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***“Care Without Coverage: Too Little, Too Late” A Report On The
Institute Of Medicine Committee On Uninsurance***

Many of us have grown up with and always assumed we would enjoy quality health care. This is especially true in a state like Michigan, where health care coverage—for workers and retirees—historically has been an integral part of employee compensation packages in the auto industry, in higher education, in the pharmaceutical industry, and in many other sectors of our economy.

The University of Michigan’s leadership role in promoting insurance as a vehicle for safeguarding the public’s health goes back many years, and we should be rightly proud of this tradition. In the 1940s, Professor Nathan Sinai in the Department of Health Management and Policy developed a voluntary health insurance plan that became the prototype for Blue Shield. Dr. Sinai was a member of the Carnegie-funded Committee on the Costs of Medical Care in the late 1920s and an early advocate of prepaid group practice—a forerunner to the HMO. His colleague, Professor Sy Axelrod, studied voluntary health insurance plans, launched the Bureau of Public Health Economics in 1943, and contributed to President Truman’s efforts to implement a comprehensive health insurance plan in 1950.

Today, Michigan residents obtain benefit from excellent community-based hospitals and, of course, the University of Michigan Health System, which consistently ranks among the nation’s top 10. The first university-owned medical facility in the United States, the U-M Health System is known for many other “firsts,” including the nation’s first Department of Dermatology and the first human genetics program. It is home to a top-ranked medical school, the nation’s first comprehensive Depression Center, and is a leader in proteomics and applied genetics research. Its clinical specialists in virtually every discipline of medicine are simply among the best in the world.

But access to clinical care like that afforded to most of us in this room is unaffordable or unavailable to far too many of our fellow citizens. In this country, it is the harsh reality that about 40 million Americans—including some 8.5 million children—are without health insurance. Very recent Census Bureau data put the number now at over 41 million. Being without health insurance often implies a drastic decline in one’s quality of life and, in the worst of cases, premature death. With rising health care costs and increasing numbers of employees being asked to

pay more of their health care costs, there is little relief in sight.

If we doubted whether any of this affects us here, *The Ann Arbor News* recently reported that Hope Medical Clinic in Ypsilanti, for the first time in its 20-year history, is turning away new adult patients because it cannot meet the increasing demand for free medical care to uninsured children and adults. All newspapers in the region have recently reported that the numbers of medically uninsured are growing in Michigan.

Our nation's patchwork of employment-based and publicly funded medical insurance is fraying, leaving all of us—individuals, families, our communities, and our nation—vulnerable.

As co-chair of the Institute of Medicine's Committee on the Consequences of Uninsurance, I have had the opportunity to examine the labyrinth of uninsurance in depth, and can only conclude that the U.S. health care distribution system, as we know it, belies our nation's reputation and character as a fair and compassionate society. Let me explain the purpose of the committee's work, the manner in which it is being conducted, and the results that lead our committee to our conclusions.

The Institute of Medicine (IOM) periodically undertakes studies related to American health care and public policy. The Committee on the Consequences of Uninsurance is a sustained effort by the IOM to inform the public debate about this pressing and persistent challenge. We are very fortunate that the Robert Wood Johnson Foundation has similar interests and has provided funding for our work, the results of which will be released in six reports spanning about three years.

The 16-member IOM committee brings a breadth of expertise (See [Figure 1](#)) encompassing the fields of clinical medicine, epidemiology, public health, nursing, health and labor economics, strategic corporation planning, academic health care, and provision of care to those without coverage and other populations at risk. Each of the six reports was also crafted with the assistance of subcommittees, specific for each topic. We held two workshops early in our deliberations and invited public comment. Staff at the IOM has kept the aggressive study and publication schedule on time. The entire project is under the guidance of Janet Corrigan, director of the Board on Health Care Services. Wilhelmine Miller and Diane Wolman have worked tirelessly on the drafting of each report. Normal external peer review processes were utilized, as is customary with IOM studies.

Our three-year study has two objectives: To assess and consolidate evidence about health, economic, and social consequences of uninsurance, and to raise awareness and improve understanding by both the general public and policy-makers.

In addition to providing baseline information to assess the consequences of

uninsurance, we have sought to identify strengths and limitations of existing data, evaluate the evidence relating health insurance and access to care, explain the dynamics of health insurance coverage, and describe the uninsured population and those most likely to be uninsured.

We have systemically reviewed the vast research literature on the composition and demographics of the uninsured and on health outcomes as a function of insurance status. As IOM committee members, we felt compelled to undertake this serious vetting and culling process so that when we went to the public, there would be no doubt regarding the validity of the data. Subcommittee members conducted unbiased, systematic literature searches to identify studies, employed explicit criteria evaluating the quality of the methodology, and reviewed and abstracted studies. In each report, typically in an appendix, the reader will find a list of explicit evaluative criteria for judging the literature reviewed in that volume, as well as a specific bibliography. We focused on individuals under age 65 since the federal Medicare program provides nearly universal coverage for those 65 and older. While we understand that under-insurance is also a troubling problem, we confined our study to those lacking health insurance for at least one year. The health outcomes we evaluated were based on measures of health status and guideline-concordant care, e.g., U.S. Preventive Services Task Force standards. We also identified and evaluated important covariates of insurance status.

Our first goal, the topic of the first report, “Coverage Matters, Insurance and Health Care in 2001,” was to identify the problem: Who are the uninsured? The second report, “Care Without Coverage, Too Little, Too Late,” released earlier this year; focuses on whether having health insurance makes a difference in overall health status and this is the title I captured for the talk today. Our third report, “Health Insurance Is A Family Matter,” published in September 2002, examines family dynamics and the impact of lacking health insurance on the whole family.

In subsequent reports, we will examine the impacts of uninsured populations on communities, the economic costs of significant populations of uninsured to society, and ultimately offer suggestions for models and criteria for health financing reforms.

We started with the questions, who are the uninsured and how do most Americans view the problem of uninsurance? Quickly, it became apparent that as a nation we underestimate the numbers of uninsured among us; we hold misperceptions about their identity and how they lose insurance (or never gain it) and about the economic and health consequences of being uninsured. Let’s start with the myths:

Myth #1

People without health insurance get the medical care they need.

Reality

Over and over, studies show that those without health insurance are less than half as likely to receive needed medical care. They are much less likely to have a physician visit within a year, have fewer visits annually, and they are more than three times as likely to lack a regular source of care. They also are less likely to receive preventive services and appropriate routine care for chronic conditions than those with insurance.

Myth #2

The number of Americans without health insurance is not large and has not been growing.

Reality

The Census Bureau estimates 38 million to 42 million people in the United States lacked health insurance coverage in 1999 (See [Figure 2](#)). That is about 15 percent of the total population of 274 million persons and 17 percent of the population under 65. Unfortunately, this intractable problem has persisted for many years.

Myth #3

Most people without health insurance decline coverage offered in the workplace because they are young and healthy and don't think they need it.

Reality

Young adults are more likely to be uninsured mostly because they are ineligible for workplace coverage. Only 3 million workers between 18 and 44 are uninsured because they decline workplace health insurance. Eleven million workers between 18 and 44 are uninsured because their employer does not offer them coverage.

Myth #4

Most of the uninsured do not work, or they live in families where no one works.

Reality

More than 80 percent of uninsured children and adults under the age of 65 live in working families (See [Figure 3](#)). Even members of families with two full-time wage earners have almost a one-in-ten chance of being uninsured.

Myth #5

Recent immigrants account for the increase in the number of uninsured persons.

Reality

Immigrants who have come to the United States within four years comprise a relatively small proportion of the general population (See [Figure 4](#)). Non-citizens represent less than one in five uninsured persons.

Let me summarize for you the principal ways that people living in this country gain or lose insurance coverage:

Employment-based insurance is by far the most common type of coverage available. Workers purchase coverage when it is offered, as well as additional coverage for family members if they can afford it. Work-based plans are more likely to cover the entire family than other types of insurance. Marriage increases a

family's chances of having employment-based health insurance. But because of the predominance of employment-based coverage in the U.S., families who have enjoyed excellent health insurance coverage for years may suddenly lose this safety net when a working parent changes jobs, is laid off, dies, or divorces. Life transitions such as changing jobs or retiring can put such coverage at risk, whether it is employment-based or public coverage, since eligibility is often based on family income.

Money may not buy love, happiness, or good health, but there is a strong correlation between family income and having health insurance. Ninety percent of families with incomes of more than 200 percent of the federal poverty level are able to insure all family members. This contrasts with lower-income families, of which only 59 percent are able to obtain insurance for the whole family. In reality, if your family is headed by a single parent, or you recently emigrated to the U.S., or you are a member of a racial or ethnic minority group, your family is less likely to have insurance for some or all family members.

Perhaps most disturbing, it would require almost 40 percent of the yearly income of a family of four with an income at the federal poverty level to purchase an average employment-based health insurance premium for family coverage in 2000.

So, who are the uninsured? They are likely to have at least one wage earner in the family, earn less than 200 percent of the federal poverty baseline, and lack a college education. They also are likely to be self-employed, employed by a small firm of fewer than 100 workers, or work in the wholesale and retail trade, agriculture, forestry, fishing, mining, and construction sectors. In terms of life stage, the uninsured are most likely to be adults and young adults, unmarried, and members of families that include children. It is also true that the probability of being uninsured varies vastly by geographic region (See [Figure 5](#)). The highest proportions of medically uninsured are found in the mid-South and Southwestern states, with occasional high ratios in other areas such as Florida, Alaska, and California.

Having described the face of the uninsured in America, our next task was to evaluate the literature about the health consequences of uninsurance, because establishing this causal link is critical to shaping public policy and gaining support for widespread health care financing. For this aspect of the project, we evaluated the best-designed research studies about the health of working age adults (18 through 64) with and without health insurance. As this audience well understands, such research is challenging because controlled longitudinal trials are not feasible. However, to be selected by the IOM committee, the studies had to encompass two factors: 1) an individual's health insurance status as an independent variable or

“predictor” and 2) the effect of insurance status on one or more health-related outcomes. The complete definitions of insurance status and entire bibliography may be found in the published report.

Let me give you the “punch line” first:

The committee finds a consistent and statistically significant relationship between health insurance coverage and health outcomes for adults.

Coverage is associated with having a regular source of care, which promotes continuity of care, and with greater use of appropriate health services. The ultimate result is improved health outcomes.

We concluded that health insurance is associated with better health outcomes for adults and with their receipt of appropriate care across a range of preventive, chronic, and acute care services. Adults without health insurance coverage die sooner and experience greater declines in health status over time than do adults with continuous coverage.

Now to some specific findings:

Adults with chronic conditions and those in late middle age are the most likely to realize improved health outcomes as a result of gaining health insurance coverage because of their high probability of needing health care services.

In particular, population groups that tend to lack stable health insurance coverage have worse health status and would benefit from increased health insurance coverage.

Longitudinal studies over one to four years document relatively greater decreases in general health status measures for uninsured adults and for those who lost insurance coverage during the period studied than for those who enjoyed continuous coverage. Over two years, major declines in health status were reported by 22 percent of continuously uninsured adults, 16 percent of intermittently uninsured, and just 8 percent of continuously insured adults.

Longitudinal, well-controlled studies of mortality reveal a higher risk of dying prematurely for those who were uninsured at the beginning of the study than for those who initially had private coverage. In fact, over a 13- to 17-year follow-up period, adults initially uninsured had a 25 percent greater risk of dying prematurely than did adults with private insurance. Over a two- to five-year follow-up period, black men and white women who were uninsured had a 50 percent greater risk of dying prematurely than their insured counterparts, and uninsured white men had a 20 percent higher risk. For reasons we do not understand, the risk for black women did not differ by insurance status.

Uninsured adults are less likely than adults with any kind of health coverage to

receive timely preventive and screening services. We found that health insurance that covers preventive and screening services is likely to result in more appropriate use of these services, and that it would likely reduce racial and ethnic disparities among those receiving preventive and screening services.

Because of delays in diagnosis, uninsured persons with breast, cervical, colorectal, prostate cancer, and melanoma generally are in poorer health and are more likely to die prematurely than persons with insurance. Tragically, uninsured women diagnosed with breast cancer have a 30 percent to 50 percent higher risk of dying than women with private insurance. Uninsured women are more likely to receive a late-stage diagnosis of cervical cancer than are women with any kind of insurance, and uninsured patients with colorectal cancer have a 50 percent to 60 percent higher mortality rate.

A number of studies evaluated chronic diseases and the impact of insurance status. Those living with chronic diseases—diabetes, cardiovascular disease, end-stage renal disease, HIV infection, and mental illness—are less likely to receive appropriate care to manage their health conditions than those who have health insurance.

Twenty-five percent of adults with diabetes who are uninsured for at least a year had not had a routine exam within the past two years, compared with 5 percent of those who had insurance. Adults with diabetes who are without insurance are less likely to receive recommended services such as foot exams or dilated eye exams.

Lacking health insurance for longer periods can lead to uncontrolled blood sugar levels, which, over time, put diabetics at risk for additional chronic disease and disability.

Uninsured adults with hypertension or high blood cholesterol have diminished access to care, are less likely to be screened, are less likely to take prescription medication if diagnosed, and experience worse health outcomes. Not surprisingly, adults with hypertension who lost health coverage had poorer blood pressure control than those who remained insured. And if you are without insurance and have a heart attack, you are less likely to be admitted to a hospital that performs angiography or revascularization procedures. You also are less likely to receive these diagnostic and treatment procedures and are more likely to die in the short term.

Among adults with HIV, having health insurance has shown to reduce the risk of dying within a six-month period by 71 percent to 85 percent. Uninsured adults with HIV infection are less likely to receive highly effective medications that have been shown to improve survival and die sooner than HIV-infected adults with coverage.

Adults with health insurance that covers any mental health treatment are more

likely to receive mental health services and care consistent with clinical practice guidelines than are those without any health insurance or with insurance that does not cover mental health conditions.

Uninsured patients who are hospitalized are likely to receive fewer services when admitted and to experience substandard care and injury when admitted than are insured patients. Perhaps most disturbing, they also are more likely to die in the hospital. In one statewide study, uninsured victims of auto crashes had a 37 percent higher mortality rate than insured crash victims, controlling extensively for personal injury and hospital characteristics.

Health insurance that provides for adequate physician panels and that includes preventive services, prescription drugs, and mental health care is more likely to facilitate the receipt of appropriate care than insurance that does not have these features.

Broad-based health insurance strategies across the entire uninsured population would be more likely to produce the benefits of enhanced health and life expectancy than would health insurance aimed only at the seriously ill.

Our committee has concluded that providing insurance would result in improved health, including greater life expectancy. Increased rates of health insurance coverage would especially improve the health of those in the poorest health and those most disadvantaged in terms of access to care.

We believe several policy implications may be drawn from these findings:

- Empirical evidence affirms that having health insurance results in better health outcomes

- Continuity of coverage appears to account for some of the health benefits of insurance

- Scope of benefits is related to receipt of appropriate care

- Insurance coverage that begins only after an illness is diagnosed will not achieve all of the potential positive impacts on health

The way our health insurance distribution system is configured is part of the problem. Although most of us live in families, insurance goes to individuals. For example, publicly financed health insurance programs tend to cover individuals—poor children or pregnant women—rather than the family. However, our nation's well-being depends, in part, on providing conditions for families to successfully raise the next generation of Americans.

In the third report, the Committee examined the wide range of consequences to families having one or more uninsured members. What we concluded is that the physical, psychosocial, and financial health and well-being of the whole family can be adversely affected if even one member lacks health insurance. And the number of families in this situation is large. One out of every five American

families has at least one member who has been uninsured throughout the previous year. This means that roughly 58 million individuals are either uninsured themselves or live with a family member who is uninsured.

Many family transitions affect insurance coverage. Children typically lose coverage under their parents' policies when they reach age 19. The death of a spouse who had family coverage through work can mean loss of insurance for the surviving family members. A spouse who retires at age 65 may immediately qualify for Medicare, but a younger spouse and other dependents may be left with no coverage.

We know that serious health problems and large medical bills can shake a family's financial foundation. Families with no members insured during the year are more than twice as likely as families with all members insured all year to have medical expenses that exceed 10 percent of their income. Two-thirds of working-age adults with high medical bills resort to borrowing from family or friends. Twenty-five percent obtain a loan or mortgage to cover medical expenses, and some families declare bankruptcy, putting their credit rating and financial future in jeopardy. Medical expenses are a factor in almost half of all personal bankruptcy filings.

We have found that families without insurance use health services very selectively. They may delay or forego treatment or preventive care to reduce short-term costs, to the point of jeopardizing their long-term health. Children who are without health insurance fare much worse in the health care system than those privileged children whose parents do have insurance. Because a child's early development depends on the health and well-being of his or her parents, parental coverage is extremely important. We have found that parents who understand and use health services appropriately themselves are more likely to seek care for their children. Unfortunately, the nine million uninsured parents in the United States are more likely to be in poor physical or mental health and have greater difficulty obtaining care than parents who have health insurance. They also are more likely to lack a regular source of care than parents with private insurance and to forego needed care, not just for themselves, but also for their children.

Children without health care coverage are more likely to receive no or delayed care, placing them at greater risk of hospitalization for such conditions as asthma that could be treated less expensively on an outpatient basis. Children who are not treated for such common childhood conditions as ear infections and iron deficiency anemia may suffer consequences that affect their language development, long-term school performance, and success in life.

The impact can be even more severe on children with serious illnesses and disabilities who require more medical care than average children. One out of every

nine children with special needs is uninsured; these children are less likely to have a usual source of care, less likely to have seen a doctor in the previous year, and less likely to get needed prescriptions, medical, mental health, dental, or vision care than their peers with insurance.

And, if a child requires hospitalization, those without insurance typically fare much worse than children who have private insurance. For example, uninsured infants with coarctation of the aorta, a birth defect in the major artery from the heart, are more likely to die than children with the same condition who do have private insurance.

In the United States, where prenatal visits early in the pregnancy and continuing through delivery are the standard of care, the effect of being born without health insurance starts in the womb. Uninsured women and their newborns receive, on average, less prenatal care and fewer expensive services such as cesarean sections. They also are more likely to have poor outcomes, including greater likelihood of maternal complications, infant death, and low birth weight. On the continuum of care, publicly insured women receive less care than women with private insurance but more care than the uninsured.

Let me reiterate our conclusions from the study of impact of health insurance coverage on families:

First, the current hodgepodge of employment-based and public insurance leaves gaps in coverage for many families. These gaps occur both over time and across the members of the family.

Second, uninsured families—that is, families with at least one member who was uninsured throughout the entire previous year—often cannot afford major health bills or insurance premiums and therefore avoid seeking care.

Third, pregnant women, newborns, and children without health insurance have worse access to care, receive fewer services, and often have poorer health outcomes, and

Fourth, children whose parents do not have health insurance coverage are less likely to be insured and less likely to receive appropriate health care, regardless of the child's eligibility for coverage.

There are a number of policy implications that have emerged from this last report. We now know that a family's financial stability can be jeopardized by having even one uninsured member. We know that if a family is uninsured through work or public benefits that the costs of insurance and medical bills are more than most families can afford. We know that when public insurance programs cover parents, their children are far more likely to be enrolled. And we know that uninsured children experience poorer access to care and worse health than those with insurance coverage.

When we consider all three reports, what have we learned? Being uninsured usually is not a choice. Health insurance does contribute to improved health. The lack of health insurance, even for a single individual in a family, can adversely affect the entire family.

Will Americans demand a fairer and more efficient system of health insurance? It has been almost a decade since we closely examined the issue of health insurance in the United States, and the situation has deteriorated during a time of great national prosperity. As more people become aware of how intractable the current system is and how vulnerable it leaves us at all levels of society, I believe that we will muster the collective will to change. We must.

I think that many of the solutions will come from the academy as faculty study and provide the analysis we need to make the right decisions. At the University of Michigan, we have many faculty working on ethical and policy issues related to health care.

Dr. Susan Goold (from our department of Internal Medicine) and her colleagues at the National Institutes of Health are among those looking at ethical issues and the uninsured. They have developed a game about health insurance called CHAT, the acronym for Choosing Healthplans All Together. The object of the game is to develop an imaginary group health insurance plan. Throughout the simulation, participants have to make tradeoffs between competing needs for limited resources. CHAT presents the challenge of a full array of possible health care options, but limited resources. Nine to 15 players play through four rounds, deciding what to include and to eliminate from their health insurance plans. They can choose from more than a dozen types of services—dental care, hospital care, mental health, drug coverage, and long-term care—at three levels of coverage (basic, medium, or high) and then test their choices by drawing “Health Event” cards determined by the spin of a roulette wheel. The goal is to help people better understand health insurance and to help health insurance policy-makers better understand the health care priorities of ordinary people.

When Dr. Goold and her colleagues used CHAT in a study of more than 200 uninsured individuals from clinical and community settings in central North Carolina, they found that groups of low-income uninsured individuals are able to identify acceptable benefit packages that are comparable in cost but differ in benefit design from managed-care contracts offered to many U.S. employees today. Dr. Goold says that with adequate time and information, the public is willing and able to engage in allocation of finite resources.

Health economist Catherine McLaughlin (from our School of Public Health) and her colleagues at the Michigan-based Economic Research Initiative on the

Uninsured (ERIU) are contributing to the uninsurance debate with research and by helping policy-makers better understand the interplay between labor force dynamics, health insurance coverage, and markets in general. Now in its second year of a three-year, \$9 million grant from the Robert Wood Johnson Foundation, ERIU's goal is to diversify the pool of experts who study health insurance coverage trends, to ask new questions about the issue of the uninsured, and to bring new perspectives to the field. In fact, Hans Kuttner, Senior Research Associate from ERIU, has been a consultant to our IOM study.

For example, a recent ERIU-funded analysis of people in their 50s and early 60s revealed that while 90 percent were insured at some point in time, 22 percent were without coverage at some time between 1992 and 1998. Professor McLaughlin notes that a five- to six-month coverage gap for this population can impose serious financial burdens and jeopardize timely treatments. ERIU estimates that 40 percent of all workers were without private coverage at some point during 1996 and 1998. More than half of the gaps were because of a job change.

Many of you are familiar with the Consolidated Omnibus Budget Reconciliation Act (COBRA), which was created at the federal level to cover unemployed workers in transition from one job to the next. However, we are learning that fewer employees are eligible for COBRA than is commonly believed. The Urban Institute estimates only 57 percent of non-elderly workers and their adult dependents are potentially eligible for COBRA. Also, the COBRA take-up rate is fairly low, which is not surprising, given that the premium is often a fairly high percent of income. Unemployed workers would face average annual premium costs of \$2,700 for an individual plan and \$7,000 for a family plan based on average employer plan costs in 2001, according to the study by Professor McLaughlin and Sarah Crow, a Ford School of Public Policy alumna and research associate at ERIU.

Health economist Michael Chernew (from Public Health, Internal Medicine, and LSA), another ERIU associate, has been studying the creation and use of health plan "report cards"—performance-based evaluations of health insurance plans—and how such an evaluation system would impact employers and consumers when choosing plans. He also is studying the determinants of rising health-care expenditures and the extent to which rising health care premiums cause coverage rates to decline.

Although the statistics and the capricious nature of not having health insurance are discouraging, I believe that, armed with accurate information and thoughtful analysis, we will find better, more workable solutions.

Thank you for allowing me to share with you some of my concerns about the state

of health insurance in America. I hope that you will stay tuned for our committee's subsequent reports. What I urge all of you to do is to alert me to individuals on this campus who might be interested in suggesting new public policies for our final report on the uninsured in America.

I leave you with one last thought from Goethe. It has been a guiding principle for all of us serving on the Committee on the Consequences of Uninsurance:
"Knowing is not enough; we must apply. Willing is not enough; we must do."