Exhibit 5

Commentary

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The moral foundations of health insurance

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Introduction

The US and numerous developing countries do not provide universal health insurance coverage to their populations. Academic approaches to health insurance¹ have typically adopted a neo-classical economic perspective, assuming that individuals make rational decisions to maximize their preferred outcomes, and businesses (including insurance companies) make rational decisions to maximize profits. In this approach, individuals who are riskaverse will purchase health insurance to reduce variation in the costs of health care between healthy and sick periods.² In empirical studies, however, individuals do not always make rational choices. They also find it difficult to assess their health risks and to know how much insurance they need.³

By contrast, medical ethics has focused on the issue of equal access to health care, but provided little in the way of philosophical justification for risk management through health insurance *per se*. Nor has it shown how the practice whereby many at-risk individuals pay premiums to cover one individual's expensive health outcome ('risk-pooling'), is ethically desirable, except insofar as it ensures equal access to health care and equal income to purchase it for all contributors.

This article offers an alternative moral framework for analysing health insurance: that universal health insurance is essential for human flourishing. The central ethical aims of universal health insurance coverage are to keep people healthy, and to enhance their security by protecting them from both ill health and its economic consequences, issues not adequately considered to date.

Universal health insurance coverage requires redistribution through taxation, and so individuals in societies providing this entitlement must voluntarily embrace sharing these costs. This redistribution is another ethical aim of universal health insurance unaddressed by other frameworks. This article is part of an alternative approach to health and social justice, ⁴ offered here and elsewhere, ^{5,6} that builds on and integrates Aristotle's political theory and Amartya Sen's capability approach.

Theory of demand for health insurance

In neo-classical welfare economic theory, individuals make choices to maximize their preferences over time, and the goal of society is to maximize social welfare, or aggregate preferences. It assumes that individuals make rational choices based on cost-benefit calculations under varying conditions.⁷

This approach asserts that the free market is the best way to allocate resources, as it values efficiency over equity. Risk-averse individuals are predicted to choose insurance against large risks, leaving smaller risks uncovered, thereby improving their overall welfare.⁸ As stated above, however, in empirical studies, individuals find it difficult to make such choices.³

Health insurance markets are also not entirely free. Insurance companies have an information advantage, which they can use to 'cherry pick'9 both the kinds of consumers they insure, and

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the kinds of coverage they offer them, in order to increase their profits. In consequence, more comprehensive coverage tends to be confined to wealthier individuals, reducing the pooling of risk across the population. Conversely, poorer individuals often fail to choose coverage that meets their health needs.¹⁰

Behavioural economics and prospect theory

In health insurance markets, as in other areas of economics, people do not perfectly forecast their preferences or desires under different conditions, nor can they always estimate the consequences of changes in their circumstances. They also have relatively little knowledge of individual health insurance plans when choosing between them. Neo-classical theory predicts that consumers will insure against catastrophic medical events and cover lower-cost services themselves; in reality consumers typically choose policies with low deductibles and co-payments.

Economists explain this divergence as a matter of 'regret': individuals choose plans with no deductibles to avoid making trade-offs between medical care and money, trade-offs they might 'regret' after the fact. ¹³ Prospect theory ¹⁴ offers a different explanation for this behaviour. In empirical research, given equal cash amounts of loss and gain, consumers place a higher value on the amount lost than on the same amount gained. This strong aversion to loss may lead consumers to buy low-deductible policies to eliminate barriers to medical care. Such efforts to minimize regret, loss, and anxiety reflect a concern for overall well-being, rather than the preference maximization efforts described by the neo-classical model.

Medical ethics and equal access to health care

In medical ethics, several principles support a right to health care and equal access to health care. Space does not allow a thorough review of the literature, but approaches ranging from egalitarian to communitarian have been used to justify equal access to health care or health coverage. However, they have not provided an adequate analysis of health insurance in relation to risks, their consequences and management. Consequently, they do not adequately consider loss aversion, regret, anxiety, forecasting, discounting, and redistribution, all important issues for a theory of health insurance.

Economic theory, while often inconsistent with practice, recognizes these human characteristics, and can provide many helpful insights, both into people's behaviour and their underlying motives. We will now examine an alternative framework for understanding health insurance issues, and rationalizing universal health insurance to resolve them.

Welfare economics and the capability approach

Amartya Sen's capability approach is an alternative to the neo-classical economic model. It evaluates an individual's well-being and social welfare in terms of functionings and capabilities. Functionings are a person's achievements: what they are able to do or be, their activities and states of being. Capability is a person's freedom to achieve functionings that they value. Capabilities thus address both actual and potential functionings, 15 taking into account individuals' abilities to function even if they are not actually functioning at that level at a given time. For example, someone who is convalescing typically retains the capability for work (a functioning) even though they cannot work right now, whereas someone who is seriously injured may lose that capability, if the injury is serious enough.

From this perspective, the major premise of neo-classical economics, that welfare rests on an individual's willingness to pay for a commodity (e.g. health insurance), is flawed. Rather than resting on the individual's pursuit of maximum satisfaction, with priority given to satisfying individual and aggregate preferences, the capability approach gives moral significance to human capability and human flourishing. Moreover, welfare economics depends on the standard rational actor model. The capability approach does not make those assumptions: in the real world, individuals do not invariably make rational choices, according to the neo-classical model.

This approach focuses on individuals' exposure to risk and their ability to adequately manage it, rather than their preferences regarding it. When individuals lack access to means of reducing or mitigating risks, they become insecure. Vulnerability and insecurity diminish well-being and inhibit human flourishing.

Vulnerability and insecurity

Vulnerability and insecurity in health are an inescapable fact of life. However, because the risk

of ill health is uncertain in frequency, timing and magnitude, it is difficult to insure against at the individual level. Most measures of risk give equal weight to both upward and downward variation in factors such as income, but downward changes both affect and concern most people far more than upward changes do.

Lack of health-care access increases risk exposure: failing to meet health needs when they occur can expose individuals to even greater risk of illness or injury later on. Illness itself brings vulnerabilities: a potential further decline in health, lost income due to medical expenses, and lost opportunities at work or school. The irreversibility of worst-case scenarios, such as severe disability or death, heightens individuals' insecurity and vulnerability.

Without health insurance, individuals and house-holds must self-insure, use informal risk-sharing arrangements, diversify assets, draw down savings, sell assets, borrow, or go into debt to cover needed services, all of which offer moderate to little effective income smoothing over time. In many cases, individuals who lack health insurance must go without necessary medical care.

Moral foundations of health insurance

From this perspective, the moral foundations of health insurance build on the Aristotelian concept of 'human flourishing', the goal of all political activity. This is Aristotle's theory of the supreme good, the aim of 'every action and decision'. ¹⁶ If health policy is to promote human flourishing, its goal should be to enable individuals to function best, given their circumstances, and thus reduce the vulnerability and insecurity associated with ill health. ⁵ It is not enough simply to provide resources to individuals (for example, cash payouts or direct medical services). ¹⁷ Justice requires that individuals and households be protected against the vulnerabilities resulting from ill health, ¹⁸ and insurance offers this protection.

From this view, protective security¹⁹ through health insurance is a necessary safety net that shields individuals from physical and mental harm and preventable death. This is both valuable in itself and also in providing the other opportunities that result from good health. Because protective security supports a person's overall health and general capability, public policies relating to health and health care should promote it. The way society finances health care thus has equity implications

above and beyond health services delivery and health capability inequalities.

In this approach, universal health insurance is critical to protect individuals against deprivations resulting from illness or injury, and changes in material circumstances, such as exorbitant health care debt. Society must protect people from financial insecurity resulting from 'changes in the economic or other circumstances or from uncorrected mistakes of policy'²⁰ such as an economic downturn and rising unemployment. Protecting health, for example, and preventing 'sudden, severe destitution'²¹ are thus major goals of public policy.

Universal health insurance is thus morally justified because it ensures (some of) the conditions for human flourishing, by reducing, mitigating and coping with the risks of ill health and the resulting financial insecurity. Major illness and/or disability cause significant economic costs both in income losses and medical expenses. Lack of insurance, underinsurance, self-insurance, informal insurance and discontinuous insurance not only provide insufficient protection, but are also barriers to receiving high-quality, ^{22,23} medically necessary and appropriate health care. ⁶

Health care costs can also affect health directly by suppressing demand for necessary medical services. Direct out-of-pocket payments (co-payments, user fees, user charges, waiting periods, and deductibles) can discriminate against the sick and impede use of necessary health care. Attempts to exempt poorer individuals from user fees in public facilities and to use ability-to-pay sliding scales for user fees have had limited success.²⁴ Co-payments, deductibles, user fees, and other costs of health care thus create inequities and raise important moral concerns. Financial disincentives that discourage patients from using necessary health services leave people behind economic barriers and therefore fail to promote health capabilities.²⁵ Studies of small co-payments are necessary to assess their affect on the demand for needed health care and their ability to avoid unlimited demand for health care.

Health insurance can reduce risk by providing preventative medicine (immunizations, prenatal and maternity care, infant care, cancer screening, nutritional services, regular wellness exams and physical exams), as well as covering health-care costs in times of illness or injury. Insurance effectively pools risk across time and across individuals such that the financial risks of illness can be predicted and premiums (including actuarially fair premiums plus administrative costs) can be estimated with good reliability, given a sufficiently large pool. For all these reasons, formal,

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institutional and legally guaranteed health insurance is not only critical but also the rational choice in a just society.

An equitable health system requires protection of all individuals, especially the poor and most disadvantaged, against the monetary burdens associated with health risks. Experience-rated insurance premiums, which penalize those who have used more health care, violate this principle of provision. They can cause sicker individuals to avoid seeking care, by making them pay more than healthier individuals. In contrast, community-rated premiums require everyone to pay the same rate, regardless of health status. The equity implications of financing and of access are inseparable.

If universal health insurance is not to exacerbate other inequities, such as income, the population should share the health insurance tax burden justly, so that the poor or sick are not impoverished by insurance premiums. Financing systems can be classed as regressive (contributions consume a progressively smaller proportion of income as income rises), neutral (all income groups pay the same percentage of their income) or progressive (premiums represent a rising percentage of income as income rises). Health insurance financing needs to be progressive to improve health and overall capabilities. Risk pooling and wealth redistribution are essential for equitable and efficient health care financing.

The justification for progressive financing and community rating is based on the close relationship between income and reduced capability. Coupling disadvantages, ²⁶ such as when a sick person cannot earn a decent income or pay for needed health care, compounds the problem. As Sen notes, 'Hardships such as age or disability, or illness, reduce one's ability to earn income. But they also make it harder to convert income into capability, since an older or more disabled, or more seriously ill person may need more income (for assistance, for prosthesis, for treatment) to achieve the same functionings'. ²⁷

Universal health insurance boosts the economic security of both individuals and communities. Good health can expand people's productivity and incomes, allowing them to support a more prosperous overall economy, which can then afford more and better health care and other social services. By contrast, uninsured health care costs can force a person into poverty through medical expenditures or the inability to access necessary health care. Aggregated over many individuals, these consequences can undermine the economy at large. Health security and economic security are interrelated, and promotion of human flourishing requires attention to both. Health policy must

ensure universal health insurance to enhance human capabilities and promote individuals' ability to flourish, and it must do so efficiently. Health insurance helps create opportunities for both good health and protective security; these interrelated freedoms 'advance the general capability of a person'.²⁸

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