Public Health Ethics: Mapping the Terrain

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Public health ethics, like the field of public health it addresses, traditionally has focused more on practice and particular cases than on theory, with the result that some concepts, methods, and boundaries remain largely undefined. This paper attempts to provide a rough conceptual map of the terrain of public health ethics. We begin by briefly defining public health and identifying general features of the field that are particularly relevant for a discussion of public health ethics.

Public health is primarily concerned with the health of the entire population, rather than the health of individuals. Its features include an emphasis on the promotion of health and the prevention of disease and disability; the collection and use of epidemiological data, population surveillance, and other forms of empirical quantitative assessment; a recognition of the multidimensional nature of the determinants of health; and a focus on the complex interactions of many factors — biological, behavioral, social, and environmental — in developing effective interventions.

How can we distinguish public health from medicine? While medicine focuses on the treatment and cure of individual patients, public health aims to understand and ameliorate the causes of disease and disability in a population. In addition, whereas the physician-patient relationship is at the center of medicine, public health involves interactions and relationships among many professionals and members of the community as well as agencies of government in the development, implementation, and assessment of interventions. From this starting point, we can suggest that public health systems consist of all the people and actions, including laws, policies, practices, and activities, that have the primary purpose of protecting and improving the health of the public.¹ While we need not assume that public health systems are tightly structured or centrally directed, we recognize that they include a wide range of governmental, private and non-profit organizations, as well as professionals from many disciplines, all of which (alone and together) have a stake in and an effect on a community's health. Government has a unique role in public health because of its responsibility, grounded in its police powers, to protect the public's health and welfare, because it alone can undertake certain interventions, such as regulation, taxation, and the expenditure of public funds, and because many, perhaps most, public health programs are public goods that cannot be optimally provided if left to individuals or small groups.

The Institute of Medicine's landmark 1988 definition of public health provides additional insight: "Public health is what we, as a society, do collectively to assure the conditions in which people can be healthy."² The words "what we, as a society, do collectively" suggest the need for cooperative behavior and relationships built on overlapping values and trust. The words "to assure the conditions in which people can be healthy" suggest a far-reaching agenda for public health that focuses attention not only on the medical needs of individuals, but on fundamental social conditions that affect population levels of morbidity and mortality. From an ethical standpoint, public health activities are generally understood to be teleological (end-oriented) and consequentialist — the health of the public is the primary end that is sought and the primary outcome for measuring success.³ Defining and measuring

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"health" is not easy, as we will emphasize below, but, in addition, "public" is a complex concept with at least three dimensions that are important for our discussion of ethics.

First, public can be used to mean the "numerical public," i.e., the target population. In view of public health's goal of producing net health benefits for the population, this meaning of public is very important. In measurement and analysis, the "numerical public" reflects the utilitarian view that each individual counts as one and only one. In this context, ethical analysis focuses on issues in measurement, many of which raise considerations of justice. For example, how should we define a population, how should we compare gains in life expectancy with gains in health-related quality of life, and whose values should be used in making those judgments?

Second, public is what we collectively do through government and public agency - we can call this "political public." Government provides much of the funding for a vast array of public health functions, and public health professionals in governmental roles are the focal point of much collective activity. In the United States, as Lawrence Gostin notes, government "is compelled by its role as the elected representative of the community to act affirmatively to promote the health of the people," even though it "cannot unduly invade individuals' rights in the name of the communal good."4 The government is a central player in public health because of the collective responsibility it must assume and implement. The state's use of its police powers for public health raises important ethical questions, particularly about the justification and limits of governmental coercion and about its duty to treat all citizens equally in exercising these powers. In a liberal, pluralistic democracy, the justification of coercive policies, as well as other policies, must rest on moral reasons that the public in whose name the policies are carried out could reasonably be expected to accept.5

Third, public, defined as what we do collectively in a broad sense, includes all forms of social and community action affecting public health — we can call this "communal public." Ethical analysis on this level extends beyond the political public. People collectively, outside of government and with private funds, often have greater freedom to undertake public health interventions since they do not have to justify their actions to the political public. However, their actions are still subject to various moral requirements, including, for instance, respect for individual autonomy, liberty, privacy and confidentiality, and transparency in disclosure of conflicts of interest.

GENERAL MORAL CONSIDERATIONS

In providing a map of the terrain of public health ethics, we do not suggest that there is a consensus about the methods and content of public health ethics.⁶ Controversies persist about theory and method in other areas of applied or practical ethics, and it should not be surprising that variety also prevails in public health ethics.⁷ The terrain of public health ethics includes a loose set of general moral considerations clusters of moral concepts and norms that are variously called values, principles, or rules — that are arguably relevant to public health. Public health ethics, in part, involves ongoing efforts to specify and to assign weights to these general moral considerations in the context of particular policies, practices, and actions, in order to provide concrete moral guidance.

Recognizing general moral considerations in public health ethics does not entail a commitment to any particular theory or method. What we describe and propose is compatible with several approaches. To take one major example, casuistical reasoning (examining the relevant similarities and differences between cases) is not only compatible with, but indispensable to our conception of public health ethics. Not only do - or should - public health agents examine new situations they confront in light of general moral considerations, but they should also focus on a new situation's relevant similarities to and differences from paradigm or precedent cases — cases that have gained a relatively settled moral consensus. Whether a relatively settled moral consensus is articulated first in a general moral consideration or in precedent cases does not constitute a fundamental issue - both are relevant. Furthermore, some of the precedents may concern how general moral considerations are interpreted. specified, and balanced in some public health activity, especially where conflicts emerge.

Conceptions of morality usually recognize a formal requirement of universalizability in addition to a substantive requirement of attention to human welfare. Whatever language is used, this formal feature requires that we treat similar cases in a similar way. This requirement undergirds casuistical reasoning in morality as well as in law. In public health ethics, for example, any recommendations for an HIV screening policy must take into account both past precedents in screening for other infectious diseases and the precedents the new policy will create for, say, screening for genetic conditions. Much of the moral argument will hinge on which similarities and differences between cases are morally relevant, and that argument will often, though not always, appeal to general moral considerations.8 We can establish the relevance of a set of these considerations in part by looking at the kinds of moral appeals that public health agents make in deliberating about and justifying their actions as well as at debates about moral issues in public health. The relevant general moral considerations include:

- producing benefits;
- avoiding, preventing, and removing harms;
- producing the maximal balance of benefits over harms and other costs (often called utility);
- distributing benefits and burdens fairly (distributive justice) and ensuring public participation,

including the participation of affected parties (procedural justice);

- respecting autonomous choices and actions, including liberty of action;
- protecting privacy and confidentiality;
- keeping promises and commitments;
- disclosing information as well as speaking honestly and truthfully (often grouped under transparency); and
- building and maintaining trust.

Several of these general moral considerations - especially benefiting others, preventing and removing harms, and utility — provide a *prima facie* warrant for many activities in pursuit of the goal of public health. It is sufficient for our purposes to note that public health activities have their grounding in general moral considerations, and that public health identifies one major broad benefit that societies and governments ought to pursue. The relation of public health to the whole set of general moral considerations is complex. Some general moral considerations support this pursuit; institutionalizing several others may be a condition for or means to public health (we address this point later when we discuss human rights and public health); and yet, in particular cases, some of the same general moral considerations may limit or constrain what may be done in pursuit of public health. Hence, conflicts may occur among these general moral considerations.

The content of these various general moral considerations can be divided and arranged in several ways - for instance, some theories may locate one or more of these concepts under others. But, whatever theory one embraces, the whole set of general moral considerations roughly captures the moral content of public health ethics. It then becomes necessary to address several practical questions. First, how can we make these general moral considerations more specific and concrete in order to guide action? Second, how can we resolve conflicts among them? Some of the conflicts will concern how much weight and significance to assign to the ends and effects of protecting and promoting public health relative to the other considerations that limit and constrain ways to pursue such outcomes. While each general moral consideration may limit and constrain public health activities in some circumstances, for our purposes, justice or fairness, respect for autonomy and liberty, and privacy and confidentiality are particularly noteworthy in this regard.

Specifying and weighting general moral considerations

We do not present a universal public health ethic. Although arguably these general moral considerations find support in various societies and cultures, an analysis of the role of cultural context in public health ethics is beyond the scope of this paper. Instead, we focus here on public health ethics in the particular setting of the United States, with its traditions, practices, and legal and constitutional requirements, all of which set directions for and circumscribe public health ethics. (Below we will indicate how this conception of public health ethics relates to human rights.)

General moral considerations have two major dimensions. One is their meaning and range or scope; the other is their weight or strength. The first determines the extent of conflict among them — if their range or scope is interpreted in certain ways, conflicts may be increased or reduced. The second dimension determines when different considerations yield to others in cases of conflict.

Specifying the meaning and range or scope of general moral considerations - the first dimension - provides increasingly concrete guidance in public health ethics. A common example is specifying respect for autonomy by rules of voluntary, informed consent. However, it would be a mistake to suppose that respect for autonomy requires consent in all contexts of public health or to assume that consent alone sufficiently specifies the duty to respect autonomy in public health settings. Indeed, specifying the meaning and scope of general moral considerations entails difficult moral work. Nowhere is this more evident in public health ethics than with regard to considerations of justice. Explicating the demands of justice in allocating public health resources and in setting priorities for public health policies, or in determining whom they should target, remains among the most daunting challenges in public health ethics.

The various general moral considerations are not absolute. Each may conflict with another and each may have to yield in some circumstances. At most, then, these general moral considerations identify features of actions, practices, and policies that make them *prima facie* or presumptively right or wrong, i.e., right or wrong, all other things being equal. But since any particular action, practice, or policy for the public's health may also have features that infringe one or more of these general moral considerations, it will be necessary to determine which of them has priority. Some argue for a lexical or serial ordering, in which one general moral consideration, while not generally absolute, has priority over another. For instance, one theory might hold that protecting or promoting public health always has priority over privacy, while another might hold that individual liberty always has priority over protecting or promoting public health. Neither of these priority rules is plausible, and any priority rule that is plausible will probably involve tight or narrow specifications of the relevant general moral considerations to reduce conflicts. From our standpoint, it is better to recognize the need to balance general moral considerations in particular circumstances when conflicts arise. We cannot determine their weights in advance, only in particular contexts that may affect their weights --- for instance, promises may not have the same moral weights in different contexts.

Resolving conflicts among general moral considerations

We do not believe it is possible to develop an algorithm to resolve all conflicts among general moral considerations. Such conflicts can arise in multiple ways. For example, it is common in public health practice and policy for conflicts to emerge between privacy and justice (for instance, the state collects and records private information in disease registries about individuals in order to allocate and provide access to resources for appropriate prevention and treatment services), or between different conceptions of justice (for instance, a government with a finite public health budget must decide whether to dedicate resources to vaccination or to treatment of conditions when they arise). In this paper, however, we focus on one particular permutation of conflicts among general moral considerations that has received the most attention in commentary and in law. This is the conflict between the general moral considerations that are generally taken to instantiate the goal of public health - producing benefits, preventing harms, and maximizing utility - and those that express other moral commitments. For conflicts that assume this structure, we propose five "justificatory conditions": effectiveness, proportionality, necessity, least infringement, and public justification. These conditions are intended to help determine whether promoting public health warrants overriding such values as individual liberty or justice in particular cases.

Effectiveness: It is essential to show that infringing one or more general moral considerations will probably protect public health. For instance, a policy that infringes one or more general moral considerations in the name of public health but has little chance of realizing its goal is ethically unjustified.

Proportionality: It is essential to show that the probable public health benefits outweigh the infringed general moral considerations — this condition is sometimes called proportionality. For instance, the policy may breach autonomy or privacy and have undesirable consequences. All of the positive features and benefits must be balanced against the negative features and effects.

Necessity: Not all effective and proportionate policies are necessary to realize the public health goal that is sought. The fact that a policy will infringe a general moral consideration provides a strong moral reason to seek an alternative strategy that is less morally troubling. This is the logic of a *prima facie* or presumptive general moral consideration. For instance, all other things being equal, a policy that provides incentives for persons with tuberculosis to complete their treatment until cured will have priority over a policy that forcibly detains such persons in order to ensure the completion of treatment. Proponents of the forcible strategy have the burden of moral proof. This means that the proponents must have a good faith belief, for which they can give supportable reasons, that a coercive approach is necessary. In many contexts, this condition does not require that proponents provide empirical evidence by actually trying the alternative measures and demonstrating their failure.⁹

Least infringement: Even when a proposed policy satisfies the first three justificatory conditions — that is, it is effective, proportionate, and essential in realizing the goal of public health — public health agents should seek to minimize the infringement of general moral considerations. For instance, when a policy infringes autonomy, public health agents should seek the least restrictive alternative; when it infringes privacy, they should seek the least intrusive alternative; and when it infringes confidentiality, they should disclose only the amount and kind of information needed, and only to those necessary, to realize the goal.¹⁰ The justificatory condition of least infringement could plausibly be interpreted as a corollary of necessity — for instance, a proposed coercive measure must be necessary in degree as well as in kind.

Public justification: When public health agents believe that one of their actions, practices, or policies infringes one or more general moral considerations, they also have a responsibility, in our judgment, to explain and justify that infringement, whenever possible, to the relevant parties, including those affected by the infringement. In the context of what we called "political public," public health agents should offer public justification for policies in terms that fit the overall social contract in a liberal, pluralistic democracy. This transparency stems in part from the requirement to treat citizens as equals and with respect by offering moral reasons, which in principle they could find acceptable, for policies that infringe general moral considerations. Transparency is also essential to creating and maintaining public trust; and it is crucial to establishing accountability. (Below we elaborate a process-oriented approach to public accountability that goes beyond public justification to include, as an expression of justice and fairness, input from the relevant affected parties in the formulation of policy.)

Screening program example

An extended example may illustrate how these moral justificatory conditions function in public health ethics. Let us suppose that public health agents are considering whether to implement a screening program for HIV infection, tuberculosis, another infectious or contagious disease, or a genetic condition (see Figure 1 for some morally relevant features of screening programs).

The relevant justificatory conditions will require public health agents to consider whether any proposed program will be likely to realize the public health goal that is sought (effectiveness), whether its probable benefits will outweigh the infringed general moral considerations (proportionality), whether the policy is essential to realize the end (necessity), whether it involves the least infringement possible consistent with realizing the goal that is sought (least infringement), and whether it can be publicly justified. These conditions

FIGURE 1. FEATURES OF PUBLIC HEALTH SCREENING PROGRAMS.					
	Degree of Voluntariness				
		Voluntary	Mandatory		
Extent of Screening	Universal				
	Selective				

will give priority to selective programs over universal ones if the selective programs will realize the goal (as we note below, questions may arise about universality within selected categories, such as pregnant women), and to voluntary programs over mandatory ones if the voluntary programs will realize the goal.¹¹

Different screening programs may fail close scrutiny in light of one or more of these conditions. For instance, neither mandatory nor voluntary universal screening for HIV infection can meet these conditions in the society as a whole. Some voluntary and some mandatory selective screening programs for HIV infection can be justified, while others cannot. Mandatory screening of donated blood, organs, sperm, and ova is easily justified, and screening of individuals may also be justified in some settings where they can expose others to bodily fluids and potential victims cannot protect themselves. The question of whether and under what conditions screening of pregnant women for HIV infection should be instituted has been particularly controversial. Even before the advent of effective treatment for HIV infection and the identification of zidovudine (AZT) as effective in reducing the rate of perinatal transmission, there were calls for mandatory screening of pregnant women, especially in "high risk" communities. These calls were defeated by sound arguments that such policies entailed unjustifiable violations of autonomy, privacy, and justice.¹² In effect, the recommended policies failed to satisfy any of the justificatory conditions we have proposed here.

However, once it was established that zidovudine could interrupt maternal-fetal transmission of HIV, the weight of the argument shifted in the direction of instituting screening programs of some type. The focus of the debate became the tensions between the public health interests in utility and efficiency, which argued for mandatory, selective screening in high-risk communities, and considerations of liberty, privacy, and justice, which argued for voluntary, universal screening.¹³

In many situations, the most defensible public health policy for screening and testing *expresses* community rather than *imposes* it. Imposing community involves mandating or compelling testing through coercive measures. By contrast, expressing community involves taking steps to express solidarity with individuals, to protect their interests, and to gain their trust. Expressing community may include, for example, providing communal support, disclosing adequate information, protecting privacy and confidentiality, and encouraging certain choices. This approach seeks to make testing a reasonable, and perhaps moral, choice for individuals, especially by engendering public trust, rather than making it compulsory. Several diseases that might be subjected to screening for public health reasons involve stigma, and breaches of privacy and confidentiality may put individuals' employment and insurance at risk. Expressing community is often an appropriate strategy for public health, and, *ceteris paribus*, it has priority over imposing community through coercive policies.

PROCESSES OF PUBLIC ACCOUNTABILITY

Our discussion of the fifth justificatory condition — public justification - focused on providing public reasons for policies that infringe general moral considerations; this condition is particularly applicable in the political context. While public accountability includes public justification, it is broader - it is prospective as well as retrospective. It involves soliciting input from the relevant publics (the numerical, political, and communal publics) in the process of formulating public health policies, practices, and actions, as well as justifying to the relevant publics what is being undertaken. This is especially, but not only, important when one of the other prima facie general moral considerations is infringed, as with coercive protective measures to prevent epidemics. At a minimum, public accountability involves transparency in openly seeking information from those affected and in honestly disclosing relevant information to the public; it is indispensable for engendering and sustaining public trust, as well as for expressing justice.14

Public accountability regarding health promotion or priority-setting for public health funding additionally might involve a more developed fair process. Noting that in a pluralistic society we are likely to find disagreement about which principles should govern issues such as priority-setting in health care, Norman Daniels calls for a fair process that includes the following elements: transparency and publicity about the reasons for a decision; appeals to rationales and evidence that fair-minded parties would agree are relevant; and procedures for appealing and revising decisions in light of challenges by various stakeholders. He explains why this process can facilitate social learning: "Since we may not be able to construct principles that yield fair decisions ahead of time, we need a process that allows us to develop those reasons over time as we face real cases."¹⁵

Public accountability also involves acknowledging the more complex relationship between public health and the public, one that addresses fundamental issues such as those involving characterization of risk and scientific uncertainty. Because public health depends for its success on the satisfaction of deeply personal health goals of individuals and groups in the population, concepts such as "health" and "risk" cannot be understood or acted upon on the basis of a priori, formal definitions or scientific analysis. Public accountability recognizes that the fundamental conceptualization of these terms is a critical part of the basic formulation of public health goals and problems to be addressed. This means that the public, along with scientific experts, plays an important role in the analysis of public health issues, as well as in the development and assessment of appropriate strategies for addressing them.

Risk characterization provides a helpful example. A National Research Council report, Understanding Risk: Informing Decisions in a Democratic Society, concluded that risk characterization is not properly understood if defined only as a summary of scientific information; rather, it is the outcome of a complex analytic-deliberative process — "a decision-driven activity, directed toward informing choices and solving problems."¹⁶ The report explains that scientific analysis, which uses rigorous, replicable methods, brings new information into the process, and that deliberation helps to frame analysis by posing new questions and new ways of formulating problems, with the result that risk characterization is the output of a recursive process, not a linear one, and is a decision-driven activity.

Assessment of the health risks of dioxin illustrates this process. While scientific analysis provides information about the dose-response relationship between dioxin exposure and possible human health effects, public health focuses on the placement of waste incinerators and community issues in which dioxin is only one of many hazardous chemicals involved and cancer only one of many outcomes of concern. The critical point is that good risk characterization results from a process that "not only gets the science right," but also "gets the right science."¹⁷

Public health accountability addresses the responsibility of public health agents to work with the public and scientific experts to identify, define, and understand at a fundamental level the threats to public health, and the risks and benefits of ways to address them. The appropriate level of public involvement in the analytic-deliberative process depends on the particular public health problem.

Public accountability requires an openness to public deliberation and imposes an obligation on decision-makers

to provide honest information and justifications for their decisions. No ethical principle can eliminate the fact that individual interests must sometimes yield to collective needs. Public accountability, however, ensures that such trade-offs will be made openly, with an explicit acknowledgment that individuals' fundamental well-being and values are at stake and that reasons, grounded in ethics, will be provided to those affected by the decisions.¹⁸ It provides a basis for public trust, even when policies infringe or appear to infringe some general moral considerations.

PUBLIC HEALTH INTERVENTIONS VS. PATERNALISTIC INTERVENTIONS

An important empirical, conceptual, and normative issue in public health ethics is the relationship between protecting and promoting the health of individuals and protecting and promoting public health. Although public health is directed to the health of populations, the indices of population health, of course, include an aggregation of the health of individuals. But suppose the primary reason for some restrictions on the liberties of individuals is to prevent harm to those whose actions are substantially voluntary and do not affect others adversely. The ethical question then is, when can paternalistic interventions (defined as interventions designed to protect or benefit individuals themselves against their express wishes) be ethically justified if they infringe general moral considerations such as respect for autonomy, including liberty of action?

Consider the chart in Figure 2: An individual's actions may be substantially voluntary (competent, adequately informed, and free of controlling influences) or non-voluntary (incompetent, inadequately informed, or subject to controlling influences). In addition, those actions may be self-regarding (the adverse effects of the actions fall primarily on the individual himself or herself) or other-regarding (the adverse effects of the actions fall primarily on others).

Paternalism in a morally interesting and problematic sense arises in the first quadrant (marked by the number "1" in Figure 2) — where the individual's actions are both voluntary and self-regarding. According to John Stuart Mill, whose On Liberty has inspired this chart, other-regarding conduct not only affects others adversely, but also affects them directly and without "their free, voluntary, and undeceived consent and participation."¹⁹ If others, in the maturity of their faculties, consent to an agent's imposition of risk, then the agent's actions are not other-regarding in Mill's sense.

Whether an agent's other-regarding conduct is voluntary or non-voluntary, the society may justifiably intervene in various ways, including the use of coercion, to reduce or prevent the imposition of serious risk on others. Societal intervention in non-voluntary self-regarding conduct is considered weak (or soft) paternalism, if it is paternalistic at all, and it is easily justified. By contrast, societal interference in volunFIGURE 1. TWO MODELS OF STIGMA.

		Adverse Effects of Individuals' Actions		
		Self-regarding	Other-regarding	
Voluntariness of Individuals' Actions	Voluntary	1	2	
	Non-voluntary	3	4	

tary self-regarding conduct would be strong (or hard) paternalism. Coercive intervention in the name of strong paternalism would be insulting and disrespectful to individuals because it would override their voluntary actions for their own benefit, even though their actions do not harm others. Such interventions are thus very difficult to justify in a liberal, pluralistic democracy.

Because of this difficulty, proponents of public health sometimes contend that the first quadrant is really a small class of cases because individuals' risky actions are, in most cases, other-regarding or non-voluntary, or both. Thus, they insist, even if we assume that strong or hard paternalism cannot be ethically justified, the real question is whether most public health interventions in personal life plans and risk budgets are paternalistic at all, at least in the morally problematic sense.

To a great extent, the question is where we draw the boundaries of the self and its actions; that is, whether various influences on agents so determine their actions that they are not voluntary, and whether the adverse effects of those actions extend beyond the agents themselves. Such boundary drawing involves empirical, conceptual, and normative questions that demand attention in public health ethics. On the one hand, it is not sufficient to show that social-cultural factors influence an individual's actions; it is necessary to show that those influences render that individual's actions substantially non-voluntary and warrant societal interventions to protect him or her. Controversies about the strong influence of food marketing on diet and weight (and, as a result, on the risk of disease and death) illustrate the debates about this condition.

On the other hand, it is not sufficient to show that an individual's actions have some adverse effects on others; it is necessary to show that those adverse effects on others are significant enough to warrant overriding the individual's liberty. Controversies about whether the state should require motorcyclists to wear helmets illustrate the debates about this condition. These controversies also show how the inclusion of the financial costs to society and the emotional costs to, say, observers and rescue squads can appear to make virtually any intervention non-paternalistic. But even if these adverse financial and emotional effects on others are morally relevant as a matter of social utility, it would still be necessary to show that they are significant enough to justify the intervention.

Either kind of attempt to reduce the sphere of autonomous, self-regarding actions, in order to warrant interventions in the name of public health, or, more broadly, social utility, can sometimes be justified, but either attempt must be subjected to careful scrutiny. Sometimes both may represent rationalization and bad faith as public health agents seek to evade the stringent demands of the general moral consideration of respect for autonomy. Requiring consistency across an array of cases may provide a safeguard against rationalization and bad faith, particularly when motives for intervention may be mixed.

Much of this debate reflects different views about whether and when strong paternalistic interventions can be ethically justified. In view of the justificatory conditions identified earlier, relevant factors will include the nature of the intervention, the degree to which it infringes an individual's fundamental values, the magnitude of the risk to the individual apart from the intervention (either in terms of harm or lost benefit), and so forth. For example, even though the authors of this paper would disagree about some cases, we agree that strong paternalistic interventions that do not threaten individuals' core values and that will probably protect them against serious risks are more easily justifiable than strong paternalistic interventions that threaten individuals' core values and that will reduce only minor risks. Of course, evaluating actual and proposed policies that infringe general moral considerations becomes very complicated when both paternalistic and public health reasons exist for, and are intertwined in, those policies.

SOCIAL JUSTICE, HUMAN RIGHTS, AND HEALTH

We have noted potential and actual conflicts between promoting the good of public health and other general moral considerations. But it is important not to exaggerate these conflicts. Indeed, the societal institutionalization of other general moral considerations in legal rights and social-cultural practices generally contributes to public health. Social injustices expressed in poverty, racism, and sexism have long been implicated in conditions of poor health. In recent years, some evidence suggests that societies that embody more egalitarian conceptions of socioeconomic justice have higher levels of health than ones that do not.²⁰ Public health activity has traditionally encompassed much more than medicine and health care. Indeed, historically much of the focus of public health has been on the poor and on the impact of squalor and sanitation on health. The focus today on the social determinants of health is in keeping with this tradition. The data about social determinants are impressive even though not wholly uncontroversial. At any rate, they are strong enough to warrant close attention to the ways conditions of social justice contribute to the public's health.

Apart from social justice, some in public health argue that embodying several other general moral considerations, especially as articulated in human rights, is consistent with and may even contribute to public health. For example, Ionathan Mann contended that public health officials now have two fundamental responsibilities - protecting and promoting public health and protecting and promoting human rights. Sometimes public health programs burden human rights, but human rights violations "have adverse effects on physical, mental, and social well-being" and "promoting and protecting human rights is inextricably linked with promoting and protecting health."21 Mann noted, and we concur, that, ultimately, "ethics and human rights derive from a set of guite similar, if not identical, core values," several of which we believe are captured in our loose set of general moral considerations.²² Often, as we have suggested, the most effective ways to protect public health respect general moral considerations rather than violate them, employ voluntary measures rather than coercive ones, protect privacy and confidentiality, and, more generally, express rather than impose community. Recognizing that promoting health and respecting other general moral considerations or human rights may be mutually supportive can enable us to create policies that avoid or at least reduce conflicts.

While more often than not public health and human rights — or general moral considerations not expressed in human rights — do not conflict and may even be synergistic, conflicts do sometimes arise and require resolution.²³ Sometimes, in particular cases, a society cannot simultaneously realize its commitments to public health and to certain other general moral considerations, such as liberty, privacy, and confidentiality. We have tried to provide elements of a framework for thinking through and resolving such conflicts. This process needs to be transparent in order to engender and sustain public trust.

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1. Our definition builds on the definition of health systems offered by the World Health Organization: Health systems include "all the activities whose primary purpose is to promote, restore, or maintain health." See World Health Report 2000 Health Systems: Improving Performance (Geneva: World Health Organization, 2000): at 5.

2. Committee for the Study of the Future of Public Health, Division of Health Care Services, Institute of Medicine, *The Future of Public Health* (Washington, D.C.: National Academy Press, 1988): at 1.

3. We recognize that there are different views about the ultimate moral justification for the social institution of public health. For example, some communitarians appear to support public health as an instrumental goal to achieve community. Others may take the view that the state has a duty to ensure the public's health as a matter of social justice. Although these different interpretations and others are very important for some purposes, they do not seriously affect the conception of public health ethics that we are developing, as long as public health agents identify and inform others of their various goals.

4. L.O. Gostin, *Public Health Law: Power, Duty, Restraint* (Berkeley: University of California Press; New York: The Milbank Memorial Fund, 2000): at 20.

5. T. Nagel, "Moral Epistemology," in R.E. Bulger, E.M. Bobby, and H.V. Fineberg, eds., Committee on the Social and Ethical Impacts of Developments in Biomedicine, Division of Health Sciences Policy, Institute of Medicine, *Society's Choices: Social and Ethical Decision Making in Biomedicine* (Washington, D.C.: National Academy Press, 1995): 201–14.

6. For some other approaches, see P. Nieburg, R. Gaare-Bernheim, and R. Bonnie, "Ethics and the Practice of Public Health," in R.A. Goodman et al., eds., *Law in Public Health Practice* (New York: Oxford University Press, in press), and N.E. Kass, "An Ethics Framework for Public Health," *American Journal of Public Health*, 91 (2001): 1776–82.

7. We do not explore here the overlaps among public health ethics, medical ethics, research ethics, and public policy ethics, although some areas of overlap and difference will be evident throughout the discussion. Further work is needed to address some public health activities that fall within overlapping areas for instance, surveillance, outbreak investigations, and community-based interventions may sometimes raise issues in the ethics of research involving human subjects.

8. Recognizing universalizability by attending to past precedents and possible future precedents does not preclude a variety of experiments, for instance, to determine the best ways to protect the public's health. Thus, it is not inappropriate for different states, in our federalist system, to try different approaches, as long as each of them is morally acceptable.

9. This justificatory condition is probably the most controversial. Some of the authors of this paper believe that the language of "necessity" is too strong. Whatever language is used, the point is to avoid a purely utilitarian strategy that accepts only the first two conditions of effectiveness and proportionality and to ensure that the non-utilitarian general moral considerations set some *prima facie* limits and constraints and establish moral priorities, *ceteris paribus*.

10. For another version of these justificatory conditions, see T.L. Beauchamp and J.F. Childress, *Principles of Biomedical Ethics*, 5th ed. (New York: Oxford University Press, 2001): at 19–21. We observe that some of these justificatory conditions are quite similar to the justificatory conditions that must be met in U.S. constitutional law when there is strict scrutiny because, for instance, a fundamental liberty is at stake. In such cases, the government must demonstrate that it has a "compelling interest," that its methods are strictly necessary to achieve its objectives, and that it has adopted the "least restrictive alternative." See Gostin, *supra* note 4, at 80–81.

11. Of course, this chart is oversimplified, particularly in identifying only voluntary and mandatory options. For a fuller discussion, see R. Faden, M. Powers, and N. Kass, "Warrants for Screening Programs: Public Health, Legal and Ethical Frameworks," in R. Faden, G. Geller, and M. Powers, eds., *AIDS*, *Women and the Next Generation* (New York: Oxford University Press, 1991): 3-26.

12. Working Group on HIV Testing of Pregnant Women and Newborns, "HIV Infection, Pregnant Women, and Newborns," *Journal of the American Medical Association*, 264, no. 18 (1990): 2416–20.

13. See Faden, Geller, and Powers, *supra* note 11; Gostin, *supra* note 4, at 199-201.

- 14. In rare cases, it may be ethically justifiable to limit the disclosure of some information for a period of time (for example, when there are serious concerns about national security; about the interpretation, certainty, or reliability of public health data; or about the potential negative effects of disclosing the information, such as with suicide clusters).

15. N. Daniels, "Accountability for Reasonableness," British Medical Journal, 321 (2000): 1300-01, at 1301.

16. P.C. Stern and H.V. Fineberg, eds., Committee on Risk Characterization, Commission on Behavioral and Social Sciences and Education, National Research Council, *Understanding Risk: Informing Decisions in a Democratic Society* (Washington, D.C.: National Academy Press, 1996): at 155. 17. Id. at 16-17, 156.

18. See, for example, N. Daniels and J. Sabin, "Limits to Health Care: Fair Procedures, Democratic Deliberation, and the Legitimacy Problem for Insurers," *Philosophy and Public Affairs*, 26 (Fall 1997): 303–50, at 350.

19. J.S. Mill, On Liberty, ed. G. Himmelfarb (Harmondsworth, England: Penguin Books, 1976): at 71. For this chart, see J.F. Childress, Who Should Decide? Paternalism in Health Care (New York: Oxford University Press, 1982): at 193.

20. See, for example, the discussion in I. Kawachi, B.P. Kennedy, and R.G. Wilkinson, eds., *Income Inequality and Health*, vol. 1 of *The Society and Population Health Reader* (New York: The New Press, 2000).

21. J.M. Mann, "Medicine and Public Health, Ethics and Human Rights," *The Hastings Center Report*, 27 (May-June 1997): 6–13, at 11–12. Contrast Gostin, *supra* note 4, at 21. For a fuller analysis and assessment of Mann's work, see L.O. Gostin, "Public Health, Ethics, and Human Rights: A Tribute to the Late Jonathan Mann," S.P. Marks, "Jonathan Mann's Legacy to the 21st Century: The Human Rights Imperative for Public Health," and L.O. Gostin, "A Vision of Health and Human Rights for the 21st Century: A Continuing Discussion with Stephen P. Marks," *Journal of Law, Medicine, and Ethics*, 29, no. 2 (2001): 121–40.

22. Mann, *supra* note 21, at 10. Mann thought that the language of ethics could guide individual behavior, while the language of human rights could best guide societal-level analysis and response. See Mann, *supra* note 21, at 8; Marks, *supra* note 21, at 131–38. We disagree with this separation and instead note the overlap of ethics and human rights, but we endorse the essence of Mann's position on human rights.

23. See Gostin, supra note 4, at 21.