

## The Ethics of Priority Setting for Health

**Summary:** This project continues a strong record of research in the Department of Bioethics that is aimed at facilitating fair and effective allocation of resources to promote health. The research involves a variety of methodologies including conceptual analysis and empirical methods including survey research, focus groups to promote democratic deliberation, secondary analysis of large datasets, and meta-analysis of the literature.

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**Background:** The ethical challenge of justly distributing limited resources is among the most persistent and thorny questions in health policy. Our research aims to examine both analytical questions that continue to perplex moral theorists and empirical questions regarding how the public believes resources should be allocated, how resources are in fact distributed by health care providers, as well as how fair resource distribution might be enhanced. We recognize that health care systems are complex and involve participants at multiple policy and practice levels; participants at each of these levels have important roles to play, and decisions made at one level affect decisions and outcomes at other levels. We also recognize, from growing research in social epidemiology, that health cannot be guaranteed by actions in the health care sector alone. Thus our research has increasingly focused broadly on the ethics of allocating resources across policy sectors in order to address the social determinants of health and foster widespread population health.

**Departmental Research Initiative:**

**THEORETICAL ANALYSES:**

- **Developing a novel strategy for allocating scarce medical interventions**

In a conceptual analysis regarding the allocation of very scarce interventions such as organs, Alan Wertheimer and Ezekiel Emanuel, working with a pre-doctoral fellow, Govind Persad, have explored four principles for such allocations: treating people equally, favoring the worst off, maximizing total benefits, and promoting social usefulness. They propose a novel system of rationing – the complete lives system – which prioritizes younger people who have not yet lived complete lives and also incorporates prognosis, attention to maximizing the number of lives saved, and the concept of instrumental value. In crises such as an epidemic, the proposed system offers a workable multi-principle framework that is an advance over existing single principles (Persad 2008).

- **Critiquing procedural approaches to resource allocation**

A number of substantive theories of distributive justice have been proposed by moral philosophers for the fair distribution of scarce resources. Among the more prominent of these theories are utilitarianism, which argues for distributing resources in a way that achieves the greatest amount of good; egalitarianism which argues for equal distribution of resources; and prioritarianism, which argues for giving the most to those individuals in society who are the worst off. In the absence of any logical way to resolve differences among these theories, the philosopher, Norman Daniels has argued that a procedural approach that allows stakeholders who are fairly represented to deliberate among themselves is preferable. Lindsay Sabik and Reidar Lie criticize Daniels' claim that his procedural approach to resource allocation can solve the challenge for priority setting of irreconcilable conflicts between competing values. They argue that when his procedures are specified in sufficient detail to provide useful guidance to decision makers, they will also necessarily have to be justified by the same values found to be problematic in substantive accounts. In a companion article they argue that countries that have set up prioritizing bodies that have actual decision making power have been relatively more successful than countries that have set up advisory bodies only. (Sabik 2008a, Sabik 2008b).

- **Taking geography into account in priority setting: priority setting for rural health**

The allocation of resources for the health of rural populations raises unique questions. Danis, using the extensive literature on rural health and health care, carried out an ethical analysis of resource allocation for rural health that examined factors that make rural populations vulnerable. The analysis included four steps: 1) a characterization of rural socio-demographic characteristics, rural health, and health care; 2) an examination of the ethical ramifications of this characterization; 3) an application of theories of distributive justice to priority setting for rural health care, and 4) a consideration of the policy implications for rural health. The low density of rural populations requires solutions different from those that might work for urban populations.

The circumstances of rural communities leave them susceptible to having fewer of the resources necessary to ensure health status on par with more heavily populated communities. In this sense, rural residents are more vulnerable and deserve priority in funding. Yet, allocation of resources for rural communities is not best guided by aiming for equivalent services with urban communities because their unique geography reduces the likelihood that similar services will yield similar results. Rather, allocation of resources for rural communities would be best guided by aiming for parity of health status and by taking advantage of innovations in communication and technology to achieve this goal (Danis 2008a).

- **Intransitivity and Priority setting**

One of the most basic assumptions that underlies efforts at priority setting is that it is possible to rank priorities through some rule of logic and that rankings are transitive. Transitivity assumes that if we prefer A to B and B to C, that we necessarily prefer A to C. Yet this assumption does not always hold because the characteristics of the many benefits that we might consider ranking may have multiple characteristics that are not always comparable.

Alex Friedman and Marion Danis propose that under these circumstances – when it is unclear how a rational and justifiable choice can be made, the only course of action that is acceptable is to see if we can make choices that minimize priority setting of pooled resources. We suggest that such an approach to priority setting does not require us to rank (or, in fact, even directly compare) possible distributions of utilization of health care services. Instead, our proposed solution amounts to a cost-sharing scheme in which individuals are given some fair share of the resource pool to use as they see fit, and any consideration of utilities of groups is avoided (Friedman 2010).

- **Fostering inter-sectoral policy to address the social determinants of health**

Improving population health and reducing unjustifiable health disparities is heavily predicated on addressing the predisposing factors—the social determinants of health such as income and education—that make people vulnerable to ill health. Philosophers and policy experts alike have vigorously argued in favor of addressing the non-medical determinants of health within national health policy agendas. However, a fully described package of socio-economic interventions targeted to meet the needs of a particular population, with an estimate of the actuarial cost of providing such a set of interventions, is usually absent from policy discussions. The need to address the socio-economic determinants in the United States is quite pressing since the US lags behind forty-one countries in life expectancy and behind thirty-three countries in infant mortality despite having the highest per capita health care expenditure in the world and a remarkable biomedical infrastructure.

Building on the evidence from the extensive literature on the socio-economic determinants of health (SEDH), Danis and a former pre-doctoral fellow, Namrata Kotwani, outline some of the philosophical arguments justifying the public provision of a broad array of health-promoting socio-economic interventions. We also cite evidence that policymakers and governments worldwide are incorporating non-medical services for low income populations, such as poverty reduction strategies, early childhood education, and improved working conditions in their health policy programs. We then suggest a set of evidence-based health-promoting socio-economic interventions for adults aged 18-30 with incomes up to 200% of the federal poverty level. The proposed socio-economic interventions address the fundamental determinants of health among young adults—higher education, employment, family life, housing, and community. Targeted interventions for improving the health and well-being of young adults are attractive policy options and a strategic investment in human capital (Kotwani 2009).

- **A framework for rationing by clinical judgment**

It is generally recognized that a health care system cannot remain financially sustainable if every patient is given all possible treatments including those that have minimal expected benefit or extremely high cost. But what role physicians should play in rationing such care is a matter of dispute. If they take on such a role, they face competing goals of shepherding resources wisely and advocating for the needs of individual patients. From surveys we have conducted we know that physicians take cost into account in making some of their treatment decisions and we believe this is inevitable. Yet physicians rarely think explicitly about the fairness of their decisions as they make them. Danis and a former post-doctoral fellow, Samia Hurst, therefore suggest a framework for bedside rationing to address concern for fairness. We have defined rationing by clinical judgment, identified several contexts in which it occurs, apply notions of procedural justice, and suggested application of an analytical framework in order to facilitate fair bedside rationing (Hurst 2007b).

We proposed that clinicians can ration at the bedside by three mechanisms: 1) in accord with external constraints, 2) by rules of medical practice, or 3) by exercising clinical judgment when the first two mechanisms do not apply. Rationing by clinical judgment can itself take three very different forms. First, it can occur as an instance of triage, where locally available resources are allocated between identified patients who are in competition with each other as in assigning the last available ICU bed. Second, rationing by clinical judgment can occur in a situation where resources are strained and where, although there is no competition between identified patients, a candidate for an intervention is nevertheless compared to other potential patients, such as the population served by an institution, that could potentially benefit from the resources involved. Third, rationing by clinical judgment can take the form of an expert opinion, where a precisely applicable cost-effectiveness analysis does not exist, or the cost-effectiveness of the contemplated intervention for the patient at hand is too small to put the intervention over

a certain threshold that is deemed reasonable. These three circumstances represent increasingly wider circles of resource pools in which the rationing decision takes place.

For a clinician to ration fairly, several requisite conditions should be present: a closed system that offers reciprocity, uniformity, explicitness, and review of decisions. By adopting requisite conditions for rationing by clinical judgment, clinicians could practice bedside rationing as fairly as possible, and the process could be monitored for its legitimacy and appropriateness.

- **Applying evidence to insurance design, coverage, and reimbursement policies**

Sound priority setting must be based on solid evidence about the comparative effectiveness of various proposed medical interventions. Several ethical issues arise in using evidence based medicine to guide insurance benefit design and reimbursement policies. Thus a major focus of the work of the Section on Ethics and Health Policy involves analyses of these ethical issues. A full description of this work is presented in a separate project description prepared by Steve Pearson.

## **SURVEY RESEARCH**

- **A study of bedside rationing in four European countries**

The role that physicians should play in cost containment is controversial. Hurst and Danis, along with European colleagues therefore conducted a study entitled *Values at the Bedside*, an, NIH-funded, survey of general internal medicine physicians in four European countries - Norway, UK, Italy and Switzerland - to explore their reported experience with rationing, their perception of scarcity and fairness in their health care system, and their attitudes both towards clinical rationing, and towards various other cost-containment strategies. Physicians reported bedside rationing, and a number of factors associated with limit-setting in clinical care (Hurst 2006).

In addition to examining physician self-reports of bedside rationing, the Values at the Bedside study explored the assessment of these physicians of the rationing strategies of the health care systems in which they work. In particular we ascertained their views of the cost-containment strategies and the availability of various medical interventions across a full range medical need from preventive (cancer screening) to end-of-life services (intensive care and nursing homes beds) in order to gain insights about the impact of system-wide priority setting on access to care (Hurst 2007a).

Most respondents perceived some resources as scarce, with the most restrictive being: access to nursing home, mental health services, referral to a specialist, and rehabilitation for stroke. Respondents witnessed adverse outcomes from scarcity, and some respondents had encountered severe adverse events such as death or permanent disability. Despite universal coverage, nearly half of study respondents

reported instances of underinsurance. Nearly four fifths of respondents also reported some patient groups as more likely than others to be denied beneficial care on the basis of cost. The survey results also revealed that physicians found at least one cost-containment policy acceptable. While respondents are willing to participate in cost-containment, they do not want to be guided by administrative rules or restrictions on hospital beds.

The findings suggest that physicians may be able to serve as bellwethers who provide an indication of how organizational factors affect availability and equity of health care services. Physicians are willing to participate in cost-containment decisions and strategies should be developed to enable physicians, who are in a unique position to observe unequal access or discrimination in their health care environment, to address these issues in a more targeted way (Hurst 2007a).

## **META-ANALYSIS**

- **Willingness of physicians to ration**

Several quantitative surveys have been conducted internationally to gather information about physicians' attitudes towards health care rationing. Yet there has been no systematic review of these studies. Danis, Persad, and a visiting European colleague, Daniel Strech, conducted a meta-analysis of published studies to examine the following questions: Are physicians ready to accept and implement rationing, or are they rather reluctant? Do they prefer implicit bedside rationing that allows the physician-patient relationship broad leeway in individual decisions or do they prefer strategies that apply explicit criteria and rules? A systematic literature search and meta-analysis was performed for all English and non-English language references using CINAHL, EMBASE, and MEDLINE. Three blinded experts independently evaluated title and abstract of each reference. Survey items were extracted that match with: 1) willingness to ration health care or 2) preferences for different rationing strategies. Sixteen studies were eventually included in the systematic review. Percentages of respondents willing to accept rationing ranged from 94% to 9%. This wide range in views about the acceptability of rationing reported in these studies has important implications for development of effective strategies for physician participation in resource allocation (Strech 2009).

## **PUBLIC ENGAGEMENT IN PRIORITY SETTING FOR HEALTH**

- **Public Deliberation to design affordable health insurance**

Over the past decade as the US has struggled to find approaches to affordably expand health insurance coverage for the uninsured and to keep insurance affordable for those who have coverage, there has been significant need to design low cost insurance benefit packages that best meet patient needs. Thus a major focus of our research

regarding priority setting has involved engaging the public in small group exercises that permit public deliberation about insurance benefit design. Toward this end Danis, in collaboration with Susan Goold at the University of Michigan, designed the “Choosing Healthplans All Together” (CHAT) a small group decision exercise intended to give the public a voice in priority setting in the face of unsustainable health care costs. The CHAT exercise has now been used for research, policy, and teaching purposes in nine US states (Danis 2010a). There are several findings that are ubiquitous across CHAT projects. One is that groups select a slightly broader array of benefits than individuals, since they must accommodate a broader array of preferences. We also find that group decisions are more community-minded than individual decisions. For instance, groups in Minnesota were more likely than the individuals in the groups to forgo some of their benefits to expand health insurance to the uninsured. Importantly, the exercise increases understanding that benefits need to be limited in order to limit health care spending (Danis 2007). In addition, participants are more likely to give priority during the final round of decision making to services like mental health and rehabilitation, as they become more aware of the need for and the benefits of such services over the course of the exercise (Danis 2007). Whenever measured, at least 85% of participants are willing to abide by group decisions.

Having published studies reporting the use of the CHAT exercise among uninsured individuals in the US, Marion Danis’s work has begun to be of interest outside the U.S. In 2005 Danis was invited to participate in a cross-cultural project funded by the European Union to promote the development of Micro Health Insurance Schemes for rural poor villages in India. The CHAT exercise has been subsequently modified for use the Indian context. The insurance premium was tailored to the willingness to pay among this population, the tool was translated into several Indian languages, assistance was added for illiterate participants, and the facilitation technique was modified to accommodate the deliberative style of rural villages. Published results show that respondents chose holistic benefit packages at basic coverage levels that reflect high aggregate costs, over narrower benefit packages with higher coverage that protect against catastrophic events (Danis 2007b). The group process resulted in inclusion of benefits that protect mainly the vulnerable sub-groups, such as maternity, medical equipment and mental health. The group process has the capacity to enhance popular understanding of the link between premium levels and expectation of coverage by health insurance and can enhance willingness to join and pay among communities where health insurance is an unfamiliar concept. We have subsequently conducted an analysis of the effectiveness of participants’ choices, using three criteria: 1) reimbursement regardless of the level of expenditure, 2) fairness, and 3) catastrophic coverage. The most frequently chosen benefit packages scored high on all three criteria (Dror 2007).

- **Public deliberation to prioritize interventions to address the socio-economic determinants of health**

Over the last seven years Danis has focused on addressing health disparities experienced by low income populations. In recognition of the socio-economic determinants of health, she has developed an exercise to prioritize interventions beyond the traditional health care sector that are aimed at improving health. The aim is to make interventions such as education, job training, safe housing, dependent care, improved nutrition, health behavior education, and stress reduction affordably available to low income individuals. Building upon the CHAT exercise, and in collaboration with the Center for Health Communications Research at the University of Michigan and Mercer Human Resources Consultants, Danis designed the REACH exercise which stands for Reaching Economic Alternatives that Contribute to Health. She has used this tool to design healthful employment benefit packages with input from low income employees. Two major projects have been conducted and published in this area of research:

### **1. Revising Employment Benefits for the Sake of Health**

One of the more overlooked inequities in the US that may have an important impact on disparity in health status is the vast difference in employment benefits offered to low and high income employees. In a priority setting exercise using the REACH decision tool, Danis and several fellows, Frank Lovett, Sabik, and Kathryn Adikes, have explored the views of low income earners regarding the employment benefits that would consider most important to have (Danis 2007c)

### **2. Identifying Priorities of Low-Income Urban Residents for Interventions to Address the Socio-Economic Determinants of Health**

In its final report in 2008, the World Health Organization's Commission on the Social Determinants of Health recommended comprehensive strategies to reduce health inequalities associated with social factors, particularly low income and poverty. The Commission suggested that communities seeking to address poverty-related health deficits ought to offer an array of policies that effectively target the numerous dimensions of poverty in their local population in a coordinated manner. Such a broad agenda is likely to be challenging both politically and financially. Poverty rates in the US during the past decade have ranged from 11.3% of the population to 14.3% in 2009. Poverty rates for subgroups, particularly African Americans and Hispanics have been notably higher at 25% and 23 %. Public programs to address the socio-economic needs of the poor have not succeeded in meeting their needs. Housing policies designed to address the supply of poverty-level affordable housing, for example, have long been unable to keep up with shortfalls in supply. Particularly, when the economy is weak, the number of poor and low income individuals who need social services rises. A dramatic illustration of the magnitude of the demand is the number of people needing food assistance which exceeded 30 million individuals in the US in 2009. At the same time that need expands, state and federal programs are most likely to face budgetary shortages that require cutting assistance programs. This reality of persistent, and at

times, exacerbated shortages in resources to meet the needs of the poor point to the importance of priority setting.

With this challenge in mind, a research project was conducted, to facilitate the prioritization of interventions that address the SEDH for an urban low-income population in the U.S. The project was done in collaboration with the Howard University Department of Family Medicine and the District of Columbia Department of Health. Study participants were residents of the District of Columbia with incomes under 200% of the federal poverty threshold.

Given a budget valued at approximately twice an estimated cost of health care alone (\$885), the interventions ultimately prioritized by the greatest percentage of individuals were: health insurance (95%), housing vouchers (82%), dental care (82%), job training (72%), adult education (63%), counseling (68%), healthy behavior incentives (68%), and job placement (67%). The percentages of respondents who received support for housing, adult education, and job training and placement were far less than the percentage who prioritized these interventions. The study demonstrates the possibility of utilizing the priorities of poor and low income residents to inform allocation of social services that affect health (Danis 2010b).

Public understanding of the issues at hand is crucial if the public is to have a voice in policy setting. Thus one of the important findings of this study, which has not been shown before, was that the exercise increased participants' appreciation of the role that socio-economic factors play in determining health (Pesce 2011).

- **Impact of resource allocation on mortality of critically ill patients**

- Any effort to guide the utilization of health care resources, including medical personnel, should be driven by evidence about clinically meaningful outcomes. While critically ill patients who are admitted to intensive care units are thought to gain an added survival benefit from management by critical care physicians, the evidence of this benefit comes from small studies.

- Danis, in collaboration with other investigators of the Values, Ethics and Rationing in Critical Care (VERICC) Task Force used data from Cerner Project IMPACT, a database of patients admitted to 123 ICUs in US hospitals, to compare hospital mortality of patients cared for entirely by critical care physicians (CCM) and patients cared for entirely by non-critical care physicians (non-CCM). To adjust for severity of illness, a modified Simplified Acute Physiology Score (SAPS II) was used. Since more severely ill patients might be selectively referred to critical care physicians, a propensity score for critical care management was applied. Patients were grouped into six categories defined by patient management type (CCM vs. no CCM) and ICU type ( $\geq 95\%$  of patients received CCM, 5-95% CCM, or  $\leq 5\%$  CCM). Logistic regressions were performed using hospital death as the dependent variable.

- Among a sample of over 100,000 patients, those receiving CCM were generally sicker, received more procedures, and had higher mortality rates. After adjustment for severity of illness and propensity score, mortality rate remained higher for CCM patients than non-CCM patients. The difference in adjusted mortality was less for patients who were sicker and were predicted by propensity score to receive CCM. These findings suggest that management by critical care physicians did not confer survival benefit. The findings suggest the need to explore how to improve the clinical management practices of critical-care-trained physicians to reduce mortality particularly among less severely ill ICU patients (Levy 2008).

## **Impact of research**

Over the course of the last decade the CHAT exercise has been used for research, policy and teaching purposes in nine states and involved over 4,200 participants between 1999 and 2009. For example, departments of Insurance in various states in the US have used CHAT to determine public opinion about what should be included in basic health insurance packages for the uninsured. Some municipalities have used it to assess public priorities for direct service delivery to the uninsured.

Outside of the US, the CHAT exercise has served as the basis for designing micro-health insurance plans for resource poor rural villages in India through the efforts of the Micro Insurance Academy.

Our study of public engagement in priority setting to address the social determinants shows for the first time that disadvantaged populations can learn to appreciate the importance of the social determinants of health. This finding will be important as the US faces difficult policy choices during economic crises that threaten to exacerbate health disparities.

We anticipate that recommendations for promoting fair bedside rationing will be valuable as the need to control costs becomes increasingly pressing both in the US and in other countries.

## **Future research initiatives**

One of the more important and refractory problems containing health care costs in the U.S. is the reticence to explicitly acknowledge and address the societal and personal costs of illness and medical care in public discourse and in doctor-patient encounters. Much of the direction that planned research efforts in this project will take are intended to focus on finding acceptable strategies to foster dialogue about medical costs and ways to reduce them.

## Conceptual analysis

- **A framework for calculating health benefits in the Disease Control Priorities Project**

A conceptual study on the basic presuppositions and values involved in calculating health benefits within the framework of the Disease Control Priorities Project funded by the Gates Foundation and led by a research group at the University of Washington is being planned. This study will be a collaborative project between members of the Department, researchers at the University of Washington and University of Bergen, Norway.

- **Changing the language of rationing**

We will argue that antipathy towards rationing among the American public is perpetuated by reluctance to discuss the topic. We introduce the concept of optimal rationing, which requires that forgone benefits be marginal, that other methods to contain cost that do not require forgoing some benefit be instituted first, and that benefits forgone be reduced to the minimum necessary to maintain a sustainable healthcare system. We propose that by focusing on this subset of rationing, consideration of rationing would be more acceptable and feasible in both the public arena and the clinical encounter.

- **Discussing end-of-life costs with patients and families**

The cost of care at the end of life is known to be expensive and to account for a high proportion of health care costs. In this analysis we will argue that in order to address the need to contain end-of-life costs it is necessary to explicitly broach the topic of the cost of care at the end of life with patients and that it is possible to do so in a respectful and sensitive manner. Conversations about how money will be spent should be incorporated routinely into the discussions of care for chronically ill patients before the end is near. Secondly, we consider the possibility of incorporating financial issues into advance care planning. Through these approach one can avoid abruptly and insensitively bringing up financial issues only at the very concluding period of a person's life when one would prefer to address the painful and important issues of spiritual and existential loss that are appropriately the focus when a person is dying.

- **Incorporating concepts of equity into cost effectiveness guidelines**

The World Health Organization (WHO)'s Costs, Effectiveness, Expenditure and Priority setting (CEP) unit provides guidance to decision makers from low- and middle-income countries to aid in setting health priorities. Priority-setting work to date has focused on developing innovative methods to provide valid, timely and comparable estimates of cost effectiveness, and to apply them to meet the informational requirements of policymakers in developing countries. As part of its mandate to aid policymakers from low and middle income countries in setting health priorities, CEP seeks to strengthen explicit consideration of equity and other relevant concerns in conjunction with cost-effectiveness analysis. Cost effectiveness analysis needs to be contextualized and seen to be part of a multi-criteria approach to priority setting. Danis will be participating in development of a concept paper with staff of CEP and faculty of the University of Bergen to develop guidance and a checklist that will facilitate consideration of equity and other relevant concerns in relation to cost-effectiveness results and priority-setting processes.

- **The ethics of bedside rationing**

Based on the empirical findings of Values of the Bedside study, we will publish an edited volume of essays exploring how to foster fairness in these decisions. This question takes on a particular difficulty once we recognize that, as is suggested in our study, complex interactions exist between macro-level policy decisions and clinical rationing decisions at the micro-level of patient care.

### **Empirical studies**

- **A randomized controlled trial of supportive information facilitate decision making for chronically critically ill patients**

A growing number of critically ill patients in the US survive intensive care but fail to be weaned from mechanical ventilation and require tracheotomy. These patients have been given the label of chronically critically ill. They have very poor outcomes – approximately 1% are able to live independently a year after their intensive care unit stay and approximately 60% are dead at 1 year. Marion Danis is collaborating in an NINR funded randomized, controlled, multi-center trial of an intervention to provide informational support and a framework for goal-directed medical decision-making to families of patients with chronic critical illness. This intervention, consisting of a program of proactive, protocolized family meetings by a Supportive Information Team (“SIT”) led by a palliative medicine physician, and a printed informational aid for families, will be compared to usual care to determine whether such support and information alters the treatment choices for this costly and devastatingly ill population.

- **Focus groups to explore discussing costs in the doctor-patient encounter**

The cost of illness and medical care has a profound impact both for society as a whole and for each patient and family as they experience being sick and seeking treatment. Yet discussion of these costs between patients and their doctors has been largely discouraged. Although there are several reasons for the aversion to any discussion of costs, there are several ethically defensible reasons why one might encourage clinicians to talk to patients and their families about financial issues.

#### **New CHAT projects:**

- **Cancer CHAT**

While the CHAT exercise has been used with thousands of individuals to engage the public in prioritizing health insurance benefits, the exercise has not been used to ascertain the opinions of seriously ill patients and their families on deliberation about health insurance coverage for advanced disease. Thus in a departure from prior work, advanced cancer patients and their family members, will be enrolled in a CHAT project to identify their priorities for Medicare coverage of advanced cancer care. Particularly as overwhelming expensive chemotherapy agents that yield marginal gains in life expectancy become available, it is a timely opportunity to raise this ethically charged policy question about coverage of such cancer medications. Danis will collaborate on this project with faculty at Duke Cancer Center and the Duke Public Policy Program with funding from the Agency for Healthcare Research and Quality.

- **Switzerland CHAT**

In Switzerland, the public is unusually involved in priority setting for health, since they often have the opportunity to vote about health care issues. Yet some object that the public is not well enough informed about health issues to wield such influence. We are designing a project to examine whether engagement in the CHAT process enhances participant understanding of the issues. This project will be done in collaboration with Hurst at the University of Geneva. We anticipate the involvement of the Federal Office of Public Health of Switzerland in this project which will involve two focus groups of citizens of each canton in Switzerland.

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