

Michiganders with
Pre-Existing Conditions
Are Protected by the Health Care Law

#### Worry No More: Michiganders with Pre-Existing Conditions Are Protected by the Health Care Law

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n June 28, 2012, hundreds of thousands of Michiganders could breathe a sigh of relief. On this fateful day, the Supreme Court upheld the constitutionality of the health care law. Thanks to this decision and the protections offered by the law, people in Michigan and across the nation who have pre-existing conditions will be protected from discrimination based on their health status. Beginning in 2014, no Michigander can be denied coverage, charged a higher premium, or sold a policy that excludes coverage of important health services simply because of a pre-existing condition.

To determine just how many people in Michigan and across the country will be helped by this part of the landmark decision, Families USA commissioned The Lewin Group to quantify the number of Michiganders who have been diagnosed with pre-existing conditions. Looking at only those serious conditions that are commonly linked to coverage denials, we found that nearly 2.4 million non-elderly Michiganders have been diagnosed with pre-existing conditions that could lead to denials of coverage, absent health reform. This means that more than one in every four non-elderly Michiganders (28.4 percent) would be at risk of being denied coverage today without health reform.

In addition to estimating the total number of people in Michigan who will be helped by these protections, Families USA and The Lewin Group took a closer look at who these Michiganders are. For the first time, this analysis drills down to the local level to estimate the number of people who have been diagnosed with pre-existing conditions by county (or cluster of counties, in areas with fewer people). In addition, we took a closer look at diagnoses of pre-existing conditions by age group, income group, and racial and ethnic group. The findings of our analysis are clear: No group is immune to the effects of this pervasive problem. People across the state, young and old, black and white, rich and poor, all have a great deal to gain from health reform's protections against discrimination based on pre-existing conditions.

Our analysis captures only those who have already been diagnosed with pre-existing conditions, focusing solely on those conditions that frequently result in denials of coverage. As our data show, the likelihood of being diagnosed with a pre-existing condition grows substantially with age, so these vital protections will aid many more Michiganders over time. Still more who will benefit were not captured in this analysis because they have a pre-existing condition that has yet to be diagnosed. This means that many more Michiganders have conditions that would leave them at risk of paying higher premiums or for having critical benefits excluded in the absence of health reform.

The bottom line is this: Whether they need these protections today or will be helped by them tomorrow, each and every Michigander can rest a little easier knowing that he or she cannot be discriminated against because of health status, thanks to health reform.

### **Key Findings**

#### A Pervasive Problem

- Nearly 2.4 million Michiganders under the age of 65 have been diagnosed with preexisting conditions that, without health reform, could lead to denials of coverage in the individual health insurance market (Table 1).
- Without health reform, more than one in four (28.4 percent of) non-elderly Michiganders is at risk of being denied coverage (Table 1).
- People across the state are affected by pre-existing conditions. The proportion of people affected ranges from 26.1 percent in Ottawa County to 33.7 percent in Arenac, Gladwin, Iosco, Ogemaw, and Roscommon Counties (Table 1).

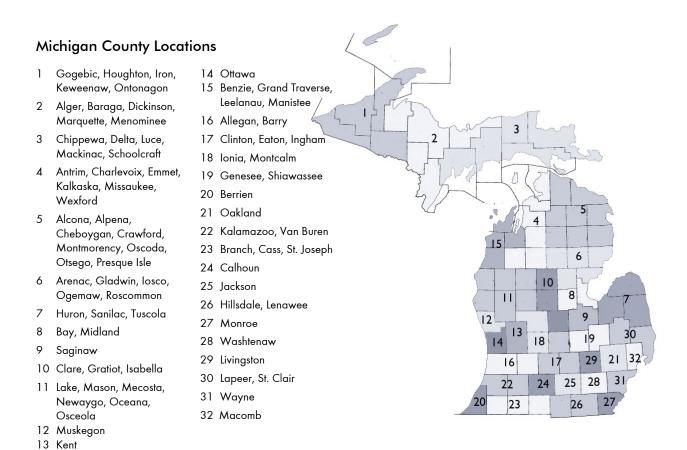


Table 1.

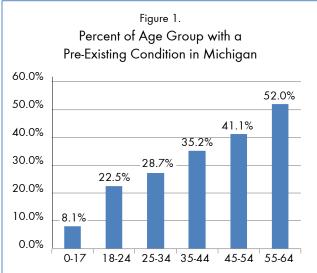
Michiganders Diagnosed with a Pre-Existing Condition that Could Result in a Denial of Coverage, by County

		Population (	ınder 65
County	Number	Number with a Pre-Existing Condition	Percent with a Pre-Existing Condition
1 Gogebic, Houghton, Iron, Keweenaw, Ontonagon	<i>77</i> ,500	23,800	30.7%
2 Alger, Baraga, Dickinson, Marquette, Menominee	88,500	27,300	30.8%
3 Chippewa, Delta, Luce, Mackinac, Schoolcraft	80,600	26,100	32.4%
4 Antrim, Charlevoix, Emmet, Kalkaska, Missaukee, Wexford	118,400	36,200	30.6%
<ol> <li>Alcona, Alpena, Cheboygan, Crawford, Montmorency, Oscoda, Otsego, Presque Isle</li> </ol>	102,600	33,500	32.6%
6 Arenac, Gladwin, Iosco, Ogemaw, Roscommon	82,700	27,900	33.7%
7 Huron, Sanilac, Tuscola	105,700	32,500	30.7%
8 Bay, Midland	156,500	45,900	29.3%
9 Saginaw	165,600	47,900	28.9%
10 Clare, Gratiot, Isabella	119,900	35,200	29.4%
11 Lake, Mason, Mecosta, Newaygo, Oceana, Osceola	147,000	44,700	30.4%
12 Muskegon	143,800	42,200	29.3%
13 Kent	523,700	139,300	26.6%
14 Ottawa	228,700	59,700	26.1%
15 Benzie, Grand Traverse, Leelanau, Manistee	120,800	36,700	30.4%
16 Allegan, Barry	144,200	40,800	28.3%
17 Clinton, Eaton, Ingham	400,400	110,800	27.7%
18 Ionia, Montcalm	108,400	32,000	29.5%
19 Genesee, Shiawassee	418,100	124,200	29.7%
20 Berrien	126,000	35,900	28.5%
21 Oakland	1,023,000	276,800	27.1%
22 Kalamazoo, Van Buren	276,200	76,300	27.6%
23 Branch, Cass, St. Joseph	131,100	38,700	29.5%
24 Calhoun	112,400	32,400	28.9%
25 Jackson	133,300	39,800	29.9%
26 Hillsdale, Lenawee	121,600	35,700	29.4%
27 Monroe	128,800	3 <i>7</i> ,600	29.2%
28 Washtenaw	304,300	80,400	26.4%
29 Livingston	1 <i>57,</i> <b>4</b> 00	44,400	28.2%
30 Lapeer, St. Clair	211,900	62,800	29.6%
31 Wayne	1,550,200	431,300	27.8%
32 Macomb	702,600	198,800	28.3%
Total	8,311,700	2,357,400	28.4%

**Notes**: Estimates prepared by The Lewin Group for Families USA (see the Technical Appendix for details). Data are for the non-institutionalized, non-Medicare-eligible population. Numbers may not add due to rounding.

#### A Problem that Grows with Age

- Michiganders in every age group are affected by pre-existing conditions that, without health reform, could lead to a denial of coverage in the individual insurance market (Figure 1 and Table 2). However, those who are older are much more likely to have such a condition. In Michigan:
  - One in five (22.5 percent of) young adults aged 18 to 24 has a pre-existing condition that could lead to a denial of coverage.
  - Two in five (41.1 percent of) adults aged 45 to 54 have a preexisting condition that could result in a denial of coverage.
  - More than half (52.0 percent) of adults aged 55 to 64 have a preexisting condition that could lead to a denial of coverage.



• Adults aged 45 to 64 account for about 30 percent of the non-elderly population in Michigan, but they make up nearly half (49.5 percent) of those with pre-existing conditions (Table 2).

Table 2.

Michiganders Diagnosed with a Pre-Existing Condition that Could Result in a Denial of Coverage, by Age

Age Group	Number in Age Group	Number in Age Group with a Pre-Existing Condition	Percent of Age Group with a Pre-Existing Condition	Age Group as a Percent of People with a Pre-Existing Condition
0-17	2,364,700	191,200	8.1%	8.1%
18-24	965,200	217,100	22.5%	9.2%
25-34	1,152,500	330,200	28.7%	14.0%
35-44	1,283,200	452,300	35.2%	19.2%
45-54	1,444,100	594,100	41.1%	25.2%
55-64	1,102,000	572,500	52.0%	24.3%
Total	8,311,700	2,357,400	28.4%	100.0%

Notes: Estimates prepared by The Lewin Group for Families USA (see the Technical Appendix for details). Data are for the non-institutionalized, non-Medicare-eligible population. Numbers may not add due to rounding. Data by age are also available upon request for the county clusters listed in Table 1.

#### **Every Income Group Is Affected**

- Michiganders of all incomes have pre-existing conditions that, without health reform, could lead to a denial of coverage (Table 3). By income group, we found the following:
  - Among the lowest-income Michiganders, 28.9 percent of people in families with incomes below 100 percent of the federal poverty level (less than \$23,050 for a family of four in 2012) are affected, and 27.5 percent of people with incomes between 100 and 199 percent of poverty (between \$23,050 and \$46,100 for a family of four in 2012) are affected.
  - Among middle-income Michiganders, we see that similar proportions are affected. Approximately 28.3 percent of people in families with incomes between 200 and 299 percent of poverty (between \$46,100 and \$69,150 for a family of four in 2012) and 29.3 percent of people in families with incomes between 300 and 399 percent of poverty (between \$69,150 and \$92,200 for a family of four in 2012) are affected.
  - Among higher-income Michiganders (people in families with incomes above 400 percent of poverty, or \$92,200 for a family of four in 2012), 28.2 percent are affected.

Table 3.

Michiganders Diagnosed with a Pre-Existing Condition that Could Result in a Denial of Coverage, by Income

Family Income Relative to the Federal Poverty Level	Number in Income Group	Number in Income Group with a Pre-Existing Condition	Percent of Income Group with a Pre-Existing Condition	Income Group as a Percent of People with a Pre-Existing Condition
<100%	1,498,500	432,700	28.9%	18.4%
100-199%	1,409,600	387,000	27.5%	16.4%
200-299%	1,371,700	387,600	28.3%	16.4%
300-399%	1,191,000	348,700	29.3%	14.8%
≥400%	2,840,900	801,300	28.2%	34.0%
Total	8,311,700	2,357,400	28.4%	100.0%

**Notes**: Estimates prepared by The Lewin Group for Families USA (see the Technical Appendix for details). Data are for the non-institutionalized, non-Medicare-eligible population. Numbers may not add due to rounding. Data by income group are also available upon request for the county clusters listed in Table 1.

#### Every Racial and Ethnic Group Is Affected

- Michiganders of every racial and ethnic group have pre-existing conditions that, without health reform, could lead to a denial of coverage (Table 4). By racial and ethnic group, we found the following:
  - Nearly one-third (30.0 percent) of white, non-Hispanic Michiganders have such a condition.
  - More than one-quarter (26.9 percent) of black, non-Hispanic Michiganders have such a condition.
  - Nearly one in five (18.8 percent of) Hispanic Michiganders is affected.
  - Just over one in 10 (11.7 percent of) Asian, Hawaiian, or Pacific Islander Michiganders is affected.
  - One-quarter (25.0 percent) of Michiganders who identify themselves as being of multiple races or of another racial or ethnic group are affected.
  - White, non-Hispanic Michiganders account for 79.6 percent of the non-elderly state residents who have been diagnosed with a pre-existing condition (Table 4).

Table 4.

Michiganders Diagnosed with a Pre-Existing Condition that Could Result in a Denial of Coverage, by Race and Hispanic Origin

Racial or Ethnic Group	Number in Group	Number in Group With a Pre-Existing Condition	Percent of Group With a Pre-Existing Condition	Group as a Percent Of People with a Pre-Existing Condition
Asian, Hawaiian, or Pacific Islander	228,500	26,700	11.7%	1.1%
Black, Non-Hispanic	1,191,700	320,700	26.9%	13.6%
Hispanic	403,700	76,000	18.8%	3.2%
White, Non-Hispanic	6,255,900	1,876,000	30.0%	79.6%
Other/Multiracial*	231,900	58,000	25.0%	2.5%
Total	8,311,700	2,357,400	28.4%	100.0%

Notes: Estimates prepared by The Lewin Group for Families USA (see the Technical Appendix for details). Data are for the non-institutionalized, non-Medicare-eligible population. Numbers may not add due to rounding.

<sup>\*</sup> The category "other/multiracial" includes those who identify themselves as: (1) more than one race or ethnicity, (2) American Indians or Alaska Natives, or (3) another group not captured here. These subgroups were combined to ensure sufficient sample size to achieve reliable results.

#### Important Notes about These Data

Our analysis counts only those Michiganders who are *diagnosed* with pre-existing conditions that frequently result in denials of coverage. There are four reasons why our analysis presents a conservative estimate of the number of people who will be helped by the protections for people with pre-existing conditions:

- 1. The data capture only those people who are diagnosed with one of a list of specific pre-existing conditions. The data do not count people who have an undiagnosed condition.
- 2. The data count only those people who were diagnosed with or treated for one of a list of pre-existing conditions within the one-year period of 2009 (the latest year for which data are available).
- 3. We count only people who had at least one health condition on the list of specific conditions that are likely to lead to a denial of coverage. We do not count people who had conditions that are not on this list but that may also lead to a denial of coverage or to higher premiums or coverage exclusions.
- 4. As our data show, the likelihood of having a pre-existing condition is low in childhood and increases substantially over time. Because our estimates count the number of people diagnosed with a pre-existing condition at one point in time, they do not capture the full number of people who will be aided by these protections over the course of a lifetime.

In addition to the reasons just listed, because people with low incomes and racial and ethnic minorities are disproportionately represented among the uninsured and underinsured, they are likely to be undercounted in our analysis. Access to care is substantially lower among racial and ethnic minorities and among the uninsured. For example, the uninsured are more than five times more likely to lack a regular source of care than people with private insurance (55 percent versus 11 percent).¹ Likewise, uninsured adults are more than four times as likely to postpone seeking care due to cost as adults with private insurance (30 percent versus 7 percent).² Regardless of insurance status, Hispanics face significant access problems. Hispanic women are more than three times as likely as white women to lack a usual source of care (36.9 percent versus 13.2 percent), and Hispanic women are more than twice as likely as white women to receive late prenatal care (22.9 percent versus 11.1 percent).³

Similar trends are seen with cancer screenings: One-third (36 percent) of low-income adults between ages 50 and 64 received a colon cancer screening in the past five years, compared to nearly six in 10 (56 percent of) higher-income adults in the same age group.<sup>4</sup> Only 35.0 percent of Hispanic adults aged 50-75 reported receiving a colon cancer screening, versus 48.7 percent of black, non-Hispanic adults and 55.2 percent of white adults in the same age group.<sup>5</sup>

#### The Scope of the Problem in Michigan

Hundreds of thousands of Michiganders have been diagnosed with pre-existing conditions such as diabetes, heart disease, and cancer. Hundreds of thousands more will develop such conditions over the course of their lives. Each of these people will be helped by the health care law's protections against discrimination based on pre-existing conditions. Thanks to reform, insurers are now no longer able to deny coverage to children because of pre-existing conditions, nor are they allowed to exclude care for kids with pre-existing conditions. Beginning in 2014, no Michigander, regardless of age, can be denied coverage. Equally important, insurers will no longer be allowed to charge higher premiums based on health status or to sell policies that exclude coverage for certain benefits based on a person's pre-existing condition.

In order to get a sense of how pervasive pre-existing conditions are today in the state of Michigan, Families USA commissioned The Lewin Group to estimate the number of non-elderly Michiganders who have been diagnosed with pre-existing conditions that frequently lead to a denial of coverage in the current individual insurance market. To date, a handful of analyses have estimated the number of Americans with pre-existing conditions, some of which included state-level data. In 2010, Families USA released our first report with such state-level estimates. This analysis updates these data and, for the first time, takes these estimates down to the county level (or to the level of county clusters for less populated areas).

Our findings are alarming: Nearly 2.4 million non-elderly Michiganders, more than one out of every four residents under the age of 65, have been diagnosed with pre-existing conditions that, absent reform, could lead to a denial of coverage. Moreover, our findings show that every group of Michiganders—people from every part of the state; from across the income scale; and of all ages, races, and ethnicities—have pre-existing conditions. In addition, we found that, nationally, 64.8 million (24.9 percent of) non-elderly Americans have been diagnosed with pre-existing conditions that could lead to a denial of coverage.

Thanks to the health care law, each and every Michigander no longer has to worry about being discriminated against because of health status. Likewise, millions of Michiganders who don't have pre-existing conditions today but who may develop them tomorrow will be protected by the law. These critically important protections will help secure a healthy, vital future for Michigan families.

# Security Denied: The Consequences of Health Insurance Discrimination

Before the health care law was passed, insurers were generally free to treat individuals with pre-existing conditions unfairly. In most states, insurers have been able to refuse to sell individuals policies for a variety of reasons, including their medical history, health status, and health risks. The consequences of such denials can be dire: Frequently, uninsured people are forced to go without care due to the high cost of health services. When a condition becomes so serious that treatment can no longer be put off, the uninsured seek care. Quite often, people who are uninsured suffer devastating financial consequences as a result of paying for this care. In addition, the fear of going without health coverage negatively affects productivity and the labor market because many Americans make decisions about what job to choose, or whether to stay in a job, based on whether the job provides health coverage—a phenomenon known as "job lock." The following provides more detail on these and other detrimental effects of coverage denials.

#### Going without Coverage: Less Care, Poorer Health

- Uninsured Americans often delay or forgo care due to cost.
  - Uninsured adults are more than six times as likely as those with private insurance to go without needed care due to cost (26 percent versus 4 percent).<sup>8</sup>
  - Among children, the contrast is even more stark. Uninsured children are 13 times more likely than privately insured children to go without needed care due to cost (13 percent versus 1 percent). Likewise, uninsured children are nearly seven times as likely as privately insured children to postpone seeking care due to cost (20 percent versus 3 percent).9
- Uninsured Americans are less likely to get preventive care and cancer screenings.
  - Uninsured adults are nearly four times more likely than insured adults to delay or forgo getting a preventive care screening due to cost (36 percent versus 10 percent).<sup>10</sup>
  - Uninsured women over the age of 50 were about half as likely as insured women to have received a mammogram in the past two years (42 percent versus 79 percent).<sup>11</sup>

- Uninsured Americans are less likely to have a usual source of care outside of the emergency room.
  - Uninsured adults are five times more likely to lack a regular source of care than the insured (55 percent versus 11 percent).<sup>12</sup>
  - More than half (51 percent) of uninsured adults who tried to find a new primary care doctor in the past three years reported that it was "somewhat difficult" or "very difficult," with one in five (20 percent) reporting that it was "very difficult." 13
  - More than two in five (41 percent of) uninsured adults reported that a doctor's office or clinic that they sought primary care from would not accept them as a new patient.<sup>14</sup>

#### Going without Coverage: Financial Risks

- Uninsured Americans pay more for care.
  - Uninsured patients are unable to negotiate the same discounts on hospital and doctor charges that insurance companies do. As a result, uninsured patients are often charged more than 2.5 times what insured patients are charged for hospital services.<sup>15</sup>
  - Another reason that people without insurance often pay more for care is because they delay getting the care they need when they need it. When people delay care, their health conditions often worsen and become more costly to treat. For example, uninsured women are substantially more likely than women with private insurance to be diagnosed with breast cancer in a later state and to require more intensive treatment.<sup>16</sup>
- Uninsured Americans struggle to pay for care.
  - Uninsured adults are two and a half times as likely as insured adults to report having trouble paying medical bills (51 percent versus 21 percent).<sup>17</sup>
  - Uninsured adults are nearly three times as likely as insured adults to be contacted by a collection agency for unpaid medical bills (30 percent versus 11 percent).<sup>18</sup>
  - Nearly a quarter (23 percent) of uninsured people who report having trouble paying their medical bills or having medical debt took on credit card debt because of medical bills. Nearly half (45 percent) used up all of their savings to pay for medical bills.<sup>19</sup>

- Uninsured Americans suffer financial catastrophe because of medical bills.
  - Medical debt is strongly linked to bankruptcy. In 2007, illness or medical bills were contributing factors in nearly two-thirds (62.1 percent) of all personal bankruptcies filed.<sup>20</sup>
  - In addition, medical debt can lead to the loss of a home. One study found that nearly half of home foreclosures were due, at least in part, to financial issues stemming from a medical problem.<sup>21</sup>

#### Going without Coverage: Bad for the Economy

- Fear of being denied coverage in the individual market leads many Americans to make decisions about which job to choose or whether to stay in a job based on whether the job provides health insurance. This phenomenon is known as job lock.<sup>22</sup>
- Workers who have health problems are less likely to leave a job that offers health coverage. One study found that chronically ill workers who rely on their employer for health coverage are about 40 percent less likely to leave their job than chronically ill workers who do not rely on their employer for coverage.<sup>23</sup>
- In addition, workers with a history of health problems such as diabetes, cancer, or heart attack, and those with substantial medical expenses, stay at their jobs significantly longer because of their job-based health coverage.<sup>24</sup>

#### **Endnotes**

- <sup>1</sup> Kaiser Family Foundation, *The Uninsured: A Primer, Key Facts about Americans Without Health Insurance* (Washington: Kaiser Family Foundation, October 2011).
- <sup>2</sup> Ibid.
- <sup>3</sup> Cara V. James, Alina Salganicoff, Megan Thomas, Usha Ranji, Marsha Lillie-Blanton, and Roberta Wyn, *Putting Women's Health Care Disparities on the Map: Examining Racial and Ethnic Disparities at the State Level* (Washington: Kaiser Family Foundation, June 2009).
- <sup>4</sup> Sara R. Collins, Ruth Robertson, Tracy Garber, and Michelle M. Doty, *The Income Divide in Health Care: How the Affordable Care Act Will Help Restore Fairness to the U.S. Health System* (New York: The Commonwealth Fund, February 2012). Low-income is defined as household income below 133 percent of poverty (less than \$20,123 for a couple in 2012). Higher-income is defined as household income above 400 percent of poverty (more than \$60,520 for a couple in 2012).
- <sup>5</sup> Agency for Healthcare Research and Quality, *2011 National Healthcare Quality and Disparities Reports Data Tables Appendix*, Table 131.12b, "Men and Women Ages 50-75 Who Report that They Had a Blood Stool Test in the Past Year, Sigmoidoscopy in the Past Five Years, and Blood Stool Test in the Past Three Years, or a Colonoscopy in the Past 10 Years, by Ethnicity, United States, 2008," available online at <a href="http://www.ahrq.gov/qual/qrdr11/1\_cancer/T1\_3\_1\_1\_2b.htm">http://www.ahrq.gov/qual/qrdr11/1\_cancer/T1\_3\_1\_1\_2b.htm</a>.
- <sup>6</sup> Government Accountability Office, *Estimates of Individuals with Pre-Existing Conditions Range from 36 Million to 122 Million* (Washington: GAO, March 2012), available online at <a href="http://gao.gov/assets/590/589618.pdf">http://gao.gov/assets/590/589618.pdf</a>.
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- <sup>12</sup> Kaiser Family Foundation, *The Uninsured: A Primer, Key Facts about Americans without Health Insurance*, op.cit.
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- 18 Ibid.
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- <sup>20</sup> David U. Himmelstein, Deborah Thorne, Elizabeth Warren, and Steffie Woolhandler, "Medical Bankruptcy in the United States, 2007: Results of a National Study," *The American Journal of Medicine* 122, no. 8 (June 2008): 741-746.
- <sup>21</sup> Christopher Tarver Robertson, Richard Egelhof, and Michael Hoke, "Get Sick, Get Out: The Medical Causes of Home Mortgage Foreclosures," *Health Matrix* 18 (2008): 65-105.
- <sup>22</sup> Business Week, "Held Hostage by Health Care: Fear of Losing Coverage Keeps People at Jobs Where They're Not Their Most Productive," *Business Week*, January 29, 2007; Brigitte C. Madrian, "Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock?" *The Quarterly Journal of Economics* 109, no. 1 (February 1994): 27-54.
- <sup>23</sup> Kevin T. Stroupe, Eleanor D. Kinney, and Thomas J. Kniesner, "Chronic Illness and Health Insurance-Related Job Lock," *Journal of Policy Analysis and Management* 20, no. 3 (Summer 2001): 525-544.
- <sup>24</sup> Inas Rashad and Eric Sarpong, *Employer-Provided Health Insurance and the Incidence of 'Job-Lock': Is There a Consensus?* (Atlanta: Department of Economics, Georgia Health Policy Center, May 2006).

## **Technical Appendix:**

# Estimating the Number of People with Specific Health Conditions

Prepared by

The Lewin Group

Randy Haught John Sheils

#### Introduction

The Affordable Care Act (ACA) prohibits insurers from denying coverage, charging higher premiums, or eliminating coverage for certain health conditions because people have health problems. Families USA and The Lewin Group (Lewin) conducted these analyses to determine the number of people who currently have a diagnosed health condition that could exclude them from purchasing health insurance in the individual market.

#### **Coding Excludable Health Conditions**

The first step in estimating the number of people who would potentially benefit from eliminating pre-existing condition exclusions was to determine the conditions for which people are commonly denied insurance. Families USA and Lewin examined lists of conditions that are used to determine high-risk pool eligibility in 19 states. We selected the 69 conditions that were most commonly included in lists for determining high-risk pool eligibility across all the states. To be included in the analysis, each condition had to be on the eligibility lists for at least five states.

Lewin assigned either a Clinical Classification code (CCS) or an International Statistical Classification of Diseases code (ICD-9) to each of the conditions. The CCS codes aggregate five-digit ICD-9 codes into broad, clinically homogenous, mutually exclusive categories. However, CCS categories do not exist for all conditions. Therefore, for each of the conditions, the analysis team assigned the condition to its umbrella CCS code if it existed. Twenty-five conditions were assigned a CCS code.

The remaining conditions were identified using ICD-9 codes. One limitation is that the Medical Expenditures Panel Survey (MEPS) 2009, which was the primary data source for the study, contains only three-digit ICD-9 condition codes. These three-digit ICD-9 codes provide a broader definition of disease categories than their five-digit counterparts. Ideally, more specific five-digit ICD-9 codes would have been used if available for this analysis. As they were not, however, we included people in the analysis based on the available three-digit ICD-9 codes. Accordingly, this analysis may capture a broader group of people for some conditions and could overestimate the number of people with an excludable health condition for these conditions.

There were 42 conditions that were assigned an ICD-9 code. Two of the conditions, open heart surgery and topectomy/lobotomy, were not assigned a code because MEPS does not have a highly inclusive collection of procedure codes. This may result in an underestimate of the number of people with an excludable health condition in this analysis. In addition, no data were available for seven of the conditions that were included in our list of 69: Hodgkin's disease, aplastic anemia, brain tumor, ALS (Lou Gehrig's Disease), Friedreich's

ataxia, silicosis, and tabes dorsalis. It is possible that, due to sample size, MEPS did not have enough records to capture these people, or that these conditions tend to occur more often in people living in institutions (who are not included in MEPS) or in people who are aged or disabled with Medicare coverage (who were also excluded from this study).

#### Determining People in the MEPS with an Excludable Condition

We used the MEPS 2009 Medical Conditions file for this analysis. This file contains all medical conditions reported by each survey respondent based on records of medical events throughout the year. We identified the number of individuals with each excludable condition. We found that 24 percent of the weighted MEPS sample under the age of 65 who were not enrolled in Medicare had at least one of these conditions.

Table 1 lists the conditions used for the study, the number of states that used this condition to determine eligiblity for their high-risk pool, the CCS or ICD-9 codes, and the weighted number of people under age 65 with that condition. If a person had multiple diagnosed conditions, then separate records are included in the count of the number of people who have each condition. For example, a person with diabetes and kidney failure is counted under both conditions in the "Number of People under Age 65 with Each Condition" column of Table 1. However, this individual is counted only once in the total number of people with pre-existing conditions.

One caveat of the MEPS data is that it included only information on people's health conditions that were either treated or diagnosed in 2009. Therefore, this analysis would miss people who have a history of a specific condition but were not treated in 2009. This could underestimate the number of people with excludable health conditions in the analysis.

#### Generating State- and County-Level Estimates

The MEPS data do not provide state or county identifiers, so we could not use these data to generate state- or county-level estimates of the number of people with at least one of these conditions. Therefore, we developed a probabilistic predictive model to determine the probability of having at least one of the conditions based on a person's age, gender, race, employment status, income as a percent of poverty, health insurance status, and Census region.

We used the MEPS 2009 Full Year Consolidated File to determine insurance status and demographic characteristics for the sample. We selected only people under age 65 and who did not report having Medicare coverage. In addition, it is important to note that the MEPS does not include people who live in institutions.

Table 1: Conditions Used in the Study

Condition	Number Of States	ICD-9 Codes	CCS Codes	Number of People under Age 65 with Condition	Prevalence
		ccs			
Alcohol/Drug Abuse/ Chemical Dependency	9	-	660, 661	1,124,294	0.4%
Aortic Aneurysm	5	-	115	162,858	0.1%
Cancer (except skin)	5	_	11-22, 24-36, 41	3,937,496	1.5%
Cardiomyopathy/Primary Cardiomyopathy	13	-	97	98,814	<0.1%
Chronic Obstructive Pulmonary Disease (COPD)	7	-	127	11,217,129	4.3%
Chronic Pancreatitis	5	-	152	169,714	0.1%
Congestive Heart Failure	6	-	108	525,698	0.2%
Cystic Fibrosis	17	-	56	50,792	<0.1%
Diabetes	12	-	49, 50	11,418,855	4.4%
Hepatitis Active/ Hepatitis Chronic	12	-	6	611,162	0.2%
HIV+	15	-	5	239,698	0.1%
Hodgkin's Disease**	13	-	37		
Kidney Failure/ Kidney Disease w/ Dialysis/ Renal Failure	18	-	1 <i>57</i> , 1 <i>5</i> 8	274,302	0.1%
Leukemia	16	-	39	49,955	<0.1%
Lupus Erythematosus Disseminate/Lupus	15	-	210	425,953	0.2%
Malignant Tumor*	10	-			
Motor or Sensory Aphasia	6	-	654	566,014	0.2%
Multiple or Disseminated Sclerosis	19	-	80	339,682	0.1%
Myocardial Infarction	6	-	100	1,854,500	0.7%
Parkinson's Disease	14	-	79	155,692	0.1%
Peripheral Arteriosclerosis	5	-	114	226,152	0.1%
Psychotic Disorders (e.g. Schizophrenia; Schizoaffective Disorder; Bipolar)	14	-	659, 657	19,080,410	7.3%
Rheumatoid Arthritis	9	-	202	2,869,755	1.1%
Sickle Cell Anemia / Sickle Cell Disease	8	-	61	63,135	<0.1%
Stroke (CVA)	14	-	109	1,126,210	0.4%

Table 1: Conditions Used in the Study (continued)

Condition	Number Of States	ICD-9 Codes	CCS Codes	Number of People under Age 65 with Condition	Prevalence
		ICD-9			
Acquired Immune Deficiency Syndrome (AIDS)	19	042, 043, 044, 279, 795, 795, V08	-	882,05 <i>7</i>	0.3%
Alzheimer's Disease	12	331	-	36,099	<0.1%
Angina Pectoris	9	413	-	1,1 <i>57</i> ,669	0.4%
Anorexia Nervosa	7	307.1	-	479,941	0.2%
Aplastic Anemia**	7	284	-		
Arteriosclerosis Obliterans	5	440	-	76,512	<0.1%
Artificial Heart Valve/ Heart Valve Replacement	9	V43.3	-	80,380	<0.1%
Ascites	10	789.5	-	1,551,357	0.6%
Brain Tumor**	5	191, 225	-		
Cancer, Metastatic	12	196.0-199.1	-	302,012	0.1%
Cerebral Palsy/ Palsy	12	343	-	220,867	0.1%
Cirrhosis of the Liver	17	571	-	293,307	0.1%
Coronary Artery Disease	5	410-414, 429.2	_	5,030,234	1.9%
Coronary Insufficiency*	10	411.1	-		
Coronary Occlusion*	9	411.81	-		
Crohn's Disease	14	555	-	471,348	0.2%
Dermatomyositis	9	710.3	-	425,953	0.2%
Emphysema/ Pulmonary Emphysema	8	492	-	1,011,825	0.4%
Friedreich's Disease/ Ataxia**	11	334	-		
Hemophilia	1 <i>7</i>	286	-	53,738	<0.1%
Huntington's Chorea/ Disease	15	3334	-	1,002,723	0.4%
Hydrocephalus	13	742.2-742.4, 331.3-331.7	-	72,075	<0.1%
Intermittent Claudication	7	440.21	_	76,512	<0.1%
Lead Poisoning with Cerebral Involvement	8	984.9	-	23,461	<0.1%
Lou Gehrig's Disease/ Amyotrophic Lateral Sclerosis/ALS**	13	335.2	-		
Major Organ Transplant	9	V42	-	67,746	<0.1%
Muscular Atrophy or Dystrophy	19	359	-	40,674	<0.1%
Myasthenia Gravis	16	358, 775.2	-	21,929	<0.1%
Myotonia	8	359.2	-	40,674	<0.1%
Obesity	5	BMI >= 35	-	22,738,035	8.7%
Open Heart Surgery/ Heart Bypass Surgery***	9	-	-		
Paraplegia or Quadriplegia	17	344	_	122,988	<0.1%

Table 1: Conditions Used in the Study (continued)

Condition	Number Of States	ICD-9 Codes	CCS Codes	Number of People under Age 65 with Condition	Prevalence
		ICD-9			
Polyarteritis (periarteritis nodosa)	9	446	-	21,612	<0.1%
Polycystic Kidney	9	<i>7</i> 53.1	-	99,722	<0.1%
Postero-lateral Sclerosis	8	336	-	111,367	<0.1%
Silicosis * *	8	502	-		
Splenic Anemia/ True Banti's Syndrome/ Banti's Disease	9	289.4-289.5, 759.0	-	466,878	0.2%
Still's Disease	8	714.2, 714.3	-	2,832,176	1.1%
Syringomyelia (Spina Bifida or Myelomeningocele)	15	336, 742	-	150,992	0.1%
Tabes Dorsalis (locomotor ataxia)**	8	94	-		
Thalassemia (Cooley's or Mediterranean Anemia)	6	282.4	-	94,331	<0.1%
Topectomy and Lobotomy***	8	Procedure	-		
Ulcerative Colitis	10	556	-	336,675	0.1%
Wilson's Disease	13	275.1	-	320,657	0.1%

Note: Includes all non-institutionalized people under age 65 who are not covered by Medicare.

Source: Lewin Group analysis of 2009 MEPS data.

<sup>\*</sup> Indicates conditions that are already included in other condition categories. Malignant tumor is included in cancer. Coronary insufficiency and coronary occlusion are included in coronary artery disease.

<sup>\*\*</sup> No records were found for the following conditions: Hodgkin's disease, aplastic anemia, brain tumor, Friedreich's ataxia, ALS, silicosis, and tabes dorsalis. It is possible that, due to sample size, MEPS did not have enough records to capture these people, or that these conditions tend to occur more often in the elderly or people living in institutions, who are not included in MEPS.

<sup>\*\*\*</sup> MEPS does not have a highly inclusive or detailed collection of procedure codes, so the analysis could not produce any information on the number of people with topectomy/lobotomy or open heart surgery.

Using the MEPS demographic information, the analysis team created categories for independent variables: age, race/ethnicity, employment status, income level, sex, health insurance coverage, and region. The dependent variable was whether the person had an excludable health condition in that year. Table 2 shows the parameters from the model.

The MEPS model was then applied to the American Community Survey (ACS) three-year data file for 2008-2010, which had a sample size of 7,437,591 people under age 65 once those with Medicare coverage were excluded. The model assigned each person in the ACS a probability of having at least one of the conditions based on their age, race/ethnicity, employment status, health insurance coverage, income level, and gender.

The analysis team compared ACS national estimated results with actual MEPS data by demographic and insurance breakdowns for people to check for consistency. Table 3 on page 20 shows

Table 2: Model Parameter

Parameter	Estimate
Intercept	-1.4153*
Age Group	
0-17 25-34 35-44 45-54 55-64	-0.1284* 0.2639* 0.4765* 0.6424* 0.8750*
Female	0.1909*
Race/Ethnicity	
Black Asian or Hawaiian/Pacific Islander Hispanic Other/Multiple Races	-0.1322* -0.6569* -0.2334* 0.0993
Employment Status	
Employed Any Time during Year Not Employed Adult	0.4712* 0.7734*
Insurance Status	
Private Non-Group Medicaid Uninsured	-0.1801* 0.2721* -0.1378*
Income as Percent of Federal Poverty Level	
125%-200% 200%-400% >400%	-0.0072* -0.0438* -0.1802*
Region	
Northeast Midwest West	-0.0262* 0.0443* -0.0279*

<sup>\*</sup> Significant with 95 percent confidence.

that the ACS and MEPS results were comparable, so we created state- and county-level tables. Separate state-level tables were created for age, income level, sex, race/ethnicity, and health insurance status. Separate county-level tables were produced for age and income level. The ACS data include geographic areas of at least 100,000 people. Thus, counties with smaller populations were clustered together.

Each table presents the number of people under age 65 without Medicare coverage, the estimated number with an excludable health condition, and the percent with an excludable condition for each state/county and the District of Columbia. We highlighted each cell where we felt the sample size was insufficient to produce reliable estimates (fewer than 30 cases).

Table 3: MEPS Actual Reported Data Compared to Predicted ACS Data

	М	EPS Data - Actuals			ACS Data - Predicted	
Demographic Group	Total Population Under Age 65 Without Medicare	Population under Age 65 without Medicare with a Condition	Percent With a Condition	Total Population Under Age 65 Without Medicare	Population under Age 65 without Medicare with a Condition	Percent With a Condition
Under 18	74,382,882	5,040,519	6.8%	73,637,984	4,974,441	6.8%
18-24	29,688,152	5,367,941	18.1%	30,332,469	5,895,630	19.4%
25-34	40,517,548	9,623,750	23.8%	40,048,676	9,842,321	24.6%
35-44	39,591,834	11,979,526	30.3%	40,823,551	12,717,028	31.2%
45-54	42,796,843	15,604,397	36.5%	42,890,888	15,962,240	37.2%
55-64	33,130,289	15,465,491	46.7%	32,312,286	15,429,754	47.8%
White	162,715,743	44,432,161	27.3%	160,398,704	45,240,692	28.2%
Black	32,275,827	7,548,114	23.4%	32,819,910	7,904,052	24.1%
Asian, Hawaiian, Pacific Islander	13,052,502	1,463,916	11.2%	13,291,726	1,529,903	11.5%
Hispanic	45,679,264	8,063,045	17.7%	45,838,666	8,292,606	18.1%
Other/Multiple Races	6,384,213	1,574,387	24.7%	7,696,848	1,854,162	24.1%
Employer	155,754,886	39,582,320	25.4%	155,351,664	39,732,637	25.6%
Non-Group	13,517,992	2,583,683	19.1%	1 <i>7</i> ,592,110	3,989,206	22.7%
Tricare	3,064,117	670,283	21.9%	4,243,083	1,001,375	23.6%
Medicaid	35,574,579	7,838,705	22.0%	35,384,235	8,531,264	24.1%
Uninsured	52,195,976	12,406,633	23.8%	47,474,762	11,566,933	24.4%
Northeast	46,137,393	11,326,986	24.6%	46,170,441	11,546,156	25.0%
Midwest	56,329,060	14,920,307	26.5%	56,323,938	15,409,112	27.4%
South	95,946,954	23,237,677	24.2%	95,928,013	23,892,144	24.9%
West	61,694,142	13,596,654	22.0%	61,623,462	13,974,003	22.7%
Male	130,028,354	26,874,186	20.7%	130,210,075	27,964,975	21.5%
Female	130,079,195	36,207,438	27.8%	129,835,779	36,856,440	28.4%
<100% FPL	38,473,892	9,502,445	24.7%	43,532,838	11,003,030	25.3%
100-125% FPL	10,433,922	2,421,654	23.2%	10,958,177	2,586,118	23.6%
125-200% FPL	35,158,887	8,162,538	23.2%	33,514,965	7,940,247	23.7%
200-400% FPL	79,753,624	19,190,740	24.1%	77,058,289	19,235,924	25.0%
≥400% FPL	96,287,224	23,804,248	24.7%	95,066,629	24,077,075	25.3%
Total	260,107,549	63,081,624	24.3%	260,045,854	64,821,415	24.9%

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