Final Report:
University of Notre Dame Ad Hoc Committee on Bioethics and Healthcare Policy
(For committee membership see appendix 1)

1. Introduction

As the federal government again grapples with the difficult problem of reforming the US health care system, we are presented with two different pictures of the US health care system. First, the US health care system is the locus of innovation in the world. Advances in antiretroviral drugs have reduced annual mortality rates among HIV/AIDS patients by 70 percent, neonatal intensive care have saved the lives of many low weight births that in years past who would have died shortly after birth, and effective treatments for heart attacks have in the past few decades helped boost the life expectancy among the elderly by large amounts. Prescription drugs have helped temper the mortality costs of high blood pressure and high cholesterol assisted in eliminating many childhood diseases through vaccinations and helped reduce the suffering associated with depression and other mental disorders. Hip and knee replacements have helped damped the debilitating aspects of degenerative bone and joint conditions. Imagining techniques now allow the detection of tumors without invasive surgical procedures and many surgical methods that used to require days of recovery in a hospital can be performed on an outpatient basis.

In contrast to these successes stories, it is easy to construct a case that health care in America, and around the world, is broken. In 2006, per capita spending on health in the U.S. was $6,714, 49 percent more than the next highest-spending country (Norway), more than twice the median value for OECD countries, about twice the value of Canada and nearly 2.5 times the value of the United Kingdom. Despite this spending, in 2005, the US ranked 25th of 29 countries in average life expectancy and the US had the fourth highest infant mortality rate of 28 reporting countries. The Dartmouth Atlas Project shows that per capita Medicare reimbursements across hospital referral regions vary by a factor of three. Despite these spending differences, there is little evidence that the differences in spending lead to better quality of care or better mortality outcomes, leading the group to conclude that roughly one third of Medicare expenditures are wasted on ineffective treatments. Inadequate quality endangers or kills thousands of patients every year. Healthcare consumes 17 percent of the gross national product yet 40 percent of Americans cannot afford the recommended care and 46 million Americans do not have health insurance. Costs are skyrocketing at a rate well beyond inflation, and just two federal programs, Medicare and Medicaid, threaten to swallow nearly 40 percent of the federal budget as early as 2030.

Although the list of what ails the US health care system is long and growing, these problems are dwarfed by the global health crisis that afflicts those in the developing world. In sub-Saharan Africa, 5 percent of adults are infected with HIV, resulting in 1.5 million deaths per year. A 2003 Lancet Series on Child Mortality drew significant attention by noting the sad and staggering fact that each year over six million children die from diseases that could have been easily prevented or treated. Two million deaths are caused by diarrhea which is effectively treated by oral rehydration therapy. Similarly, close to two million child deaths are caused by pneumonia and additional one million by malaria, diseases that can be prevented substantially or treated successfully by cheap and simple measures.

Health care policy occupies a prominent place in the legislatures, the executive branches of our governments, and leading NGOs of the world. It is consistently ranked among the top issues that worry Americans, driving many of their most personal and important decisions. Millions of dollars have been spent researching causes and effects. Thousands of specific and general solutions have been proposed.

Multiple well-funded think tanks, institutes, and centers have dedicated expertise to addressing these issues.

The Catholic faith is predicated on the belief that each human being is created in the image of God and possesses inherent human dignity. Health care enjoys a privileged place in upholding and protecting sacred human life. The problems of health care delivery and policy are powerfully linked to conceptions of social justice within Catholic social teaching. Therefore, the day to day issues of who gets care and at what price are not separate from ethical and theological reasoning.

While Notre Dame has many educational and research programs dedicated to address poverty, education, environmental destruction, and peace, historically it has limited research capacity in this important and influential area. Given this lacuna, the Task Force on Bioethics and Health Policy is charged with exploring whether and how the University of Notre Dame can make a meaningful contribution, and even achieve preeminence, in these fields. Our deliberations have raised serious questions about the prevailing de facto standards in the field, both in regard to scholarly excellence and as applied to institutions imbued with a uniquely Catholic ethos and mission. We have agreed that Notre Dame has a unique opportunity to embody - through free inquiry and leading teaching, research and outreach - a robust Catholic vision based on the principles of human dignity and the common good, and to engage the rest of the field animated by this perspective and intellectual tradition.

This Bioethics and Health Policy Task Force was formed to address the following issues:

- What does Notre Dame currently provide with respect to education, research, and outreach in the areas of bioethics and health policy?
- Should Notre Dame do something different than it is already doing in these areas? If so, what efforts might provide Notre Dame with maximal value and how might these efforts be optimally structured?
- Through a strategic investment in research capacity, can the university obtain excellence in these fields?

In what follows we outline the Task Force's answers to these questions. In section 2 we outline the role of Catholic health care in America and the unique vision that a Catholic university can bring to health care and health policy. In section 3, we outline the work of the task force and the results of our internal and external scans of the disciplines of health policy and bioethics. Finally, in section 4, we outline a number of possible strategic investments the university can make in these fields, in terms of both research and teaching. We present the pros and cons of each option, outline some benchmarks for success and provide thumbnail sketches of the probable costs associated with each alternative.

2. Catholic Health Care in America and a Distinctive Role for a Catholic University

Addressing thoughtfully the challenges facing health care and bioethics is inextricably linked to the cause of justice, making it deeply relevant to Notre Dame's mission. In *Evangelium Vitae*, Pope John Paul II reaffirmed a list of offenses against human dignity first enumerated in *Gaudium et Spes*: "Whatever is opposed to life itself, such as any type of murder, genocide, abortion, euthanasia, or willful self-destruction, whatever violates the integrity of the human person, such as mutilation, torments inflicted on body or mind, attempts to coerce the will itself; whatever insults human dignity, such as subhuman living conditions, arbitrary imprisonment, deportation, slavery, prostitution, the selling of women and children; as well as disgraceful working conditions, where people are treated as mere instruments of gain rather

than as free and responsible persons. . . .” This list indicates, by way of negation, the rich and comprehensive conception of human dignity affirmed by the Catholic tradition. The scope of this conception distinguishes the Catholic tradition from social and religious movements which make much narrower appeals to human dignity. Notre Dame’s commitment to the cause of social justice is manifested in countless ways, beginning with the university’s mission statement that proclaims a commitment "to create a sense of human solidarity and concern for the common good that will bear fruit as learning becomes service to justice."

No single list of components of the common good complements the list of violations of human dignity, but several recurrent features appear in Catholic thought. These include the principles of solidarity and subsidiarity; the good of each individual as a necessary component of the good of the whole yet not reducible to the good of the whole; and a careful attempt to relate duties and rights without compromising either. The Catholic conception of the common good affirms respect for human dignity in all its forms as a necessary condition of the common good, insists on the inseparability of the good of each individual and that of society, and draws from a long tradition of philosophical and theological reflection on the human good. In all three of these respects it differs from prevailing secular conceptions of justice and the good, which tend to focus on individual liberty and social utility in abstraction from broader considerations of just order and human flourishing.

It is clear from a Catholic perspective that our society is deeply torn between many competing political visions, none of which are animated by the richest and fullest understanding of human dignity and the common good. While it is perhaps not surprising that the world of Catholic bioethics and health policy is similarly divided among such competing approaches, it should be disconcerting. (For a more full articulation of this perspective, offered by the Task Force, please see *Appendix 2 – Bioethics Sub-Team Vision Statement*).

Placed at the center of this problematic is the network of Catholic health providers and so too, in a certain sense, the Catholic Church. Catholic health care is the nation's largest provider of not-for-profit health care, providing an enormous range of services across the continuum of care for all ages, races, and religious beliefs. One in six people in the United States is cared for in a Catholic hospital each year, and Catholic health care facilities provide a wide range of community benefits to assist individuals and families. Today, there are 624 Catholic hospitals in the United States in over 60 separate Catholic health care systems. Catholic health directly employs over 600,000 people with facilities in all 50 states. Often Catholic health care providers are the "safety net" to thousands of patients who cannot afford health care coverage. This is particularly true of immigrants, many of whom cannot afford services but turn to urban Catholic hospitals for care.

In a story we know too well in the Catholic Church, Catholic health is under duress. The sponsorship of almost all Catholic hospitals rests with various religious orders, mostly vowed religious sisters, and whose numbers are in decline. Management of these institutions and networks is shifting to lay boards and executives who may fail to fully understand or appreciate the unique mission of the organizations they inherit. While many Catholic hospitals and networks are strong, waves of mergers and consolidations, expected to continue, reveal institutional weaknesses that could have a profound impact on the American health care system and so too the welfare of American society.

Yet Catholic health remains enormously influential. In 2007, the CEO and President of the Catholic Health Association, Sister Carol Keehan, was named the “most powerful person” in healthcare in this country. Leaders of six Catholic health networks were also included on this list. This is a testament to the influence of Catholic health, particularly when one considers that the list includes many well known leaders, including President Barak Obama, Secretary Hilary Clinton, governors, senators, and heads of governmental health agencies, union leaders, academic leaders and philanthropists.

As the premiere Catholic university, the University of Notre Dame is positioned to be an academic laboratory and a public intellectual forum where a Catholic vision that combines and integrates the principles of human dignity and the common good in their most comprehensive forms "may intersect with all forms of knowledge." There is presently no robust academic home broad Catholic vision anywhere in the field of bioethics and health policy, and external thought leaders agreed, no place better then Notre Dame where it could live, thrive and engage the world. In consideration of this opportunity, the University has a number of strengths that can help construct a solid foundation for an investment in health policy and bioethics.

First, every year Notre Dame graduates more eventual physicians than almost any medical school in the United States, and more future physicians than any of the top ten medical schools in the country. Given Notre Dame's national prominence and the comparatively small geographic footprint of most medical schools, Notre Dame's scope of influence, in terms of placing graduates at the finest institutions throughout the country and around the world, is virtually unparalleled. Given the varying degrees of importance that different medical schools place on particular specialties or types of practice, Notre Dame places physicians in as many different medical specialties and practices as any major academic health institutions in the land. Many of our physician graduates eventually achieve prominent roles in medical societies, practices, and industries.

Beyond the formation of physicians, Notre Dame graduates business leaders that go on to manage hospitals and other health institutions and practices. Even for those that do not enter the health industry in particular, the management and containment of health costs for their companies is almost certainly an area of some concern and interest. Notre Dame graduates in theology and philosophy can contribute to bioethics and health ethics. Efforts in social sciences and the humanities can also be enhanced. In science and engineering, there are unknown numbers of graduates engaged in discovery and sales at pharmaceutical and biomedical companies. Our law graduates could also gain much from exposure to these concerns.

At first glance, a number of these characteristics could describe any number of colleges or universities in the country. Talented students, faculty expertise, well placed alumni, people of various depths and varieties of faiths, engaged in scholarly pursuits. What distinguishes Notre Dame? The very thing that makes us distinctive on nearly every great accomplishment we have achieved: our Catholic heritage and mission.

This connection to the Catholic Church has many benefits, and among them is the link to health care delivery. As noted above, the network of Catholic health providers is one of the largest in the nation, its presence noted in every state. No other component of the Catholic institutional life, save perhaps education, is more pervasive and influential. It is here where Notre Dame could find a distinctive voice and a meaningful influence in the health field, the Church and society.

What value do peer universities place on heath policy education and research? Of the top 20 undergraduate universities in the country, 17 have established health policy centers. Two of those that do not are the institutions dedicated to more technical discoveries, the Massachusetts and California Institutes of Technology. The single other outlier is Notre Dame. A similar story is found among the nation's top research universities. Of the 62 member universities in the American Association of Universities (AAU), considered the best research universities in the nation, 92% have a dedicated health policy center. Of the 22 institutions admitted since 1965, 21 have such a center.

3. Task Force Efforts

The task force was divided into two sub-committees: one on Bioethics (chaired by Prof. Gerald McKenny) and one on Health Policy (chair by Dean Carolyn Woo). Both sub-committees began by taking an internal inventory of the research, teaching and outreach efforts within their respective areas. The sub-committees also identified and reviewed similar research centers at peer institutions. Finally, it identified and interviewed various thought leaders around the country. In what follows, we present the results of our external environmental scan, the internal inventory, and the thought leader interviews are presented in the next subsections. (The complete results of these exercises can be found in the Appendixes to this Report).

a. External benchmarking

a.1. Bioethics

In the committee's effort to benchmark peer institutions, the committee undertook a review of other academic bioethics centers and reviewed indicators of excellence based upon rankings on related core disciplines. The committee decided to limit its review to 10 elite centers at other universities considered as peers in different categories. These included the leading public, ivy-league, or national universities of regard, as well as important or notable centers at other Catholic universities. A variety of factors were evaluated, including an overview of the center's work, programs or degrees offered, and when possible a list of courses. (The specific institutions evaluated, and the results of our environmental scan are listed in *Appendix 3 – Bioethics External Data Collection Overview* and *Appendix 4 – Select National Bioethics Centers*).

Ethical reflection on the practice of medicine has a long history in the West dating to antiquity, but bioethics as an academic field and a public enterprise carried out largely by non-physicians is only about forty years old. Since the establishment of the Hastings Center and Georgetown University's Kennedy Institute of Ethics approximately forty years ago, bioethics centers and institutes have proliferated to the point that virtually no university with an attached medical school is without one today.

In the course of these four decades, two interrelated trends have become increasingly prominent in the field of bioethics. First, the field has become specialized. In the early years all of those who taught and specialized in bioethics had been trained in a standard academic discipline, usually theology, philosophy, law, or (to a lesser extent), medicine. Today, many "bioethicists," as they are now called, earn specialized degrees in bioethics and often receive limited training in a standard discipline. At the same time, bioethics itself has not developed into a standard discipline but often rather draws broadly from a wide range of theoretical and applied disciplines. At its best, bioethics exhibits the kind of interdisciplinary, problem-oriented approach that is increasingly popular in universities. At its worst, it can lack coherence and rigor. It is fair to say that there is a widespread sense among many who work in bioethics that the field lacks intellectual rigor and coherence, and concern about the state of bioethics education is an enduring topic of interest at conferences and meetings of professional associations. This trend must be taken seriously by any university of Notre Dame's stature that considers initiating an educational program in bioethics at any level.

The second trend has to do with a historic shift of emphasis in the field from broad concerns with the philosophical, theological, and cultural implications of developments in biomedical technology and changes in the practice of medicine to more focused concerns with evaluating clinical procedures, generating clinical practice guidelines, formulating institutional policies, and working out national and international consensus statements. The priority now given to these more focused concerns reflects the greater integration of bioethics with clinical practice, the role of bioethicists in medical schools and

teaching hospitals, the globalization of biomedical research with the concomitant emergence of international regulatory frameworks, and, above all, the enormous growth in funding for clinical and policy issues and the increasing dependence of bioethicists on such funding to maintain their positions and salaries. This trend must be taken seriously by any university of Notre Dame's stature that considers initiating a significant bioethics program without a formal affiliation with a medical school and teaching hospital in close geographical proximity. It is sobering to note that there are only two significant bioethics centers that are not closely affiliated with a medical school. One, the Kennedy Institute of Ethics, is widely considered to be in decline while the other, the Hastings Center, is still respected but is no longer the influential voice it once was.

Several other trends in the field of bioethics are worth noting. One is a growing alignment between the fields of bioethics and public health. This trend is fueled by several factors: the globalization of health care and of diseases; the increasing emphasis on preventive medicine; and the growing recognition of how a wide range of societal conditions, ranging from sanitary conditions to respect for human rights, affect health. Because of its many academic and service programs in these areas, Notre Dame is poised to make contributions in this area despite lacking a school of public health. Another trend is the growing role of new and emerging technologies (including but not limited to nanotechnology) in medical diagnosis and treatment. These new and emerging technologies bring bioethics into wider conversations and debates over the ethical evaluation of new and emerging technologies. Once again, Notre Dame has faculty pursuing important research in some of these areas and is therefore poised to make potentially significant contributions. Finally, there appears to be some interest in raising the broader questions about the philosophical, theological, and cultural implications of biomedicine which have been marginalized in recent decades. While the President's Council on Bioethics recently met with vociferous criticism from representatives of the bioethics "establishment" (i.e., those who have the most influence in bioethics centers, organizations, journals, etc.), even its critics often conceded that the Council did a service by bringing these broader questions back into the center of debates in bioethics. Once again, because of its historic strengths in philosophy, theology, and other humanistic disciplines, Notre Dame is poised to take advantage of whatever opportunity has been opened with this trend.

a.2. Health Policy

In the committee's effort to benchmark peer institutions, the committee undertook a review of other academic health policy centers. The committee decided to limit its review to 22 centers at other universities considered as peers in different categories. These included six other Catholic universities, four centers at large "Big 10" universities, and 12 centers at national universities of regard. A variety of factors were evaluated, including whether the center was associated with a medical school or public health center, the number of faculty and staff present, and what departments were represented by expert faculty. Also, the committee attempted to discern the focus of each particular center. (The specific institutions evaluated and the results of our environmental scan are listed in *Appendix 5 – Select National Health Policy Centers* and *Appendix 6 - Health Policy Centers Summary*).

This exercise has produced the following conclusions. First, a large fraction of the health policy centers are associated with schools of medicine and/or schools of public health. Leading centers include those at Penn, Johns Hopkins, and UCLA. These include large numbers of scholars across a variety of medical and social science disciplines investigating a variety of topics. Their size and research scope suggests that these institutions cannot serve as a model for Notre Dame.

The smaller centers attached to medical schools tend to have a narrow research focus such as health evaluations, cost effectiveness, or bioethics. A large fraction of the public institutions are attached to medical schools or are supported by funds from state governments to perform certain tasks such as cost

effectiveness work, or Indian health. The list of centers at Catholic schools is also not particularly informative in that many are attached to medical schools, some have a narrow focus of bioethics as outlined in the previous section and one (Boston College) is only tangentially related to health in that its focus is on aging.

Eliminating centers attached to medical or public health schools, without on-going state support for research and those that have the narrow focus of bioethical issues in day to day patient care, the list of centers that can provide a useful template for the Notre Dame is actually rather small and includes such institutions as those at Duke, Princeton, Rutgers, Boston University and Georgetown. There are a few common characteristics inherent in all these centers. First, representation is made up primarily of social scientists. This is a concern for Notre Dame since as we outline below, few of the social scientists on campus are engaged in health research. Second, the topics of interest are much broader than health policy per se. These centers are engaged in basic questions of health inequalities, health behaviors, the sociology of medicine, global health, the impact of disease on economic growth, etc. These are fairly standard topics in social sciences but in many respects these topics are not at the core of health policy, although they may inform health policy debates.

b. Internal inventory

Our review, therefore, led to two principal conclusions. First, the field of bioethics is currently occupied with concrete policy issues and with issues arising in clinical contexts rather than with broad themes of a philosophical or theological nature. Given this more narrow scope, little if any research at Notre Dame would be considered central to these efforts. Likewise, health policy, as currently practiced at many medical schools and schools of public health is also a rather narrow field. However, in mainline academic disciplines topics that reflect on health and inform health policy are varied and vibrant. Therefore, in our internal scan and in any effort to invest in these areas, a much broader lens that defines these fields must be used.

With that caveat in mind, we undertook an internal inventory of the current education, research and outreach capacities in bioethics and health policy at Notre Dame.

b.1. Educational Opportunities

b.1.i. Bioethics

To gain a greater sense of what has been available to our students in the area of Bioethics courses, we compiled a list of all the educational offerings that fell within a broad understanding of "Ethics and Bioethics" taught by Notre Dame faculty, across the university, over the past decade. After considering the broadest possible array of course offerings, we narrowed the list to include only those courses which specifically focused on issues of bioethics. We employed strict criteria to determine what counts as a bioethics course. A list of all of the courses that treat issues of health and medicine and include at least some normatively significant content would be longer but less useful. Using these stricter criteria, it becomes clear that there are about ten faculty members at Notre Dame who teach undergraduate bioethics courses on a regular basis. Only three faculty members in the Department of Philosophy and two faculty members in the Department of Theology teach such courses regularly. The perceived priorities of both departments make it unlikely that they will hire scholars who specialize in clinical bioethics or bioethics narrowly understood in the foreseeable future. Below is a list of the existing undergraduate courses in bioethics at Notre Dame, offered within the past decade:

- Cultural Aspects of Clinical Medicine (ANTH) – Robert Wolosin

- Medicine and Public Health in U.S. History (HIST) – Christopher Hamlin
- Death and Dying (PHIL) – Ted Warfield, Natalia Baeza, Elise Crull, Joshua McCollum, Luke Van Horn, Alven Nieman
- Medical Ethics (PHIL) – David Solomon, Camosy
- Practicing Medical Ethics (PHIL) – David Solomon
- Abortion, Euthanasia, and Capital Punishment (PHIL) – Ted Warfield
- Biomedical Ethics and Public Health Risk (PHIL) – Kristin Shrader-Frechette
- Biomedical Ethics (STV) – Gerald McKenny
- Introduction to Clinical Ethics (STV, SCPP) – James Foster
- Introduction to the American Health Care System (STV, SCPP) – Rudolph Navari
- Health Care Ethics in the Twenty-First Century (CST) – Maura Ryan
- Theology of Medicine (THEO) – Maura Ryan

b.1.ii. Health Policy

Notre Dame has a modest number of classes in various aspects of health and a few classes directly related to health policy. Some include:

- Medicine and Public Health in US History (AMST 30372)
- Health Economics (ECON 34550)
- Seminar in Health Care Policy (HESB 43519)
- Science/Medicine/Social Reform (HIST 93979)
- Medicine and Public Health in America (HPS 93753)
- Introduction to the American Health Care System (SCPP 30331)
- Trauma and Peace-building (HPS60311)

Note that there are NO classes on health whatsoever in the sociology department, notable given that social science tends to have a key role in this field. Of the many graduate level courses, only one was found dedicated to health policy, a course in the History and Philosophy of Science program, Medicine and Public Health in America (HPS 93753) offered once during AY 2007-8. Five other graduate courses were again identified as touching on health policy but as part of another focus. (For a full review of Health Policy related courses taught at Notre Dame see *Appendix 7 - Health and Health Policy Undergraduate Courses* and *Appendix 8 - Health and Health Policy Graduate Courses*).

b.2. Research Capacity

b.2.i Research Capacity in Bioethics

While there are relatively few current faculty members at Notre Dame who teach bioethics courses regularly, there are even fewer faculty members who have significant research interests in bioethics. Maura Ryan of the Department of Theology and Cathleen Kaveny and Carter Snead of the Law School are the only faculty members for whom bioethics is a major area of research. Bioethics is a significant area of research for Gerald McKenny of the Department of Theology, Phillip Sloan of the Program of Liberal Studies, and David Solomon of the Department of Philosophy. Finally, the most prominent contributions to bioethics from Notre Dame faculty members have arguably come from John Finnis of the Law School and Alasdair MacIntyre of the Department of Philosophy, yet neither considers bioethics a major part of his scholarly enterprise.

The conclusion reached by the Bioethics Sub-Team is that there sufficient faculty resources does not currently exist for Notre Dame to sustain a robust educational or research program in bioethics.

b.2.ii Research Capacity in Health Policy

Although there some undergraduate class options exist in health policy, few of these classes are staffed by scholars actively engaged in health policy research. The Committee's scan of research capacity on campus found at most two faculty members engaged in what can be considered health policy in the College of Arts and Letters, the likely home for this type of work: Bill Evans in Economics and Econometrics and Vania Smith Oka in Anthropology.

In contrast to the dearth of research on health policy, a number of faculty members at Notre Dame are actively engaged in research on other aspects of health and the health economy. On campus, the strengths in health-related research are in four areas: Tropical disease transmission, basic research on issues related to pharmaceuticals, child and maternal health, and a smaller group working on health information technology. The first two groups of scholars are housed in the College of Science, the third group is primarily made up of scholars from the College of Arts and Letters and the final group is housed in the Mendoza College of Business. The Center for Family and Children in the College of Arts and Letters is primarily concerned with how various institutions impact the social outcomes of families and children and measures of health are one potential outcome. (For a full review of research capacity in health related areas see *Appendix 9 - Health, Health Policy and Bioethics Research at ND*).

b.3. Outreach

b.3.i Outreach in Bioethics

The annual Medical Ethics Conference, now in its 25th year, sponsored by the Center for Ethics and Culture, is a prominent example of health related outreach efforts at Notre Dame. While its primary focus has always been on biomedical ethics, it draws an audience of practicing physicians and medical students to campus every year and health policy discussions and debates are embedded in the activities.

b.3.ii Outreach in Health Policy

The Pre-professional Program at Notre Dame provides students an enormous number of educational, service, and volunteer opportunities that relate to health policy. In addition, the Center for Social Concerns offers various related experiences, including a week long health policy immersion experience in Washington D.C. during spring break. Finally, the alumni office and alumni network offer various opportunities such as the Medical Mission program and the Dr. Tom Dooley Society, a Notre Dame medical alumni group with over 1,600 members.

c. Interviews with thought leaders

c.1. Bioethics

The bioethics sub-committee completed 5interviews with thought leaders in the field of bioethics. Those interviewed include

- Fr. Thomas Berg, Ph.D. (Westchester Institute for Ethics and the Human Person)

- Lisa Sowle Cahill, Ph.D. (Boston College): April 17, 2009
- Jorge Garcia, Ph.D. (Boston College): March 27, 2009
- Gilbert Meilaender, Ph.D. (Valparaiso University): March 27, 2009
- Edmund Pellegrino, M.D. (U.S. President's Council on Bioethics, Georgetown University): March 28, 2009
- Daniel P. Sulmasy O.F.M, MD, Ph.D. (New York Medical College): April 20, 2009

The leaders were asked three broad questions:

- How would you describe the current state of the field of academic bioethics? What issues and questions are currently being addressed, and what issues and questions are not being addressed?
- Given Notre Dame's existing strengths and its lack of a medical school and teaching hospital, what (if anything) can Notre Dame do to achieve recognized excellence in the field of bioethics?
- Is there currently a place in the field of academic bioethics for a distinctly Catholic voice? Could such a voice be part of the broader conversation in bioethics or would it be marginal?

A summary of the answers to these questions are below:

Current state of bioethics: Pellegrino notes that the field of bioethics has lost sight of the fundamental philosophical and theological questions that animated it in its earlier years, and there is a great need to return to these questions. Cahill notes that the field of academic bioethics is slowly turning into social ethics, as against both a "principle of autonomy" oriented and a Catholic "personal decision-making" approach. Sulmasy argues that the field of bioethics has become less oriented to fundamental philosophical and theological questions and increasingly occupied with much narrower questions of politics and policy.

A Role for Notre Dame: Cahill notes that issues of global health access and health care justice are both urgent and consequential. One could address these issues without necessarily having a medical school, since such an affiliation implies an older "clinical ethics" approach, with an overlay of U.S. law and courts, and focusing on introduction of new technologies. Garcia and Meilaender note that basic academic questions and issues are not taken as seriously as they should be taken and once were taken. At present, work on bioethics is heavily focused on public policy agreements on various issues. Such agreements are necessary, but the focus leaves unaddressed a lot of the basic concerns of philosophical and theological anthropology that are usually not addressed in policy agreements. As an example, take transplantation: is the body just a resource? Notre Dame could bring these important theological and philosophical considerations back into conversations about bioethics. This could make Notre Dame an ongoing location for what the U.S. President's Council on Bioethics sought to contribute to the field. No other bioethics center is doing this kind of thing. Regarding Notre Dame's potential contribution to the field, we were reminded by some, like Fr. Thomas Berg, that Notre Dame is not necessarily the first to combine significant commitments to the common good and to the dignity of the human person. Others, like Pellegrino, noted "the need for a bioethics center committed to the full range of Catholic concerns in the area of health care ethics and policy. There is no other academic center that attempts to do this. Indeed, Notre Dame would be wasting its time if it were to do anything other than this: there are enough centers devoted to other things and no other institution can do what Notre Dame can do to bring a Catholic voice in its fullest sense to bioethics." Others point to the problem of a caricatured and polemical perception of Catholic teachings as narrow and retrogressive. Cahill noted that the media, the public, and many Catholics themselves see Catholics as only about "pro-life" issues (and not understood in a broad sense as a range of issues extending throughout human life and in various contexts). "It is

really hard to get out of this box. The very existence of the box (and the vociferousness of those who believe this is the proper place for Catholics, again including many bishops) make it hard for Catholics to be taken seriously on any other issues, and on pro-life issues, they are very narrowly stereotyped. A big challenge is to advance a position more in tune with Catholic social teaching, the preferential option for the poor, and to engage this effectively in the public debate." Striking a similar note, Sulmasy notes that "It is true that it is difficult to do anything with the word "Catholic" attached to it. On the ASBH board no one would even consider thinking for more than three nanoseconds about why physician-assisted suicide might be wrong. 'Why waste our time just talking about what all those religious people think?' So, yes, there is a major challenge here. Once people hear the word "Catholic," they dismiss you." At the same time, Ed Pellegrino noted that it would be a serious error to ignore the life issues in an effort to avoid controversy or win the respect of critics. Instead, an authentically Catholic approach to bioethics would combine a robust respect for life (from conception to natural death) with a serious and sustained commitment to the common good, broadly understood. No center (inside or outside academe) faithfully integrates these two threads of scholarly inquiry in a full way, taking ***both*** as seriously as Catholic teaching demands. Pellegrino concluded that Notre Dame is better positioned than any other institution to undertake such inquiry and to re-integrate respect for life and human dignity with concern for the common good. (For the full summary of the Bioethics thought leader interviews please see *Appendix 10 - Bioethics Thought-Leader Interviews Summary*).

c.2 Health Policy

The committee also interviewed several thought leaders to solicit opinions and feedback regarding the issues this committee was considering. These conversations were limited to several key people, including the Catholic Medical Association, key health representatives from the United States Conference of Catholic Bishops, leadership of Bon Secours - a Catholic health system, and leaders associated with the Catholic Health Association and the Catholic Medical Association. All engaged parties were supportive of Notre Dame's consideration at becoming more active in health and stated a belief that Notre Dame would be able to meaningfully contribute to the health policy conversations. While most said they could not specifically comment on what educational or research opportunities Notre Dame could provide to students, there was a consensus that Notre Dame may have a unique role to play as a facilitator of conversations that other institutions of higher education are not filling. (For the results of our interviews see *Appendix 11 - Health Policy Thought-Leader Interviews Summary*).

V. Options for Investment

This task force was charged with projecting "whether Notre Dame can and should provide a distinctive and influential voice in the contemporary national dialogue on biomedical ethics and U.S. healthcare policy and whether the University should consider establishing or expanding educational programs in the area."

In this section, we outline four possible investment paths that can be adopted. These options are:

1. **Enhance current efforts on campus.** This option outlines ways to enhance and extend the current course offerings on campus in health policy and bioethics. This is proposed as a low-cost option that can be achieved with few strategic hires and some rearranging of current course offerings. However, this option will also add minimally to the research capacity of the university.

2. **Significantly Strengthening research capacity.** This option outlines where strategic hires in bioethics and health policy might best be placed within current research efforts on campus. This option also outlines two additional graduate programs: the Notre Dame Programs in Healthcare

Management and Administration and graduate program options in bioethics. The first of these programs is a MBA degree with an emphasis on working in non-profit and especially Catholic healthcare institutions.

3. **Establish an Institute in Health and the Human Condition.** A strategic investment of a few senior hires as outlined in option 2 will enhance the research capacity in a few disciplines but a much larger investment of approximately 15 scholars throughout the university, made in a strategic fashion, will allow the construction of an impressive institute on health research. The institute would be unique among current centers in that it would combine the efforts of scientists, social sciences, and philosophers/theologians in an institute dedicated to the fullness of the dignity of the human as made manifest through the health related disciplines.

4. **Establish a School of Public Health**. Some of the leading health policy research is conducted at schools of public health. These schools have a core of required classes that must be offered to receive accreditation but after meeting these requirements, there exists broad freedom in school content. Notre Dame could establish a fundamentally unique school of public health by offering one with a Catholic perspective. The school would provide courses in Public Health and Bioethics and possibly house the concentration in healthcare management.

Detailed descriptions including the costs, benefits, pitfalls, and benchmarks for success are offered below. Before we outline these options, a few comments are in order.

The options are not mutually exclusive. Option 3 can in some ways be thought of as the natural progression of options 1 and 2. However, option 4 and 2-3 would seem at the start to be incompatible. Schools of public heath are almost exclusively soft money institutions and it would seem difficult to move hires made in a hard money environment over to a soft money institution once they are on campus.

Option 4 is the most audacious offering but large returns require large risks so it is no surprise that option 4 is also the most expensive alternative.

Although the committee was charged with investigating the possibility of a strategic investment in health policy and bioethics, it is clear from our internal scan that Notre Dame has limited research capacity in all areas of policy analysis, not just health policy. This appears to be an active decision on the part of the university. In an early meeting with someone from the provost's office about health policy research on campus, the administrator remarked that the university "does not do policy" and nearly the same language was used by someone from the Dean's office in the College of Arts and Letters during a more recent interview. The past three university forums have been on global health, immigration and energy policy. There are at best a handful of scholars on campus working in all three fields combined. We have only a few scholars working on issues of environmental policy, perhaps two scholars on campus whose work considers federal transfer programs, no one whose research considers criminal justice and one or two scholars considering the policy implications of the graying of the American population.

[Among several exceptions to the above discussion is the large group of researchers who are actively engaged in research, teaching, and outreach on education policy as part of the mission of the Institute for Educational Initiatives (IEI). In many respects the IEI may be a template of how to draw power and synergies from diverse disciplines and departments across campus for a focused, policy-relevant topic. Housing 30 scholars from 10 different departments and colleges, IEI engages scholars whose interest range from the theoretical (How do we learn ethical and moral behavior?) to the practical (How should questions about mathematics be framed so as to elicit correct information about student learning?) to the spiritual and formative (the Alliance for Catholic Education).]

We think this is a unique opportunity for the University to engage in a larger, campus wide effort to re-evaluate the role of policy-relevant analysis within the current research portfolio.

Also, the specific options offered below are the result of creative brainstorming by the Task Force. Though they included limited consultations with stakeholders on campus, it is important to note that they have not been vetted systematically by the departments, centers, institutes or colleges. They are offered as broad options and opportunities in light of various strategic considerations. These include: an understanding of Notre Dame's distinctive character; perceived strengths and areas for growth within the University; opportunities for synergies; opportunities for leveraging existing assets; particular characteristics of health related fields of study; possible opportunities in the health industry; and likely funding opportunities. While numbers are proposed in certain sections, they serve as very preliminary markers of scale rather than estimates derived from in-depth analysis. In short, we sought to offer an array of possible options that we feel have strategic value and are worthy of consideration for future potential investments in health, bioethics and health policy, but would require additional systematic analysis and appropriate consultation before being acted upon.

Options 1: Enhance current efforts on campus

Recalling the fact that Notre Dame forms more eventual physicians than almost any medical school in the United States, and calling to mind the sheer size of the Health Care sector in the economy, it can be argued that Notre Dame has both a unique opportunity, and a responsibility, to invest more in this area of its undergraduate offerings. Although there is a lack of scholarship on campus in health policy, there are currently a reasonable number of classes that touch on and contribute to the discussion about health policy and bioethics. Two options would be to establish an undergraduate minor in health policy such as the minor in Poverty Studies (http://www.nd.edu/~poverty/) or the minor developed by the IEI, Education, Schooling and Society (http://www.nd.edu/~edss/), and/or upgrade the course offerings in the pre-professional programs to reflect a greater concentration in bioethics.

The undergrad minor in Poverty Studies currently lists 23 classes. The requirements include 15/16 credit hours including a gateway course, elective course work, experiential learning, and a capstone course with a senior thesis. Our internal inventory indicates that adequate courses exist to staff this type of minor. One's perception about the costs and benefits of such an approach are probably best summarized by one's own perceptions about the current poverty studies minor. The current director of the program, Jenner Warlick of the Department of Economics and Policy Studies, notes that in the 3 semester old program, there are currently 37 students enrolled. Their goal is to have 20 graduates per year which would seem to be an attainable goal for a similar program in health policy.

The Education, Schooling and Society (ESS) minor may pose a more robust example. The ESS Minor consists of 15 credit hours, with two required courses, an introductory course and a senior seminar involving a required original research project. Three courses are electives, from which students may choose among 5 education focused courses or 14 courses that deal generally with education related topics. Students are encouraged to take courses from various disciplines to cultivate a varied and inter-disciplinary perspective on education related issues. The ESS minor is one of the largest in the College, with more than 100 students currently enrolled.

The Colleges of Arts & Letters and Science are both in the process of making major changes in their pre-professional programs (ALPP and SCPP). The College of Science has gone a long way toward developing a rigorous major in Science and Society while the College of Arts & Letters is in the early

stages of developing a supplementary major with the same title. The current ALPP supplementary major consists of the full range of pre-med science courses plus five elective courses. One proposal, consistent with current discussions of the Arts & Letters Science and Society supplementary major, would be to introduce a track which would designate some or all of the five elective courses as bioethics and health policy courses. This would in effect fold a bioethics concentration into the proposed Science and Society major. Another option, which would be more suitable for non-pre-professional students who wish to study bioethics, is to introduce a distinct bioethics track into the current minor in Science, Technology, and Values. In line with other tracks in the STV minor, this one would consist of three courses in bioethics and health policy. Yet another option is to introduce a bioethics concentration into an existing departmental major. However, the most appropriate candidates for such a concentration are the departments of Philosophy and Theology. Some members of the Task Force evinced skepticism as to the likelihood that either of these two Departments having an interest in hosting such a program. A final option is to establish a free-standing minor consisting of five courses in bioethics and health policy. All of these options would require additional faculty hires. Current course offerings in bioethics may come close to meeting the minimal number and range of courses for a minor, but they are not sufficient to support a high-quality program. Moreover, most of the courses currently offered also meet departmental requirements and would therefore be unable to fully accommodate students enrolled in a minor or a concentration.

What courses would a major or a concentration in bioethics require? The Bioethics Sub-Team proposed the following list as an example of what might be a useful starting point:

Foundational Courses to be taught regularly:

- Bioethics and the Law (for undergraduates)
- Philosophy of Law
- Morality and the Law
- A History of Bioethics: Hippocrates to Peter Singer
- A History of Bioethics: 1968 to the Present
- Bioethics: The Roman Catholic Tradition
- Bioethics: Comparative Religious Traditions
- Introduction to Medical Sociology (taught with a focus on its relevance for bioethics)
- Methods in Contemporary Bioethics: Principlism, Casuistry and Natural Law

Various specialized courses to be taught occasionally:

- The Doctor/Patient Relationship: Theological, Clinical and Anthropological Perspectives
- Medicalization and the Concept of Disease
- Informed Consent and Patient Autonomy
- The Ethics of Killing
- Patient Privacy and the Digital Revolution
- The Ethics of Medical Experimentation
- Ethics and the Professions (with a special emphasis on medicine)
- Nueroethics – Brain and Behaviour
- Global Health – International Issues in Ethics

The cost of the program would be modest in that these efforts could be sustained with some additional hires, not necessarily within the tenure/tenure track ranks. A downside of this option is that it leaves unaddressed the research needs. A benchmark for success for this program would be the number of undergraduates enrolled in the program, as well as perhaps a longitudinal study of graduate career trajectories.

The current pre-professional program has one introductory course in statistics that provides pre-med students with the basic tools to understand the results from random assignment clinical trials, the basic research tool in medicine. However, much of the research in medicine and public health lies outside of these experiments and the tools for analysis are typically biostatistics and epidemiology. Fr. James Foster, CSC has indicated that a current hole in the pre-professional program is the lack of classes in these two areas. Dean Crawford current attempt to hire senior professional faculty to teach an epidemiology class and making this a permanent part of the undergraduate curriculum would be a tremendous advantage. Unfortunately, it is not obvious where a permanent faculty member in these fields would fit into the current university structure, so it is not clear if tenure/tenure track hires are possible.

Option 2: Significantly Strengthening Existing Research and Teaching Capacity.

We have some general suggestions about specific investments in research capacity in both the area of bioethics and health policy. In addition, we have two specific suggestions about additional graduate programs that would be unique to Notre Dame: the Notre Dame Programs in Healthcare Management and Administration and a graduate program in bioethics.

The lack of scholars conducting research in either health policy outside of the Colleges of Engineering and Science or in health policy means that if Notre Dame aspires to be a center of excellence in health scholarship, then most of the talent must be imported. If the University is to embark on such a strategy, then a few guidelines for investment should be followed. First, most health research centers that are housed outside of medical and public health schools have a much broader focus than just health policy and Notre Dame should follow this strategy. This is most important within the area of bioethics. Research in bioethics increasingly takes its "data" from clinical practice. Bioethicists conduct rounds with physicians in the morning and use what they hear and observe to write articles and grant proposals in the afternoon. Without a medical school and teaching hospital, bioethicists at Notre Dame must go out of their way to gain access to clinical bioethics research. Second, any hire in health should help build on existing research strengths and help foster existing strategic goals. Notre Dame is a relatively small research university and as such, it cannot have as diverse a research portfolio as some others. Hence, creating synergies with existing programs would seem a prudent course. Third, the hires should complement the uniquely Catholic mission of the university.

With these guidelines, we now consider some investment opportunities in bioethics and health policy.

a. Specific investment options in research capacity

Although the lack of a medical school would at first appear a stumbling block in bioethics, we believe this situation also offers opportunities for Notre Dame. First, Notre Dame has an opportunity to gain distinction as the only program of research which represents the spectrum of Catholic concerns in bioethics and health policy. Second, Notre Dame has an opportunity to gain distinction in the broad issues which have been marginalized in recent bioethics research but appears to be gaining renewed interest. Third, Notre Dame has an opportunity to gain distinction in the ethical evaluation of new and emerging biomedical technologies. Fourth, Notre Dame has an opportunity to gain distinction in ethical and policy issues involved in global health.

The University of Notre Dame should focus on the fields of global health and health policy along the lines recommended by the health policy sub-group. Given the university's mission and commitments, it is imperative that bioethics play an important role in any such initiative. The commitment of the Catholic tradition to a broad moral vision that includes both human dignity and the common good gives the university an opportunity to make a unique and important contribution to the ethics of health policy and

global health, which generally follows a narrow range of utilitarian considerations in the ethical and policy evaluations of programs. In order to make an impact in these areas the university should hire at least two people in each field (global health and health policy), one combining strong credentials in a relevant humanistic discipline with a strong record (or promise of such) in bioethical issues in global health or health policy, and the other with strong credentials in a relevant scientific or social-scientific discipline with a strong record (or promise of such) in bioethical issues in global health or health policy.

Within the health policy side, the most pressing needs would appear to be in the primary fields in social sciences (anthropology, economics, political science, psychology and sociology) which are the home disciplines for most health policy scholars. The two most glaring holes are in sociology and political sciences where currently there are no scholars working on topics related to health, yet these are key disciplines in most health policy discussions. Other colleges that would also likely be represented in hiring include the College of Business and the College of Science. An important consideration is to find scholars that can complement existing health related work, such as the stellar programs in tropical diseases or the existing psychology department research on families and children. A few detailed examples are given below.

- The largest group of scholars examining health-related work in Arts and Letters resides within the Psychology department. One scholar examines the psychological determinants of cancer survivorship, another examines the determinants of successful aging and a handful of scholars in the Center for Children and Families have moved their research to include topics that include health as an outcome. The department was also successful in hiring a faculty member that examines the roll of stress in health. The psychology department also currently plans to hire a faculty member that examines the psychological aspects of the diagnoses and treatment of cancer. This offer would be related to the Walther Cancer Research Center and would fit well with a possible health initiative. The psychology department has just gone through an internal and external review and both reports note the biggest weakness in the department is the absence of anyone doing research on the biological basis of behavior and outcomes. The department recognizes the need to find additional scholars whose focus links the mind and health outcomes. Other areas that would help strengthen a health initiative would be in areas such as aging and health, health psychology, and healthy development with a focus on children and families.

- Political science is currently engaged in an effort to strengthen the quantitative component of their program. Hiring empirically based researchers in health policy would help the department's goal as well as any health initiative. To date, there are few scholars in Political Science that are engaged in policy related research so an important short-run task would be to generate buy-in from this department.

- The sociology department has historically had strength in research on families. However, the group of scholars associated with this program is nearing retirement and the department must identify how to fill this impending hole. Hiring scholars whose research touches on maternal and child health would fill a need in sociology but it would also generate important linkages with the psychology and economics departments who have active researchers in these areas and who are part of the Center for Children and Families. The sociology department also has research strength in the sociology of religion. Scholars who examine the role that religion plays in health and healing would dovetail nicely with current efforts of scholars in psychology that also examine this issue. The sociology department currently has no scholar in traditional research fields such as the sociology of aging or health disparities, so hires in these fields would help broaden the research portfolio of the department. Currently, the Department of Sociology has no open slots nor do they anticipate hiring anytime soon. Through Dan Myers in the Dean's office of the College of

Arts and Letters, the department has signaled an interest in a health hires, if appropriate incentives can be identified.

- The anthropology department has one scholar whose current research examines the impact of globalization on health in developing countries. A scholar whose research is focused on health in a developing country would help build some synergies within this program. Many other scholars in this department have research that touches on health so there are some important synergies available in this department.

- Although most of the discussion on the committee has centered on domestic health policy, a unique potential for investment is possible in the area of global health. One of the most active health research programs on campus is currently the work on tropical diseases in the College of Science. This program, coupled with the Eck Institute for Global Health, has focused exclusively on the science of tropical diseases. In combating these diseases, however, the science is not sufficient. Important questions about the delivery of medicine or preventive measures are equally vital and challenging research necessary to address these deadly diseases. Unfortunately, research on the social aspects of global health is grossly underdeveloped on campus. However, the university has a successful Institute in the Kellogg Institute for International Studies and a new program in human development studies (the Ford Family Program) that can and should be effectively paired with existing work on tropical diseases as part of the Eck global health effort. The Kroc Institute is also developing initiatives on trauma healing and the psychological effects of violent conflict that could contribute to a new emphasis on global health. By more fully integrating the social, biological, and physical scientific research, there is a significant opportunity to leverage success. A successful program would require the hiring of faculty members in sociology, economics, public health, biology, and anthropology whose interests are in health in developing countries.

- The business school has some strength in information technology (IT) with two researchers who are engaged in health IT research, so hires in this area would help strengthen Notre Dame's health research capacity. This promises to be a growth field in business since the federal government, as part of the stimulus package recently signed into law, has devoted $19 billion toward investments in electronic medical records. A marketing scholar whose research examines public service messages and unhealthy behavior would fit nicely within the current marketing group. The business school has a Masters degree in non-profit management (MNA) and could build upon research that focuses on the non-profit sector. The non-profit sector is large in the health care arena and the biggest non-profit element is Catholic hospitals. A researcher whose interests include non-profit hospitals would fit nicely with the research interests of the business school and the Catholic mission of the university. We discuss this in more detail later.

- The Department of Economics and Econometrics has a number of scholars whose work examines the health outcomes of children and strategic hires of health economists who focus primarily on child health issues would help solidify this area as a particular strength in the department. The department has identified environmental economics as a priority field and since many health problems in developing countries are environmentally based, scholars whose focus is on environmental issues in a developing country context would help strengthen ties with the Eck program and GLOBES. Hires in development economics with an emphasis on health in developing countries would help develop the Ford Family program and help build ties between the department and Kellogg. Finally, hires in the field of health economics would solidify this as a particular specialty for this new and growing department.

Estimated staffing: Initially, this would require at least 5-7 additional hires on campus, with most being at the senior level. It would be tough to argue for junior colleagues in many of these fields without senior mentorship.
Benchmarks for excellence: Given the availability of research money from the National Institutes of Health, it is not unreasonable to expect that half of senior faculty associated with the program would have investigator initiated awards (R01s) from the NIH at any one time. Likewise, the senior faculty should be instrumental in moving junior faculty from smaller developmental awards at the NIH such as R21's and R03's. We would expect that in their year prior to tenure, junior professors would have multiple submissions to the NIH by the time they come up for tenure.

b. The Notre Dame Programs in Healthcare Management and Administration

A unique opportunity for Notre Dame would be to establish a graduate management program (similar to an MBA) in Healthcare Administration. The program could be housed in the Mendoza College of Business or within a school of public health that is outlined in option 4. While Notre Dame does not have existing expertise in healthcare management, there may be considerable demand from the private sector for a Notre Dame graduate management program tailored to a healthcare audience. Specifically, there are three potential significant opportunities for Notre Dame to achieve success and preeminence: Catholic healthcare, non-profit healthcare, and private physicians.

> ***Catholic Health Association:*** Catholic Health is the single largest non-governmental provider of health care services in the United States. It is composed of some 60 Catholic health care systems, operating over 600 hospitals, employing over 600,000 people. This collective organization, in response to the decline in religious leadership, is struggling to maintain its Catholic identity while successfully operating large and complex business entities. It is an audience that is increasingly seeking graduate business education, and given its Catholic identity, is tailor made to seek that experience at a university like Notre Dame. With sponsorship from the Catholic Health community, this Program has a high likelihood of becoming one of the premier health management programs in the country.
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> ***Other nonprofit hospitals and healthcare organizations:*** Over 60% of hospitals in the United States are nonprofit. Most of these are not Catholic but instead university and community hospitals. Currently, no well known or respected MBA programs target this market specifically, though it is enormous and generally very cash rich and profitable. In cooperation with Catholic Health, Notre Dame could establish a program specifically directed at nonprofit hospital and health administration that could achieve national preeminence in a relatively short time.
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> ***Physicians:*** There are over 175,000 physicians in the United States either employed by institutions (hospitals, universities, governments, HMOs) or in large physician owned practices (greater than 50 partners). These individuals are an underserved population in the business school community, with very few programs (the University of Tennessee MBA is the most well known and highest ranked) tailored to their needs despite their earning and leadership capacity. With the perceived need for an MBA among physicians only increasing, the segmentation and targeting of this market could be a significant opportunity to complement the other opportunities noted above.

To offer a graduate management program to these three markets, a specialized curriculum would need to be developed. For optimal positioning, this would need to be done after careful consideration and consultation with key members of the groups noted above. Such healthcare administration programs (Michigan, Duke) have generally been joint degree programs with admission by and course content from

both the business school and a medical school. Another approach is a track or minor within the regular MBA program. These would not be a specific degree in healthcare management but a concentration within the MBA program. Such programs are less demanding in terms of the number of courses required. For example, at Harvard, MBA students interested in healthcare management enroll in four possible courses specific to the industry. At the Carlson School of Management in Minnesota, candidates in the Health Leadership Program have seven possible courses from which to choose, taught by 15 tenure-track faculty, supported by over $1 million in external generated funding. The Mendoza MBA currently offers one elective in healthcare management. It also enrolls healthcare professionals in the Executive MBA program, Master in Nonprofit Administration program and a large number of healthcare organizations in its non-degree certificate and custom programs (designed specifically for one organization).

Finally, efforts in healthcare at Mendoza would be complementary to other significant investments at Notre Dame. Consider Innovation Park: if Notre Dame aspires to "facilitate the transformation of innovations into viable marketplace ventures", it will need to strengthen and enhance the business acumen and expertise that can make these transformations possible. Mendoza can play a critical part in this transfer, particularly as it relates to the enormous industries of medical devices, pharmaceuticals, and health information technology.

c. A graduate program in bioethics

Any serious discussion of graduate education in bioethics at Notre Dame must take account of the generally low esteem in which specialized degrees in bioethics are held and of the departmental autonomy in relation to graduate programs which currently prevails at this university.

1. *A Master of Arts degree in Ethics*. This option is designed for students who wish to undertake an intensive study of bioethics before entering medical school or for mid-career professionals who wish to enrich their practice or change their career path. This option would offer tracks in law, philosophy, and theology with a core course in each of these disciplines. It would comprise one year of study, perhaps supplemented by one or two summers. Additional faculty resources would be necessary in all three fields and should include at least two high-profile hires.

2. *A masters degree in Law, Philosophy, or Theology with a concentration in bioethics.* This option would build on existing school or departmental degree programs. Its advantage is that it offers bioethics education within a rigorous program of education in a standard discipline. Its disadvantage is that it would require a high degree of cooperation from the host school or department. In each case, at least one additional faculty hire would be necessary.

3. *A track in bioethics and health policy in the present History and Philosophy of Science Ph.D. program*. The HPS program offers rigorous training in the history and philosophy of science, has one of the best placement records in the university, and enjoys a very strong national and international reputation. There is currently a science ethics track in this program. Two additional faculty hires of unusually high caliber would be necessary to ensure that this track is of the same quality as the current tracks. Further consideration of this option should be preceded by a conversation with the current director of the program, Don Howard.

Option 3: Establish an Institute in Health and the Human Condition.

Options 2 is an effort to 'seed' health policy and bioethics research on campus by making a few strategic hires across a number of different departments. The option will enhance Notre Dame's research capacity

on this issue but without greater coordination, thus possible synergies across disciplines will be absent. A more substantial, concentrated effort to hire 15 scholars across many departments in health and bioethics would allow Notre Dame to generate an Institute that could provide a uniquely Catholic perspective on Health and the Human Condition.

Our environmental scan noted that both the fields of bioethics and heath policy were relatively narrow disciplines and did not fit well in a university setting without a medical public health school. In contrast, existing institutes not attached to medical schools have taken a broader emphasis and focused on such issues as the social determinants of health. A health institute at Notre Dame with such a broad research agenda would provide a fertile ground for health research and provide a uniquely Catholic perspective by focusing on the dignity of the whole person.

The institute would have to build on the university's current strengths which are in tropical diseases and research on children and families and the investment guidelines outlined in the previous option apply here as well. A unique aspect of the institute would be an effort to merge the sciences, the social sciences and the philosophical/theological perspective. This would be a unique collection of disciplines that is currently not spanned in an existing health policy center or institute.

An important question would be where such an entity would be housed. One possibility is to model the institute after Kellogg where hires would be housed in existing departments but have responsibilities within the new entity. The new institute would be the primary vehicle to coordinate all efforts – education, research, and outreach – regarding health initiatives at Notre Dame. The institute structure allows for gains from specialization in that scholars would be housed in their host departments, but the coordinating efforts would be facilitated by the institute.

Benchmarks for excellence: As above it is not unreasonable to expect that a large fraction of the senior faculty associated with the program would have investigator initiated awards (R01s) from the NIH at any one time. The building of an institute should also allow important synergies which should help generate lucrative thematic grants (P01) at NIH. We also anticipate that such a focused, topical and far reaching program should be attractive to the generous donors of the university.

The downside of a new institute is that it starts from scratch, it increases the overhead and non-research hires on campus, and most importantly, it may have to cannibalize some existing centers for intellectual capacity. For example, the successful Eck institute has a tremendous track record in the science of tropical diseases. A larger health institute would directly compete for resources and talent. Any bioethics investment would compete with the Center for Ethics and the program in Health Science and Technology. One possibility would be to broaden the goal of an existing center or institute and bring more people from other disciplines under the existing tent but such an option may be met with some opposition from existing groups.

Option 4: Establish a School of Public Health and Health Policy

The University of Notre Dame aspires to be a preeminent research university and member of the American Association of Universities (AAU). Notre Dame believes its Catholic voice should be heard in the health care industry, in health policy and in bioethics. This option would involve the creation of new school at Notre Dame, in the spirit of a school of public health, which encompasses health policy, bioethics and public health, including global health. Different from an institute structure, a School of Public Health, Health Policy and Bioethics would be self-governing and autonomous much like a school of law or architecture model at Notre Dame. It would be able to offer minors at the undergraduate level,

aspire to become an accredited school of public health and offer master's degree programs in public health, and master's degrees and Ph.D degrees in bioethics and health policy.

Unique Features: A School of Public Health, Health Policy and Bioethics at Notre Dame would be only the second school in the country, after St. Louis University, to bring Catholic social teaching into a School of Public Health program. The public health aspect of the school would be dedicated to the *discovery, translation* and *dissemination* of *public health knowledge* to improve the *health and well being* with a unique Catholic mission enlivened by Catholic social thought and values.

The school concept could offer a broad array of graduate educational programs in bioethics differing in several ways from other institutions. Noting some trends in the field of bioethics discussed earlier in this document, such an effort would need to take careful consideration as to the nature of the bioethics or health ethics programming that Notre Dame would seek to establish. As mentioned earlier, it would be important to ground graduate formation in bioethics in academic disciplines, particularly taking advantage of traditional strength areas within the university such as theology, philosophy and law. At its best, however, bioethics can and should strive to exhibit the kind of interdisciplinary, problem oriented approach that is increasingly valued at universities, while maintaining coherence and rigor rooted in academic disciplines. This would include serious formation in research methods appropriate to specific academic focus within the field of bioethics and health ethics. Careful attention would also need to be given to the appropriate balance of academic orientation and thematic strengths. These considerations should consider addressing broad concerns with philosophical, theological and cultural implications related to developments in biomedical technology (including the sciences and engineering), changes in medical practice, and broad public health concerns (including the globalization of health care and disease, the role of preventative medicine, and how societal conditions – from sanitation to human rights- impact health). Specific themes, educational programs, and areas of focus would of course be clarified by key stakeholders in related areas, but should seek to take advantage of existing academic strengths within the University.

In terms of health policy, the proposed school would offer master's programs and Ph.D programs addressing public health problems through the development, analysis, implementation and evaluation of health policies. Within this program, public policy would be viewed broadly and encompass social issues, law, politics, environment and science—all within the context of Catholic social teaching and our Catholic mission. Research also would focus on how public health policies impact the public's health. It would use public health policies as tools for preventing disease and injury, promoting the common good and providing health care for the vulnerable.

A School of Public Health, Health Policy and Bioethics would enable Notre Dame to effectively engage the local hospitals, St. Joseph Regional Medical Center and Memorial Hospital of South Bend, and possibly the network consortiums of Catholic hospitals. It would be able to leverage, engage and expand on current relationships with the Indiana School of Medicine, both in Indianapolis and on our South Bend branch campus. The school would be able to accommodate joint appointments for faculty members in all colleges and schools on campus—joint appointments in such a school could be very instrumental when attracting top-notch faculty. The school would able to utilize Innovation Park for translational research which can provide an outlet for useful and practical knowledge. It would be able to engage many centers and institutes on campus in a deep and meaningful way (many of these centers and institutes have been named in other documents). The school would be a model of interdisciplinary research, collaboration and cooperation where many of our traditional disciplines can converge.

School versus Institute: We could create a university institute as the umbrella organization to combine policy, social sciences, ethics, science, engineering, law and business. However, such an organization

offers less autonomy, flexibility and the entrepreneurial opportunities than an independent school can offer. Faculty lines would need to be dedicated to the school with primary appointments in the school, rather than in existing departments as is the institute/center model. Most other schools with public health programs as a separate school collaborate broadly, with faculty having joint or concurrent appointments and adjunct appointments in traditional academic departments. The school would have a Dean, structured like the Law School and the School of Architecture without formal department boundaries, to promote interdisciplinary collaboration. It would be a natural home for biostatistics and epidemiology. These examples of public health oriented disciplines urgently need to be represented at Notre Dame, but they cannot find a departmental home in the present structure. It would be a school where social scientists, scientists, engineers, lawyers and business-minded faculty could be on a Ph.D committee, jointly advising in a seamless and simple way; revealing great synergies among academic disciplines.

Financial Model: The financial model would consist of a combination of: (1) reallocation of resources; (2) revenue generation of master's programs; (3) external research dollars; and (4) fundraising. What is intriguing about a school of public health is that its financial underpinnings are different—it generates revenue from its master's program like an MBA program, and it generates funding like science, engineering and medicine research. Most schools of public health have their faculty on 4- to 6-month appointments rather than 9- or 12-month appointments because funding levels for external research dollars are so high. It is an academic culture that expects faculty to pay a portion of their academic salary through grants and contracts. Some reallocation may also be necessary from various programs, centers and institutes, colleges or the future SAPC programs. Among the number of Notre Dame alumni who become health professionals—many physicians and other allied health fields—it is possible that we might find a group eager to support such an audacious plan.

Roughly speaking, if an institution wishes to create from scratch and grow a school of public health entity to 30 full-time T&R faculty members, the faculty salaries for the school will need to be on the order of $4-5 million depending on the financial model, $2-3 million recurring operating budget, $25-30 million one-time faculty start-up and capitalization packages to attract the best faculty, and $75-80 million to create a new building for the school constructed to support interdisciplinary research interactions. This start-up investment of over 125 million dollars at first glance seems an insurmountable obstacle. But with some reallocation of resources, with a plan to grow a steady-state master's program of 100 students per year paying full tuition, with an expectation that a faculty size of 30 could in principle bring in more than $20 million annually in external funding from federal agencies and foundations, with the possibility of the research translating into commercial value to better society and health care, and with a very large alumni network indebted to Notre Dame for training them to become physicians and health care professionals, this goal just might be achievable. A school with 30 faculty members is still relatively small. Determining the research areas to invest in will need to be decided in order to create areas of strength and synergies with our current faculty, to match our research aspirations and to resonate with our Catholic mission.

Catholic Mission: The School of Public Health, Health Policy and Bioethics would represent an academic community flourishing in the light of the Catholic social teaching that guides our service and mission as a University—a straightforward response to the command to "heal the sick." We understand that mission to include not only treatment of illness but also the promotion of well-being, health education and disease prevention—a concern for the whole person from conception to natural death. The Notre Dame School of Public Health, Health Policy and Bioethics Covenant would be a unique statement of values that guides the research and programs of the school, with the aspiration and expectation that students will internalize these values through a holistic educational experience and carry them into the world of practice. (We include a copy of a proposed covenant for the School of Public Health, Health Policy, and Bioethics in *Appendix 12 – Proposed School of Public Health Covenant*).