# **Universal Health Care Foundation of Connecticut**

# UNINSURED: The Costs and Consequences of Living without Health Insurance in Connecticut

### **Prepared by**

Stan McMillen Manager, Research Projects Kathryn Parr, Senior Research Assistant Moh Sharma, Research Assistant Connecticut Center for Economic Analysis University of Connecticut

### **Preface by Juan A. Figueroa** President Universal Health Care Foundation of Connecticut

## Preface

Not having health insurance is deadly and costly. Even those with health insurance suffer from the insecurity of inadequate coverage and care. Despite this warning by the Institute of Medicine (IOM), proposals to reform the nation's health care system over the last several decades have succumbed to partisan politics and intensive lobbying campaigns by insurance companies. Meanwhile, more than 44 million Americans are without health insurance. More than 356,000 of them live in Connecticut, which has the highest per capita income in the country. Separate proposals in the early '90s -- for a state as well as a national universal health coverage plan -- were unsuccessful.

In the protracted absence of a national commitment to a universal system of health coverage, states once again are pursuing their own solutions. States such as Maine, Missouri and Oregon are paving the way, with some measure of success. The Universal Health Care Foundation of Connecticut is watching these and other models with keen interest. As Dr. James Kimmev at the Missouri Foundation for Health aptly observes, the challenge to policymakers attempting to deal with the issues of uninsurance and underinsurance includes finding the option or mix of options that would reduce the number of uninsured while achieving significant political consensus to enable adoption.

To thoroughly explore the appropriate options for Connecticut, it is necessary to gain a clearer understanding of our state's situation. This report, "Uninsured: The Costs and Consequences of Living without Health Insurance in Connecticut," represents a key piece of work in a series of policy studies supported by the Foundation. To effectively inform health care policy change and reduce the number of uninsured, Connecticut needs data that can only be gained from reliable state-specific research. This study by CCEA replicates and evaluates IOM's work as it applies to Connecticut. It profiles residents without insurance, discusses the consequences of lack of health insurance and estimates the costs of uninsurance. Finally, the study examines whether the IOM evaluation of a national universal health insurance plan is applicable to Connecticut.

Similar to the findings of the IOM study, the CCEA study confirms the fact that everyone ultimately pays a high price when people do not have health coverage. Of the 356,000 people without insurance in Connecticut, 64,000 are children. Inadequate health care in childhood results in poorer educational performance and increased chances of poor health over a lifetime. Most of Connecticut's uninsured, 80 percent are employed. The personal, social and financial burdens are devastating. CCEA found that Connecticut loses up to \$1.164 billion a year because of preventable illnesses among people without insurance.

The Universal Health Care Foundation is publishing the findings of this research to deepen the understanding of uninsurance and its consequences in our state. It is our wish that this report will spur more productive discussions about how to provide coverage to the uninsured people of Connecticut. We hope this study, combined with other efforts, will ultimately lead to health care coverage for all Connecticut residents.

Juan A. Figueroa President Universal Health Care Foundation of Connecticut

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# **Executive Summary**

Over 43 million Americans did not have health insurance in 2002.<sup>1</sup> Without health insurance, these people and their families face health risks associated with inconsistent and inadequate care and the financial risk of large medical bills. Access to appropriate health care for all is a long-standing issue.<sup>2</sup> Proposals for comprehensive national health insurance reform have languished for decades amid insurance company objections and partisan politics.<sup>3</sup> Following the example of Oregon, many believe the time has come for the states to act on this issue.<sup>4</sup>

In Connecticut, the wealthiest state in the United States in per capita income terms, 10.5% of its population lacks health insurance.<sup>5</sup> That is, 356,000 individuals do not have health insurance; 64,000 of these uninsured are children.<sup>6</sup> Lacking health insurance has serious consequences: it is typically associated with increased severity of

#### IOM Principles and Recommendations

- 1. Health care coverage should be universal.
- 2. Health care coverage should be continuous.
- 3. Health care coverage should be affordable to individuals and families.
- 4. The health insurance strategy should be affordable and sustainable for society.
- 5. Health insurance should enhance health and well-being by promoting access to high-quality care that is effective, efficient, safe, timely, patient-centered and equitable.

IOM (2004). <u>Insuring America's Health</u>, Washington DC: National Academies Press.

illness, increased costs of health care, reduced worker productivity, and, for children, lower educational attainment. The private and public costs that result from the lack of health insurance elevate this to a social issue of major significance.

The Institute of Medicine

(IOM) recently conducted a three-year study of people without health insurance, and the costs and consequences of the lack of health insurance. The IOM study strongly confirmed the high costs of the lack of health insurance: those without health insurance have worse health outcomes, it places families with even one uninsured member under stress, and it reduces access to health care in communities with high levels of the lack of health insurance in multiple ways, from lower worker productivity and stunted childhood development to bearing the direct costs for the health care of those without health insurance. From this

broad perspective, the IOM study concluded it would *be more cost effective* to have universal health care than to continue with the current system.

The Universal Health Care Foundation of Connecticut asked the Connecticut Center for Economic Analysis (CCEA) to perform a similar review for Connecticut. This study replicates and evaluates selected elements of the IOM study as they apply to Connecticut. It profiles Connecticut people without health insurance, discusses the consequences of the lack of health insurance for Connecticut, estimates Connecticutspecific costs of the lack of health insurance, and evaluates whether the IOM findings regarding national universal health insurance are applicable to Connecticut.

## **Key Findings**

Those individuals without health insurance, their families, their communities and taxpayers everywhere pay the costs of the lack of health insurance in Connecticut. The resources, currently directed toward supporting a health insurance system that leaves behind distinct social groups, could be restructured into caring for all.

This CCEA study characterizes Connecticut's population lacking health insurance and estimates the costs and consequences of the lack of health insurance in Connecticut. A summary of our findings

follows:

Despite our state's productive economy, Connecticut has a

Connecticut loses between \$584 million and \$1.164 billion in increased morbidity and mortality because of preventable illness in the uninsured.

substantial number of residents without health insurance;

Hispanics and African-Americans are more likely to lack health insurance in Connecticut than in the U.S. as a whole and are substantially more likely to lack health insurance than Connecticut's white population;

Connecticut's working poor run the greatest risk of lacking health insurance;

Connecticut residents without health insurance are less likely to access care when they need it and consequently have worse health outcomes and a lower quality of life than the insured;

Purchasing private insurance costs as much as 50% of a low-income household's income and is unaffordable for many Connecticut households;

Connecticut families of those individuals without health insurance face substantial financial burdens;

Health care quality suffers in communities where provider resources are strained by those without health insurance;

Connecticut's medical practitioners provided an estimated \$377 million in uncompensated care to those without health insurance in 2002; and Connecticut loses between \$584 and \$1.164 billion annually because of preventable illnesses in those without health insurance.

Connecticut's current system is economically inefficient. Too many working Connecticut residents fall through the cracks of employer based-insurance and needbased government programs.

### Introduction

Over 43 million Americans did not have health insurance in 2002.<sup>7</sup> Without health insurance, these people and their families face health risks associated with inconsistent and inadequate care and the financial risk of large medical bills. Access to appropriate health care for all is a long-standing issue.<sup>8</sup> Proposals for comprehensive national health insurance reform have languished for decades amid insurance company objections and partisan politics.<sup>9</sup> Following the example of Oregon, many believe the time has come for the states to act on this issue.<sup>10</sup>

In Connecticut, the wealthiest state in the United States in per capita income terms, 10.5% of its population lack health insurance.<sup>11</sup> That is, 356,000 individuals do not have health insurance; 64,000 of these uninsured are children.<sup>12</sup> Lacking health insurance has serious consequences: it is typically associated with increased severity of

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illness, increased costs of health care, reduced worker productivity, and, for children, lower educational attainment. The private and public costs that result from the lack of health insurance elevate this to a social issue of major significance.

The Institute of Medicine (IOM) recently conducted a three-year study of those without health insurance, and the costs and consequences of the lack of health insurance.<sup>13</sup> The IOM study strongly confirmed the high costs of the lack of health insurance: those without health insurance have worse health outcomes, it places families with even one uninsured member under stress, and it reduces access to health care in communities with high levels of the lack of health insurance. Society as a whole bears the costs of the lack of health insurance in multiple ways, from lower worker productivity and stunted childhood development to bearing the direct cost for the health care of those

without health insurance. From this broad perspective, the IOM study concluded it would *be more cost effective* to have universal health care than to continue with the current system.

The Universal Health Care Foundation of Connecticut asked the Connecticut Center for Economic Analysis (CCEA) to perform a similar review for Connecticut. This study replicates and evaluates selected elements of IOM's work for Connecticut. It profiles people without health insurance in Connecticut, discusses the consequences of the lack of health insurance for Connecticut, estimates Connecticut-specific costs of the lack of health insurance, and evaluates whether the IOM findings regarding national universal health insurance are applicable to Connecticut.

## The Lack of Health Insurance in Connecticut

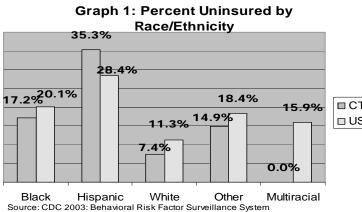
Ten and one half percent (10.5%) of Connecticut's population had no health insurance from March 2001 to March 2002 compared with 15.2% of all Americans. Considering that Connecticut has the highest per capita income, a high rate of educational attainment, and the nation's highest worker productivity, this is a relatively high rate of those without health insurance. Connecticut's rate of health uninsurance (the fraction of eligible residents lacking health insurance) ranks behind such states as Massachusetts, Rhode Island, and New Hampshire, each of which has a lower per capita income and lower worker productivity.<sup>14</sup> On its face, therefore, Connecticut's rate of uninsurance is inconsistent with its high economic rank.

How People Gain Coverage	How People Lose Coverage
Get a job where insurance is offered	Lose a job where insurance was offered, so
and premiums are affordable	employer no longer subsidizes premiums
Purchase insurance on your own, if	Lose Medicaid or SCHIP eligibility once
you qualify and can afford the	you or your children grow up or if you
premiums	family's income increase
Marry someone with insurance and	Lose a spouse due to separation, divorce or
if there are affordable family out-of-	death
pocket premiums	Attain the age of 18 or graduate from
Qualify for Medicaid, SCHIP or	college and lose eligibility under parents'
Medicare	plan Your insurer goes out of business or cancels its contract with you, or your employer
IOM (2001). "Report Brief: Coverage	denies coverage to you
Matters,"http://www.iom.edu/file.asp?id=4	Be priced out of the market when the cost of
147 p. 5.	premiums increases

In the most recent economic downturn (2000 to 2002), the United States' health uninsurance rate increased by 1% (from 15.2 to 14.2%); Connecticut's health uninsurance rate increased two and half times faster, by 2.6% (7.9 to 10.5%). This suggests that Connecticut's workers may be more vulnerable to economic stress and losing their health insurance than in the nation as a whole.

Furthermore, the U.S. Census Bureau's official Connecticut estimates of a 10.5% rate of the lack of health insurance in the general population and 12.5% for the nonelderly<sup>15</sup> understates the problem of those without health insurance.<sup>16</sup> Although often quoted as 'the uninsurance rate', this rate counts only those who lacked health insurance for the entire (previous) calendar year. Because continuity in health insurance is an important factor in establishing appropriate routine and preventive health care services,<sup>17</sup> a more useful estimate of the lack of health insurance is those who have gone without health insurance at any point during the previous year.

A recent study by Families USA<sup>18</sup> estimates that 26.5% or 767,000 of Connecticut's non-elderly population has gone without insurance at some point within a year and almost two-thirds of them were without health insurance for six months or more.<sup>19</sup> These numbers suggest that the lack of health insurance directly affects almost a quarter of Connecticut's residents – nearly two and half times larger the routinely reported number.



Graph 1 demonstrates that those without health insurance in Connecticut primarily come from minority populations. Compared to national rates, Connecticut's Hispanics are

1.24 times more likely to lack health insurance than

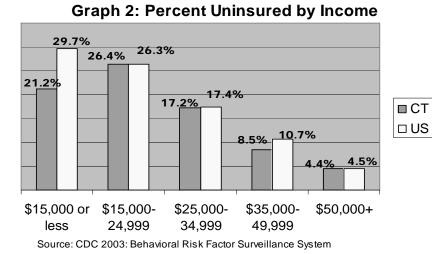
in the nation as a whole. In comparison, the health uninsurance rate of Connecticut's

# Ethnic and Racial Health Uninsurance Rates

white population is two-thirds less than the national average. One reason that the Hispanic and African-American populations are more likely than whites in Connecticut to lack health insurance may be because they have relatively lower household incomes. In fact, in Connecticut, 31% of Hispanic households and 24% of African-American households have incomes below the poverty line.<sup>20</sup> This compares to 6% of white households.<sup>21</sup>

Other studies indicate that there are social barriers to accessing insurance for these populations, irrespective of income. A Wisconsin study suggests that Hispanics face a language barrier, are concerned about immigration issues, prefer to get care in clinics, or feel that the insurance available to them does not cover a sufficient amount of care to warrant purchasing it.<sup>22</sup> The same study found that for African-Americans the cost of insurance and unsuccessful prior attempts to get insurance were significant barriers to getting health insurance.<sup>23</sup> Aside from affordability, these broader issues may determine the success of any program designed to increase access to insurance. More research is needed to understand these issues in a Connecticut-specific context. Regardless of the motivations, ethnic and racial minority populations are significantly more likely to lack health insurance in Connecticut than in the U.S.<sup>24</sup>

# The 'Uninsured' by Income Group



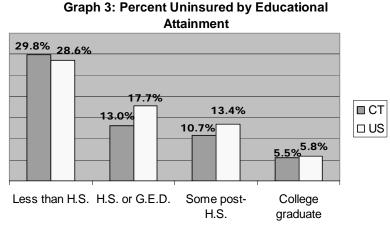
the U.S. as a whole and in Connecticut. Graph 2 confirms that Connecticut performs slightly better than the U.S. insuring the poorest segment of its population (incomes

It is clear that households with lower incomes are less likely to be insured in both

Connecticut Center for Economic Analysis, University of Connecticut

less than \$15,000).<sup>25</sup> This may be attributed to Connecticut's HUSKY (Healthcare for Uninsured Kids and Youth) program, which offers affordable health insurance to low-income children and their families. The rates of health uninsurance in Connecticut, however, *increased* in the \$15,000 to \$24,999 income bracket, consistent with the national pattern. In Connecticut, 26.4% of households in this bracket lack health insurance. Households in this bracket fall into a painful gap: they earn too much to qualify for government help, but not enough to afford health insurance premiums.<sup>26</sup> As a result, they are the most likely income group to lack health insurance in Connecticut irrespective of race or ethnicity.

# The Lack of Health Insurance and Educational Attainment

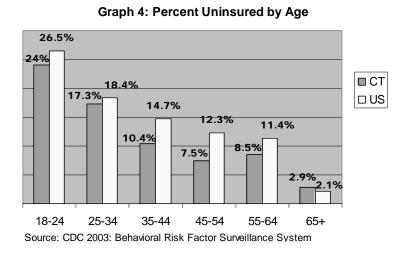


Source: CDC 2003: Behavioral Risk Factor Surveillance System

Educational attainment correlates with income. Less educated individuals are likely to have jobs that pay less and do not offer health benefits. Graph 3 shows that individuals with less education are more likely to lack health insurance. Thirty percent (30%) of Connecticut individuals with less than a high school education lack health insurance. Connecticut residents with high school or more education are more likely to be insured than the U.S. as a whole at every level of educational attainment.

### The Lack of Health Insurance and Age

With respect to age, 18 to 24 year olds are most likely to lack health insurance for Connecticut and the U.S. (Graph 4). This age group is often no longer eligible for insurance under their household's (parent's or guardian's) plan or under Medicaid but they do not yet have direct access to health benefits through employment. Individuals in this age group are less likely to work at a job that offers health benefits or to have worked at a job sufficiently long to qualify for benefits. According to the IOM, few adults in the U.S. decline employer-sponsored health; however, this remains a contentious issue.<sup>27</sup>

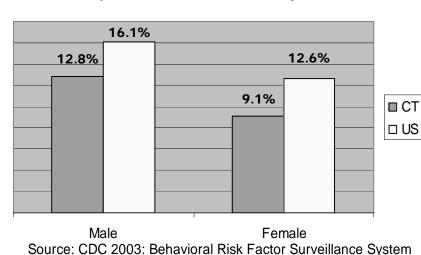


Furthermore, 8.1% of Connecticut's children under age 18 do not have health insurance.<sup>28</sup> This compares favorably with 11.6% of children who lack health insurance nationally.<sup>29</sup> It is critical that children have health insurance because without health insurance they

are particularly disadvantaged. They miss more school and/or experience increased severity of illness than children with insurance.<sup>30</sup> Moreover, evidence suggests that offering insurance to children without offering it to their parents or guardians does not ensure children access to sufficient health care. Studies find that parents who access routine care for themselves are far more likely to access timely care for their children.<sup>31,32</sup>

### The Lack of Health Insurance and Gender

With respect to gender, males have a higher rate of health uninsurance than females do in both Connecticut and the U.S. (Graph 5). Women are more likely to be insured, in part, because they are more likely to qualify for state-health insurance programs because they are more likely to be heads of low-income households with children. However, such programs may be more unstable in the long run than employersponsored insurance, because these programs are based on income status that may change.<sup>33</sup>



**Graph 5: Percent Uninsured by Gender** 

Although Connecticut outperforms the national average in insurance coverage, the statistics above suggest serious and costly gaps in Connecticut's current health insurance system. As many as a quarter of households are typically without

insurance over the course of a year. Hispanic and African-American populations are less likely to participate in Connecticut's health insurance system compared to the rest of the nation and are dramatically less likely to be insured than are white Connecticut citizens. Almost a quarter of all individuals with incomes below \$25,000 do not have health insurance in Connecticut. This includes the working poor, self-employed, and unemployed citizens. People who have not finished high school are 5.5 times less likely to have health insurance than are college graduates. As the next section shows, these gaps have consequences not only for those without health insurance but for everyone.

### Consequences of the Lack of Health Insurance

The lack of health insurance has grave consequences. Because individuals

In 1999, 57% of Americans believed that "uninsured people are able to get the care they need from physicians and hospitals" (up from 43% in 1993).

Blendon, et al. (1999) "The Uninsured, the Working Uninsured, and the Public" Health Affairs, Vol. 18, No. 6, p. 203-211.

without health insurance do not access routine care, preventive care, screening, or even acute care at the same rates as the insured, they face increased severity of illness and possibly premature death.

Nationally, studies find worse outcomes for chronic conditions such as diabetes, hypertension, HIV infection, end-stage renal disease, as well as for many cancers, including breast cancer, melanoma, and traumatic conditions such as car accidents.<sup>34</sup> Individuals without health insurance simply do not receive timely screenings that would catch cancers at an early stage or receive needed monitoring and treatment to control chronic conditions. Consequently, individuals without health insurance receive care that is often 'too little and too late'.<sup>35</sup> That means it is not simply less effective but often much more expensive, a cost typically borne largely or entirely by the public.

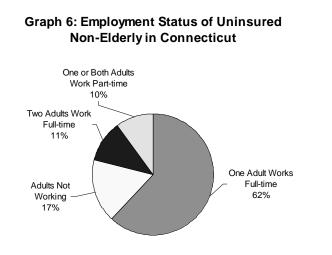
In Connecticut, we see an alarming pattern emerging similar to the national pattern described above. The 2001 Connecticut Office of Health Care Access (OHCA) household survey on health care access found that 9.1% of people with no health insurance who needed emergency care did not receive it in 2000.<sup>36</sup> Ninety-nine percent (99%) of these people stated that lacking health insurance and not being able to afford treatment was a factor in their decision not to get care. This compares to 0.9% of insured individuals who needed emergency care and did not receive it. This implies that those without health insurance are *9 times less likely* to get emergency care *when they need it* than those with insurance in Connecticut.

The OHCA survey found that 22.5% of those lacking health insurance (vs. 5.1% of the insured) did not have a primary source of medical care, while 19.5% of those lacking health insurance (vs. 1.9% of the insured) reported not receiving non-emergency care when they needed it.<sup>37</sup> This makes Connecticut's residents without health insurance

vulnerable to becoming acutely ill and requiring intensive or emergency care, behavioral patterns that increase the long run costs for the state and, thus, taxpayers. Increased severity and frequency of illness make it difficult for individuals to either hold a job or obtain one that offers health benefits.<sup>38</sup> The lack of health insurance and poverty can thus become a vicious cycle.

The consequences of the lack of health insurance extend beyond the health and productivity effects on the individual. The lack of health insurance for even one family member directly impacts the family's financial future. Therefore, even working families may share the risks of the lack of health insurance.

In fact, in Connecticut, most non-elderly (less than age 65) lacking health insurance come from families with working members (Graph 6). Eighty-two and one-half percent (82.5%) of families of those lacking health insurance have at least one



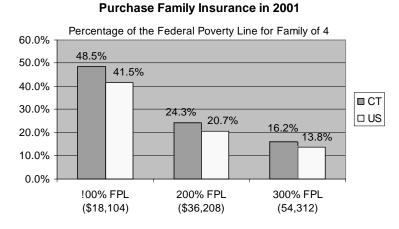
working member. Seventy-two and one-half percent (72.5%) of families have at least one full-time worker. Only 17.2% of families in which at least one person lacks health insurance do not have any employed adults.<sup>39</sup> With firms reducing their costs, employment no longer goes hand in hand with benefits such as health insurance.

A family having even one member without health insurance jeopardizes its financial stability and well-being. Families with outstanding medical bills are more likely to find it difficult to obtain credit and, if successful, they are more likely to pay higher interest rates for mortgages and other types of credit. Unpaid medical bills are a factor in almost 50% of all personal bankruptcies in the United States.<sup>40</sup> Purchasing health insurance is simply beyond many households' reach. The average premium for a family of four is \$8,788 in Connecticut, compared to \$7,509 for the United States,

according to the most recent Census Bureau Medical Expenditure Panel Survey (MEPS).<sup>41</sup> These premiums do not include the cost of co-payments or other out-of-pocket expenditures for medical goods and services not covered by insurance.

At the individual and family level, Graph 7 shows the cost of premiums equals roughly half of a four-person household's income at the federal poverty line (FPL). In contrast, a recent national

survey by the Kaiser Foundation found that low-income households, on average, allocate about 7% of their income for medical care.<sup>42</sup> Their expenditures include 33% for housing, 20% for transportation, 17% for



Graph 7: Share of Household Income Required to

food, 4% for apparel and services, 4% for entertainment, and 14% for other goods.<sup>43</sup> Clearly, with the competing demands on a household's budget, paying the average health insurance premium would cause financial hardship for many Connecticut households.

At the community level, the lack of health insurance affects everyone seeking care whether they are insured or not. Although those without health insurance pay a significant proportion of their health care costs out-of-pocket,<sup>44</sup> providers who treat a large percentage of patients without health insurance face financial difficulty as they may have to write-off a substantial portion of their costs. Providers that most often treat those without health insurance are federally qualified health centers and hospitals, with the patient entry points often being the emergency rooms.<sup>45</sup> Even with government subsidies such as the Hospital Disproportionate Share (DSH) program, these facilities are more likely to close services or fail to invest in new equipment or facilities.<sup>46</sup> The overall quality and availability of care, then declines as those without health insurance affect the financial viability of providers.<sup>47</sup>

Providers are not the only group to make financial trade-offs. Governments often have to trade-off between spending alternatives, particularly in times of economic

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stress.<sup>48</sup> Funding for public health programs, for example, may be reduced to help pay for treatment for those without health insurance.<sup>49</sup> In this way, the quality of life for the broader community is affected by these competing demands for government resources. Consequently, *already stressed communities become more stressed* under the burden of

the lack of health insurance.

The consequences of the lack of health insurance affect us all. In Connecticut, the lack of health insurance has the following effects:

individuals experience increased morbidity and mortality without stable health insurance coverage;

- households face a significant financial risk if even one member of the household is lacks health insurance;
- buying insurance presents a significant financial hardship as insurance premiums cost as much as 50% of a low-income household's income;
- health facilities in communities with high levels of the lack of health insurance can be financially disadvantaged and may offer limited care to *all* their patients; and,
- communities face reduced services as government and other resources are spent to care for those without health insurance.

While individuals without health insurance and their families face the greatest burden, we all pay for the lack of health insurance and its consequences. One of the most marked ways we pay for the lack of health insurance is through direct government or private subsidy of the many services provided to those without health insurance. The next section describes the cost of caring for those without health insurance in Connecticut.

### Costs of the Lack of Health Insurance

Individuals without health insurance pay a significant portion of their own health care costs often by borrowing or going into debt. Even so, those without health insurance may also receive some reduced-charge care or default on their bills. This care is uncompensated from the perspective of the provider. *Uncompensated care is not free care*. Even if those without health insurance pay less than insured patients do, the former use the same resources and incur the same costs as the latter. Initially, providers absorb these costs. Over time, a patchwork of private and government resources have been assembled to financially support providers and pick up at least some of the bill for those without health insurance. This support comes from federal funds for health care clinics, Medicaid disproportionate share payments (DSH) for hospitals, bailouts for bankrupt hospitals, and charity funds.

The IOM used the national MEPS database to develop estimates of the health expenditures for those without health insurance.<sup>50</sup> Although state-level data is not

available, CCEA develops Connecticutspecific estimates of the cost of care for individuals without health insurance based on

Connecticut's uninsured used an estimated \$377 million in uncompensated care in 2002.

the IOM methodology (see appendix A for details). In lieu of a Connecticut survey, we take a fraction of the national estimates to obtain Connecticut spending for uncompensated care. A comprehensive local survey would generate a clearer understanding of the exact sources of costs and the levels of uncompensated care as well as who pays for it in Connecticut.

The total personal health care expenditure for Connecticut residents without health insurance (Connecticut's uninsured) was \$1.08 billion in 2002. Of this total, CCEA estimates these people paid \$291 million out of their own pockets. Other programs, such as Tricare/CHAMPVA and workers' compensation, paid \$409 million. Connecticut health care providers delivered an estimated \$377 million in uncompensated care that includes reduced cost care, care at no charge, and bad debt.

Initially, providers absorb the cost of the resources used to provide uncompensated care. Of the estimated \$377 million, Connecticut hospitals reported

providing \$153.6 million in uncompensated care in 2002.<sup>51</sup> Based on national patterns, CCEA estimates that physicians and clinics provided another \$223.5 million in uncompensated care in that same year.<sup>52,53</sup> The resources to cover these costs come ultimately from government programs and private resources, such as private charities and physicians' time. As the IOM study concluded for national resources, Connecticut resources could be channeled into other productive uses such as providing health insurance for all Connecticut residents.

Most of the costs of the lack of health insurance are *not* health care costs. The greatest economic costs from the lack of health insurance arise from worse health, diminished capacity to earn a living, and shorter lives. Because individuals without health insurance do not receive needed medical care, they have higher morbidity and mortality rates than the insured. Using studies that place a dollar value on long life and good health to individuals, the IOM found that each year an individual lacks health insurance results in an average \$1,645 loss related to reduced life expectancy and a combined loss of \$3,280 in terms of a shorter life and increased likelihood and severity of illness.<sup>54</sup> For Connecticut, this means a loss of \$584 million *annually* in reduced life expectancy alone, and \$1.164 billion *annually* in combined shorter lives and increased illness at our current rate of health uninsurance. (See appendix B for technical details.)

These figures represent resources that could be directed toward providing health care for all. The IOM developed national estimates of the potential cost of providing care to those currently without health insurance.<sup>55</sup> *They were able to show that the expected increase in costs of care for those currently without health insurance was less than the current losses from uncompensated care and worse health status.* A similar analysis could be conducted for Connecticut.

In addition to the quantifiable costs of the lack of health insurance borne directly by those without coverage, there are additional costs borne by society as a whole. Worker productivity is lower without health insurance. People with chronic or acute illnesses miss more days of work and are less productive when at work. Families of individuals without health insurance bear the burden of increased financial risk of health costs and debt. Studies have found children fail to achieve appropriate developmental outcomes and are more prone to fall behind in school if they are lack health insurance.<sup>56</sup>

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Finally, when those without health insurance become eligible for Medicare at age 65 they are more likely to be in poorer health and thus, initially, more expensive to insure than those who have received routine care and have been regularly insured.<sup>57</sup> Ultimately, we all bear the costs of the lack of health insurance.

# Conclusions

Individuals without health insurance, their families, their communities and taxpayers everywhere pay the costs of the lack of health insurance in Connecticut. The resources, currently directed toward supporting a health insurance system that leaves

behind distinct social groups, could be restructured into caring for all.

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population lacking health insurance and estimates the costs and consequences of the lack of health insurance in Connecticut. A summary of our findings follows:

Despite our state's productive economy, Connecticut has a substantial number of people without health insurance;

Hispanics and African-Americans are more likely to lack health insurance in Connecticut than in the U.S. as a whole and are substantially more likely to lack health insurance than Connecticut's white population;

Connecticut's working poor run the greatest risk of lacking health insurance; Connecticut residents without health insurance are less likely to access care when they need it and consequently have worse health outcomes and a lower quality of life than the insured;

Purchasing private insurance costs as much as 50% of a low-income household's income and is unaffordable for many Connecticut households;

Connecticut families with members who lack health insurance face substantial financial burdens;

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Connecticut residents fall through the cracks of employer based-insurance and need-

based government programs.

### From this perspective, the CCEA findings for Connecticut agree substantially

*with the IOM analysis.* While Connecticut-specific research is required to establish the cost-effectiveness of a universal health insurance program in this state, CCEA finds in

this analysis, the potential for substantial cost savings (at least \$377 million in uncompensated care) and productivity improvement with a more comprehensive system of health insurance coverage. Such a system would be based on a best practices analysis with reference to Connecticut. We strongly recommend additional Connecticut-specific research to substantiate the IOM findings. In particular, the following research would be of significant value in understanding the scope of the issue and developing detailed policy recommendations:

A Connecticut-specific analysis of sources and costs of uncompensated care; A Connecticut-specific analysis of barriers to accessing insurance and care, particularly in low-income, youth and minority populations; A feasibility and best practice analysis for state-level universal insurance programs; and A Connecticut-specific analysis of the costs and benefits and potential costsavings of a universal health care program.

The current patchwork of health insurance programs systematically leaves behind many Connecticut residents. Without routine health care, these groups will continue to fall short of their potential to live long, healthy lives and to contribute fully to Connecticut society. Connecticut taxpayers and health care providers will continue to bear the costs of inefficiency of our health insurance system. Resolving the lack of health insurance in Connecticut is a challenge to us all.

### References

- Bhandari, Shailesh and Elizabeth Gifford (2003). "Children with Insurance: 2001," U.S. Census Bureau Current Population Report P60-224, http://www.census.gov/prod/2003pubs/p60-224.pdf.
- Blendon, Robert J., John T. Young, and Catherine M. DesRoches, (1999). "The Uninsured, The Working Uninsured, And the Public," *Health Affairs*, Vol. 18, No. 6, p. 203-211.
- CDC (2003). Behavioral Risk Factor Surveillance System, http://www.cdc.gov/brfss/.
- Center for Survey Research & Analysis (2002). "A Report Prepared for Office of Health Care Access," http://www.ohca.state.ct.us/Publications/2001HouseholdSurvey.pdf.
- Connecticut Office of Health Care Access (2004). "Annual Report on the Financial Status of Connecticut's Short Term Acute Care Hospitals for Fiscal Year 2002." http://www.ohca.state.ct.us/Publications/FSReport2002revised3.pdf.
- Connecticut Office of Health Care Access (2001). "2001 Medical Expenditure Panel Survey About Employer Based Health Insurance Coverage," http://www.ohca.state.ct.us/Publications/MEPS.pdf.
- Dubay, Lisa and Genevieve Kenney (2004). "Addressing Coverage Gaps for Low-Income Parents," *Health* Affairs Vol. 23, No. 2, p. 225-234.
- Families USA (2004). "One in Three: Non-elderly Americans Without Health Insurance, 2002-2003," http://www.familiesusa.org/site/DocServer/82million\_uninsured\_report.pdf?docID=3641.
- Families USA (2000). "Five Good reasons for States to Expand Family Coverage," http://www.familiesusa.org/site/DocServer/5good.pdf?docID=724.
- Hadley, Jack and John Holahan (2003). "How Much Medical Care Do the Uninsured Use, and Who Pays For It?" *Health Affairs* (Feb. 12) p. 66-81.
- Holahan, John, Teresa Coughlin, Randall Bovbjerg, Ian Hill, Barbara Ormond and Stephen Zuckerman, (2004). "State Responses to Budget Crises in Fiscal Year 2004," http://www.kff.org/medicaid/7002.cfm.
- IOM (Institute of Medicine, Committee on the Consequences of Uninsurance) (2004). <u>Insuring America's</u> <u>Health: Principles and Recommendations</u>, Washington, DC: National Academies Press.
- IOM (Institute of Medicine, Committee on the Consequences of Uninsurance) (2003a). <u>Hidden Costs,</u> <u>Value Lost: Uninsurance in America</u>, Washington, DC: The National Academies Press.
- IOM (Institute of Medicine, Committee on the Consequences of Uninsurance) (2003b). <u>A Shared Destiny:</u> <u>Effects of Uninsurance on Individuals and Families</u>, Washington, DC: The National Academies Press.
- IOM (Institute of Medicine, Committee on the Consequences of Uninsurance) (2002a). <u>Care Without</u> <u>Coverage: Too Little, Too Late</u>, Washington, DC: National Academies Press.
- IOM (Institute of Medicine, Committee on the Consequences of Uninsurance) (2002b). <u>Health Insurance is</u> <u>a Family Matter</u>, Washington, DC: The National Academies Press.

- IOM (Institute of Medicine, Committee on the Consequences of Uninsurance) (2001). "Report Brief: Coverage Matters," http://www.iom.edu/file.asp?id=4147.
- Kaiser Family Foundation (2004). State Facts Online, http://www.statehealthfacts.kff.org.
- Kaiser Family Foundation (2003). "Challenges and Trade-offs in Low-Income Family Budgets: Implications for Health Coverage," http://kff.org/medicaid/4147.cfm.
- Krugman, Paul (2004). "Health Versus Wealth," New York Times, July 9, 2004 http://www.nytimes.com/2004/07/09/opinion/09KRUG.html?ex=1090036800&en=6334922d17e0 6eb2&ei=5006&partner=ALTAVISTA.
- May, Jessica H. and Peter J. Cunningham (2004). "Issue Brief: Tough Trade-Offs: Medical Bills, Family Finances and Access to Care," http://www.hschange.com/CONTENT/689/689.pdf.
- Reed, Marie C., Peter J. Cunningham and Jeffrey J. Stoddard (2001). "Issue Brief: Physicians Pulling Back from Charity Care," http://www.hschange.com/CONTENT/356/356.pdf.
- U.S. Census Bureau (2003). Current Population Survey, Annual Social and Economic Supplement, http://www.census.gov/hhes/www/hlthins.html.
- USAToday (2004). "Uninsured Deserve Better," USAToday, June 15, 2004, http://www.keepmedia.com/ShowItemDetails.do?ema\_id=29628&item\_id=488729&oliID=176.
- Simpson, Joanne T. (2004). "Barriers to Accessing Health Insurance Coverage: Findings from Focus Groups and Surveys with Wisconsin Residents," Citizen Input. Wisconsin State Planning Grant http://www.dhfs.state.wi.us/medicaid8/state-grant/Citizen-Input.ppt.
- Welch, William M. and Julie Appleby (2004). "States Watching Tennessee's Health Care Plan for the Poor," USAToday July 6, 2004 http://www.keepmedia.com/pubs/USATODAY/2004/07/06/501045.
- Wyman, Nancy (1999). "The State Comptroller's Report: Connecticut's Economic Health," http://www.osc.state.ct.us/reports/economic/99cmprpt/Arc2.pdf.

# Appendix A: The Costs of Uncompensated Care in Connecticut

The IOM developed estimates of the cost of medical care received by individuals without health insurance based on national survey data.<sup>58</sup> IOM based total expenditures on MEPS, adjusted to match the National Health Accounts estimated by the Center for Medicaid and Medicare Services. The IOM basis for payer or burden calculations was a combination of MEPS, an AMA survey of physicians and independent surveys by the authors.<sup>59</sup> Because of limitations in the scope of its research, CCEA bases its estimates directly on these national estimates. We outline the calculations for Connecticut below.

In 1998, the most recent state-level figure available, Connecticut spent \$12.185 billion on health care.<sup>60</sup> This number includes expenditures on hospitals, physicians and other health care professionals, medical durable and non-durable supplies and other personal health expenditures. CCEA chose these expenditure categories to most closely match the IOM analysis and represent non-elderly health care expenditures.<sup>61</sup>

To estimate the growth in Connecticut health care expenditures from 1998 to 2002, CCEA uses an average annual growth rate of 7.1%. This growth rate is the national growth rate in personal health expenditures from 1998 to 2002. This is a moderate estimate. In Connecticut, personal health care expenditures grew an average of 9.2% per year from 1980-1998. However, between 1991 and 1998, the growth rate in Connecticut expenditures declined to 4.8%. Because we do not think this unusually low rate of growth continued, CCEA chose the moderate 7.1% rate. At this rate of growth, CCEA estimates Connecticut's 2002 personal health care expenditures to be \$16 billion dollars.

The portion paid by those without health insurance, 10.5% of the total expenditure, is \$1.683 billion. Hadley and Holahan, authors of the IOM analysis, estimate individuals without health insurance spend only 64% as much on health care as the insured (see Table A-1 below).<sup>62</sup>

	Uninsured			Full-year Insured		
Source of Payment	All	Full-Year	Part-	Private	Public	All
			Year			Non-
						Elderly
Uncompensated	\$34.5	\$24.6	\$9.9	\$10.7	\$4.2	\$49.4
Care						
Out of Pocket	\$26.4	\$14.1	\$12.3	\$80.4	\$2.6	\$109.7
Private Insurance <sup>1</sup>	\$24.2	\$1.9 <sup>2</sup>	\$22.3	\$279.0	\$0.8	\$304.0
Public Insurance	\$13.8	\$0.0	\$13.8	\$4.9	\$35.1	\$53.8
Total, all sources	\$98.9	\$40.6	\$58.3	\$375.1	\$42.5	\$516.9 <sup>3</sup>
Per capita spending	\$1,587	\$1,253	\$1,950	\$2,484	\$2,335	\$2,233

Table A-1: Estimated Amounts and Sources of Medical Care Payments, in billions of 2001 Dollars, by Insurance Status, from the medical Expenditure Panel Survey (MEPS)

<sup>1</sup>Includes Tricare, CHAMPVA, and worker's compensation.

<sup>2</sup> Workers Compensation only.

<sup>3</sup> Individual entries do not sum because of rounding.

With these adjustments, Connecticut residents without health insurance spent an estimated \$1.08 billion in 2002 on health care services.

Because no state-level expenditure data exist, we use the Hadley and Holahan estimates for payer sources.<sup>63</sup> For Connecticut, the rates and amounts for each payer category are as follows:

27% paid out of pocket by people without health insurance or \$290.9 million;

38% covered by public and private insurance or \$409.4 million; and,

35% uncompensated care or \$377 million.

Public and private insurances include Tricare/CHAMPVA and workers' compensation payments. Uncompensated care in Connecticut is care that is either provided at no charge, at a discounted rate or simply written off as bad debt.

While uncompensated care may be provided at no or reduced cost to the person receiving the care, it uses resources such as clinician's time, hospital bed space, and pharmaceuticals, which are not free. 'Uncompensated care' refers to the payment arrangement only. The costs of this care are still borne by providers either privately or through subsidy by taxpayers.

Although a detailed survey and accounting of payer sources were beyond the scope of this study, CCEA develops estimates of who pays for uncompensated care in Connecticut.

Based on the Connecticut Office of Health Access (OHCA) hospital financial database for 2002, acute care hospitals provided \$153.6 million in uncompensated care. This includes both free care and bad debt. Although estimates of bad debt may include some default by insured patients, this is likely to be a smaller percentage of this type of hospital debt.

Physicians provide some free or reduced price care to those without health insurance. This care is in some sense private 'philanthropy' as it is time for which fee-for-service based doctors do not receive full compensation. From the American Medical Association's 1994 Socioeconomic Monitoring System, Hadley and Holahan found that 67.7% of physicians provided an average of 7.2 hours of uncompensated care per week.<sup>64</sup> A more recent study by Reed, et al. found that 72% of doctors provided an average of only 2.6 hours of charity care per week.<sup>65</sup> Our estimate of uncompensated care lies between the two.

To estimate charity care provided by physicians in Connecticut, we assume that their rates of charity care are similar to the national average. There are 10,998 licensed physicians in Connecticut.<sup>66</sup> We used two different wage estimates, one based on Hadley and Holahan<sup>67</sup> and one based on a recent survey of New England physicians by the American Medical Association (AMA)<sup>68</sup> to develop a dollar value for the forgone wages in providing free care. We use the mid-point of these estimates, \$175.3 million, to impute the value of uncompensated care provided by physicians not in clinics or hospitals. We assume the remainder of uncompensated care is provided by clinics and direct care programs funded mostly by government programs and philanthropic contributions.

In summary, uncompensated care in Connecticut for 2002 totaled \$470.2 million. The following providers supplied this care:

\$153.6 million in by acute care hospitals;\$175.3 million by physicians; and,\$48.2 million by clinics and direct care programs.

In turn, these providers rely on government dispensations, such as the Medicaid DSH payments or federal funding for clinics, or on private donations of money and talent. A detailed accounting of the source of funds would be available through the financial statements of all the clinics, programs and hospitals in the state. Further research is

required to estimate the ultimate source of the costs of paying for those without health insurance.

# Appendix B: The Loss of Health Capital in Connecticut

The estimates of the loss of health capital for Connecticut are based on the IOM (2003) national estimates.<sup>69</sup> From a comprehensive literature review, the IOM estimated the statistical odds of reduced quality of life and increased mortality for each year of the lack of health insurance by age and gender.<sup>70</sup> The value of a healthy year of life is \$160,000 based on an average value suggested by the current body of economic research. The average annual value of statistical loss of life from the lack of health insurance was \$1,645. The IOM used health-related quality of life measures (HRQL's) to account for increases in morbidity for those without health insurance. The IOM estimated an average annual total loss of quality and quantity of life of \$3,280. CCEA applies these loss rates to the current number of full-year uninsured (individuals without health insurance) in Connecticut based on the Annual Social and Economic Supplement to the Current Population Survey.<sup>71</sup>

## Endnotes

<sup>4</sup> Welch, William M. and Julie Appleby (2004). "States Watching Tennessee's Health Care Plan for the

<sup>9</sup> USA Today (2004). "Uninsured Deserve Better," USAToday, June 15, 2004,

http://www.keepmedia.com/ShowItemDetails.do?ema\_id=29628&item\_id=488729&oliID=176.

<sup>10</sup> Welch, William M. and Julie Appleby (2004). "States Watching Tennessee's Health Care Plan for the Poor," USAToday July 6, 2004 http://www.keepmedia.com/pubs/USATODAY/2004/07/06/501045.
<sup>11</sup> U.S. Census Bureau (2003). <u>Ibid</u>.

<sup>12</sup> Bhandari, Shailesh and Elizabeth Gifford (2003). "Children with Insurance: 2001," U.S. Census Bureau Current Population Report P60-224, http://www.census.gov/prod/2003pubs/p60-224.pdf.

<sup>13</sup> See http://www.iom.edu.

<sup>15</sup> Non-elderly include the population under age 65.

<sup>16</sup> <u>Ibid</u>.

<sup>17</sup> IOM (2002). <u>Care Without Coverage: Too Little, Too Late</u>, Washington, DC: National Academies Press.

<sup>18</sup> *Families USA* is a national nonprofit, non-partisan organization dedicated to the achievement of high quality, affordable health care for all Americans.

<sup>19</sup> Families USA (2004). "One in Three: Non-elderly Americans Without Health Insurance, 2002-2003," http://www.familiesusa.org/site/DocServer/82million\_uninsured\_report.pdf?docID=3641.

<sup>20</sup> Kaiser Family Foundation (2004). <u>State Facts Online</u>, http://www.statehealthfacts.kff.org/.

<sup>21</sup> Particularly for Hispanic households, this compares unfavorably with the U.S. as whole where only 22.6% of Hispanic households' incomes fall below the FPL. By comparison, 9.1% of white households' and 24.9% of African-American households' incomes fall below the poverty line. <u>Ibid.</u>

<sup>22</sup> Simpson, Joanne T. (2004). "Barriers to Accessing Health Insurance Coverage: Findings from Focus Groups and Surveys with Wisconsin Residents," Citizen Input. Wisconsin State Planning Grant http://www.dhfs.state.wi.us/medicaid8/state-grant/Citizen-Input.ppt.

<sup>23</sup> <u>Ibid.</u>

<sup>24</sup>CDC (2003) Behavioral Risk Factor Surveillance System, http://www.cdc.gov/brfss/

<sup>25</sup> CDC (2003). Behavioral Risk Factor Surveillance System, http://www.cdc.gov/brfss/

<sup>26</sup> This phenomenon is a potential effect of TANF. Families no longer eligible for assistance find low paying jobs and now earn too much to continue with the Medicaid benefits but are not offered health insurance with their new jobs.

<sup>27</sup> The IOM estimates that only 4% of adults aged 18-44 decline employer-sponsored health insurance. IOM (2001). <u>Op Cit</u>.

<sup>28</sup> U.S. Census Bureau (2002). <u>Op Cit.</u>

<sup>29</sup> <u>Ibid.</u>

<sup>&</sup>lt;sup>1</sup> Most recent data available from U.S. Census, 2003. "Annual Social and Economic Supplement to Current Population Survey," http://www.census.gov/hhes/www/hlthins.html.

<sup>&</sup>lt;sup>2</sup> Krugman, Paul (2004). "Health Versus Wealth," New York Times, July 9, 2004

http://www.nytimes.com/2004/07/09/opinion/09KRUG.html?ex=1090036800&en=6334922d17e06eb2&ei =5006&partner=ALTAVISTA.

<sup>&</sup>lt;sup>3</sup> USA Today (2004). "Uninsured Deserve Better," USAToday, June 15, 2004,

http://www.keepmedia.com/ShowItemDetails.do?ema\_id=29628&item\_id=488729&oliID=176.

Poor," USAToday July 6, 2004 http://www.keepmedia.com/pubs/USATODAY/2004/07/06/501045.

<sup>&</sup>lt;sup>5</sup> U.S. Census Bureau (2003). <u>Ibid</u>.

<sup>&</sup>lt;sup>6</sup> Bhandari, Shailesh and Elizabeth Gifford (2003). "Children with Insurance: 2001," U.S. Census Bureau Current Population Report P60-224, http://www.census.gov/prod/2003pubs/p60-224.pdf.

<sup>&</sup>lt;sup>7</sup> Most recent data available from U.S. Census, 2003. "Annual Social and Economic Supplement to Current Population Survey," http://www.census.gov/hhes/www/hlthins.html.

<sup>&</sup>lt;sup>8</sup> Krugman, Paul (2004). "Health Versus Wealth," New York Times, July 9, 2004

http://www.nytimes.com/2004/07/09/opinion/09KRUG.html?ex=1090036800&en=6334922d17e06eb2&ei =5006&partner=ALTAVISTA.

<sup>&</sup>lt;sup>14</sup> U.S. Census Bureau (2002). <u>Op Cit.</u>

<sup>34</sup> IOM (2002a). Care Without Coverage: Too Little, Too Late, Washington, DC: The National Academies Press.

<sup>35</sup> Ib<u>id</u>.

<sup>36</sup> Center for Survey Research & Analysis (2002). "A Report Prepared for Office of Health Care Access," http://www.ohca.state.ct.us/Publications/2001HouseholdSurvey.pdf.

<sup>37</sup> Ibid.

<sup>38</sup> IOM (2002a). <u>Op Cit</u>.

<sup>39</sup> Wyman, Nancy (1999). "The State Comptroller's Report: Connecticut's Economic Health," http://www.osc.state.ct.us/reports/economic/99cmprpt/Arc2.pdf. Because of rounding, these percentages do not add to 100%.

<sup>40</sup> May, Jessica H. and Peter J. Cunningham (2004). "Issue Brief: Tough Trade-Offs: Medical Bills, Family Finances and Access to Care," http://www.hschange.com/CONTENT/689/689.pdf.

<sup>41</sup> Connecticut Office of Health Care Access (2001). "2001 Medical Expenditure Panel Survey – About Employer Based Health Insurance Coverage," http://www.ohca.state.ct.us/Publications/MEPS.pdf.

<sup>42</sup> Kaiser Family Foundation (2003). "Challenges and Trade-offs in Low-Income Family Budgets: Implications for Health Coverage," http://kff.org/medicaid/4147.cfm. <sup>43</sup> Ibid.

<sup>44</sup> The uninsured pay an estimated 40% of their medical costs out-of-pocket according to IOM (2003). Hidden Costs, Value Lost: Uninsurance in America, Washington, DC: The National Academies Press. <sup>45</sup> IOM (2003b). A Shared Destiny: Effects of Uninsurance on Individuals and Families, Washington, DC:

The National Academies Press.

<sup>46</sup> Ib<u>id</u>.

47 Ibid.

<sup>48</sup> Holahan, John, et. al. (2004). "State Responses to Budget Crises in Fiscal Year 2004,"

http://www.kff.org/medicaid/7002.cfm.

<sup>49</sup> Ib<u>id.</u>

<sup>50</sup> Hadley, Jack and John Holahan (2003). "How Much Medical Care Do the Uninsured Use, and Who Pays For It?" Health Affairs (Feb. 12) p. 66-81.

<sup>51</sup> Connecticut Office of Health Care Access (2004). "Annual Report on the Financial Status of Connecticut's Short Term Acute Care Hospitals for Fiscal Year 2002,"

http://www.ohca.state.ct.us/Publications/FSReport2002revised3.pdf.

<sup>52</sup> Hadley and Holahan (2003). Op Cit.

<sup>53</sup> Reed, Marie C., Peter J. Cunningham and Jeffrey J. Stoddard (2001). "Issue Brief: Physicians Pulling Back from Charity Care," http://www.hschange.com/CONTENT/356/356.pdf.

<sup>54</sup> IOM (2003a). <u>Hidden Costs, Value Lost: Uninsurance in America</u>, Washington, DC: The National Academies Press. <sup>55</sup> Ibid.

<sup>56</sup> IOM (2002b). <u>Op Cit.</u>

<sup>57</sup> IOM (2003a). Op Cit.

<sup>58</sup> IOM, (2003a) <u>Op Cit.</u>

<sup>59</sup> Hadley and Holahan, (2003) Op Cit.

<sup>60</sup> http://www.cms.hhs.gov/statistics/nhe

<sup>61</sup> The IOM used non-elderly expenditures in their calculations because most elderly are insured by Medicare. The same data is not available for Connecticut. CCEA uses statewide data similar to the expenditures of the non-elderly for our calculations.

<sup>62</sup> Hadley and Holahan (2003). <u>Op Cit.</u> p. 69.

<sup>63</sup> I<u>bid</u>.

<sup>64</sup> Hadley and Holahan (2003) Op Cit.

<sup>&</sup>lt;sup>30</sup> IOM (2002b). Health Insurance is a Family Matter, Washington, DC: The National Academies Press. <sup>31</sup> Families USA (2000). "Five Good reasons for States to Expand Family Coverage,"

http://www.familiesusa.org/site/DocServer/5good.pdf?docID=724.

<sup>&</sup>lt;sup>32</sup> Dubay, Lisa and Genevieve Kenney (2004). "Addressing Coverage Gaps for Low-Income Parents," Health Affairs Vol. 23, No. 2, p. 225-234.

<sup>&</sup>lt;sup>33</sup> IOM (2001). Op Cit.

<sup>70</sup> <u>Ibid</u>.

<sup>71</sup> U.S. Census Bureau (2003) <u>Op Cit.</u>

<sup>&</sup>lt;sup>65</sup> Reed, et al., (2001) <u>Op. Cit</u>.

<sup>&</sup>lt;sup>66</sup> This is the total number of physicians licensed to practice with the Connecticut Department of Public Health who also report a Connecticut address. There are 14,420 physicians licensed to practice in Connecticut with addresses throughout the U.S.

 <sup>&</sup>lt;sup>67</sup> Hadley and Holahan (2003) <u>Op Cit.</u>
<sup>68</sup> Based on personal communication with the Connecticut chapter of the AMA.
<sup>69</sup> IOM (2003a) <u>Op Cit.</u>