standards clearly carry a risk of noncompliance. However, the involvement of a regulatory agency can spur industry self-regulation where formal regulation is difficult and elevate the visibility of companies' commitments, creating public relations consequences for companies that renege.

Critical Opportunity

The FDA could regulate the sodium content of manufactured and prepared foods by determining a "safe use" level—a step that is within the agency's existing authority and that the IOM and several advocacy organizations have recommended.[49] The FDA has determined that sodium chloride meets the criteria for a "generally regarded as safe" food additive; however, it has not specified a safe level of daily sodium consumption.[52,53] These decisions could be revisited through the generally regarded as safe process.

The FDA's Select Committee on Generally Regarded as Safe Substances maintains the position that "the prevalent judgment of the scientific community that the consumption of sodium chloride in the aggregate should be lowered" in the United States, recommends the development of guidelines for restricting sodium in processed foods, and recognizes that the existing evidence does not permit the conclusion that current levels of sodium use are safe.[54] Revisiting the generally regarded as safe process would engage food companies and give them time to reformulate products before new standards are imposed. Several large food companies have already voluntarily taken steps to reduce levels of sodium in their products[55]; by requiring such efforts, new regulation would create a level playing field for all food companies. Opposition to sodium reduction from food manufacturers appears moderate, relating largely to the food science needed to reduce sodium content while maintaining flavor and shelf life. Public opposition may arise if vocal opponents successfully invoke the frame of "nanny statism," as they have done for other recent initiatives to regulate food, and may be amplified by the lack of clarity regarding the scientific evidence on the health consequences of sodium. But concern may be eased by emphasizing that no ban on sodium is proposed.

Evidence Base

Although not uncontroverted, the evidence about the health effects of sodium is sufficient to have persuaded the IOM and World Health Organization to recommend policies to reduce sodium consumption and sodium content in foods.[49,50] Nevertheless, evidence is lacking on the magnitude of population risk at current consumption levels and what level of sodium in food is safe. The broad health benefits of legally regulating sodium as a food additive are highly plausible and sufficient to justify a national policy of curbing dietary sodium intake once safe limits are scientifically established.

Certainly, the existing evidence justifies the FDA initiating a process to obtain additional data on safe consumption levels and determine what regulatory actions, if any, are appropriate. As the evidence base regarding the deleterious effects of sodium on health grows in strength, so will the case for more assertive regulation.

LAWS FACILITATING OPIOID OVERDOSE REVERSAL

Sometimes, a critical opportunity may lie in removing legal barriers, or offering legal support, to a nonlegal intervention that has shown promise. This approach could be used to respond to the rapidly escalating threat of opioid overdose.

Public Health Significance

Recently, a dramatic increase in deaths among licit and illicit users of prescription opioids has put overdose squarely on the prevention agenda.[56] Overdose deaths—mostly involving prescription opioids—quadrupled between 1999 and 2008 and are now a leading cause of injury mortality in the United States, implicated in 14 800 deaths annually.[56] Crime, inappropriate prescribing, poor access to quality care for chronic pain, drug marketing, and the inherent risks of opioids all contribute to a complex causal web.[57–59]

Role of Law

A variety of legal approaches are being deployed to promote safer prescribing practices, better regulate pharmaceutical marketing, and limit diversion of prescription drugs into illegal markets.[57,58,60] For example, 37 states

have implemented prescription monitoring programs.[61] State and federal laws also regulate the dispensing and administration of naloxone, an opioid antagonist that is the standard medication for reversing acute opioid overdose.[62]

Critical Opportunity

An increasing number of states are recognizing an opportunity to facilitate reversal of overdoses.[63,64] Health departments and harm reduction programs have developed an intervention that helps opioid drug users and others who are likely to witness an overdose (e.g., parents and police officers) recognize the signs of overdose, offer first aid, call 911, and administer naloxone.[64,65]

The critical opportunity is to change law from a barrier to a facilitator of overdose reversal programs. The main legal barrier to wider availability of naloxone is that it must be prescribed by a licensed health care provider to a patient with a medical need, and in many states it could be considered a crime for a layperson to administer the drug to another.[62]

Leaving aside the long-term possibility of the FDA converting naloxone to over-the-counter status, states can facilitate overdose reversal by creating an exception to the legal requirements for distribution of prescription drugs. Specifically, legislation could (1) authorize prescription of naloxone to, and administration by, trained laypersons (as have, for example, New Mexico and New York)[62]; (2) allow liberal use of standing orders for naloxone prescription (as did Massachusetts before it passed an explicit authorization law); and (3) create civil and criminal immunities for health care providers or laypersons participating in these programs (as have, for example, Connecticut and California).[62] States can also encourage bystanders to call 911 by following the example of states such as Washington that have created "Good Samaritan" immunities for people who report an overdose.[65]

The passage of enabling legislation in several states without substantial opposition, support from families of young overdose victims, and an endorsement from the chief of the Office of National Drug Control Policy[66] suggests a reasonable degree of political feasibility. The fact that many overdose victims are medical users may help insulate the intervention from criticism that it facilitates illegal drug use. Authorizing the intervention does not necessarily require funding, although some states have tasked health departments to create materials, track reversals, or otherwise invest resources.

Evidence Base

There is currently only suggestive evidence that enacting these measures leads to a reduction in overdose deaths. Observational studies have reported that trainees will retain naloxone provided to them, can accurately identify the signs of overdose, are willing and able to administer the drug to people in need, and succeed in reversing overdose without serious negative side effects.[67–71] Forty-eight programs reportedly have provided 53 032 individuals with naloxone since 1996, facilitating 10 171 overdose reversals.[65] A North Carolina program has been associated with reductions in the overdose death rate and the proportion of victims who received their opioid prescription from a physician in the participating community.[72]

The case for laws promoting overdose reversal interventions rests on the plausibility of the approach; its demonstrated feasibility; consistent reports that naloxone is being used by witnesses to reverse overdose; the lack of any reports of serious harm; and, even if the intervention has as yet unidentified risks, the fact that the alternative is death for many opioid users. Considering the severity of the overdose epidemic, it makes sense to experiment with and evaluate legal interventions targeting every point in the process between prescribing and death.

UNIVERSITY-BASED MENTAL HEALTH INTERVENTIONS

A critical opportunity may take the form of using law to mandate the use of a package of effective interventions to address various aspects of a complex public health problem such as college students' mental health.

Public Health Significance

About 40% of the 20 million students enrolled in US colleges and universities have suffered a diagnosable mental health disorder or substance abuse problem during the past year.[73,74] The college years span the most common ages of onset of serious mental illnesses and substance abuse disorders. In recent years, tragic acts of violence by mentally disturbed students have focused national attention on the problem of untreated mental disorder in college students.

Role of Law

Legal approaches to college mental health issues vary across jurisdictions, tend to be poorly understood by stakeholders,[75] and are often not used or not well implemented. For example, national campus safety experts and law enforcement organizations have recommended that colleges institute campus "threat assessment teams" to evaluate and monitor troubled students, but many institutions lack or rarely use them, and only 2 states legally require them.[76]

A further issue is that colleges' ability to identify and monitor students with mental health problems is affected by federal privacy and disability laws, including the Family Educational Rights and Privacy Act, the Health Insurance Portability and Accountability Act, and the Americans with Disabilities Act. These laws protect important values but, properly understood, permit higher educational institutions to do considerably more than most currently do.

Critical Opportunity

State legislatures could require colleges to implement evidence-based campus safety measures that federal law does not forbid. Virginia provides an example for other states.[77] Following the Virginia Tech shootings, the state legislature swiftly enacted a law in 2008 requiring that public colleges and universities have threat assessment teams tasked with forging relationships with law enforcement and mental health agencies "to expedite assessment and intervention with individuals whose behavior may present a threat to safety."[78] Colleges must also adopt policies and procedures to notify the parents of a dependent child who is experiencing a mental health problem that poses a safety risk.[79]

Optimally, mandates such as those in Virginia's law should extend to community colleges; however, the most effective campus

safety measures assume the presence of a student mental health counseling center, which many community colleges lack. State laws therefore should require—and support through appropriations or incentives—the availability of mental health counseling, or at least referral services, at all public institutions of higher education. In states such as Virginia where a strong background norm favors self-regulation by private colleges, private institutions should be encouraged to voluntarily institute these policies. In other states, legislation could cover all institutions of higher education.

Although hundreds of campuses across the nation have successfully implemented threat assessment teams, most have not. The reason for this, in part, is that threat assessment teams (and the mental health service capacities on which they depend) cost money and are not required by law, except in Illinois and Virginia. Legal mandates may thus be necessary. Because some colleges will struggle to implement new requirements without additional funding, legislative appropriations may also be needed. This requires difficult budgetary choices, but we are currently in a political moment when public concern may motivate action.

Very few states have required parental notification of students experiencing mental health problems. Because widespread confusion about what the federal laws actually permit institutions to disclose may prevent colleges from acting prudently in notifying parents, legislative action should include guidance to eliminate misperceptions. For the reasons we have outlined, the public would likely support these measures insofar as they do not conflict with federal law.

Evidence Base

High face validity and expert consensus support the view that threat assessment teams can help protect students with potentially dangerous mental health conditions from harming themselves or others.[76,80] There is strong evidence for the effectiveness of a range of pharmacological and psychotherapeutic interventions for mental health disorders[81] as well as for the importance of support from family members in ensuring adherence to prescribed treatment.[82] Taken together, this evidence strongly suggests that the risk of a student spiraling out of control is substantially reduced through these interventions.[81]

In summary, colleges have an opportunity to identify students with emergent mental health problems and intervene, potentially producing lifelong improvements in students' well-being and important gains in population health. Using the law to move these institutions toward best practices and eliminating misconceptions about what the law prohibits are critical steps.

MOVING FORWARD

In the tradition of "winnable battles" and "grand challenges," we propose an effort for researchers and policymakers to identify and act on critical opportunities for public health law. We have illustrated the application of our criteria for critical opportunities with 5 examples. We conclude with some reflections on the need for a national conversation to create a policy agenda for public health law.

The criteria we propose are not novel and should not be controversial. But the notion that policymakers should systematically apply a set of decision criteria to assess the relative merits of ideas competing for attention in the policy space is unconventional. Public health lawmaking has tended to be more ad hoc. Research in public health law has tended to focus either on the evidence concerning a specific legal intervention or on theories of what the law should do and has not supported policy prioritization. Our framework provides a disciplined, pragmatic approach to making hard decisions about where to focus effort and resources.

The 5 interventions we have discussed are but a few of the important opportunities for public health law. They merit serious consideration because they are potentially high impact, involve regulatory actions that are proportional to the available evidence, and can be accomplished with only modest changes (or no changes) to existing statutes and regulations. Just as important, however, is their illustrative function: the eclectic list reveals both the breadth of health problems that law can address and the breadth of legal mechanisms that can be used to tackle them. Concerted deliberation by public health leaders, their legal counsel, and scholars can generate myriad other useful proposals.

Why a Critical Opportunities Initiative Now

There are several reasons it is important to pursue a national conversation to identify critical opportunities. First, it can enhance the legitimacy and perceived value of law as a tool for population health improvement. Public health officials face 2 important barriers to expanding the use of law to achieve health aims: fiscal constraints and political opposition. Identifying critical opportunities can address both problems.

With regard to economic constraints, a critical opportunities initiative can help establish the level of investment a legal intervention requires and what the likely return on investment will be by identifying the costs and effectiveness of legal interventions. Public health officials are being asked to do more with less and are forced to confront hard questions about resource allocation and opportunity costs. In times of contentious politics and extreme strain on state budgets, it becomes very difficult to accomplish even sensible policy changes with mainly long-range expected benefits if they impose immediate costs. Lawmakers thus need evidence of the value of legal interventions to advance them on tightly constrained policy agendas. Cost-effectiveness analysis can be difficult to conduct in the early years of experimentation with a new legal approach when data about the law's real-world costs and effects are scant but becomes more feasible as experience accumulates.

Demonstrating the value of legal approaches to health problems can also help overcome ideological opposition to expanded use of public health law. In an era of calls for smaller government, there is a need to show that official action can succeed in producing population health benefits. A strong list of critical opportunities highlighting effective, feasible interventions can counter beliefs that regulation cannot work and carries too great a social cost. Acknowledging areas in which law is not working well and should be reformed or retrenched can also help counter fears of an ever-expanding governmental presence in citizens' lives. Finally, creative models of regulation, such as "libertarian-paternalist" or

"nudge" approaches,[83] can be applied to show that official action is not necessarily incompatible with an ideology emphasizing individual autonomy.

A second reason a critical opportunities conversation is needed is to support strategic choices in policymaking. There are a limited number of spaces on any lawmaking body's agenda. Individual policymakers, too, must make hard choices about where to invest effort and resources. Working amid the din of interest groups competing for attention, it can be difficult to isolate the most valuable opportunities for action in the "policy soup."[84] A critical opportunities discussion can help set priorities and spark debate on strategic tradeoffs, not just in domains such as tobacco control or injury prevention but also across them.

Third, a critical opportunities movement could bridge informational gaps that may account for the lack of uptake of some promising legal interventions. Policymakers have both too much information and too little about opportunities in public health law. On some issues, political interest groups have flooded the information space, but policymakers may have difficulty evaluating stakeholders' competing claims. They may have far less access to objective, scientific information—especially comprehensible summaries of the strength of evidence for particular legal interventions. A critical opportunities initiative can supply reliable evidence syntheses and expert analyses where an evidence base already exists. It can also identify lingering evidentiary gaps that require further research (e.g., what constitutes a safe level of sodium exposure) and help research sponsors establish funding priorities. Consulting—or engaging a health agency to contribute to—a growing menu of critical opportunities could help health leaders find innovative legal interventions to meet state and local needs that will not wait for exhaustive research and a Cochrane, Campbell or *Community Guide* review.

By bridging informational gaps, a critical opportunities initiative can also promote evidence-based lawmaking. Generating consensus about critical opportunities can help make the case for policy experiments of promising ideas as well as the systematic evaluation of those experiments that is necessary to advance knowledge and improve laws over time. The best examples of public health law conforming to evidence—such as GDL laws, child safety seat laws, and clean indoor air laws—are ones in which early innovations at the state or local level were evaluated, adapted with evidence-based changes, and then further evaluated and tweaked in a cycle of innovation and assessment. A conversation on critical opportunities can place policy ideas in this cycle and help policymakers understand where those ideas currently lie along the continuum of evidence.

Continuing the Conversation

The critical opportunities approach is an exercise in the generation and diffusion of innovation. Many innovators in public health law have promising ideas, but there need to be pathways along which these ideas can reach important opinion leaders and thence move out across networks. The process of suggesting, vetting, and publicizing critical opportunities can create an easily accessible window for policymakers to see where the needs are and how they might be fulfilled through better use of law. Of course, identifying good ideas does not remove the barriers to pursuing them. Policymakers will always struggle with interest group politics, opposition to regulation from industry, severe resource constraints, and other obstacles. But arming themselves with consensus-based, evidence-based policy recommendations may help policymakers make their case.

The Public Health Law Research program, building on the momentum generated by the IOM's report on public health law, has taken steps to catalyze this process. It has begun to solicit and discuss critical opportunities candidates at professional meetings and is developing a "critical opportunities kit" that other organizations can use to spark discussions of their own.[85] It is also working with the Robert Wood Johnson Foundation to introduce a social media–driven assessment process and will disseminate the most promising ideas to organizations of policymakers, public health practitioners, and interested stakeholders with the help of the Network for Public Health Law, AcademyHealth, American Public Health Association, and other organizations.

Leaders and practitioners in public health are trying to make the best of challenging political and economic times by identifying what works and devising new ways to deliver essential services. Accreditation, consolidation, and cross-jurisdictional sharing of public health programs and staff are all examples of this effort. More effective use of law should be part of this transformation, and a critical opportunities initiative can light the way. ■

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