SOURCES OF VULNERABILITY: A CRITICAL REVIEW OF THE LITERATURE ON RACIAL/ETHNIC MINORITIES, IMMIGRANTS, AND PERSONS WITH CHRONIC MENTAL ILLNESS

Sarah E. Crow, M.P.P
The University of Michigan

Mary E. Harrington, M.P.P.
The University of Michigan

Catherine G. McLaughlin, Ph.D.
The University of Michigan

October, 2002

Table of Contents

SOURCES OF VULNERABILITY:

A CRITICAL REVIEW OF THE LITERATURE ON RACIAL/ETHNIC MINORITIES, IMMIGRANTS, AND PERSONS WITH CHRONIC MENTAL ILLNESS

I.   PURPOSE/OVERVIEW

This document provides background information for a one-day workshop focused on health insurance and selected vulnerable populations (identified for our immediate purposes as racial and ethnic minorities, immigrants, and people with mental illness) sponsored by the Economic Research Initiative on the Uninsured (ERIU) and its Task Force on Vulnerable Populations. The workshop, to be held on October 21, 2002, in Ann Arbor, MI, will bring together a group of researchers with relevant expertise to recommend studies that will help us understand the factors influencing coverage outcomes for these populations. At the end of the day we hope the workgroup will accomplish the following things:

- Review a set of research questions that fit with ERIU's mission.

- Agree on what we already know that informs these questions, and identify the knowledge gaps.

- Consider available data sources that have been or could be used to address the gaps, as well as timing and overall feasibility issues.

- Rule out questions that are not feasible to address given data and/or timing constraints.

- Identify people to approach about conducting a study to address one or more of the questions on the "feasible" list.[1]

The workshop will bring together labor economists who are knowledgeable about labor force dynamics, and health services researchers who are knowledgeable about one or more of the three vulnerable populations and coverage disparities. Because participants have varying backgrounds and familiarity with ERIU, we prepared these background materials to give everyone a common foundation from which to begin working together at the workshop.

The next section briefly describes the mission of ERIU and explains how its focus on coverage and the uninsured is distinct from other related efforts. That is followed by sections that summarize current knowledge about the interaction between labor force characteristics and health insurance coverage for each vulnerable population group.

---

[1] ERIU does not plan to issue an open solicitation for research on these topics. Also, participants in the workshop may be included in the list of possible study Principal Investigators.
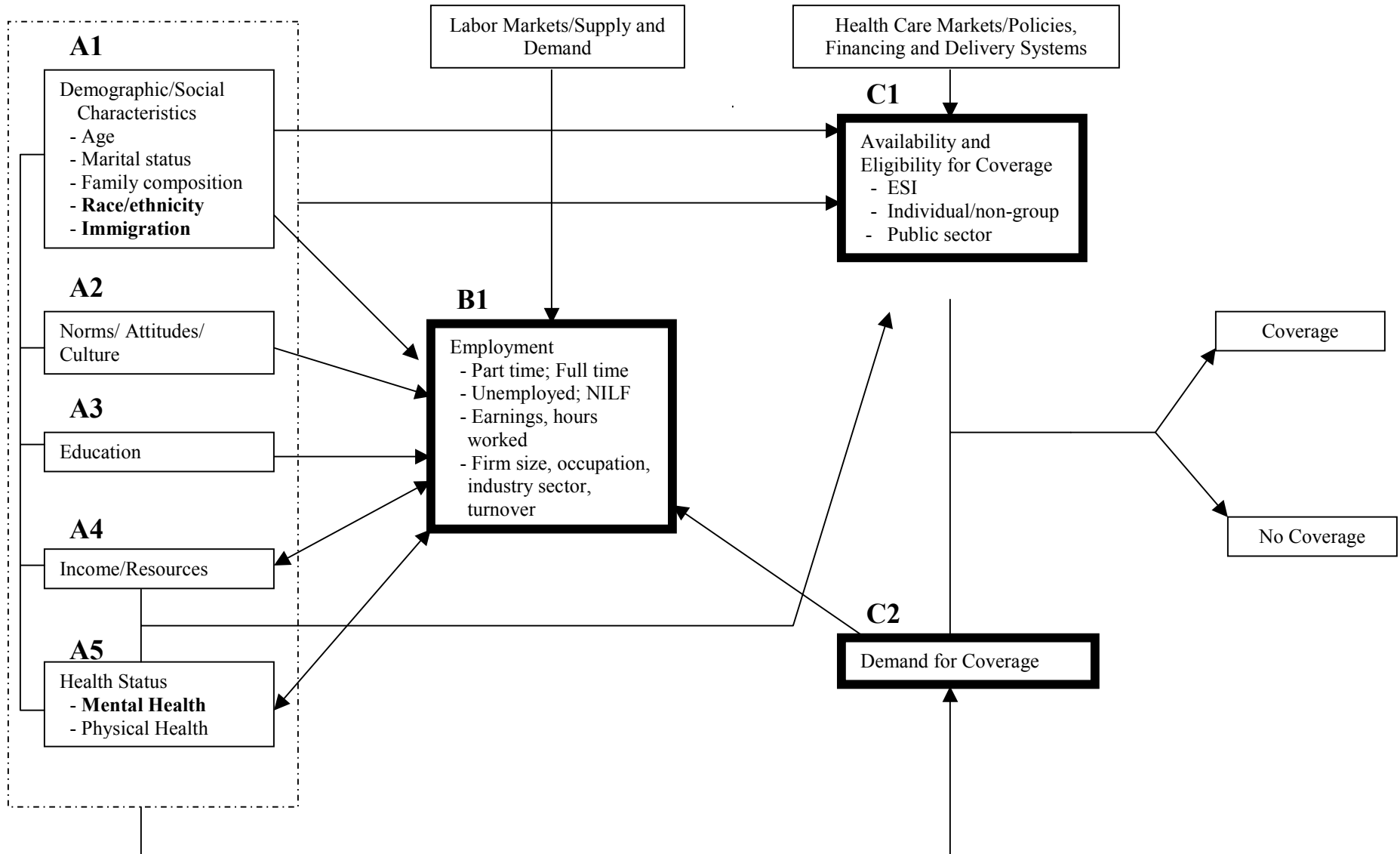
II. ERIU'S MISSION AND CONCEPTUAL FRAMEWORK

When The Robert Wood Johnson Foundation (RWJF) awarded a three-year grant to launch ERIU, it recognized the need for rigorous economic research to inform policies about the causes and consequences of being uninsured. Certain questions were not being addressed adequately in existing research on these issues, in part because the factors influencing coverage and the factors jointly influencing, with coverage, an array of outcomes, such as labor force participation and health status, are numerous. One area in particular—the interaction between employment-related factors and coverage—stood out as lacking the kind of rigorous exploration needed to inform policies about the uninsured. To a large extent, researchers studying labor market issues weren't focusing adequately on health insurance considerations, and health services researchers studying insurance issues weren't focusing adequately on labor force considerations. Given the importance of employer-sponsored insurance (ESI) in providing access to group insurance for the majority of Americans, a more integrated, interdisciplinary approach was needed.

ERIU's primary goal, then, is to diversify the pool of experts studying health insurance coverage issues and stimulate a more rigorous exploration into the relationship between labor market dynamics and health insurance coverage. The studies ERIU supports address various topics and use different methods and data sources, but they all employ state-of-the-art economic theory and methods to examine the relationships and interactions among multiple factors, and they all consider the interplay between labor force considerations and coverage. The Task Force on Vulnerable Populations was formed out of concern that very few proposals submitted through ERIU's regular RFA process reflected an adequate mix of both substantive expertise in vulnerable population groups and an economic framework and approach.

Figure 1 provides a conceptual framework for ERIU's approach to studying coverage issues for these vulnerable populations. The three vulnerable population groups are highlighted, along with a preliminary mapping of the relationships and interactions between these and other factors. Employment characteristics, availability/eligibility for coverage, and demand for coverage are highlighted because these elements are considered essential to ERIU's particular focus. It is helpful when looking at the flowchart to think about the concept of a pathway to coverage, and to consider the ways in which various factors influence or mediate the pathway to coverage through employment. Specifically, ERIU's focus on vulnerable populations would consider the way in which characteristics of vulnerability (race/ethnicity, immigrant status, mental illness) influence directly or indirectly the availability of and demand for employment-based coverage.

This work builds on and complements a vast amount of research across varying disciplines that is contributing to our understanding of the causes and consequences of being uninsured. But it is important to keep in mind that many important and pressing questions fall outside the scope of ERIU's mandate. Some of these questions are being addressed by other initiatives, including the major effort underway by the Institute of Medicine to examine and address the causes and consequences of being uninsured, and numerous projects and studies focused on coverage issues supported by RWJF.

Figure 1
ERIU Vulnerable Populations Conceptual Framework

A1

Demographic/Social
Characteristics
- Age
- Marital status
- Family composition
- **Race/ethnicity**
- **Immigration**

A2

Norms/ Attitudes/
Culture

A3

Education

A4

Income/Resources

A5

Health Status
- **Mental Health**
- Physical Health

Labor Markets/Supply and
Demand

Health Care Markets/Policies,
Financing and Delivery Systems

C1

Availability and
Eligibility for Coverage
- ESI
- Individual/non-group
- Public sector

B1

Employment
- Part time; Full time
- Unemployed; NILF
- Earnings, hours
 worked
- Firm size, occupation,
industry sector,
turnover

C2

Demand for Coverage

Coverage

No Coverage

In very broad terms, ERIU's focus on vulnerable populations is distinct from this larger body of research in primarily two respects. First, ERIU studies will focus to a large extent on the determinants of and economic and labor market consequences of coverage rather than the health status consequences of being uninsured. Second, ERIU studies will build on but go beyond descriptive studies that document disparities in coverage, health status, educational attainment, and income/wealth. ERIU's focus will be on understanding how these disparities and differences in health-related norms, attitudes, and culture mediate pathways to coverage. The broad set of questions we hope to address includes:

- What economic forces are driving observed disparities in coverage? How much of the disparity is due to employment/labor force factors, and how do other socioeconomic factors and health status contribute to disparities in labor market outcomes that would then influence coverage?

- What types of research studies will help us to better isolate and understand the labor market/economic factors that influence coverage? What data sources can we utilize, and what methods can we employ to better account for both the direct and the indirect/interactive effects of various factors (race/ethnicity, norms/preferences/attitudes about insurance, income/wealth, education, employment, health status)?

III.   SUMMARY OF CURRENT KNOWLEDGE

The following sections summarize available evidence from the literature that is relevant to the topics of interest and that fits within the framework outlined above. Several criteria were used to guide our literature search and determine if a study should be included. These are outlined briefly below.

1. We looked first for studies that had employed multivariate methods and that examined the interaction between employment/labor force characteristics and coverage for the populations of interest. We reviewed all of these studies.

2. We also included selected recent studies with descriptive statistics and correlations that would help in providing an orientation to the characteristics of the populations of interest. For the racial/ethnic and immigrant sections, we also generated cross-tabulations of selected variables from the 2001 Current Population Survey (CPS).

3. For the mental illness section, we included other types of multivariate studies because we found so few studies focused on coverage and no studies that examined the interaction between labor force characteristics and coverage. For this section, we also included multivariate studies that examined either labor force participation or coverage outcomes. We did not, however, include studies focused only on coverage of mental health services and/or on the issue of parity between coverage of mental health and general health care services.

A. RACIAL/ETHNIC MINORITIES

Racial and ethnic minorities lack health insurance coverage at much higher rates than Whites. Twenty-two percent of U.S.-born Hispanics and 17% of Blacks lack health insurance, compared to 9% of Whites (CPS 2001).[2] A large number of papers and research reports have documented not only disparities in coverage rates between communities of color and Whites but also disparities in educational attainment, job sectors, income, and wealth. The conceptual framework shown in Figure 1 illustrates how these factors and others comprise pathways that may lead individuals to either obtain or lack health insurance coverage. This section synthesizes the available literature on racial and ethnic minorities that informs our understanding about the pathways leading to observed coverage disparities.   When the various factors that lead to lower insurance rates are tied together using a causative model, we can start to understand which are most important, and where to focus scarce resources to correct disparities.

Where possible, we restrict this section to findings on racial and ethnic minorities who are U.S.-born, and address issues specific to immigrants and immigration in the next section. The tables in Appendix A provide specific information on U.S.-born minorities across several variables. Information on Hispanic subpopulations is presented, although it is important to note that for some of these groups, sample sizes are very small. Information on Asian subpopulations was not available; the category "Asian" encompasses many diverse groups of individuals that we are unable to separate out for analysis here.

Socioeconomic Differences Between Minorities And Whites

EducationalAttainment.

Among U.S. born adults (ages 22 and older), Whites and Asians have the highest rates of educational attainment, and Hispanics have the lowest. The majority of American Indians (60%), Hispanics (60%), and Blacks (57%) have a high school diploma or less. Insurance rates are negatively correlated with educational attainment for all population groups. (See Appendix A, Table A2). The discrepancy between insurance coverage for these minority groups and Whites is greatest, however, at the highest level of educational attainment.

Income and Wealth.

A greater proportion of racial and ethnic minorities have low incomes and live below the poverty line than Whites. Almost a quarter of Blacks (23%) and a fifth of Hispanics (20%) live below the federal poverty line. Over one-third of Blacks and Hispanics live below 150% of the poverty line.[3] Within income and poverty levels, however, there are differing rates of insurance coverage among racial/ethnic groups. The coverage rate for those families below the poverty line is actually higher for some of the minority population groups than it is for Whites. Hispanics, however, always have higher levels of uninsurance and the discrepancy increases as

---

[2] ERIU staff developed various descriptive tables using data from the March 2001 Current Population Survey. The tables are included in Appendix A, and referenced below as CPS 2001.

[3] The Current Population Survey defines the average poverty threshold as income of $18,104 per year for a family of four; 150% of the poverty threshold for a family of four is $27,156.

the degree to which the family's income surpasses the poverty level increases. (See Tables A3 and A4.)

Medicaid Coverage

Of the working age population, 5% of Whites, 13% of Blacks, and 11% of Hispanics are on Medicaid. Among those with incomes below the federal poverty line, 42% of Black working aged adults are covered by Medicaid, compared to 31% of Hispanics, and 28% of Whites (Hall et al., 1999). Shi (2000) found that race/ethnicity is a strong predictor of being covered by public rather than private insurance.

Employment Sector

A few patterns emerge across racial/ethnic sub-populations from data on occupational categories. (See Table A5). The top occupational categories for Whites and Asians are the same (executive, professional specialty, and administrative support), and the top two occupational categories for Hispanics and Blacks are the same (administrative support and service occupations). Almost 50% of American Indians are employed in the farming, forestry, and fishing occupations.

Within occupational category, there are large variations in insurance coverage. The top three occupational categories for Whites and Asians all have relatively low uninsurance rates. In each case, Asians have lower uninsurance rates than Whites. The administrative support category, which employs a high percentage of all racial/ethnic groups, is associated with varying levels of insurance coverage depending on race/ethnicity. Within that category, Blacks and Hispanics have higher rates of uninsurance than Whites (CPS 2001).

Of primary wage earners, a larger proportion of Hispanics work in small firms than other racial/ethnic groups. Thirty percent of Latinos work in firms with fewer than 25 employees (Brown et al. 1998).

Labor Force Participation and Employer-sponsored Insurance.

Blacks, Whites, and Hispanics all have similar rates of working full-time, full-year. (See Table A6) However, working full-time, full-year does not ensure the same level of access to insurance coverage for all groups. Of full-time, full-year workers, American Indians (30%), Hispanics (18%) (particularly Mexican Americans, Puerto Ricans, and Central and South Americans), and Blacks (15%) all have very high rates of uninsurance compared to Whites (8%).

A study by Offner and Holzer (2002) finds that young, less educated Black men have a much lower labor force participation rate than less educated Hispanic or White men: Black men lag 10 to 25 percentage points behind their Hispanic and White counterparts.

Estimates vary as to what percent of racial and ethnic minority groups are covered by employer sponsored insurance (ESI), but all conclude that the rates are substantially lower than that of Whites. Hispanics are twice as likely as Whites to work for an employer that does not offer ESI (Brown et al., 2000). Quinn (2000) finds that Whites have greater access to ESI than Blacks or Hispanics, even within labor force participation category, firm size of primary earner,

or industry of primary earner. Moreover, the rate of insurance may be dropping for Hispanics –
between 1987 and 1996, the percentage of Hispanics covered by work-related insurance dropped
almost 8 percentage points, and 11 points among Hispanic males (Monheit and Vistnes 2000).

Table 1
Rates of Any ESI Coverage, Reported in Various Studies

	Kass et al. (1999) 1996 MEPS – workers aged 16 - 64	Brown et al. (2000) 1998 CPS – total persons ages 0 to 64	Quinn (2000) Commonwealth Fund 1999 National Survey of Workers' Health Insurance – all people under age 65	Garrett, Nichols, Greenman (2001) 1999 CPS – all workers
Blacks	66%	53%	50%	77%
Hispanics	55	43	43	64
Whites	77	73	71	85

There is some dispute about whether the lower rates of ESI coverage observed for
minorities reflect that they are less likely to be offered ESI or that they are less likely to take up
an offer. While not measuring take up rates directly, one study finds that a disproportionately
high percentage of Blacks and Hispanics with access to ESI (either through own or a family
member's employment) are uninsured, 7% and 13%, respectively, compared to 3% of Whites
(Cunningham et al., 1999). Below is a short synopsis of various articles on ESI offer and take
up rates among minorities, and their findings.

Table 2
ESI Offers and Take-Up Rates

	Offer Rates		Take-Up Rates	
	Own ESI	ESI through family member or own	Own ESI	ESI through family member or own
Blacks				
Cooper/Schone 96 MEPS	74.5	77.8	79.5	84.9
Monheit/Vistnes 96 MEPS	74.6[4]		84.2[4]	
Quinn 99 Cmwf Survey	81		86	
Garrett et al. 99 CPS	90		85	
Schur/Feldman 99 CPS	84.6		87.0	
Hispanics				
Cooper/Schone 96 MEPS	61.1	67.0	77.5	82.6
Monheit/Vistnes 96 MEPS	56.2[4]		76.1[4]	
Quinn 99 Cmwf Survey	61		82	
Garrett et al 99 CPS	90		85	
Schur/Feldman 99 CPS	80.9[5]		86.6[5]	
Whites/Other				
Cooper/Schone 96 MEPS	77.3	84.7	80.4	90.2
Monheit/Vistnes 96 MEPS	80.8[4]		85.1[4]	
Quinn 99 Cmwf Survey	81		82	
Garrett et al. 99 CPS	91		85	
Schur/Feldman 99 CPS	87.3		87.4	

---

[4] Percentage of wage earner males only.
[5] Includes only U.S.-born Hispanics.

Discrepancies in the rates displayed in Table 2 may be the result of differences in the population studied. Cooper and Steinberg Schone limit their sample to those ages 21 to 64 who are employed but not self-employed. Monheit and Vistnes analyze the offer and take up rates of working adults ages 21 to 64 by race and gender. Quinn includes adults ages 18 to 64. Garrett et al. use non-self-employed workers ages 18 to 64. Schur and Feldman restricted their sample to "workers," and used an over-sample of Hispanics. Differences in estimates may also be attributable to differences in definitions used by the various data sources. All of the findings presented above are results of cross-tabs using various data sources. While revealing, they do not control for nativity, income, labor force participation, or firm size.

Explaining the Disparities in Insurance Coverage

Few studies go beyond cross-tabs to produce estimates of the motivating factors behind the picture that descriptive statistics paint. A few studies address the question of how rates of insurance coverage vary, controlling for all observable confounding factors (e.g., educational attainment, labor force participation, income). Studies by Hall et al. (1999), Ku and Matani (2001), and Shi (2001) all find that Blacks and Hispanics have higher rates of uninsurance, even after various relevant variables are controlled for. For more specific information on these studies, see Table A7.

A few other studies go a step further and try to understand the reasons behind these remaining gaps in insurance coverage. The Institute of Medicine (2001) used an Oaxaca decomposition to estimate the variation in insurance coverage due to discrimination. Their model includes income, occupation, employment sector and firm size of employer, education, health status, age, gender, race and ethnicity, citizenship status, and geography. Their analysis found statistically significant differences in insurance rates after controlling for these factors. They conclude that race and ethnicity play a significant role in predicting insurance coverage. Hispanics' rates of uninsurance would shrink dramatically from those currently observed if Hispanics faced the same pay-off to determinants of coverage status as do Whites. The observed difference between Hispanics and Whites is 22 percentage points. If the estimated effects for the two groups were the same, the difference would shrink to 7 percentage points, suggesting that about two-thirds of the differential rate is attributable not to measured demographic and socioeconomic factors, but rather to the effects of these and unmeasured factors. The difference between African-Americans and Whites shrinks from 10 percentage points to 5, once all observable traits are controlled for.

Monheit and Vistnes (2000) use linear probability models for 1987 and 1996 to decompose the changes in health insurance status over a decade. They classify these changes into two categories: changes due to shifts in worker demographics (the characteristics that are included as independent variables in the models) and structural changes that are "captured by changes in the estimated regression coefficients of the linear probability models and reflect the influence of factors other than the employment and demographic characteristics" that the model controls for. They find particularly striking changes over this period for Hispanic males, who experienced a 13 percentage point drop in coverage over the decade. A 5.2 percentage point drop was attributable to changes in population characteristics, the remaining 7.8 percentage point drop was attributable to other factors.

Table 3
Differences in Private Employment-Related Health Insurance Status from 1987 to 1996, Workers Ages 21 to 64

Covered	Percentage Change from 1987 to 1996	Percentage Point Change from Characteristics	Percentage Point Change from Other Factors (coefficients)
White Males	-2.6*	-0.4	-2.2
Hispanic Males	-13.0*	-5.2	-7.8
Black Males	-3.0	0.9	-3.9
White Females	-0.6	2.0	-2.6
Hispanic Females	-7.0*	1.8	-8.9
Black Females	-7.0*	2.6	-9.6

Source: Monheit and Vistnes 2000, 1987 NMES, 1996 MEPS
* Change is significant at the .05 level.

Monheit and Vistnes find that the population characteristics actually increased Hispanic likelihood of take-up over this period (+1.6), but that changes in structural shifts (-8.6%) more than offset characteristic changes. This study includes all U.S.-residing Hispanics. The results may be weakened if analyzed only among U.S.-born racial and ethnic minorities.

Waidmann and Rajan (2000) report the relative power of each of the demographic factors they control for to influence insurance coverage. Using the first wave of the National Survey of America's Families (NSAF), they estimate a linear probability regression model that includes several factors related to access to insurance (e.g., employment, marital status, income, education, citizenship). Using the estimated coefficients from their model, they then decompose the group differences in the dependent variable into pieces attributable to group differences in each of the independent variables.

Table 4
Decomposition of Race/Ethnic Disparities in Current Uninsurance

	% Point Difference from Whites	Percent of difference attributable to Race/Ethnic Differences						
		Employ ment	Income	Education	Citizenship	Family	Demography	Residual
Hispanics	23.5	7	28	11	14	1	5	33
Blacks	8.6	-7	45	10	3	16	4	29

Source: Waidmann and Rajan (2000), NSAF 1997
Percentages significant at the .05 level; residuals significantly different from zero.

Their results show that 67% of the gap between Whites and Hispanics is explained by the independent variables in the model. Of the variables included, difference in income and citizenship explain the largest proportion of the difference in insurance status between Hispanics and Whites. The most influential factor in explaining the gap in insurance rates between Blacks and Whites is income.

Taken together, these results provide a lot of useful knowledge about the discrepancies we observe. These studies suggest that nativity and education are important components to understanding differential rates of insurance coverage for Hispanics, but income is the dominant determinant for Blacks. Gaps remain for many minority groups after socio-economic and labor force variables are held constant, suggesting that the influence of these characteristics drive some of the disparity as well. It is also clear that the determinants of the gaps in coverage are different for each minority population.

B.   IMMIGRANTS

About ten percent of the U.S. population comprises immigrants, and the number of immigrants entering the U.S. has been increasing in recent years. The foreign-born are most concentrated in California (26% of all immigrants), New York (20%), and Florida (18%). The largest proportion of immigrants are from Mexico (28%). In 2000, 37.4% of immigrants were naturalized citizens, vs. legal residents, asylees, or undocumented immigrants. (Camarota 2001) Among all immigrants, the rate of uninsurance is very high: 32% are uninsured compared to 12% of U.S. natives. (See Appendix B, Table B1)

This section identifies the specific issues pertaining to insurance status among immigrants to the U.S., and describes some of the workforce and demographic characteristics that distinguish immigrants from natives. Rather than using citizens, or only those who have entered the U.S. legally, which is the definition used by the Immigration and Naturalization Service, we follow much of the existing literature and the CPS and define immigrants as foreign-born residents of the U.S.. Although the tables in Appendix B group all foreign-born together, it is important to remember that many foreign-born persons are naturalized citizens, who may behave more like native citizens than recent immigrants. To the extent that immigrants progress through immigration statuses (e.g., from student visa holder to legal permanent resident to naturalized citizen), these statuses are likely to have important effects on the labor force attachment and uninsured rates of the foreign-born. There are other important distinctions to tease apart among the foreign-born. For example, waves of immigrants from particular countries throughout American history may differ substantially from one another with respect to educational attainment, labor force participation, and health status.

Socioeconomic Differences Between Immigrants and Natives

Educational Attainment

The relationship between educational attainment and immigrant status suggests distinct streams of immigration; that is, those who come to this country to pursue graduate education vs. those who come for economic or political reasons. The result is that the percentage of immigrants with a bachelor's degree or more is the same as the percentage of U.S. born (26% for both). (See Table B2) However, the percent with less than a high school diploma is significantly higher. Foreign-born Hispanics, specifically, have very low rates of educational attainment. Over 50% of foreign-born Hispanics have some high school or less. At all levels of educational attainment, the foreign born have higher rates of uninsurance than their U.S. born counterparts. (See Table B2)

Some scholarly work has been devoted to understanding the skill level of recent immigrants. Research by Jasso et al. (1998) analyzes the determinants of change in the skill level of new legal immigrants. They find that, among males who become immigrants as husbands of U.S. citizens, the skill level has risen since the mid-1980s. Citing failures in the CPS to distinguish between legal and illegal immigrants and new immigrants vs. non-immigrants, this study discounts the finding by Camarota (2001) and others that the average skill level of recent immigrants has fallen.

Income & Poverty

In part reflecting the large proportion of immigrants with less than a high school diploma, immigrants earn less than natives, and a higher proportion of immigrants live below the poverty line. Eighteen percent of immigrants have incomes below the poverty level, compared to 12% of natives.[6] A very high percentage of primary wage earners who immigrated since 1986 (60%) and who are Hispanic (68%) earn less than $25,000 per year. Within income categories, immigrants are more likely to be uninsured that U.S. natives: of primary wage earners who make between $1 and $25,000, 51% of immigrants are uninsured, compared to 26% of natives in that income bracket. Fifty-eight percent of recent immigrants (since 1986) in this income category are uninsured. (See Table B4)

Interestingly, the relative proportion of those without insurance increases as income rises. Approximately twice the percentage of immigrants who live below the poverty line lack coverage compared to natives (54% vs. 26%, respectively), whereas nearly three times as many immigrants who live above 150% of the poverty line are uninsured (27% vs. 10%, respectively). Across all levels of income, a greater proportion of immigrants are uninsured than natives (CPS 2001).

Medicaid Coverage

Until recently, Medicaid was available to most low-income immigrants. Prior to the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), legal immigrants were generally eligible for Medicaid on the same basis as U.S. citizens. Since the passage of PRWORA, states must provide coverage to a small number of legal immigrants regardless of their date of entry and may choose to provide coverage to most legal immigrants who entered the U.S. before August 22, 1996 (Kaiser 2000a, Chin et al., 2002). Other immigrants entering the U.S. after this date are not eligible for Medicaid during the 5-year period following their arrival in the U.S.

Twenty-two states have chosen to provide state-funded replacement programs to some or all legal immigrants ineligible for the federal Medicaid program and 13 of these states have created state-funded programs for all immigrant populations that are not eligible for federal Medicaid or SCHIP. In general, states that offer state-funded programs limit eligibility to "lawfully residing" immigrants or persons who are Permanently Residing in the U.S. Under Color of Law (PRUCOL). However, several states offer services to immigrants regardless of immigration status, especially for children and pregnant women. Of the states with the largest concentrations of immigrants, California offers state-funded programs to all legal immigrants

---

[6] The CPS defines the average poverty threshold as $18,104 in income per year.

ineligible for Medicaid and SCHIP during the five-year ban and provides certain services regardless of immigration status; Florida and Texas do not offer state replacement programs during the five-year ban. (Chin et al., 2002)

Given these policy changes, one might expect that the rate of uninsured immigrants would rise. However, the opposite is true: between 1994 and 2001 the percent of immigrants who are insured rose at roughly the same rate as that of natives during this period. (Borjas 2002) Research funded by ERIU and being conducted by George Borjas at Harvard University seeks to explain this trend.

Employment Sector

Immigrants cluster in different job sectors than the U.S. born, but even within job sector, immigrants have higher rates of uninsurance than natives. The greatest proportion of immigrants work in service occupations (20% of all immigrants), precision production and repair (13%), and as machine operators (11%). While all workers in these professions are less likely to have coverage, immigrant workers are, on average, twice as likely to be uninsured than their U.S.-born co-workers: 43% of immigrant service workers are uninsured compared to 22% of natives; 38% of production and repair workers compared to 17% of natives; and 35% of machine operators are uninsured, compared to 15% of natives. (See Table B5)

In general, immigrants who have lived in the U.S. for at least 15 years are more often employed in higher paying, white collar occupational categories than more recent immigrants. For example, 10% of long-term foreign-born immigrants are employed in the executive, administrative, and managerial occupations, compared to 6% of those who have lived here less than 15 years. In addition, as immigrants live in the U.S. longer, their rates of insurance coverage, even within job sector, increase. Thirteen percent of immigrants in the executive, administrative, and managerial occupations who have resided here more than 15 years are uninsured, compared to 24% of those who have lived here less than 15 years. Only 7% of the U.S. born in these occupations are without coverage. (See Table B5)

Labor Force Participation and Employer-sponsored Insurance

Immigrants and natives are equally likely to be full-time, full-year workers. However, even as full time workers, immigrants have lower rates of insurance coverage: 10% of full-time full-year natives are uninsured, compared to 28% of immigrants. (See Table B6)

Several studies, using descriptive and multivariate analyses, have found that those who are not U.S. citizens are much less likely to have employer-based health insurance.

- Among full-time workers, 50.8% of non-citizen immigrants have coverage from an employer as policyholder or dependent, compared to 81.4% of U.S. citizens. (Carrasquillo et al., 2000)

- Using logistic regression analysis and the 1997 CPS, Hall et al. (1999) find that a naturalized citizen's probability of having employer-based health insurance is .92 that of a native, and a non-citizen's probability is .59 that of a native.

- Ku and Matani (2001) use logit models and the 1997 NSAF to estimate the difference between job-based insurance rates for non-citizen adults. They found that being a non-citizen was associated with a 9% decrease in job-based insurance coverage. The probability of not having job-based insurance for naturalized citizens is not significantly different than U.S. born.

Again, the question arises: what explains this lower rate of insurance coverage, even among full-time employees? Schur and Feldman (2001) address the question for foreign-born Hispanics, but not for immigrants overall. They find that non-U.S.-born Hispanics have lower offer rates, but similar take-up rates as other populations. This study is the only one we found that looks at offer and take-up rates specifically among immigrants.

Table 5
Offer and Take-up Rates Among Hispanic Foreign-born

	Percent offered and eligible	Take-up rate
Hispanic		
Naturalized citizen	75.2	89.8
Non-citizen	49.9	81.4
U.S. born	80.9	86.6
White	87.3	87.4
Black	84.6	87.0

Source: Schur and Feldman 2001, CPS 1999

Differences in Insurance Rates Between Legal and Illegal Immigrants

Undocumented immigrants, or illegal immigrants, are of particular interest because they may exhibit different labor force characteristics and different demand for health insurance than other immigrants or the population at large. Moreover, they face more barriers to gaining health insurance coverage, since they are less likely to be eligible for both ESI and public programs. Many surveys do not explicitly ask about legal immigration status, out of concern that responses will be unreliable. (See Table E1 on data sources.) The estimates that do exist of undocumented immigrants suggest that they are not likely to have insurance coverage.

- The INS estimates that there were about 5.0 million undocumented immigrants in the U.S. in 1996. (INS 2001) Other estimates suggest that the number could be between 7.8 million to 9.9 million. (Lowell and Suro 2002)

- Mexico is the leading country of origin among undocumented immigrants, with 54% of the undocumented population. The second and third largest sources of illegal immigration, El Salvador and Guatemala, accounted for 6.7% and 2.7%, respectively, of the total illegal population. (INS 2001)

- Estimates suggest that the proportion of undocumented immigrants who lack health insurance is high. Caramarota (2000) estimates that two-thirds of illegal immigrants are uninsured. Schur et al. (1999) estimate that 68% of undocumented Latino immigrants in Fresno, California, and 84% of undocumented Latinos in Los Angeles are uninsured.

- Brown et al. (1999) use the Legalized Population Survey to study immigrants who legalized their immigration status under the provisions of the Immigration Reform and Control Act of 1986 (IRCA). The uninsured rate was higher among undocumented immigrants who had been in the U.S. for a shorter length of time: 52.8% of those who had resided in the country since 1980 are uninsured compared to 39.9% of those who came to the U.S. before 1975 (p<.001).

Explaining the Disparities in Insurance Coverage

A few studies have estimated the probability of immigrants having insurance after controlling for various socio-demographic and workforce variables. Taken together, they provide evidence that there are significant differences between immigrants and natives in their insurance coverage rates, even after controlling for all observable characteristics. As expected, the gap between coverage rates for naturalized citizens and natives seems to be much smaller than the gap between other immigrants and natives. Several of these studies are discussed below.

Ku and Matani (2001) use 1997 NSAF data to analyze coverage rates, controlling for health status, income, race/ethnicity, and other factors by immigrant status. They report an estimated mean change in the probability of having Medicaid, job-based insurance, or no insurance. After controlling for socio-economic factors and nativity, they find significant differences in the probability of having insurance among non-citizens and natives, but insignificant differences between naturalized citizens and natives. Similarly, there are large and statistically significant differences in the probability of having job-based insurance and Medicaid coverage between non-citizens and natives. These results were not significant for naturalized citizens.

Thamer et al. (1997) use logit models and 1989 NHIS data to examine the probability of having insurance based on nativity, race and ethnicity, and length of residence. They find that only Asian/Pacific Islander immigrants and foreign-born Whites who have lived here 15 years or more have similar coverage rates as U.S.-born Whites, after controlling for socio-demographic characteristics, health status measures, and health resource utilization. All other immigrant groups have significantly higher rates of uninsurance. The study also finds that length of residency does not improve insurance rates until immigrants have resided in the U.S. for 15 years or more except for Hispanic populations, whose odds ratios improve the longer they reside in the U.S.

The IOM (2001) used an Oaxaca decomposition to estimate the variation in insurance coverage due to discrimination. Their model includes income, occupation, employment sector and firm size of employer, education, health status, age, gender, race and ethnicity, citizenship status, and geography. They find that, after controlling for the effects of all observable characteristics other than nativity, the gap between insurance rates for short-term residents shrinks from 29.8 to 14.8%; for long-term residents, the rate shrinks from 16.9 to 10.8%; and for naturalized citizens, from 6.3 to 2.5%. This study also analyzes the gap in insurance rates between native and foreign-born racial/ethnic groups. Naturalized non-Hispanic Whites only differ from U.S.-born Whites by 0.7%. Naturalized Hispanics differ from U.S.-born Hispanics in

insurance rates by 5.5 percentage points, but Hispanic short-term residents differ from U.S.-born Hispanics by 21 percentage points.

C.   PEOPLE WITH CHRONIC MENTAL ILLNESS

Millions of people in the U.S. experience one or more mental health disorder at some time during their lifetime. It is generally agreed that nearly one-third of the U.S. population experiences one or more disorder in a year, and that a substantial proportion of this population (80 percent) experience more than one disorder (Kessler et al., 1994). Some conditions and combinations of conditions (including major depression, bipolar disorder, and schizophrenia and other psychoses) are more disabling and are likely to have a more pronounced effect on education, income, employment, and other life prospects. Many conditions may be treated successfully with medication and other therapies, though ongoing monitoring and adjustments may be required for many years. In addition to experiencing psychiatric comorbidities, people with mental illness also tend to be in worse physical health and to have more chronic conditions than those with no disorders (Frank and McGuire 1999; McAlpine and Mechanic 2000; Hadley 2000). Thus, people with mental illness, especially those with more serious and persistent problems, need access to general health care as well as mental health care.

Prevalence

The most widely cited and reliable studies suggest that between 28 and 31% of the U.S. population experiences at least one mental illness during the year (Kessler et al. 1994 and Regier et al. 1993). Data on both the prevalence of mental illness and on demographic and socioeconomic characteristics of persons with mental illness are more limited than comparable data for the other vulnerable populations we are looking at. This is largely due to the complexity and cost of obtaining accurate diagnostic information on psychiatric disorders.

Available data on the prevalence of mental illness are summarized in Table 6. Two studies—the National Comorbidity Survey (NCS) and the Epidemiologic Catchment Area (ECA) study—employed more extensive methods for measuring the prevalence of specific conditions or disorders. Both the ECA and the NCA employed diagnostic interview tools to generate DSM-III-R compatible diagnoses; the NCS was national and the ECA was fielded in only five communities. Methods used in other surveys vary but generally employ less precise measurement tools to estimate the prevalence of one or more conditions or, in some cases, overall mental health status. Varied sample characteristics and definitions of mental illness also make it difficult to compare estimates across studies.

Table 6
Prevalence Estimates of Persons with Mental Illness

Condition/Disorder	Prevalence Estimates (Percentages) by Source (12-month rates unless otherwise noted) [7]				
	NCS[8]	ECA[9]	1996 MEPS[10]	1994 NHIS[11]	1997-8 HCC[12] Lifetime rate
Any disorder	27.7 men 31.2 women	28.1 (men, women combined)		9.6	13.7 percent
Any affective disorder (major depression, dysthymia, mania)	8.5 14.1	9.5	5.0	8.3	SMI[13]: 1.7 percent
Any anxiety disorder (phobias, panic disorders, generalized anxiety)	11.8 22.6	12.6		Included in affective disorder estimate	Other disorders[14]: 11.9 percent
Non-affective psychosis (schizophrenia)	0.5 0.6	1.1		0.4	
Any substance abuse/dependence	16.1 6.6	9.5		0.6	

Characteristics of the Population with Mental Illness

The following sections summarize available evidence on the relationship between mental illness and important demographic and socioeconomic characteristics, labor force participation, and coverage. Most of the studies we reviewed report bivariate correlations, although a few employ multivariate analysis to isolate the contribution of mental illness after controlling for other confounding factors. We found only one study that used multivariate analysis to estimate health insurance coverage for persons with mental illness, and none that had specifically examined the influence of employment on coverage. Several studies provide descriptive information about coverage for persons with mental illness but do not include information about labor force participation. A few more studies have explored labor force participation for persons with mental illness, but again none of them explored the relationship between labor force

---

[7] Lifetime rates capture the prevalence of conditions present at any time in the respondent's lifetime prior to the interview, whereas 12-month rates capture the prevalence of conditions present during the 12-month period prior to the interview.

[8] The National Comorbidity Survey, 1990-1992. In-person interviews, 8,098 respondents, ages 15-64, using a modified version of the Composite International Diagnostic Interview (CIDI) to assess DSM-III-R diagnoses of psychiatric disorders. Reported in Kessler et al., 1994.

[9] The Epidemiologic Catchment Area (ECA) survey, 1980-1985; 20,291 adults (age 18 and older) in 5 sites: Baltimore, Durham, New Haven, St. Louis, Los Angeles. In-person interviews using the NIMH Diagnostic Interview Schedule (DIS). Reported in Regier et al., 1993.

[10] Druss et al., 2001 ; 23,230 respondents (all ages) to the core 1996 Medical Expenditure Panel Survey (MEPS).

[11] Druss and Rosenheck, 1998; 77,183 adult (over age 18) respondents to the National Health Interview Survey (NHIS) core survey and disability supplement.

[12] McAlpine and Mechanic 2000; 9,585 adults (over age 18).

[13] Schizophrenia, schizoaffective disorder, psychoses, bipolar depression or mania.

[14] Depression, dysthymia, anxiety, panic disorder.

participation and coverage. Taken together, existing studies provide bits and pieces of the story about the dynamics influencing health care coverage for persons with mental illness.

Gender

Available evidence suggests that the overall prevalence of mental illness varies little by gender. There are gender differences in prevalence for some conditions. Rates among women tend to be higher for depression, dysthymia, anxiety disorders and non-affective psychoses (e.g., schizophrenia); men have higher rates of substance abuse disorders and antisocial personality disorder (Kessler et al., 1994). One recent survey, Health Care for Communities (HCC), found that men were more likely to have more serious conditions, but women more likely to have other types of disorders (McAlpine and Mechanic 2000).   (See Table 7)

Age

Mental illness is distinct from many other chronic illnesses in that its onset often occurs during late adolescence or young adulthood, and so is more likely to have an impact on educational attainment.   Both the likelihood of having a disorder and the severity of illness correlates with age; prevalence and severity are both greater for younger individuals—especially those aged 25 to 34 years (Kessler et al., 1994). Psychiatric disorders have been shown to reduce educational attainment and to lead to teen pregnancy, early marriage, and marital instability. The HCC study found that individuals with severe disorders were more likely to be less educated and to be unmarried. (See Table 8)

Race and Ethnicity

Available evidence is limited and mixed regarding the extent to which prevalence rates vary across racial and ethnic subpopulations. (See Tables 7 and 8) Neither the ECA nor the NCS found significant distinctions by race in the prevalence rates of more serious conditions, though the NCS found Blacks to have significantly lower prevalence rates for any disorder and for any substance abuse problem. The HCC study found that a greater proportion of Blacks met the study's criteria for a more serious disorder; specifically, they were more likely to report that a doctor had told them they had schizophrenia or schizoaffective disorder (McAlpine and Mechanic 2000). The authors speculate that the measurement approach employed in their study versus the ECA and the NCS could have overestimated the prevalence of this disorder among Blacks[15] or, alternatively, that the HCC approach more accurately captures the prevalence of non-affective psychosis in community samples. The U.S. Surgeon General's Report on Mental Health: Culture, Race, and Ethnicity points out that language and culture are particularly important factors influencing mental health care, and that we do not yet understand whether diagnostic criteria may be applied differently with minority populations versus Whites (U.S. Department of Health and Human Services, 2001).

---

[15] Both the ECA and the NCS used in-person interviews and precise measurement instruments based on clinical diagnostic criteria. The HCC estimates are based on telephone interviews. Respondents were asked a series of questions generally designed to get at whether anyone had ever told them that they had the particular problem or diagnosis.

Income

    Studies have consistently found there to be a negative correlation between mental illness and income. (See Tables 7 and 8). Hadley (2000) notes that a major challenge in these types of analyses is identifying and measuring whether poor health causes low income, low income causes poor health, or both. Most studies, however, report reductions in earnings from mental illness, with the size of the effect varying with the type of disorder, gender, and age. A multivariate analysis that also controlled for the interaction between health, employment and income found that among the working population, having a mental illness reduces income substantially for both men and women—an 18% drop for women and a 13% drop for men (Ettner et al., 1997). (See Appendix C, Table C-1) Some studies have found significant effects on income associated with neuroses, psychoses, and both recent and long-term alcoholism. Reductions in earnings of between 20 and 25% have been found for men with more disabling conditions such as psychotic disorders and major depression; neuroses and other mental disorders were found to have smaller but significant negative impacts on earnings (5 to 15%) (summarized in Frank and McGuire, 1999).

Table 7
Demographic and Socioeconomic Correlates of 12-month Psychiatric Disorders++

	Odds Ratio
Characteristic	Any Disorder
Sex	
M	1.00
F	1.18*
Age	
15-24	2.06*
25-34	1.51*
35-44	1.24
45-54	1.00
Race	
White	1.00
Black	0.70*
Hispanic	1.11
Income	
0-19,000	1.92*
20,000-34,000	1.24
35,000-69,000	1.20
>70,000	1.00
Education	
0-11	2.33*
12	1.79*
13-15	1.58*
>16	1.00

Source: Kessler et al., 1994; data from the National Comorbidity Survey.

++ A 12-month rate indicates that the conditions were present at some time during the 12-month period prior to the interview.

* Significant from reference group, $p<0.05$

Table 8
Demographic and Socioeconomic Characteristics of Persons with Mental Disorders

	McAlpine and Mechanic+ (Lifetime)++			Druss et al.** (12-month)++
Characteristic	SMI[16]	Non-SMI[17]	No Disorder	Mood Disorders
Black	27%*	13.6%	11.2%	
Unmarried	31%*	48.4%	61.4%	26.7%
Mean family income	$27,500*	$38,000	$46,400	19.5% below poverty level
Less than 12 years education	27.5%*	22.1%*	13.6%	27.1%

Sources: McAlpine and Mechanic, data from Health Care for Communities (HCC) survey; Druss et al., 2001, 1996 MEPS.
* Significant difference from no-disorder group, p< 0.05;
** Significance levels not provided
+ McAlpine and Mechanic study reports a chi-squared test of independence for matrix of insurance by category of disorder of 80.86, p=0.000
++ "Lifetime" refers to the prevalence estimates for SMI and non-SMI disorders, which are based on whether respondents reported having one or more of the relevant conditions at any time in their life prior to the interview. A 12-month rate indicates that the conditions were present at some time during the 12-month period prior to the interview.

Labor Force Participation

As with income, the relationship between employment and mental illness is muddled and hard to tease out. While the overall tendency is for employment levels to be reduced among persons with mental illness, findings vary by age, gender, and type of condition. As Frank and McGuire point out: "Involuntary unemployment may aggravate illness. Some difficult-to-measure personal characteristics which make a positive contribution to earning are correlated with some illnesses—creativity, energy, attention to detail, for example, may be more common among people with mania or obsessive-compulsive disorders." (Frank and McGuire 1999) As a result, data reveal that employment rates for some disorders are lower than average, some are higher, and some are comparable. (See Table 9) Employment rates for women with major depression, agoraphobia, and drug dependence were significantly below the no-disorder rate; for men, rates were significantly lower for those with major depression and alcohol dependence. (Ettner et al., 1997)

A recent study examined employment among persons with mental illness using data from four nationally representative surveys: two National Health Interview Surveys—the 1989 mental health supplement and the 1994/5 survey on disability; the NCS, and the HCC (Mechanic, Binder and McAlpine 2002). They report employment rates for persons with any mental illness ranging from 48 to 73 percent. Reported rates for those with more serious disorders are lower, ranging from 32 to 61 percent overall and even lower (22 to 40 percent) for those with schizophrenia and related disorders. Other studies report high rates of unemployment among persons with mental illness, particularly those with more serious conditions. Druss et al. found unemployment rates among persons with mood disorders of 40.1%. Analysis using HCC data

---

[16] Schizophrenia, schizoaffective disorder, other psychoses, bipolar depression
[17] Depression, dysthymia, anxiety, panic disorder

found the unemployment rate for individuals with serious mental illness to be three to five times higher than for those with other disorders or no disorders, respectively (Sturm et al., 1999). This same study also found that individuals with mental illness are more likely than those without such disorders to leave a job with insurance to become unemployed or leave the labor force.

Table 9
Current Employment Status by Type of Condition

Condition	Percent Employed	
	Men	Women
No disorder	93.3	81.8
Schizophrenia	87.6	69.2
Major depression	86.9*	73.7*
Dysthymia	88.7	78.4
Mania	90.0	70.9
Agoraphobia	88.6	1.8*
Generalized anxiety	93.4	79.9
Simple phobias	95.2	77.8
Social phobia	92.1	83.1
Panic disorder	88.8	87.8
Alcohol abuse	88.8	90.0
Alcohol dependence	88.1*	86.8
Drug abuse	88.3	84.7
Drug dependence	88.1	51.9*

Source: Ettner, Frank, Kessler 1997; data from the National Comorbidity Survey.
* Significant difference from no disorder, p<0.01

Multivariate studies of labor force outcomes have generally found employment levels to be lower among persons with mental illness--though, again, findings vary by type of condition and by gender (Table C-1). The one exception was a study of older workers by Mitchell and Anderson (1999). They found that while depression and alcohol abuse are significant predictors of reduced labor force participation among men, mental health status was not a significant predictor of labor force participation for women.

Controlling for age, race and ethnicity, family status, education, and geographic factors, other studies have found that mental illness is associated with a lower probability of employment for both men and women, with effects ranging from 11 to 40%. Wilson found that among adults over age 35 (excluding those with disorders occurring before the age of 25), mental illness reduced employment for men by 19.7% overall and by 40.2% for those with a high school education or less. For women, the effects are reduced and, unlike men, more pronounced among women with higher levels of education. The overall reduction for women was 8.5%, for those

with more than a high school education,18.6% (Wilson 2001). Using data from the NCS, Ettner and colleagues found that mental health disorders reduce the probability of employment by roughly 11% for both men and women, and that employment effects are even larger among those with multiple disorders. Notably, this was one of the few studies to employ instrumental variables to control for the potential interaction between mental health and employment.[18]

Coverage

Very few studies have reported data on insurance coverage for persons with mental illness, and the findings are mixed. McAlpine and Mechanic found that persons with a mental disorder were much less likely to be insured than those without a disorder. (See Table 10.) This study also found higher rates of coverage from public sector sources among persons with a more serious disorder (37.5%, versus roughly 22% for the less serious and non-disorder groups). Druss et al. used MEPS and looked only at mood disorders; while their results are not directly comparable to the McAlpine and Mechanic findings, they suggest that uninsured rates may be somewhat lower for individuals with some disorders.

Table 10
Insurance Coverage Among Persons with Mental Disorders

Characteristic	McAlpine and Mechanic (Lifetime)+			Druss et al. (12-month)+
	SMI[19]	Non-SMI[20]	No Disorder	Mood Disorders
Insurance coverage++	Percentage with Coverage			
Uninsured	20.4	18.2	11.4	14.8
Private	34.5	57.3	63.2	66.3
Medicare	21.5	14.4	19.7	13.4
Medicaid	16.0	7.1	2.3	18.7
Other (HIS, military, other state)	7.6	3.0	3.4	

Sources: McAlpine and Mechanic, data from Health Care for Communities (HCC) survey; Druss et al., 2001, 1996 MEPS.
+ Lifetime" refers to the prevalence estimates for SMI and non-SMI disorders, which are based on whether respondents reported having one or more of the relevant conditions at any time in their life prior to the interview. A 12-month rate indicates that the conditions were present at some time during the 12-month period prior to the interview.
+ + Defined as current coverage.

The one study to employ multivariate analysis (Druss and Rosenheck 1998) found that the probability of having coverage for people reporting mental disorders was not significantly different from that of those without such disorders. However, they did find that persons

---

[18] The instrumental variables they employed were (1) number of disorders experienced by the respondent prior to age 18; (2) number of disorders ever experienced by the respondent's mother; (3) number of disorders ever experienced by the respondent's father.
[19] Schizophrenia, schizoaffective disorder, other psychoses, bipolar depression
[20] Depression, dysthymia, anxiety, panic disorder

reporting mental disorders were significantly more likely to report having had problems in obtaining or maintaining their coverage. These individuals were twice as likely to have faced waiting periods or exclusions based on preexisting condition rules, and to have remained in a job for at least two years out of fear of losing their health insurance coverage. These findings are based on NHIS data, which employs less precise measures of mental illness, so there is no information on differences by type of disorder. In addition, it will be important to confirm these effects using other data sources.[21]

We know little about the source of differential coverage. That is, whether the lower level of coverage stems from the fact that those with a disorder are less likely to receive an offer of employer sponsored health insurance (ESI) or whether they are less likely to take-up an offer. A recent study suggests that people who decline offers of ESI but remain uninsured may have poorer mental health status. (Blumberg and Nichols 2001) The authors speculate that the decliners—who also tended to be younger, less educated, and to have lower incomes that the "takers"—may have a lower demand for both coverage and health care. (See Table 11.)

Table 11
Mental Health Status Among Uninsured ESI Decliners,
Uninsured Not Offered ESI, and ESI Takers

	Percent Reporting Condition		
Mental health measure	Uninsured ESI Decliners N=2065	Uninsured Not-Offered ESI N=6151	ESI Takers N=22,346
Sad/ no cheering up	13.7	13.8	1.7*
Nervous	16.1	17.9	13.1*
Restless or fidgety	20.9	20.5	15.0*
Hopeless	7.5	7.9	3.6*
Worthless	5.7	6.6	2.6*
Effort for everything	17.4	16.3	10.7*
Condition interferes with life	34.1	32.9	24.3*

Source: Blumberg and Nichols (2001), based on analysis of 1997 National Health Interview Survey.
* Difference between this group and the decliners is significant at the 0.05 level or better.

---

[21] As shown in Table C-1, prevalence estimates based on NHIS data are roughly half the size of prevalence estimates from the ECA and NCS.

IV. IMPLICATIONS FOR FUTURE RESEARCH

It is helpful to consider these syntheses in light of the conceptual framework presented earlier. Most studies to date have helped us understand particular links or relationships within that conceptual framework, but do not yet explain the full pathway to coverage for these vulnerable populations. Data constraints have contributed to gaps in our knowledge. Another important consideration is that different sets of researchers have focused on different pieces of the puzzle and not enough research has been conducted that brings together various areas of expertise (knowledge of labor markets, coverage, and vulnerable populations).

A.   BRIEF RECAP OF WHAT WE KNOW

Existing research has helped to explain some of the relationships and factors influencing coverage. For **U.S.-born racial and ethnic minorities**, we know that:

- Black and Hispanic populations have lower rates of coverage overall and of coverage through employer-sponsored insurance (ESI). U.S. natives of Mexican-American/Mexican and Central or South American heritage have lower rates of coverage than do individuals from other Hispanic groups (Chicano, Puerto Rican, and Cuban).

- Although overall coverage rates for Asian populations are lower than those for Whites, ESI rates are higher than or comparable to rates for Whites.

- Among those employed full time throughout the year, Hispanic and Black populations are more likely than other groups to be uninsured.

- There is little variation in the dominant job sectors across racial and ethnic populations. Within each sector, Black and Hispanic populations are more likely than White and Asian populations to be uninsured.

- There is some evidence that ESI coverage is lower for Hispanics than for other groups, and that this is because they are less likely to be offered ESI and/or less likely to take it up.

- While we do not yet have a clear understanding of the precise contribution of education and income in explaining ESI coverage disparities for Black and Hispanic populations, we do know that, relative to White and Asian populations, Black and some Hispanic populations (Mexican-American/Mexican, Chicano, and Puerto Rican) have lower levels of educational attainment. With the exception of Cuban Americans, all Hispanic and Black population groups exhibit lower than average individual and family income levels. Among those with low incomes, Hispanics are more likely to be uninsured.

For **immigrants** (defined as foreign-born U.S. residents), we know that:

- Rates of coverage are lower for non-citizen immigrants than for naturalized citizens and U.S.-born natives.

- As is the case within U.S.-born population groups, coverage rates are lower overall for Hispanic immigrants than for other immigrant populations, with variation in coverage rates among the different subgroups. In all cases, however, average coverage rates for immigrants are lower than those of their U.S.-born counterpart.

- Despite high rates of full-time employment, non-citizen immigrant populations have lower rates of coverage through employer-sponsored insurance (ESI) than U.S. citizens (naturalized or native). Among those employed full time throughout the year, immigrants are more likely than natives to be uninsured.

- The job sectors employing most immigrants differ from the sectors employing most natives. Within each sector, immigrants are more likely than natives to be uninsured. There is some evidence suggesting that ESI coverage is lower for immigrants than for natives because immigrants are less likely to be offered ESI, though take-up rates do not vary between the two groups.

- Length of time in the U.S. explains some of the coverage disparities between immigrants and natives. Immigrants who have been in the U.S. for at least 15 years have coverage rates that are more similar to rates for natives; coverage gaps disappear for Asian populations after 15 years, but remain at lower levels for other immigrant populations.

- While we do not yet have a clear understanding of the precise contribution of education and income in explaining ESI coverage disparities for immigrant populations, we know that relative to U.S. natives, immigrants of Hispanic origins have lower levels of educational attainment and lower individual and family income levels. Notably, however, White, Black, and Asian immigrants are more likely than their U.S.-born counterpart to be at both ends of the spectrum, that is, to have less than high school or at least a bachelor's degree.

- Among those with low incomes, immigrants, especially those who have been in the U.S. for less than 15 years, are substantially more likely to be uninsured.

The knowledge base for **persons with mental illness** is weaker than for the other two vulnerable population groups. Available evidence suggests that:

- Mental illness is associated with reduced educational attainment and lower income levels, though the effects vary with the type and severity of the condition.

- Having a mental illness reduces the probability of employment and reduces income, especially among men. Employment reductions are greater among men with lower levels of education, and among women with higher levels of education. Employment

outcomes differ depending on the type of mental disorder (higher-than-average levels for some conditions, lower-than-average levels for others).

- Persons with mental illness may be more likely to be uninsured than those without such disorders, and are more likely to be covered under public sector programs.

- Among employed populations, the very limited available research suggests that those with mental illness may be no more or less likely to be uninsured but may have greater difficulty securing this coverage. They are also more likely to have remained in a job for two years or more out of fear of losing coverage, and to leave a job that has insurance to become unemployed or exit the labor force.

- Compared to those who take up ESI, those who are uninsured because they either declined or never got such offers are more likely to show signs of poor mental health status.

B. KNOWLEDGE GAPS

Confirming what we suspected, there has been little economic research that considers how labor market factors and coverage interact for these groups. For all three groups, we need to know more about the relationships between specific factors and coverage. For example, what explains the disparities in ESI coverage for these populations? How much of the disparity is attributable to differences in educational attainment, income/resources, job/employment characteristics, health status, and demand for coverage? What remaining gaps can be attributed to other factors, including discrimination? What is the effect of coverage on labor force participation?

For **U.S-born racial and ethnic minorities**, we especially need to know more about:

- Why Hispanics are more likely than other groups to be uninsured; why Blacks are more likely than Hispanics to be covered through ESI or Medicaid; and whether and why there are differences in ESI offer rates and take-up rates (through the worker or a family member) between Blacks and Hispanics.

- How all of these outcomes vary for specific subpopulations within the broad categories of White, Black, Hispanic, and Asian, and for native versus immigrant populations.

For **immigrants**, we need to understand:

- Whether and how immigrants who are offered ESI differ from groups not offered ESI, and whether and how ESI offer and take-up rates vary for immigrants versus natives, and by race and country of origin.

- Whether and how demand (or preferences) for insurance varies by country of origin, and how demand/preferences change over time and with changes in citizenship status.

And finally, for **persons with chronic mental illness**, we need to know:

- Whether persons with mental illness are less likely to be offered ESI, and whether and how their demand for and take-up of ESI differs from persons without such disorders.

- Whether employed persons with chronic mental illness experience greater difficulty maintaining ESI coverage; how these outcomes vary across different types of mental conditions; and what the interaction is between demand for coverage and labor force participation.

C. DATA SOURCE CONSIDERATIONS

Data constraints have influenced the types of research that have been conducted to date and will also influence the feasibility of future studies.   ERIU is interested in funding studies of vulnerable population groups that utilize data sources that at a minimum include the following types of variables:

- Characteristics that define the particular population of interest (racial and ethnic minorities, immigrants, persons with mental illness)

- Coverage status (covered or not, for what time period, and for how long), and, possibly, availability and eligibility for coverage

- Income, employment status, and factors influencing employment, including education,

To help the workgroup think about the different data sources available for future studies, we have prepared a matrix (Table E1) that summarizes basic features of 20 publicly available data sources that contain variables on labor force dynamics, insurance coverage, and at least one of the three vulnerable populations.

With respect to information needed to characterize the populations of interest, all of the data sources include some information about racial/ethnic background. Although data sources that are able to identify respondents by race or ethnicity are abundant, a much smaller number have sample sizes large enough to support studies of specific subpopulations (e.g., persons with mixed racial background or persons from Central America vs. those from South America). A few data sets, such as the Chinese American Psychiatric Epidemiological Survey (CAPES), Hispanic Health and Nutrition Examination Survey (HHANES), National Latino and Asian American Survey (NLAAS), and the National Survey of American Life (NSAL) focus on particular racial or ethnic groups, and thus may be particularly rich sources of information for questions related to the insurance coverage of those groups.

Although many sources include information of some type on immigration status, this list is more limited than for racial and ethnic minorities. These sources vary, however, in how accurately they capture citizenship status or undocumented immigrants. The Legalized Population Survey (LPS) provides information on the subset of immigrants who originally came

to the U.S. illegally, but there are few surveys that can confidently differentiate illegal from legal immigrants. Concerns about response rates and confidentiality issues have led to variations in the types of questions asked and in the reliability of responses.

There are only a few data sources that capture information about persons with mental illness, especially information on the full spectrum of conditions as well as condition severity. Several sources capture information on self-reported mental health status, but it is not yet clear whether these measures can serve as an adequate proxy for condition-specific information. It is also important for data sources to include individuals across the age spectrum. Some sources, for example, exclude those under age 35 or include only older workers. Fortunately, two of the more complete data sources with information on mental illness, the National Comorbidity Survey and the Health Care for Communities Survey, have recently been repeated and data are expected to be available soon.

References Cited

Bass, E. *Health Insurance Coverage in America: Are Immigrants Different*? The University of Illinois at Chicago. ERIU Research Proposal submitted February 2002.

Blumberg, LJ, Nichols, L.M. "The Health Status of Workers Who Declined Employer-Sponsored Insurance." Health Affairs 20(6):180-187.

Borjas, GJ. *Welfare Reform and Health Insurance in the Immigrant Population.* ERIU research proposal submitted February 2002.

Brown ER, Ojeda V, Lara L, Valenzuela A. June 1999. *Undocumented Immigrants: Changes in Health Insurance Coverage with Legalized Immigration Status*. Center for Health Policy Research, UCLA. http://www.healthpolicy.ucla.edu/publications/UndocumentedImmigrants.pdf

Brown ER, Ojeda V, Wyn R, Levan R. April 2000. *Racial and Ethnic Disparities in Access to Health Insurance and Health Care*. Washington, D.C.: UCLA Center for Health Policy Research, The Kaiser Family Foundation.

Camarota S, Edwards JR. July 2000. *Without Coverage: Immigration's Impact on the Size and Growth of the Population Lacking Health Insurance.* Washington, DC: Center for Immigration Studies. http://www.cis.org/articles/2000/coverage/uninsured.pdf

Camarota S. January 2001. *Immigrants in the US – 2000: A Snapshot of America's Foreign-Born Population*. Center for Immigration Studies. http://cis.org/articles/2001/back101.pdf

Carrasquillo O, Carrasquillo A, Shea S. June 2000. "Health Insurance Coverage of Immigrants Living in the United States: Differences by Citizenship Status and Country of Origin." *American Journal of Public Health* 90(6): 917-923.

Chin K, Dean S, Patchan K. June 2002. *How Have States Responded to the Eligibility Restrictions on Legal Immigrants in Medicaid and SCHIP?* Washington, D.C.: The Kaiser Family Foundation. http://www.kff.org/content/2002/20020628/immig.pdf

Cooper, P.F., Shone, B. November/December 1997. "More Offers, Fewer Takers for Employment-Based Health Insurance: 1987 and 1996." Health Affairs 16(6):142-149.

Cunningham, P.J., Schaefer, E., Hogan, C. October 1999. "Who Declines Employer-Sponsored Health Insurance and is Uninsured?" *Health System Change Issue Brief* Number 22:1-4.

Currie, J., Madrian, B.C. 1999. "Health, Health Insurance and the Labor Market" *Handbook of Labor Economics* Vol. 3, Chapter 50:3309-3390.

Druss B, Marcus S, Olfson M, Tanielian T, Elinson L, Pincus H. November/December 2001. "Comparing the National Economic Burden of Five Chronic Conditions." *Health Affairs* 20(6): 233-241.

Druss B, Rosenheck R. December 1998. "Mental Disorders and Access to Medical Care in the United States." *American Journal of Psychiatry* 155(12): 1775-1777.

Ettner S, Frank R, Kessler R. October 1997. "The Impact of Psychiatric Disorders on Labor Market Outcomes." *Industrial and Labor Relations Review*. 51(1): 64-81.

Frank R, McGuire T. March 1999. *Economics and Mental Health*. NBER Working Paper 7052. http://papers.nber.org/papers/w7052.pdf

Garrett AB, Nichols L, Greenman E. August 2001. "Workers Without Health Insurance: Who Are They and How Can Policy Reach Them," Washington, D.C.: The Urban Institute and the W.K. Kellogg Foundation.

Hadley, J. May 2002. *Sicker and Poorer: The Consequences of Being Uninsured.* Kaiser Commission on Medicaid and the Uninsured.

Hall A, Scott Collins K, Glied S. February 1999. "Employer-Sponsored Health Insurance: Implications for Minority Workers." The Commonwealth Fund. http://www.cmwf.org/programs/minority/hall_minorityinsur_314.asp

Holahan J, Brennen N. March 2000. "Who Are the Adult Uninsured? Assessing the New Federalism." Series B, No. B-14. Washington, D.C.: The Urban Institute. http://www.urban.org/Template.cfm?Section=ByAuthor?NavMenuID=63&template=/TaggedContent/ViewPublication.cfm&PublicationID=6480

Institute of Medicine. 2001. *Coverage Matters: Insurance and Health Care*. Committee on the Consequences of Uninsurance, Board on Health Care Services, Institute of Medicine.

Jasso G, Rosenzweig M, Smith J. October 1998. *The Changing Skills of New Immigrants to the United States: Recent Trends and Their Determinants*. NBER Working Paper 6764. http://papers.nber.org/papers/W6764

Kass BL, Weinick RM, Monheit AC. 1999. "Racial and Ethnic Differences in Health, 1996." Rockville, MD: Agency for Health Care Policy and Research. *MEPS Chartbook No. 2*. AHCPR Pub. No. 99-0001. http://www.meps.ahrq.gov/papers/cb2_99-0001/cb2.htm

Kessler, R.C., et al. January 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States: Results From the National Comorbidity Survey" *Archives of General Psychiatry* 51(1):8-19.

Ku L, Matani S. January/February 2001. "Left out: Immigrants' Access to Health Care and Insurance." *Health Affairs* 20(1): 247-256.

McAlpine, D.D., Mechanic, D. November 1999. "Utilization of Specialty Mental Health Care Among Persons with Severe Mental Illness: The Roles of Demographics, Need, Insurance, and Risk." *Health Services Research* 35(1): 277-292.

Mechanic, D., Bilder S., McAlpine, D.D. September/October 2002. "Employing Persons With Serious Mental Illness." *Health Affairs* 21(5): 242-253.

Mitchell J, Anderson K. Summer 1989. "Mental Health and the Labor Force Participation of Older Workers." *Inquiry* 26:262-271.

Monheit A, Vistnes J. 2000. "Race/Ethnicity and Health Insurance Status: 1987 and 1996." *Medical Care Research and Review*. 57(Supplement 1): 11-35.

National Institute of Mental Health. January 2001. "The Numbers Count: Mental Disorders in America. Bethesda, ND: National Institute of Mental Health, NIMH Publication No. 01-4584. http://www.nimh.nih.gov/publicat/numbers.cfm

Offner R, Holzer H. April 2002. "Left Behind in the Labor Market: Recent Employment Trends Among Young Black Men." Brookings Institution – Center on Urban and Metropolitan Policy. http://www.brook.edu/dybdocroot/es/urban/publications/offnerholzer.pdf

Quinn K. February 2000. Working Without Benefits: The Health Insurance Crisis Confronting Hispanic Americans. New York, NY: The Commonwealth Fund. http://www.cmwf.org/programs/insurance/quinn_wobenefits_370.pdf

Regier, D.A., et al. February 1993. "The de Facto US Mental and Addictive Disorders Service System: Epidemiologic Catchment Area Prospective 1-Year Prevalence Rates of Disorders and Services." *Archives of General Psychiatry* 50(2):85-94.

Schur C, Berk M, Good C, Gardner E. May 1999. *California's Undocumented Latino Immigrants: A Report on Access to Health Care Services*. Washington DC: The Kaiser Family Foundation. http://www.kff.org/content/archive/1490/latino.pdf

Schur C, Feldman J. May 2001. *Running in Place: How Job Characteristics, Immigrant Status, and Family Structure Keep Hispanics Uninsured*. Washington, D.C.: The Commonwealth Fund. Publication #453. http://www.cmwf.org/programs/insurance/schur_running_453.pdf

Shi L. February 2001. "The Convergence of Vulnerable Characteristics and Health Insurance in the U.S." *Social Science and Medicine* 53(2001): 519-529.

Shi L. March 2000. "Vulnerable Populations and Health Insurance." *Medical Care Research and Review*. 57(1): 110-134.

Stoddard, S., Jans, L., Ripple, J.R., Kraus, L. *Chartbook on Work and Disability in the United States, 1998*. An InfoUse Report. Washington, D.C.: U.S. National Institute on Disability and Research.

Sturm R, Gresenz CR, Pacula RL, Wells K. November 1999. "Datapoints: Labor Force Participation by Persons with Mental Illness." *Psychiatric Services* 50(11): 1407.

Thamer M, Richard C, Casebeer AW, Ray NF. 1997. "Health Insurance Coverage among Foreign-Born US Residents: The Impact of Race, Ethnicity, and Length of Residence." *American Journal of Public Health* 87(1):96-102.

The Kaiser Commission on Medicaid and the Uninsured. August 2000. *Immigrants' Health Care: Coverage and Access*. Washington, DC: The Kaiser Family Foundation. http://www.kff.org/content/2000/2000802a/Pub2203.pdf

U.S. Department of Health and Human Services. 2001. *Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General—Executive Summary*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General. http://www.mentalhealth.org/cre/toc.asp; http://www.mentalhealth.org/Publications/allpubs/SMA-01-3613/sma-01-3613.pdf

U.S. Immigration and Naturalization Services. *Illegal Alien Resident Population*. http://www.ins.usdoj.gov/graphics/aboutins/statistics/illegalalien/illegal.pdf

Waidmann T, Rajan S. 2000. "Race and Ethnic Disparities in Health Care Access and Utilization: An Examination of State Variation." *Medical Care Research and Review* 57(1): 55-84.

Wilson S. 2001. "Work and the Accommodation of Chronic Illness: A Re-examination of the Health-Labor Supply Relationship." *Applied Economics* 33(9):1139-1156.

Appendix A

Additional Tables for Section on Racial and Ethnic Minorities

Table A1
Percent of Uninsured by Race, US born
March CPS 2001

Race/Ethnicity	Percent of US-born Population	Total Number of US-born Population (weighted counts, thousands)	Percent of Racial/Ethnic Group who are Uninsured
White, non-Hispanic	73.94%	182,350	9.38%
Black, non-Hispanic	13.15	32,430	17.47**
American Indian	1.01	2,489	27.20**
Asian	1.65	4,074	13.07**
Hispanic	8.32	20,508	22.10**
Mexican-American/Mexican	5.54	13,657	24.58**
Chicano	0.15	382	15.62**
Puerto Rican	1.16	2,860	16.07**
Cuban	0.16	402	16.22**
Central or South American	0.68	1,685	21.48**
All Races		246,629	11.85

Table A2
Educational Attainment, by Racial/Ethnic Category and Insurance Coverage
(Individuals age 22 and over only)
March CPS 2001

	Less than high school diploma	High school diploma	Some college	Bachelor's degree or more
Racial/Ethnic Group, by Educational Attainment				
White, non-Hispanic	10.63%	33.30%	27.95%	28.12%
Black, non-Hispanic	20.60	36.75	27.79	14.86
American Indian	24.17	36.43	28.36	11.04
Asian	7.65	20.51	30.30	41.55
Hispanic	27.00	32.94	26.82	13.25
Mexican-Am/Mexican	27.65	34.32	27.48	10.56
Chicano	27.21	39.80	18.78	14.21
Puerto Rican	33.88	28.57	23.93	13.62
Cuban	11.20	24.61	33.78	30.41
Central or South American	14.70	28.83	28.31	28.16
All Races	12.93	33.66	27.82	25.59
Racial/Ethnic Group Uninsured, by Educational Attainment				
White, non-Hispanic	15.01%	11.55%	9.75%	5.06%
Black, non-Hispanic	21.94**	21.05**	16.34**	10.37**
American Indian	34.37**	29.71**	25.24**	12.48**
Asian	20.36	14.70	12.37	9.55**
Hispanic	26.66**	22.95**	15.88**	11.97**
Mexican-Am/Mexican	29.78**	24.11**	16.01**	14.31**
Chicano	22.86	21.50	12.71	0.00

	Less than high school diploma	High school diploma	Some college	Bachelor's degree or more
Puerto Rican	20.67*	19.83**	15.16*	9.63*
Cuban	22.51	14.46	12.18	12.11
Central or South American	25.64	25.24**	12.04	11.03
All Races	17.96	13.64	11.08	5.92

Table A3
Income of US Born, By Racial/Ethnic Category and Insurance Coverage
(Primary Wage Earners only)
March CPS 2001

	No wage and salary income	$1 - $24,999	$25,000-$49,999	$50,000-$74,999	$75,000 or greater
Racial/Ethnic Group, by Income Category					
White, non-Hispanic	23.93%	24.30%	28.57%	13.70%	9.49%
Black, non-Hispanic	23.55	36.66	28.98	7.79	3.02
American Indian	25.77	42.39	23.53	5.99	2.33
Asian	15.78	29.71	26.92	16.96	10.62
Hispanic	19.61	38.58	29.31	8.56	3.94
Mex-Am/Mex.	18.26	40.80	29.36	8.21	3.35
Chicano	13.46	41.15	33.25	7.25	4.88
Puerto Rican	25.89	34.88	26.62	8.29	4.33
Cuban	11.49	33.98	37.32	11.77	5.44
Cen./So. Am	16.93	34.43	31.75	10.82	6.07
All Races	23.92	26.83	28.48	12.51	8.26
Racial/Ethnic Group Uninsured, by Income Category					
White, non-Hispanic	8.33%	22.92%	6.94%	2.94%	2.44%
Black, non-Hispanic	13.98**	29.23**	11.48**	4.84*	7.68**
American Indian	20.47**	38.96**	25.27**	10.01*	13.02*
Asian	21.78**	26.90	5.93	6.47	6.66
Hispanic	20.03**	37.17**	12.68**	5.73*	5.81*
Mex-Am/Mex.	23.30**	39.20**	14.08**	5.88	6.31
Chicano	41.60**	29.40	8.73	0.00	5.20
Puerto Rican	11.62	32.62**	10.41	4.87	10.66*
Cuban	11.94	26.40	4.76	0.00	0.00
Cen./So. Am	36.06**	42.88**	10.67	5.13	0.00
All Races	9.86	25.59	8.02	3.34	3.03

Table A4
Individual Poverty Levels of US Born, By Racial/Ethnic Category and Insurance Coverage
March CPS 2001

	Below the Federal Poverty Level	100-124% FPL	125-149% FPL	150% FPL and above
Racial/Ethnic Group, by Poverty Level				
White, non-Hispanic	8.17%	3.74%	4.17%	83.92%
Black, non-Hispanic	22.77	5.83	5.85	65.55
American Indian	27.31	7.90	11.31	53.48
Asian	8.75	4.32	3.69	83.24
Hispanic	19.83	7.77	6.61	65.78
Racial/Ethnic Group Uninsured, by Poverty Level				
White, non-Hispanic	24.23	22.17	17.11	7.78
Black, non-Hispanic	22.99	22.21	17.19	12.81
American Indian	18.01	10.37	12.53	13.38
Asian	26.14	21.81	15.07	9.35
Hispanic	34.45	30.79	29.06	17.64

Table A5
Employment Sector of US Born, By Racial/Ethnic Category and Insurance Coverage
(Adults age 18 and older)
March CPS 2001

	White	Black	Amer. Indian	Asian	Hispanic
Racial/Ethnic Group by Job Sector					
Exec, admin, and managerial occupations	15.05%	11.01%	12.55%	17.07%	9.76%
Professional specialty occupations	16.00	10.18	8.58	14.84	9.27
Technicians and related support occs	3.15	3.83	2.01	2.85	3.09
Sales occupations	11.72	8.77	7.61	14.47	12.91
Admin support occ, inc cler service occs	14.10	17.94	16.80	19.26	16.55
Private household occupations	0.46	0.81	0.21	0.16	0.63
Protective service occupations	1.58	3.51	4.29	3.46	2.79
Service occs, exc hhld and protective	10.75	16.86	49.61	11.77	15.31
Farming, forestry, and fishing occs	4.06	0.88	4.46	2.70	2.14
Precision prod, craft, and repair occs	10.91	7.93	10.45	5.55	11.73
Machine opers, assemblers, & inspectors	3.71	6.64	3.83	0.97	4.46
Transportation and material moving occs	4.40	5.10	4.50	2.28	4.25
Handlers, equip cleaners, helpers and laborers	3.46	5.30	4.90	4.48	6.45
Armed Forces - currently civilian	0.64	1.26	0.21	0.15	0.64
Racial/Ethnic Group Uninsured, by Job Sector					
Exec, admin, and managerial occupations	6.09%	8.96%	9.14%	2.40%	13.59%
Professional specialty occupations	5.25	10.70	9.43	9.30	14.07
Technicians and related support occs	6.96	5.69	19.70	3.44	12.41

	White	Black	Amer. Indian	Asian	Hispanic
Sales occupations	12.65	22.52	17.81	13.21	25.30
Admin support occ, inc cler service occs	9.20	13.71	9.94	7.67	15.78
Private household occupations	26.79	0.00	23.89	0.00	40.69
Protective service occupations	5.75	18.50	22.06	20.52	14.68
Service occs, exc hhld and protective	20.51	21.99	18.79	22.03	32.33
Farming, forestry, and fishing occs	18.63	30.78	13.64	31.66	41.38
Precision prod; craft, and repair occs	14.94	25.14	16.73	2.44	24.06
Machine opers, assemblers, & inspectors	12.73	13.30	10.35	0.00	30.18
Transportation and material moving occs	17.79	16.84	35.01	14.78	21.88
Handlrs, equip cleanrs, helprs and laborrs	20.63	35.38	13.55	15.08	34.72
Armed Forces - currently civilian	0.00	0.00	0.00	0.00	0.00

Table A6
Labor Force Participation of US-Born, By Race and Insurance Coverage
(Adults age 22 and older)
March CPS 2001

	Full year, full time	Full year, part time	Part year, full time	Part year, part time	Nonworker
Racial/Ethnic Group, by Labor Force Participation					
White, non-Hispanic	51.60%	6.40%	8.57%	5.20%	28.22%
Black, non-Hispanic	52.95	3.78	10.12	3.97	29.19
American Indian	42.06	4.64	14.64	5.99	32.67
Asian	56.10	5.44	11.94	5.55	20.98
Hispanic	52.79	5.15	11.11	4.92	26.03
Mex-Am/Mex.	53.64	5.04	11.37	5.08	24.87
Chicano	56.35	6.47	11.54	6.06	19.59
Puerto Rican	48.16	3.88	10.28	4.00	33.68
Cuban	65.66	9.82	10.06	3.85	10.60
Cen./So. Am	58.34	7.42	11.30	4.62	18.31
All Races	51.58	5.97	8.97	5.04	28.45
Racial/Ethnic Group Uninsured, by Labor Force Participation					
White, non-Hispanic	8.49	13.98	18.07	15.76	6.88
Black, non-Hispanic	15.29**	32.09**	31.22**	28.31**	16.25**
American Indian	30.16**	30.15*	35.03**	33.66**	19.70**
Asian	7.02	13.53	29.61*	22.07	13.59**
Hispanic	17.52**	28.34**	34.00**	32.90**	17.28**
Mex-Am/Mex.	19.01**	31.84**	36.88**	32.71**	19.13**
Chicano	11.34	15.07	32.49	36.74	19.53*
Puerto Rican	15.85**	29.38*	28.38*	33.55**	13.58**
Cuban	13.47	15.71	7.51	49.35	7.85
Cen./So. Am	13.81	20.96	36.21*	42.32*	10.37
All Races	10.06	16.20	21.55	18.17	8.82

TABLE A7
Factors Influencing Health Insurance Coverage
Among Racial/Ethnic Minorities

Study (authors and year) Data Set and sample	Outcomes examined	Analytic Methods	Key Findings
Fronstin, Goldberg, Robins 1997 CPS 1989 – 1994	Effects of factors (region, age, marital status, education, hours of work, occupation, industry, firm size, hourly wage, other family income, medically needy) associated with differences in the probability of having health insurance coverage among Mexican-American, Puerto Rican, and Cuban-American working men.	Oaxaca decomposition	Among these populations, the largest gap in rates of private insurance coverage is between Mexican-American and Cuban-American working men (16.3 percentage point gap). 51.7% of this gap is explained by the authors' model. Hourly wages account for 23.2% of the explained portion of the differential. Of the 15.4 percentage point gap in private insurance rates between Mexican Americans and Puerto Ricans, 54.5% of it is explained by the model. Here, industry had the largest effect, accounting for 23.1% of the explained portion of the differential. The gap in private insurance coverage between Puerto Ricans and Cuban Americans is small – less than one percentage point.
Hall, Collins, Glied 1999 CPS 1997	Minority status and the distribution of employer-sponsored health insurance, taking into account workforce characteristics.	Descriptive statistics and logit models	A larger proportion of minority workers lack employer-sponsored insurance than whites. - 78% of whites who are employed full time have employer-based health insurance, compared to 68% of blacks, and 55% of Hispanics. After controlling for all workforce and socio-demographic variables, minorities are significantly less likely to have ESI (odds ratio for blacks and Hispanics is .79 relative to whites).
Institute of Medicine 2001 CPS 2000. Data from 2000 CPS in the form of a derived variable file.	Socioeconomic, demographic and geographic characteristics on insurance rates.	Oaxaca decomposition	About two-thirds of the difference in insurance rates between whites and Hispanics is attributable to differences in observed socio-demographic variables, including education, work status, occupation, size of firm, family income, gender, nativity, family type, and health status.

Study (authors and year) Data Set and sample	Outcomes examined	Analytic Methods	Key Findings
			This gap shrinks from 22.2 percentage points to 7.2 percentage points.
			The gap between insurance rates for whites and African Americans shrinks from 10 percentage points to 5 percentage when accounting for all these factors.
Monheit, Vistnes 2000

NMES 1987, MEPS 1996
Persons younger than 65, data from first interview round of each survey. Household level data. | Gaps in minority health care coverage relative to whites. Access of minority workers to ESI, and factors underlying changes in the insurance status of workers between 1987 and 1996. | Descriptive statistics and linear probability models for 1987 and for 1996 | Racial and ethnic minorities are far more likely than whites to lack health care coverage. In 1996, 15.2% of whites, 24.8% of blacks, and 35.1% of Hispanics had no insurance. Between 1987 and 1996, the uninsured rate for whites grew by 3.2%, for blacks by 4.5%, and for Hispanics by 5.4%. (p<.05)

Between 1997 and 1996, rates of private health insurance declined and uninsured rates increased for all racial/ethnic groups.

The largest decline in private employment-based coverage was among Hispanic males. Hispanic males experienced both changes in worker characteristics and structural changes that contributed to the decline in their employment-related coverage and policyholder rates. The authors defined "structural changes" as the change in the regression coefficients that are captured by changes in the estimated regression coefficients from 1987 to 1996 of the linear probability models, and reflect the influence of factors other than the employment and demographic characteristics that were controlled for.

Analysis of offers of employer-sponsored insurance found that offer rates either increased or were statistically equivalent for all groups but Hispanic males over the study period. At the margin, lower-wage Hispanic females, those belonging to unions, and black females were less likely to obtain offers of coverage over the decade.

Take-up rates declined for all racial/ethnic groups over the |

Study (authors and year) Data Set and sample	Outcomes examined	Analytic Methods	Key Findings
			decade. The declines were dominated by structural changes related to the ability of lower-income households to pay for employment-based coverage.
Shi 2000

MEPS 1996 Household Component
Persons younger than 65 years who completed the first 2 rounds of the survey. | Probability of health insurance status and coverage type of certain vulnerable populations; probability of vulnerable groups to be covered by public programs. | Descriptive statistics and logit models | Significant predictors of insurance include age, race/ethnicity, gender, and education.

Hispanics were 0.39 times as likely to have insurance as whites, blacks 0.70 as likely, and Asians 0.64 as likely, after controlling for demographics, educational attainment, wage, MSA, perceived health status, and perceived mental health status. |
| Shi 2001

MEPS 1996 Household Component. All those who completed 8 rounds of the survey. | Impact of being "vulnerable" (defined as minority, low-income, and having poor self-perceived health status) on insurance coverage. | Descriptive statistics and logit models | "Vulnerable" populations are significantly more likely to be uninsured or partially insured.

Compared to white, high-income individuals with good health, minorities with low-income and poor health were .33 times as likely to have insurance (CI. 0.22-0.50), and minorities with low-income and good health were .23 times as likely to have insurance (CI. 0.17-0.29).

Minorities with high income and poor health had rates of insurance coverage that were not significantly different than whites with high incomes and good health. Minorities with high income and good health did have significantly different rates of insurance coverage from whites with high incomes and good health (OR: 0.59, CI. 0.45-0.77). |
| Waidman and Rajan 2000

NSAF 1997 | Effect of work force and socio-economic factors on the insurance coverage of racial/ethnic minorities. | Linear probability regression | Two-thirds of the gap in insurance coverage rates between whites and Hispanics is explained by employment, income, education, citizenship, family characteristics, and demography. Of these variables, income has the largest effect (28% of the difference), followed by citizenship (14%). The residual was statistically significantly different from zero.

91% of the gap in insurance coverage rates between whites |

Study (authors and year) Data Set and sample	Outcomes examined	Analytic Methods	Key Findings
			and African Americans is explained by variables in their model. Of these, income was the most influential, accounting for 45% of the difference in insurance rates. The residual was statistically significantly different from zero.

Notes and Definitions:

- Information on Asian subpopulations was not available.
- The unweighted sample sizes in March 2001 CPS for several US-born ethnicities and racial groups are small:

Unweighted Totals, US-Born	
White, non-Hispanic	81916
Black, non-Hispanic	11625
American Indian	1743
Asian	1979
Hispanic	13998
Mexican-American/Mexican	8705
Chicano	314
Puerto Rican	2125
Cuban	287
Central or South American	1189

- "White," "Black," "American Indian," and "Asian" exclude Hispanics.
- "American Indian" includes Aleuts and Eskimos.
- "Asian" includes Pacific Islanders.
- "U.S. Native" includes people born in the U.S., Puerto Rico, or U.S. outlying areas, and people born abroad of U.S. parents.
- "Insured" includes individuals who had health insurance at any time in 2000. "Uninsured" includes all others.
- Education level refers to education level at the time of the interview, March 2001.
- Work status refers to employment in 2000.
- Wage and salary income refers to wage and salary income in 2000.
- Primary wage earners are the individuals who earned the greatest amount of wage and salary income in their families.
- One asterisk (*) indicates that the difference from insurance rates of foreign born whites is significant at the .01 level.
- Two asterisks (**) indicates that the difference from insurance rates of foreign born whites is significant at the .05 level.

Appendix B

Additional Tables for Section on Immigrants

Table B1
Percent Uninsured by Immigration Status
March CPS 2001

	Percent of Total Population	Total Number of Foreign-born Population (weighted counts, thousands)	Percent Uninsured
All Natives	89.18%	246,629	11.85%
All Immigrants	10.82	29,912	31.64
Immigrated 1986 or later	6.03	16,667	41.43**
Immigrated before 1986	4.79	13,245	19.32**
Percent of Immigrants			
White, non-Hispanic	24.19	7,236	15.05
Black, non-Hispanic	7.27	2,174	29.16**
American Indian	0.20	60	27.97
Asian	23.21	6,944	20.23**
Hispanic	44.65	13,354	47.13**
Mexican-American/Mexican	28.62	8,561	53.05**
Chicano	0.09	27	51.95**
Puerto Rican	0.11	32	22.27
Cuban	2.80	839	19.96*
Central/South American	11.04	3,303	41.95**

Table B2
Educational Attainment, By Immigration Status and Insurance Coverage
(Adults age 22 and older)
March CPS 2001

	Less than high school diploma	High school diploma	Some college	Bachelor's degree or more
Immigrants, by Educational Attainment				
All Natives	12.93%	33.66%	27.82%	25.59%
All Immigrants	32.28	24.64	17.57	26.35
White, non-Hispanic	16.60	26.60	20.81	35.99
Black, non-Hispanic	16.41	33.24	25.32	25.03
American Indian	20.81	0.00	42.34	36.84
Asian	12.73	21.28	18.39	47.60
Hispanic	55.60	24.08	11.77	8.55
Mex-Am./Mex.	66.25	20.18	8.84	4.72
Chicano	74.41	18.79	6.80	0.00
Puerto Rican	37.40	33.88	28.73	0.00
Cuban	31.77	38.36	14.23	15.64
Cen./So. Am	38.66	29.19	16.96	15.18
Immig'd 1986 or later	33.28	23.99	15.44	27.29
Immig'd before 1986	31.32	25.26	17.97	25.45

	Less than high school diploma	High school diploma	Some College	Bachelor's degree or more
Immigrants Uninsured, by Educational Attainment				
All Natives	17.96	13.64	11.08	5.92
All Immigrants	43.80	31.17	24.31	14.24
White, non-Hispanic	14.94	17.90	17.15	9.05
Black, non-Hispanic	41.52**	36.44**	19.35	16.73**
American Indian	51.74*	0.00	31.46	0.00
Asian	20.74*	26.27**	24.87**	14.73**
Hispanic	52.06**	41.35**	33.56**	23.70**
Mex-Am./Mex.	55.27**	45.59**	39.09**	32.39**
Chicano	63.36**	0.00	0.00	0.00
Puerto Rican	36.51	32.12	0.00	0.00
Cuban	15.86	23.72	19.16	17.67*
Cen./So. Am	49.85**	41.69**	33.26**	20.12**
Immig'd 1986 or later	57.89**	44.90**	35.69**	19.22**
Immig'd before 1986	29.47**	18.69**	14.96**	9.12**

Table B3
Income Level, By Immigration Status and Insurance Coverage
(Primary Wage Earners only)
March CPS 2001

	No Wage and Salary Income	$1 - $24,999	$25,000-$49,999	$50,000-$74,999	$75,000 or greater
Immigrants, by Income Category					
All Natives	23.92%	26.83%	28.48%	12.51%	8.26%
All Immigrants	19.98	36.18	25.60	9.89	8.34
White, non-Hispanic	30.82	20.92	23.07	11.93	13.26
Black, non-Hispanic	14.74	37.26	34.46	8.00	5.55
American Indian	29.92	18.61	9.45	39.83	2.19
Asian	17.49	22.36	27.88	16.20	16.06
Hispanic	15.13	53.13	24.40	5.59	1.74
Mex-Am./Mex.	12.72	58.71	23.45	3.89	1.23
Chicano	23.03	59.15	17.83	0.00	0.00
Puerto Rican	14.51	27.31	28.44	21.57	8.18
Cuban	29.31	32.69	25.01	10.74	2.25
Cen./So. Am	15.44	47.26	26.30	8.23	2.78
Immig'd 1986 or later	14.24	45.43	24.86	8.31	7.16
Immig'd before 1986	25.70	27.00	26.34	11.47	9.50
Immigrants Uninsured, by Income Category					
All Natives	9.86	25.59	8.02	3.34	3.03
All Immigrants	26.44	50.62	20.31	8.23	5.22
White, non-Hispanic	13.22	27.64	13.84	5.56	3.02
Black, non-Hispanic	38.71**	47.26**	12.50	9.10	0.00
American Indian	10.16	100.00**	83.11*	0.00	0.00

	No Wage and Salary Income	$1 - $24,999	$25,000-$49,999	$50,000-$74,999	$75,000 or greater
Asian	27.06**	38.90**	16.38	4.96	6.39
Hispanic	40.37**	59.33**	28.82**	16.95**	14.26**
Mex-Am./Mex.	50.42**	63.94**	29.63**	17.93**	15.22
Chicano	87.22*	53.55	0.00	0.00	0.00
Puerto Rican	0.00	58.43	21.19	0.00	0.00
Cuban	7.74	37.01	22.72	11.22	0.00
Cen./So. Am	44.76**	53.20**	29.82**	20.90**	15.78*
Immig'd 1986 or later	53.04**	57.93**	25.00**	11.72**	5.95*
Immig'd before 1986	11.78	38.39**	15.91**	5.71*	4.68

Table B4
Individual Poverty Levels, By Immigrant Status and Insurance Coverage
(Adults age 18 and older)
March CPS 2001

	All Immigrants		US-Born	
		Percent uninsured		Percent uninsured
Below 100% FPL	18.23%	53.81%	11.72%	26.20%
100-124% FPL	7.61	49.94	4.65	23.61
125-149% FPL	7.01	48.23	4.91	19.16
150%+ FPL	67.15	26.77	78.72	9.52
Total	100.00	31.64	100.00	11.85

Table B5
Employment Sector, By Immigrant Status and Insurance Coverage
(Adults age 18 and over)
March CPS 2001

	Foreign-born	< 15 years in U.S.	15 years + in the U.S.	Foreign-born Hispanics	U.S. born
Immigrants, by Job Sector					
Exec, admin, and managerial occupations	8.08%	5.97%	10.39%	5.34%	14.19%
Professional specialty occupations	9.22	7.42	11.19	4.16	14.67
Technicians and related support occs	1.97	1.67	2.30	1.21	3.14
Sales occupations	8.08	7.50	8.72	6.61	11.60
Admin support occ, inc cler service occs	8.22	6.59	10.00	7.20	14.73
Private household occupations	1.62	1.68	1.55	1.93	0.49
Protective service occupations	0.84	0.61	1.10	0.81	1.93
Service occs, exc hhld and protective	20.05	22.94	16.88	22.08	11.90
Farming, forestry, and fishing occs	5.65	6.80	4.40	7.59	3.63
Precision prod, craft, and repair occs	12.91	12.93	12.89	15.02	10.72
Machine opers,assemblers,and inspectors	11.48	12.32	10.56	13.94	3.96
Transportation and material moving occs	4.10	3.86	4.37	4.59	4.42
Handlers, equip cleaners, helpers and laborers	7.50	9.53	5.28	9.33	3.97
Armed Forces - currently civilian	0.27	0.19	0.37	0.20	0.65

	Foreign-born	< 15 years in U.S.	15 years + in the U.S.	Foreign-born Hispanics	U.S. born
Immigrants Uninsured, by Job Sector					
Exec, admin, and managerial occupations	17.26	24.33	12.82	21.81	6.86
Professional specialty occupations	10.68	13.08	8.94	13.35	6.31
Technicians and related support occs	13.43	17.18	10.46	23.11	7.64
Sales occupations	34.53	44.17	25.45	41.27	14.93
Admin support occ, inc cler service occs	19.22	24.32	15.55	22.13	10.42
Private household occupations	67.33	75.64	57.46	68.11	29.53
Protective service occupations	27.36	32.14	24.48	26.95	10.06
Service occs, exc hhld and protective	42.80	53.13	27.45	48.09	22.30
Farming, forestry, and fishing occs	63.54	66.84	57.95	67.11	20.26
Precision prod, craft, and repair occs	38.28	47.43	28.25	42.37	16.53
Machine opers,assemblers,and inspectors	34.99	42.54	25.35	39.85	14.87
Transportation and material moving occs	38.99	47.75	30.52	38.24	18.63
Handlrs,equip cleanrs,helprs and laborers	54.60	64.01	36.01	58.89	24.37
Armed Forces - currently civilian	0.00	0.00	0.00	0.00	0.00

Table B6
Labor Force Participation, By Immigrant Status and Insurance Coverage
(Adults age 22 and older)
March CPS 2001

	Full year, full time	Full year, part time	Part year, full time	Part year, part time	Nonworker
Immigrants, by Labor Force Participation					
All Natives	51.58%	5.97%	8.97%	5.04%	28.45%
All Immigrants	51.59	4.67	10.20	3.46	30.08
White, non-Hispanic	44.92	5.49	8.59	4.05	36.95
Black, non-Hispanic	59.98	3.85	10.19	3.39	22.59
American Indian	50.78	7.11	8.83	0.00	33.28
Asian	54.95	5.30	8.28	3.65	27.82
Hispanic	52.25	3.99	12.33	3.07	28.36
Mex-Am./Mex.	52.27	3.58	12.94	3.04	28.16
Chicano	67.47	6.99	0.00	6.26	19.29
Puerto Rican	55.08	0.00	10.13	4.63	30.15
Cuban	45.17	4.18	6.98	2.63	41.04
Cen./So. Am	53.72	4.82	12.98	3.00	25.49
Immig'd 1986 or later	52.11	4.56	12.62	3.82	26.88
Immig'd before 1986	51.09	4.78	7.88	3.11	33.14
Immigrants Uninsured, by Labor Force Participation					
All Natives	10.06	16.20	21.55	18.17	8.82
All Immigrants	27.85	33.25	42.66	34.52	27.16

	Full year, full time	Full year, part time	Part year, full time	Part year, part time	Nonworker
White, non-Hispanic	12.66	16.87	23.55	21.42	12.35
Black, non-Hispanic	22.02**	35.04*	46.48**	21.91	35.31**
American Indian	17.85	44.92	54.14	0.00	21.19
Asian	16.25*	27.77*	27.52	36.44*	20.86**
Hispanic	43.77**	50.57**	55.76**	45.94**	41.27**
Mex-Am./Mex.	48.62**	59.75**	57.45**	55.12	50.16**
Chicano	50.24**	0.00	0.00	100.00	0.00
Puerto Rican	26.66	0.00	0.00	100.00	17.30
Cuban	24.04**	29.75	41.02	26.74	9.65
Cen./So. Am	39.37**	39.96**	55.23**	32.80	34.97**
Immig'd 1986 or later	36.23**	42.80**	49.87**	43.45**	44.64**
Immig'd before 1986	19.66**	24.53**	31.61**	24.02*	13.59**

Notes and Definitions:
- Information on Asian subpopulations was not available.
- The unweighted sample sizes in March 2001 CPS for several foreign-born ethnicities and racial groups are small:

Unweighted Totals, Foreign-Born	
White, non-Hispanic	3073
Black, non-Hispanic	814
American Indian	31
Asian	2757
Hispanic	9007
Mexican-American/Mexican	5624
Chicano	18
Puerto Rican	23
Cuban	579
Central or South American	2318

- "White," "Black," "American Indian," and "Asian" exclude Hispanics.
- "American Indian" includes Aleuts and Eskimos.
- "Asian" includes Pacific Islanders.
- "U.S. Native" includes people born in the U.S., Puerto Rico, or U.S. outlying areas, and people born abroad of U.S. parents. "Foreign-born" includes all others.
- "Insured" includes individuals who had health insurance at any time in 2000. "Uninsured" includes all others.
- Education level refers to education level at the time of the interview, March 2001.
- Work status refers to employment in 2000.
- Wage and salary income refers to wage and salary income in 2000.
- Primary wage earners are the individuals who earned the greatest amount of wage and salary income in their families.
- One asterisk (*) indicates that the difference from insurance rates of foreign born whites is significant at the .01 level.
- Two asterisks (**) indicates that the difference from insurance rates of foreign born whites is significant at the .05 level.

Appendix C

Additional Tables for Section on Chronic Mental Illness

TABLE C-1
Employment/Labor Force Outcomes
Persons with Mental Illness

Study (authors and year), Data set and sample	Outcomes examined	Analytic Methods	Key Findings
Wilson 2001 New Jersey Demographics of Disability 14,659 adults, ages 35-74. Excludes individuals who reported illnesses occurring before age 25.	Probability of employment among individuals with one or more specified chronic illnesses, including mental illness.	Regression and probit analysis	Overall measure of chronic illness explained very little of the overall variation in employment probability (likelihood ratio index rises from 0.223 to 0.236 for women and 0.383 to 0.412 for men). Effects are greater when examining specific conditions. For men, mental illness has the second largest effect (after CNS trauma). - 19.7 percent decline in employment probability due to disease. - Employment effects of mental illness are greater among those with lower levels of education; 40.2 percent decline in employment rate for men with high school education or less. For women, effects of mental illness on employment are not as large as for men. - Overall, 8.5 percent decline in employment probability. - Employment effects of mental illness are greater among those with higher levels of education;18.6 percent decline in employment rate for women with more than high school education, (virtually no decline for women with high school or less).

Study (authors and year), Data set and sample	Outcomes examined	Analytic Methods	Key Findings

Ettner, Frank, Kessler 1997
 	
1990-1992 National Comorbidity Survey
 	
4626 respondents to parts I and II
  - 2225 men
  - 2401 men
	(1) Current employment status among individuals with psychiatric disorders;
	
	Among employed persons with psychiatric disorders
	(2) Usual weekly hours worked and (3) personal income during previous year.
		Multivariate and probit analysis.
		
		Two-stage instrumental variables, to address potential endogeneity of mental health.
			Psychiatric disorders in the aggregate:
			
			(1) Reduce the probability of employment by roughly 11 percent
			  - From 82.9 to 71.9 percent for women (p<0.01)
			  - From 94.1 percent to 83.4 percent for men (p<0.01)
			
			(2) Result in small reductions in the conditional work hours of men
			  - From 46.2 to 43.7 (structural shift model) or 39.5 (latent shift model) (p<0.05)
			
			(3) Lead to substantial drop in conditional income of both men and women
			  - Drop of \$3,465 or 18 percent for women, and \$4,521 or 13 percent for men) (p<0.01)
			
			Having multiple disorders (3 or more) reduces the probability of employment by roughly one-third (actual numbers not provided in article).
			
			Except for effects on annual income for men, the effects of having a psychiatric condition became larger after applying instrumental variables (IV-predicted of -12.6 percent for men, -14.2 percent for women; IV-latent of -40.2 percent for men and -33.8 percent for women.
			  - IV's used were (1) number of disorders experienced by respondent prior to age 18, and number of disorders ever experienced by (2) respondent's mother, and by (3) respondent's father.

Study (authors and year), Data set and sample	Outcomes examined	Analytic Methods	Key Findings
Mitchell and Anderson 1999 Epidemiologic Catchment Area (ECA) survey data The ECA involved two waves of in-person interviews conducted in 5 sites between 1978 and 1985. This study used data from 3 of the 5 sites (Baltimore, Durham and Los Angeles). Individuals employed FT at the time of the first interview.	Labor force participation at the time of the second interview among older workers, ages 50 to 64. Developed a mental health index equal to the sum of reported mental illness conditions (a symptom count). Also used a set of physical health indicators.	Multivariate analysis. Estimated work and mental health equations. Predicted mental health index substituted into logit for labor force participation.	Physical health measures, individually and jointly, were not significant in the work equation. The most significant health influence on retirement decision is mental health status, and this was true only for men. For women, mental health status was not found to be significant in predicting labor force participation. Only being in a white collar occupation was significant for women—with women in white collar positions more likely to be working in period two than blue collar workers. For men, mental health problems were the only things found to be significant in the work equation—men reporting symptoms of depression and alcohol abuse were less likely to be working in period two. Economic and demographic factors were not found to have a significant effect on decisions to remain in the labor force.

Appendix D: Annotated Bibliography

RACIAL/ETHNIC MINORITIES

American Academy of Pediatrics, Committee on Pediatric Research. June 2000. "Race/Ethnicity, Gender, Socioeconomic Status – Research Exploring Their Effects on Child Health: A Subject Review." *Pediatrics*. 105(6): 1349-1351.

  This article is a discussion of the use of race/ethnicity, gender, and socioeconomic status as explanatory variables in research, specifically on research involving children. The authors hope to improve the understanding of these variables; they discuss how race/ethnicity, gender, and socioeconomic status are considered to be primarily biological variables but also need to be viewed as social constructs. The committee concludes that careful research is needed to disentangle the sociology and psychology of race/ethnicity, gender, and socioeconomic status from the biology of these variables, to better understand the health effects of these variables on children and other populations.

Becker G. July 2001. "Effects of Being Uninsured on Ethnic Minorities' Management of Chronic Illness." *Western Journal of Medicine*. 175(1): 19-23.

  This article presents a qualitative analysis (with some descriptive statistics) based on December 1997 through December 2000 interviews of 300 volunteers residing in one of two urban counties in California. The participants came from one of three racial/ethnic minority groups (African American, Latino, and Filipino American) and had at least one chronic illness such as diabetes, asthma, or heart disease. Results: "Compared with insured respondents, uninsured respondents…had poorly controlled illnesses, frequent health crises, difficulty procuring medication, used medication incorrectly, demonstrated poor understanding of their illness, and displayed little knowledge of self-care measures or risk awareness."

Berk ML, Albers LA, Schur CL. 1996. "The Growth in the US Uninsured Population: Trends in Hispanic Subgroups, 1977 to 1992." *American Journal of Public Health* 86(4): 572-576.

  Authors use the 1977 National Medical Care Expenditure Survey (MEPS) and the 1989 and 1992 National Health Interview Survey to describe to what degree the growth in the Hispanic population over these years contributes to rising rates of the uninsured. They find that Hispanics constituted 8% of the uninsured population in 1977, compared with 20% of the uninsured in 1992. The growth in the number of non-Hispanic uninsured has not been as rapid as that of Hispanic uninsured.

Brown ER, Ojeda V, Wyn R, Levan R. April 2000. *Racial and Ethnic Disparities in Access to Health Insurance and Health Care*. Washington, D.C.: UCLA Center for Health Policy Research, The Kaiser Family Foundation. 105 pgs.
http://www.kff.org/content/2000/1525/UCLAReport.pdf

  Brown, et.al. use March 1995 and 1998 Current Population Survey (CPS) data, February 1997 CPS, and 1994-1996 National Health Interview Survey (NHIS) data to focus on racial and ethnic minority groups nationwide. They confine their analysis to cross-tabs and frequency distributions. This report explores uninsurance levels among Latinos, African-Americans, Asians and Pacific Islanders, and American Indians/Alaskan Natives. The findings are similar

to other reports: Latinos experience the highest uninsurance rates of all ethnic groups and most of this disparity occurs because a scant 43% have access to employment-based health insurance. Other racial and ethnic minorities are also disadvantaged in their levels of insurance coverage and access to health insurance at their places of work.

Brown ER, Wyn R, Teleki S. August 2000. *Disparities in Health Insurance and Access to Care for Residents Across U.S. Cities*. New York, NY: The Commonwealth Fund. Publication #392. 50 pgs.
http://www.cmwf.org/programs/insurance/Brown85MSAsreport.pdf
> Using March 1998 CPS data and 1995-1996 NHIS data, this report "…examines differences [using frequencies and cross tabs only] among urban areas in the U.S. in their rates of job based health insurance and how those differences affect their residents' overall health insurance coverage and access to health care services." The authors find great variance in the rates of uninsurance and employer-sponsored health insurance among the urban areas studied. Also, the uninsured living in areas with high levels of uninsurance have worse access to care than those who live where uninsurance levels are low.

Cooper PF, Shone B. November/December 1997. "More Offers, Fewer Takers for Employment-Based Health Insurance: 1987 and 1996." *Health Affairs* 16(6):142-149.
> This paper addresses the issue of the decrease in participation in employer-based insurance coverage that is occurring, despite the fact that more firms are offering health insurance to employees. One explanation discussed by the authors is the increasing cost of employment-related insurance and the decreasing premium percentage contributed by the employer. Another explanation is the increase of people covered by Medicaid, which serves as a potential substitute for private insurance. The data for this study comes from the 1996 panel of the MEPS and the 1987 National Medical Expenditure Survey (NMES). The individuals in the samples are between 21 and 64 years old and employed (but not self-employed).

Cunningham P, Ginsburg P. Spring 2001. "What Accounts for Differences in Uninsurance Rates Across Communities?" *Inquiry*. 38: 6-21.
> As opposed to characterizing the uninsured by individual demographic variables, this article sought to define the community-level variables (i.e., average health care costs in community, employment rates, state policies and Medicaid eligibility) that cause a low percentage or high percentage of uninsured in the population. The regression analysis, using the Community Tracking Study (CTS) from 1996 to 1997, found that differences in rates of uninsurance "between 'high uninsurance' and 'low uninsurance' communities are the results of differences in the racial/ethnic composition and socioeconomic status of the population (33%), differences in employment characteristics (26%), and state Medicaid eligibility requirements (12.7%)."

Cunningham PJ, Schaefer E, Hogan C. October 1999. "Who Declines Employer-Sponsored Health Insurance and is Uninsured?" *Health System Change Issue Brief* Number 22:1-4.
> This brief centers on the 20% of all uninsured people who are offered health insurance by their employer but choose not enroll in the plan(s). The authors present new findings on who is included in these 7.3 million uninsured persons. They advise policy makers to "consider ways to address the problem identified by this study: low take-up rates among lower-income

workers." The data presented are from the CTS, which contains observations on 33,000 families and 60,000 individuals.

Fronstin P, Goldberg L, Robins P. Summer 1997. "Differences in Private Health Insurance Coverage for Working Male Hispanics." *Inquiry*. 34: 171-180.

There are many papers describing and trying to pin down why the Hispanic population has such high rates of uninsurance, but few have looked into the causes of the varying rates between Hispanics of different national origin. "The purpose of this paper is to identify factors associated with differences in the probability of having private health insurance coverage among Mexican-Americans, Puerto Ricans, and Cuban-Americans." The authors use March 1989 through March 1994 CPS data and a linear probability model to examine the demographic and occupational characteristics that lead to Mexican-Americans having a higher rate of uninsurance than their Latino neighbors of Puerto Rican and Cuban descent. The difference between Mexican-Americans and Cuban-Americans in probability of having private health insurance coverage is due to Cuban-Americans having higher hourly wages, having more education, being older, working in industries with higher employer-sponsored insurance rates, and their occupations. The differences between Mexican-Americans and Puerto Ricans are due to industry, hourly wage rates, firm size, and education. The results indicated, however, that these attributes could only account for about half of the differences between the subgroups of Hispanics.

Garrett AB, Nichols L, Greenman E. August 2001. "Workers Without Health Insurance: Who Are They and How Can Policy Reach Them," Washington, D.C.: The Urban Institute and the W.K. Kellogg Foundation.
http://www.communityvoices.org/PDF/Workers-Without-Insurance.pdf

This report "offers the most detailed picture yet of the uninsured *working* population—now numbering more than 16 million—and examines the policy implications." The report uses descriptive statistics based on the February and March 1999 CPS. Among the findings, "firm size is more important than industry as a determinant of coverage possibilities for workers." Other findings link individual demographics rates of uninsurance, i.e. income determines employer sponsorship, employee eligibility, and employee take-up of insurance more strongly than marital status, family size, or labor force participation of the spouse. Policies such as tax credits, subsidies, and the expansion of public programs are discussed and compared as means to reduce the number of the working uninsured.

Greenwald HP, O'Keefe S, DiCamillo M. December 2001. *California's Working Latinos and Health Insurance: New Facts and Policy Challenges*. Los Angeles, USC. 4 pgs.
http://www.usc.edu/schools/sppd/sacto/greenwald.pdf

The report notes that about one-third of adult Latinos working in California are uninsured, 44% of which have never had health insurance at any time. The California HealthCare Foundation (CHCF) interviewed 1,000 randomly selected working Latinos in early 2001 in order to "compare the validity and importance" of the many proposed causes for the lack of health insurance among Latinos. The cost of health insurance and the lack of an offer of insurance from the employer emerged as the two most important factors preventing Latinos from having health insurance. The survey also found that language and cultural barriers, as well as recent immigration, decreased the chances of working Latinos having health

insurance. List of reports on uninsured that have been funded by CHFC are at:
http://www.chcf.org/topics/index.cfm?topic=CL109&PgNum=2&order=pubdate

Haas JS, Adler NE. October 2001. *The Causes of Vulnerability: Disentangling the Effects of Race, Socioeconomic Status and Insurance Coverage on Health.* Background paper prepared for the Committee on the Consequences of Uninsurance, The Institute of Medicine.
http://www.iom.edu/IOM/IOMHome.nsf/Pages/Consequences+of+Uninsurance#HCS
> The authors put together a literature review (1985-2000) of publications addressing vulnerability as defined by race/ethnicity and socioeconomic status. They examined several dimensions including access to care, quality of care, avoidable hospitalizations, preventive care/cancer screening, mortality, and outcomes for specific conditions (such as cancer, cardiovascular disease, diabetes, HIV, etc.). "Measures of health care utilization and process of care are more strongly and consistently influences by insurance status than are measures of health status. While health insurance may alleviate financial barriers to care and improve the choice of providers, it does not address other individual and societal determinants of poor health that are experienced by ethnic minorities and the disadvantaged."

Hall A, Scott Collins K, Glied S. February 1999. "Employer-Sponsored Health Insurance: Implications for Minority Workers." The Commonwealth Fund.
http://www.cmwf.org/programs/minority/hall_minorityinsur_314.asp
> This report includes a "multivariate logistic regression analysis modeling the likelihood of having employer-based health insurance among workers." Descriptive statistics on the distribution of the uninsured are presented. The results from the March 1997 CPS show that race and citizenship lower the odds of having employer-based health insurance; also, higher education and higher wages increase the odds of being insured through the employer.

Hoffman C, Pohl, MB. February 2002. *Health Insurance Coverage in America: 2000 Data Update*. The Kaiser Commission on Medicaid and the Uninsured, Kaiser Family Foundation.
http://www.kff.org/content/2002/4007/4007.pdf
> This report uses data from the March 1999-2000 CPS to describe health insurance coverage in the United States for the non-elderly population. In addition, this report includes multiple tables describing the uninsured on both the national and the state levels, with breakdowns of racial/ethnic minorities.

Holahan J, Brennen N. March 2000. "Who Are the Adult Uninsured? Assessing the New Federalism." Series B, No. B-14. Washington, D.C.: The Urban Institute
http://www.urban.org/Template.cfm?Section=ByAuthor?NavMenuID=63&template=/TaggedContent/ViewPublication.cfm&PublicationID=6480
> Using data from the 1997 National Survey of American Families (NSAF) "…this brief provides a snapshot of adults lacking health insurance coverage examining factors such as income level, family structure, race/ethnicity, employment, health status [self-reported health status based on a condensed, 3-point scale, and presence of a limiting condition], and access to and utilization of health care." The report has many descriptive tables for the nationwide uninsured population, and for some selected states, but no regression analysis. "Findings show that younger, low-income adults, particularly Blacks and Hispanics, have the highest uninsurance rates. At the same time, half of low-income uninsured adults are White, and the

majority of uninsured low-income adults reside in households with at least one full-time worker."

Institute of Medicine. 2001. *Coverage Matters: Insurance and Health Care*. Committee on the Consequences of Uninsurance, Board on Health Care Services, Institute of Medicine. 192 pgs. http://www.iom.edu/iom/iomhome.nsf/WFiles/uninsuranceenglish/$file/uninsuranceenglish.pdf
> This report "serves as a guide to a broad range of issues related to the lack of insurance coverage in America and provides background data of use to policy makers and health services researchers." It highlights demographic disparities in rates of uninsurance. The appendix includes an excellent multivariate analysis of the uninsured (from the 2000 Current Population Survey) using socioeconomic characteristics, race and ethnicity, immigrant and nativity status, and geographic areas as the independent variables. Their results show disparities between African-Americans, Hispanics, and other minorities (as a group) when compared to Non-Hispanic Whites, disparities not fully explained by other socioeconomic variables.

Kass BL, Weinick RM, Monheit AC. 1999. "Racial and Ethnic Differences in Health, 1996." Rockville, MD: Agency for Health Care Policy and Research. *MEPS Chartbook No. 2.* AHCPR Pub. No. 99-0001. http://www.meps.ahrq.gov/papers/cb2_99-0001/cb2.htm
> The first section reports on the health insurance status of Hispanic, Black, and White Americans, while the remainder looks at access to care and differences in health status among racial and ethnic groups. The data are taken from 1996 MEPS and presented in descriptive charts and graphs. There is little analysis, but the conclusion points out that Blacks and Hispanics fare worse than Whites in levels of employer-sponsored health coverage and rates of uninsurance.

Mayberry R, Mili F, Vaid I, Samadi A, Ofili E, McNeal M, Griffith P, LaBrie G. October 1999. *A Synthesis of the Literature: Racial and Ethnic Differences in Access to Medical Care*. Morehouse Medical Treatment Effectiveness Center (MMEDTEC), Morehouse School of Medicine. Washington, D.C.: The Kaiser Family Foundation.
> Literature review of studies published from 1985 to 1998. The review focuses on health outcomes by race and ethnicity sorted by condition or source of care: asthma, cancer, cardiovascular disease, dental services, diabetes, emergency care, eye disease, heart disease, HIV/AIDS, hypertension, infectious disease, maternal and child health, mental and neurological disorders, osteoporosis, preventive and therapeutic services, and renal disease. "Access [including insurance coverage], availability, and utilization of health services received only a limited treatise." Conclusions: "Despite the limitations [of the articles]…the literature well documents poorer access to medical care among racial and ethnic minorities for several disease groups and types of health services."

Monheit A, Vistnes J. 2000. "Race/Ethnicity and Health Insurance Status: 1987 and 1996." *Medical Care Research and Review*. 57(Supplement 1): 11-35.

> The authors use 1987 NMES and 1996 MEPS data (descriptive statistics as well as econometric analysis with linear probability models) to study how the health insurance status of White, Black, and Hispanic Americans has changed and to make comparisons between the groups. The authors identify gaps in minority health care coverage relative to that of White Americans. They also investigate the access of workers in these groups to employment-based health insurance. Over the studied time period, health insurance coverage decreased for all groups, but Hispanic males had the largest decreases, resulting from a change in the composition and economic status of Hispanics as a whole. Hispanics in 1996 were poorer than in 1987, and a larger percentage were from Latin America.

Offner R, Holzer H. April 2002. "Left Behind in the Labor Market: Recent Employment Trends Among Young Black Men." Brookings Institution – Center on Urban and Metropolitan Policy. http://www.brook.edu/dybdocroot/es/urban/publications/offnerholzer.pdf

> The authors use 1979-2000 CPS data to demonstrate how and attempt to explain why labor force participation and employment rates for young Black men are declining over the years and also why they are considerably lower than those for similar White and Hispanic young men, especially in cities (as opposed to suburban and rural areas). There is no mention of health insurance, but the paper shows an employment gap that could explain some of the lack of insurance for Black Americans.

Perry M, Kannel S, Castillo E. *Barriers to Health Coverage for Hispanic Workers: Focus Group Findings*. New York, NY: The Commonwealth Fund. http://www.cmwf.org/programs/minority/perry_barriers_425.pdf

> Information for this report comes from eight focus group sessions conducted in urban and rural areas in early 2000 with a total of 81 low and moderate-income Hispanic workers, 22 of whom were insured and 59 of whom were uninsured. Among the conclusions from these sessions is the finding that securing a job, with or without health coverage, is the first priority when seeking employment. Barriers to coverage include the fact that many employers do not offer health coverage, particularly for workers in small firms with fewer than 50 employees. For other workers, language barriers posed problems to obtaining health insurance. Additionally, immigration concerns prevent some workers from enrolling themselves or family members in private or public programs.

Pollack H, Kronebusch K. "Health Insurance and Vulnerable Populations." ERIU Working Paper 5; Ann Arbor, Michigan. http://www.umich.edu/~eriu/pdf/wp5.pdf

> The authors set out to discover the causes of lack of insurance coverage for vulnerable populations, based on a broad literature search. The first section defines the population being studied and considers components of their vulnerability. The next sections present basic demographic information, and review literature focusing on the different vulnerable populations. The last section focuses on unsettled questions in the existing literature.

Quinn K. February 2000. Working Without Benefits: The Health Insurance Crisis Confronting Hispanic Americans. New York, NY: The Commonwealth Fund. http://www.cmwf.org/programs/insurance/quinn_wobenefits_370.pdf

The author used data from the March 1999 CPS and the Commonwealth Fund 1999 National Survey of Workers' Health Insurance. Methods are limited to frequencies and cross-tabs. Important findings include the fact that four states—California, Florida, New York, and Texas—account for 73 percent of all uninsured Hispanics. In total, one-fourth of all uninsured people in the U.S. are Hispanics, a number that has doubled from 1987 to 1998 and now numbers 11.2 million. Only 43 percent of Hispanic adults and children are insured through employer-sponsored coverage, as compared with the national average of 64 percent.

Roetzheim R. Pal N, Tennant C, Voti L, Ayanian J, Schwabe A, Krisher J. "Effects of Health Insurance and Race on Early Detection of Cancer." *Journal of the National Cancer Institute*. 91(16): 1409-1415.

With data from a study of over 28,000 new cancer patients in Florida in 1994, the authors tested how type of health insurance (including lack of any insurance) and race affect the stage at which cancer is first diagnosed in the patient. Uninsured patients and those insured by Medicaid, as well as Blacks, were more likely to have a late-stage diagnosis of cancer. However, these two variables were not tested as potential confounders. For example, African-Americans are more likely to be covered by Medicaid, but this was not controlled for in the study.

Scott Collins K, Hughes D, Doty M, Ives B, Edwards J, Tenney K. March 2002. *Diverse Communities, Common Concerns: Assessing Health Care Quality for Minority Americans: Findings from The Commonwealth Fund 2001 Health Care Quality Survey*. New York, NY: The Commonwealth Fund.
http://www.cmwf.org/programs/minority/collins_diversecommunities_523.pdf

These findings are reported from The Commonwealth Fund 2001 Health Care Quality Survey (frequency distributions and cross-tabs). There is included a small section (section VI, page 45) on health insurance. Once again, findings reveal that Hispanics and African Americans are much less likely than Whites or Asian Americans to have health insurance. Even with insurance, African Americans, Hispanics and Asian Americans reported higher rates of problems communicating with physicians than insured Whites.

Shetterly SM, Baxter J, Mason LD, Hamman RF. December 1996. "Self-Rated Health among Hispanic vs Non-Hispanic White Adults: The San Luis Valley Health and Aging Study." *American Journal of Public Health*. 86(12): 1798-1801.

This study investigated whether objective health indicators explained lower self-rated health among Hispanics compared with non-Hispanic Whites. It also considered socioeconomic and cultural explanations. Health ratings of 429 Hispanics and 583 non-Hispanic Whites aged 20 through 74 were analyzed with logistic regression. Findings indicated that Hispanics were 3.6 times more likely to report fair or poor health, for which the strongest explanation was acculturation.

Shi L. March 2000. "Vulnerable Populations and Health Insurance." *Medical Care Research and Review*. 57(1): 110-134.

> The author used the Household Component of the 1996 MEPS data and logistic regression models to examine the profile of health insurance coverage for certain vulnerable populations (children, racial/ethnic minorities, low-income families, non-metropolitan statistical area residents, and those with poor health status). Shi analyzed the contributions of various dimensions of vulnerability including need factors, enabling factors, and predisposing factors. He concludes that since Medicaid and other forms of public health insurance target the unemployed poor and the unhealthy, "public insurance helped reduce the employment- and health-related disparities in private coverage," but " it has not overcome other disparities related to vulnerable characteristics including race/ethnicity, wages, education, and area of residence." This article purports to describe in detail the characteristics that lead to a decreased likelihood of having health insurance in an effort to aid policy-makers in their decisions.

Shi L. February 2001. "The Convergence of Vulnerable Characteristics and Health Insurance in the U.S." *Social Science and Medicine* 53(2001): 519-529.

> Using the same data as previously (see above for Shi L., March 2000, Medical Care Research and Review), Shi expands the analyses for this article to examine the convergence of vulnerable characteristics based on the models by Aday. The interaction of race and ethnicity (minority/ethnic non-White), income, and health status was explored using eight categories of converging vulnerability as independent variables (minority, low-income, bad health; minority, low-income, good health; minority high-income, bad health; minority, high-income, good health; White low income bad health; White low income good health; White high income bad health; White, high-income, good health). Among the findings, "…race and income significantly influence insurance coverage, …there was relatively little disparity in insurance coverage due to self-reported health status."

Smedley B, Stith AY, Nelson AR. 2002. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care.* Washington, D.C.: Institute of Medicine, Board of Health Sciences Policy. 562 pgs.

> This study aims to assess the level of racial and ethnic differences in healthcare, evaluate reasons behind these healthcare disparities, and provide recommendations for eliminating racial and ethnic healthcare disparities. In order to do this study, a 15-member committee was formed to review literature published within the last 10 years that was all peer-reviewed. Four liaison panels were also formed to serve as a resource to the committee, and 9 focus groups were formed for further insight into the topic.

Trevino F, Moyer ME, Valdez B, Stroup-Benham C. 1991. "Health Insurance Coverage and Utilization of Health Services by Mexican Americans, Mainland Puerto Ricans, and Cuban Americans." *JAMA* 265(2):233-237.

> This is a descriptive study using the 1989 CPS and 1982 – 1984 Hispanic Health and Nutrition Examination Surveys (HHANES) to compare the insurance rates of several Hispanic subpopulations with other racial/ethnic groups. The authors find that Mexican Americans have higher rates of uninsurance than either Puerto Ricans or Cuban Americans, and that

Puerto Ricans are more likely to be covered by Medicaid than either Mexican Americans or Cuban Americans.

Waidmann T, Rajan S. 2000. "Race and Ethnic Disparities in Health Care Access and Utilization: An Examination of State Variation." *Medical Care Research and Review* 57(1): 55-84.

Using the 1997 NSAF, the authors decompose the effects of various workforce and socio-economic variables on insurance rates for Whites, Blacks, and Hispanics. They find income and citizenship to be particularly powerful explanatory variables with respect to the insurance gap between Hispanics and Whites, and income to be most important in explaining the gap between Blacks and Whites. Authors also present decomposition information on gaps in insurance coverage by racial/ethnic group and state.

IMMIGRANTS

Bachrach D, Lipson K. July 2002. *Health Coverage for Immigrants in New York: an Update on Policy Developments and Next Steps*. The Commonwealth Fund. 12 pgs.
http://www.cmwf.org/programs/newyork/bachrach_immigrantsny_546.pdf

This reports discusses the changes in health coverage of immigrants due to recent court decisions and legislation, specific to New York. "The New York State Court of Appeals' June 2001 decision in *Aliessa v. Novello* restored full Medicaid eligibility to legal immigrants who were eligible for Medicaid coverage before the state implemented federal welfare reform and who meet the program's income guidelines." While legal immigrants can access public insurance, undocumented immigrants are denied all but prenatal, postpartum, and emergency services as a result of the U.S. Court of Appeals for the Second Circuit 2001 decision in *Lewis v. Thompson*. The recommendations include actions and policies to help immigrants understand and receive the benefits for which they are eligible, and increased or re-instated federal funds to assist the states in caring for their immigrant populations.

Bachrach D, Lipson K, Tassi A. March 2001. *Expanding Access to Health Insurance Coverage for Low-Income Immigrants in New York State*. New York, NY: The Commonwealth Fund.
http://www.cmwf.org/programs/newyork/bachrach_immigrant_458.pdf

The authors review data from the 1999 U.S. Census Bureau data. Since the enactment of the federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), foreign-born immigrants are often ineligible for Medicaid programs; and in New York, the state had not, at the time of this article, decided to extend state funds to immigrants. This paper explores the costs of three policy options designed to extend NY Medicaid funds to all immigrants.

Bass E. *Health Insurance Coverage in America: Are Immigrants Different*? The University of Illinois at Chicago. ERIU Research Proposal submitted February 2002.

This research proposal addresses the problem of the disproportionate number of uninsured immigrants in the US. It verifies that "immigrants do have lower coverage rates than the native-born" and "defines characteristics associated with immigrants to help explain this." Data used include those from the March 2000 Supplement to the CPS, Milton Romer's *National Health Systems of the World*, the World Health Organization, the World Bank, and the United Nations Statistics Division.

Borjas GJ. *Welfare Reform and Health Insurance in the Immigrant Population.* ERIU Research Proposal submitted February 2002.

This proposal concentrates on the "size and skill composition of the immigrant population" and their increasing lack of health insurance. It addresses the immigrant-related welfare changes to the PRWORA, and how that reform affected health insurance coverage for immigrants. The research uses the 1994-2001 CPS.

Brown ER, Ojeda V, Lara L, Valenzuela A. June 1999. *Undocumented Immigrants: Changes in Health Insurance Coverage with Legalized Immigration Status*. Center for Health Policy Research, UCLA.
http://www.healthpolicy.ucla.edu/publications/UndocumentedImmigrants.pdf

"This report examines the health insurance coverage of undocumented, or illegal, immigrants who became legal residents under…the Immigration Reform and Control Act of 1986 (IRCA)." Using data from the 1989 and 1992 Legalized Population Survey (LPS), the authors found that despite higher levels of labor force participation among the immigrant population, as compared to the general population, almost half were uninsured, and legalization of their status did not improve their health care coverage at once. Policy recommendations in the report called for broadened Medicaid eligibility, more funding for community safety nets, and another amnesty program to give legal status to undocumented immigrants.

Camarota S. January 2001. *Immigrants in the US – 2000: A Snapshot of America's Foreign-Born Population*. Center for Immigration Studies. 19 pgs.
http://cis.org/articles/2001/back101.pdf
> This report presents descriptive data on the immigrants living in the U.S. from the information in the March 2000 CPS. It includes a brief section on health insurance coverage, with a breakdown by country of origin of rates of uninsurance. The author believes that much of the growth of the uninsured population in the last decade is due to "immigrants who arrived after 1989 along with their U.S.-born children [who] account for 60 percent or 5.5 million of the increase in the uninsured population in the 1990s."

Camarota S, Edwards JR. July 2000. *Without Coverage: Immigration's Impact on the Size and Growth of the Population Lacking Health Insurance.* Washington, DC: Center for Immigration Studies. 60 pgs. http://www.cis.org/articles/2000/coverage/uninsured.pdf
> The authors used March 1999 CPS data, cross-tabs and frequencies. Among the findings of this report, about 59% of the growth in the number of uninsured is attributable to immigrants who arrived in the United States between 1994 and 1998 and their children. Camarota and Edwards conclude that PRWORA (1996 welfare reform that ended Medicaid funding for more recent immigrants) is not a significant reason why so many immigrants are uninsured since the proportion of immigrants who are uninsured has remained about the same (around 30% of persons in immigrant households lack health insurance). This report also examines uninsurance among a variety of immigrant populations, finding that the country of origin is a significant predictor of uninsurance. For example, immigrants from the Mexico, South and Central America, and Korea are the least likely to have health insurance coverage.

Capps R, Ku L, Fix M. March 2002. *How Are Immigrants Faring After Welfare Reform? Preliminary Evidence from Los Angeles and New York City*. Washington DC, The Urban Institute. 99 pgs.
http://www.urban.org/Template.cfm?Section=ByAuthor&NavMenuID=63&template=/TaggedContent/ViewPublication.cfm&PublicationID=7538

> This report provides findings (cross tabs, frequencies, and logistic regression analyses) from LANYCIS, a 1999-2000 survey of 3447 immigrant families in Los Angeles County and New York City, two cities that account for roughly a quarter of the nation's immigrant population. The Survey Research Center of UCLA conducted the survey in five different languages. The report measures housing affordability, food insecurity and hunger among immigrant populations. Health insurance coverage, health care access and self-reported health status are also highlighted. The study uses these measures to assess the need for food stamps, Medicaid and other benefits and services among differing immigrant subpopulations. The survey data were augmented by and compared to data from the March CPS (1997-1999) and the 1999 NSAF.

Carrasquillo O, Carrasquillo A, Shea S. June 2000. "Health Insurance Coverage of Immigrants Living in the United States: Differences by Citizenship Status and Country of Origin." *American Journal of Public Health* 90(6): 917-923.

> Using the 1998 March supplement to the CPS, this paper provides cross tabs and frequencies, as well as logistic regression models, to examine the rates of employer-sponsored health insurance among immigrants. The authors also examined immigrant status by country of origin (for the 16 countries with the largest number of immigrants living in the U.S.). The results demonstrate that immigrants from Guatemala, Mexico, El Salvador, Haiti, Korea, and Vietnam were the most likely to be uninsured. Overall, immigrants who are not U.S. citizens are much less likely to receive employer-sponsored health insurance or government coverage; 44% are uninsured.

Chin K, Dean S, Patchan K. June 2002. *How Have States Responded to the Eligibility Restrictions on Legal Immigrants in Medicaid and SCHIP?* Washington, D.C.: The Kaiser Family Foundation. 12 pgs. http://www.kff.org/content/2002/20020628/immig.pdf

> Using 2000 March CPS data and 2002 initial survey work from the National Immigration Law Center (NILC), "this paper … provide a brief summary of state responses to the restrictions on Medicaid and SCHIP. Specifically, they provide information on whether or not states elected to provide Medicaid to the new optional coverage categories and describe state-funded replacement programs for legal immigrants made ineligible for these federal health insurance programs by the 1996 welfare law." Twenty-two states provide health coverage programs of some sort to legal immigrants to replace the benefits lost after PRWORA.

Granados F, Puvvula J, Berman N, Dowling P. November 2001. "Health Care for Latino Children: Impact of Child and Parental Birthplace on Insurance Status and Access to Health Services." *American Journal of Public Health* 91(11):1806-1807.

> The authors used "a cross-sectional, in-person survey of 376 random households with children aged 1 to 12 years" conducted in 1997 in a primarily Latino community to assess their access to care. In the multivariate analysis, the insurance status of the child, the child's birthplace and the parents' birthplace were important predictors of the child's access to care (as defined by having a usual source of care). Immigrant children born to immigrant parents were less likely to have insurance or a regular source of care than U.S.-born children of immigrants, who in turn were less likely to have insurance or a regular source of care than U.S.-born children of U.S.-born parents.

Guendelman S, Schauffler HH, Pearl M. January/February 2001. "Unfriendly Shores: How Immigrants' Children Fare in the U.S. Health System." *Health Affairs* 20(1): 257-266.

> This paper examines "the joint effects of health insurance status and place of birth on access to care and use of health services by children of the working poor." The regression analysis uses data from the 1997 NHIS. The paper reported that "only 66 percent of the foreign-born children of the working poor had a regular source of care, compared with 92 percent of their U.S.-born counterparts" and that even among children who were insured, the foreign-born children were less likely to have a regular source of care or to have visited a doctor in the year before the survey.

Hammermesh D. September 1997. *Immigration and the Quality of Jobs*. NBER Working Paper 6195. http://papers.nber.org/papers/W6195

> The author uses data from the May and June 1991 CPS and the Quality of American Life Surveys of 1971 and 1978 to show that immigrants and native workers "enjoy very similar packages of amenities" in their jobs, that immigrants and natives do compete for the same jobs, and that immigration does not affect the amenities in the jobs of the natives, though Blacks appear to take jobs that other Americans and immigrants are unwilling to take.

Holahan J, Ku L, Pohl M. February 2001. *Is Immigration Responsible for the Growth in the Number of Uninsured?* Washington, DC: The Kaiser Family Foundation. http://www.kff.org/content/2001/2241/2221.pdf

> The authors use data from the 1995 and 1999 CPS (cross tabs and frequencies), but also assess statistical significance of factors from T1 to T2. Importantly, using a net change approach, they find that immigrants are not necessarily the cause of increasing uninsurance rates (unlike the Camarota and Edwards paper, see above). Holahan, Ku, and Pohl conclude that most of the growth in the number of uninsured occurred among native and naturalized citizens.

Jasso G, Rosenzweig M, Smith J. October 1998. *The Changing Skills of New Immigrants to the United States: Recent Trends and Their Determinants*. NBER Working Paper 6764.
http://papers.nber.org/papers/W6764

> This paper looks at "the determinants of the changing skills of new U.S. immigrants." Analysis shows that new immigrant skill levels increase with changing immigration law and the rise in purchasing power of foreign countries and that the average skill level of new legal immigrants since the mid 1980s has been rising in relation to that of the native population. The analysis is based on a data set assembled by the authors from 1972-1995 annual INS records of all new, legal immigrants.

The Kaiser Commission on Medicaid and the Uninsured. August 2000a. *Immigrants' Health Care: Coverage and Access*. Washington, DC: The Kaiser Family Foundation.
http://www.kff.org/content/2000/2000802a/Pub2203.pdf

> This is a chartbook that originated from the work done on behalf of the Kaiser Commission on Medicaid and the Uninsured. Using 1999 data from the U.S. Census, as well as 1999 INS data and March 1998 CPS data, the report describes the demographic characteristics of immigrants, the policy changes and citizenship issues that have affected immigrant health care coverage, and access to health care for immigrants. The descriptive statistics indicate that immigrants lack health insurance coverage at much greater rates than the native population, and they have less access to and less use of services.

The Kaiser Commission on Medicaid and the Uninsured. August 2000b. *Medicaid Eligibility and Citizenship Status: Policy Implications for Immigrant Populations*. Washington, D.C.: The Kaiser Family Foundation.
http://www.kff.org/content/2000/2000802a/Pub2201.pdf

> This is a policy brief prepared for the Kaiser Commission on Medicaid and the Uninsured. This paper examines the insurance status of immigrants after the 1996 PRWORA. The information is national in scope, looking at the Federal laws and exploring other non-Medicaid welfare programs (WIC, SCHIP, TANF, etc.). The brief amount of descriptive statistics come from the March 1999 CPS, but the focus of the report is more on the legislative framework surrounding immigrants and access to government benefits.

Ku L, Kessler B. December 1997. *Number and Cost of Immigrants on Medicaid*. Washington DC: The Urban Institute. Presented to the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services.
http://www.urban.org/Template.cfm?Section=ByAuthor&NavMenuID=63&template=/TaggedContent/ViewPublication.cfm&PublicationID=6233

> Early examination of the likely impact of PRWORA on health care access for immigrants, using Medicaid Quality Control database for the first half of 1994 supplemented with SSI data. These data provide a snapshot of the number and cost of immigrants to Medicaid prior to PRWORA. The authors admit, however, that … "The data presented in this paper are for 1994. It is difficult to predict how these distributions will apply in the future. There have been, and will continue to be, changes in the rate of immigration to the U.S. and in the composition of immigrants."

Ku L, Freilich A. February 2001. *Caring for Immigrants: Health Care Safety Nets in Los Angeles, New York, Miami, and Houston*. Washington DC: The Kaiser Family Foundation. http://www.kff.org/content/2001/2241/2227.pdf

> The authors used CPS data from March 1997, 1998, and 1999 for background frequencies, along with in-depth interviews of providers, administrators, and clients in the four cities, and tabulations of state and local regulations, laws, and policies, to describe the healthcare safety-nets available in each community and also the effects of 1996 welfare reform on those safety nets. The report contains an interesting narrative about the various problems providers and non-citizen immigrants are facing in these four communities.

Ku L, Matani S. January/February 2001. "Left Out: Immigrants' Access to Health Care and Insurance." *Health Affairs* 20(1): 247-256.

> This article used the 1997 NSAF to look at the prevalence of uninsurance among immigrants. The methodology included not only cross tabs and frequencies but also logit models. This article reiterates other studies that show non-citizens and their children have worse access to both regular ambulatory and emergency care, even when insured.

Lowell BL, Suro R. March 2002. *How many undocumented: The numbers behind the U.S.—Mexico Migration Talks*. Washington, D.C.: The Pew Hispanic Center.

> "This report presents new estimates of the undocumented population in the United States" as relevant to migration proposals being presently considered by the U.S. and Mexican governments. The estimates on unauthorized persons in the U.S. are broken down by place of origin (Mexico, Central America, other), and the unauthorized labor force is compared by industry and by average work days in a year. The focus is on undocumented workers from Mexico and how they and their industries would be affected by proposals to allow some undocumented migrants to gain legal status, to legalize migration linked to employment, and to deal specifically with the migration issues in the agricultural industry.

Schur C, Berk M, Good C, Gardner E. May 1999. *California's Undocumented Latino Immigrants: A Report on Access to Health Care Services*. Washington DC: The Kaiser Family Foundation. http://www.kff.org/content/archive/1490/latino.pdf

> This paper reports on the results from 1996-1997 in-person interviews with 533 undocumented Latino immigrants living in Fresno and Los Angeles counties. The interviews were conducted in Spanish on undocumented workers, residing in California for 6 months or more. This study was conducted in order to provide better information about the use of health care services by undocumented workers. In Section VI there is a brief summary of rates of uninsurance among undocumented Latino immigrants in California's metro areas. Findings indicated that most undocumented Latinos were uninsured and not participating in public programs; language was perceived as a major barrier to access.

Schur CL, Feldman J. May 2001. *Running in Place: How Job Characteristics, Immigrant Status, and Family Structure Keep Hispanics Uninsured*. Washington, D.C.: The Commonwealth Fund. Publication #453. http://www.cmwf.org/programs/insurance/schur_running_453.pdf

> This article used data from the 1997 NHIS, 1996-1998 Survey of Income and Program Participation (SIPP), and 1999 CPS in order to examine how immigrant status, job characteristics, and family structure influence health insurance coverage among the Hispanic

immigrant population. Analyses limited to cross tabs and frequencies. The authors found that although employment accounts for much of the difficulty faced by Hispanics seeking health insurance, family structure and immigrant status play smaller but still significant roles. "Mexican-American families and families of noncitizen Hispanics are particularly vulnerable because they are the least likely to have two workers."

Thamer M, Richard C, Casebeer AW, Ray NF. January 1997. "Health Insurance Coverage Among Foreign-Born US Residents: The Impact of Race, Ethnicity, and Length of Residence." *American Journal of Public Health* 87(1): 96-102.

Aggregating data from the 1989 and 1990 NHIS, the authors conducted a logistic multivariate analysis to predict the probability of health insurance coverage for immigrants compared to those born in the US. "There was no statistical difference in the proportion of Whites without health insurance according to nativity status." From their analysis, the remainder of the foreign-born were twice as likely as the US-born to be uninsured.   Hispanic immigrants fared the worse; those immigrants in the country for less time also had a higher probability of being uninsured. "Foreign-born US residents—especially Hispanics and persons residing in the United States for less than 15 years—are vulnerable to not having health insurance, which may limit their access to medical services."

U.S. Immigration and Naturalization Services. *Illegal Alien Resident Population.* http://www.ins.usdoj.gov/graphics/aboutins/statistics/illegalalien/illegal.pdf

This report estimates the characteristics of the illegal alien population currently residing in the United States, including their state of residence and country of origin. The data sources include the June 1988 CPS, 1982 to 1996 INS I-94 arrival/departure records, and 1988 and 1992 Census Bureau statistics on emigration. This report is cited frequently in the literature on the undocumented immigrant population.

CHRONIC MENTAL ILLNESS

Blumberg LJ, Nichols LM. April 2002. "The Health Status of Workers Who Declined Employer-Sponsored Insurance." *Health Affairs* 20(6):180-187.
   This paper compares the mental and physical health status of three different employee groups: workers who decline employer-sponsored insurance (decliners), workers who take offers of employer insurance, and workers who were not given any insurance offers. Using the 1997 NHIS, the authors found that uninsured decliners "fare much worse than coverage takers on every mental health issue" and on some physical health issues. They also discovered that "decliners who are not healthy appear to have greater difficulty obtaining needed services than do workers who take up employer coverage" and that "decliners tend to have somewhat better access than do the uninsured who are not offered such coverage."

Currie J, Madrian BC. 1999. "Health, Health Insurance and the Labor Market." *Handbook of Labor Economics* Vol. 3, Chapter 50: 3309-3390.
   This chapter provides an overview of the literature linking health, health insurance and labor market outcomes such as wages, earnings, employment, hours, occupational choice, job turnover, retirement, and the structure of employment. The first part of the chapter focuses on the relationship between health and labor market outcomes. The second part of the chapter considers the link between health insurance and labor market outcomes.

Druss B, Marcus S, Olfson M, Tanielian T, Elinson L, Pincus H. November/December 2001. "Comparing the National Economic Burden of Five Chronic Conditions." *Health Affairs* 20(6): 233-241.
   This paper uses data from the 1996 MEPS to study the economic burden of five chronic conditions: mood disorder, heart disease, hypertension, and asthma. The "analyses calculated the proportion of persons with a given condition who received any treatment for it and, among those who received any treatment, the costs for treatment for the condition." The study found that persons with heart disease paid the least out of pocket and were almost twice as likely to experience work loss as a result of their condition compared to the other illnesses. Also, the impact of insurance on the receipt and intensity of treatment was greater for persons with mood disorders than for any of the other diseases.

Druss B, Rosenheck R. December 1998. "Mental Disorders and Access to Medical Care in the United States." *American Journal of Psychiatry* 155(12): 1775-1777.
   Using the 1994 NHIS, "the authors studied the association between report of a mental disorder and 1) access to health insurance and a primary provider, and 2) actual receipt of medical care…While people who reported mental disorders [self-reported mental disorder as opposed to clinical diagnosis] showed no difference from those without mental disorders in likelihood of being uninsured or of having a primary care provider, they were twice as likely to report having been denied insurance because of a preexisting condition or having stayed in their job for fear of losing their health benefits."

Ettner S, Frank R, Kessler R. October 1997. "The Impact of Psychiatric Disorders on Labor Market Outcomes." *Industrial and Labor Relations Review*. 51(1): 64-81.
> This article looks at the effects of mental and substance use disorder on income, work hours, and employment rates, using data from the 1994 National Comorbidity Survey (NCS). Univariate regression and IV estimation found the presence of any psychiatric disorder (as diagnosed in the survey by a modified version of the Composite International Diagnostic Interview) to have (statistically significant) negative effects on employment and income.

Frank R, McGuire T. March 1999. *Economics and Mental Health*. NBER Working Paper 7052. http://papers.nber.org/papers/w7052.pdf
> "This paper is concerned with the economics of mental health. We argue that mental health economics is like health economics only more so: uncertainty and variation in treatments are greater; the assumption of patient self-interested behavior is more dubious; response to financial incentives such as insurance is exacerbated; the social consequences and external costs of illness are formidable. We elaborate on these statements and consider their implications throughout the chapter. 'Special characteristics' of mental illness and persons with mental illness are identified and related to observations on institutions paying for and providing mental health services. We show that adverse selection and moral hazard appear to hit mental health markets with special force. We discuss the emergence of new institutions within managed care that address long-standing problems in the sector. Finally, we trace the shifting role of government in this sector of the health economy."

French M, Zarkin G. December 1998. "Mental Health, Absenteeism and Earnings at a Large Manufacturing Worksite." *The Journal of Mental Health Policy and Economics* 1:162-172.
> The authors look at the effects that emotional/psychological symptoms have on both the income of 408 workers at the sampled manufacturing worksite and on their rates of absenteeism from work. "The analysis consistently finds that workers who report symptoms of emotional/psychological problems have higher absenteeism and lower earnings than otherwise similar coworkers."

Grella C. January-March 1997. "Services for Perinatal Women with Substance Abuse and Mental Health Disorders: The Unmet Need." *Journal of Psychoactive Drugs* 29(1): 67-78.
> "This article will: (1) provide a brief definition of dual diagnosis and describe gender differences in the prevalence of these disorders; (2) provide brief descriptions of the major mental illnesses affecting women and symptoms associated with perinatal conditions;(3) review the barriers to treatment for dually-diagnosed clients, generally, and specifically for perinatal women; (4) describe models of service delivery to the dually diagnosed; and (5) review federal, state, and local initiatives that coordinate services for the dually diagnosed."

Hadley, J. May 2002. *Sicker and Poorer: The Consequences of Being Uninsured.* Kaiser Commission on Medicaid and the Uninsured.
> This paper reviews research on the relationship between health insurance, health, work, income and education. The primary goal was to determine if health insurance improves health, and to assess the hypothesis that lack of insurance imposes significant costs on American society.

Kessler RC, et al. January 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States: Results From the National Comorbidity Survey" *Archives of General Psychiatry* 51(1):8-19.

> This study presents estimates of lifetime and 12-month prevalence of 14 DSM-III-R psychiatric disorders from the NCS. The respondents in the survey were person aged 15 to 54 and were not institutionalized. The findings include that 50% of respondents reported at least one lifetime disorder, and almost 30% at least one 12-month disorder. Less than 40% of those with a lifetime disorder had ever received professional treatment and less than 20% of those with a recent disorder had been treated in the last 12 months. The study also found that most disorders declined with age and higher socioeconomic status.

McAlpine DD, Mechanic D. November 1999. "Utilization of Specialty Mental Health Care Among Persons with Severe Mental Illness: The Roles of Demographics, Need, Insurance, and Risk." *Health Services Research* 35(1): 277-292.

> This article examines the "sociodemographic, need, insurance, and risk characteristics of persons with severe mental illness and the importance of these characteristics for predicting specialty mental health utilization among this group", using data from The Healthcare for Communities (HCC) survey. The primary findings include that the severely mentally ill are disproportionately African American, unmarried, male, less educated and have lower family incomes. Also, one in five persons with severe mental illness is uninsured, and Medicare or Medicaid insures 37% of the rest of that population.

Mitchell J, Anderson K. Summer 1989. "Mental Health and the Labor Force Participation of Older Workers." *Inquiry* 26:262-271.

> Using data from the 1991 Epidemiologic Catchment Area (ECA) survey, the authors try to find a link between poor mental health status, specifically job-related stress, and early retirement in older workers. "Our results suggest that mental, not physical, health problems are the most important reasons for the early withdrawal of older workers from the labor market." However, as noted by the authors, the ECA data has very few relevant economic questions on which to base this analysis.

National Institute of Mental Health. January 2001. "The Numbers Count: Mental Disorders in America." Bethesda, MD: National Institute of Mental Health, NIMH Publication No. 01-4584.
http://www.nimh.nih.gov/publicat/numbers.cfm

> Statistical reference for the prevalence of various mental health disorders in the United States. Disorders covered include depressive disorders, schizophrenia, anxiety disorders, ADHD, and others.

Rabinowitz J, Bromet E, Lavelle J, Severance K, Zariello S, Rosen B. "Relationship between Type of Insurance and Care During the Early Course of Psychosis." *American Journal of Psychiatry* 155:1392-1397.

> The authors used data from the Suffolk County Mental Health Project ("an epidemiologic study of first-admission psychosis" on "696 presumed psychotic patients hospitalized in one of the 12 psychiatric facilities in Suffolk County, New York, between September 1989 and December 1995.") to run logistic regression analysis on the relationship between the type of health insurance held by the patients and the care they had received for their mental illness

previous to being admitted to a psychiatric facility. The results indicated that the patients with private insurance or Medicare/Medicaid were more likely to have received some type of care or medication for their condition than those with no health insurance at all.

Regier DA, et al. February 1993. "The de Facto US Mental and Addictive Disorders Service System: Epidemiologic Catchment Area Prospective 1-Year Prevalence Rates of Disorders and Services." *Archives of General Psychiatry* 50(2):85-94.
The purpose of this study was to assess the prevalence of mental and addictive disorders and to estimate the use made of different sectors of the service system. The findings include that an annual prevalence rate of 28.1% was found for mental and addictive disorders in the US. In addition, 14.7% of the US population reported used services in one or more component sectors of the de facto US mental and addictive service system.

Ro M, Shum L. May 2001. *Forgotten Policy: An Examination of Mental Health in the U.S.* Battle Creek, MI: W.K. Kellogg Foundation. 29 pgs.
http://www.wkkf.org/pubs/Health/CommunityVoices/Pub711.pdf
A review of policy options. "… This paper presents strategies and recommendations for improving the current system so that it better addresses the mental health needs of vulnerable Americans." The authors look at the mental health care available, or not available, to vulnerable populations such as the working poor, racial/ethnic minorities, and those who live in rural areas. The statistics presented are derived from a variety of other literature and data sources, most notably the 1999 mental health report of the Surgeon General.

Sclar D, Robison L, Skaer T, Galin R. May/June 1999. "Ethnicity and the Prescribing of Antidepressant Pharmacotherapy: 1992-1995." *Harvard Review of Psychiatry*. 7:29-36.
This article used 1992-1995 National Ambulatory Medical Care Survey (NAMCS) data to compare the levels of antidepressants prescribed to Whites, Blacks, and Hispanics. The authors found rates of depression diagnosis and/or prescription of antidepressants among Blacks and Hispanics to be less than half the rate for Whites.

Shi L. March 2000. "Vulnerable Populations and Health Insurance." *Medical Care Research and Review*. 57(1): 110-134.
The author used the Household Component of the 1996 MEPS data and logistic regression models to examine the profile of health insurance coverage for certain vulnerable populations (children, racial/ethnic minorities, low-income families, non-metropolitan statistical area residents, and those with poor health status). Shi analyzed the contributions of various dimensions of vulnerability including need factors, enabling factors, and predisposing factors. He concludes that since Medicaid and other forms of public health insurance target the unemployed poor and the unhealthy, "public insurance helped reduce the employment- and health-related disparities in private coverage," but " it has not overcome other disparities related to vulnerable characteristics including race/ethnicity, wages, education, and area of residence." This article purports to describe in detail the characteristics that lead to a decreased likelihood of having health insurance in an effort to aid policy-makers in their decisions.

Stoddard S, Jans L, Ripple JR, Kraus L. *Chartbook on Work and Disability in the United States, 1998*. An InfoUse Report. Washington, D.C.: U.S. National Institute on Disability and Research.

> This chartbook is a reference on work and disability in the U.S. Each of four sections addresses a different aspect, including prevalence of disabilities among workers, labor force participation, related working factors such as income, race, age and gender, and work-related resources available to people with disabilities. It includes information on various national surveys, including the SIPP, NHIS< CPS, and others.

Sturm R, Gresenz CR, Pacula RL, Wells K. November 1999. "Datapoints: Labor Force Participation by Persons with Mental Illness." *Psychiatric Services* 50(11): 1407.

> This is a brief summary of statistics from the 1997-1998 HCC data, showing that "unemployment rates are three to five times higher among persons with mental disorders than among those with no disorder," even when the data are separated for men and women.

Sturm R, Wells K. April 2000. "Health Insurance May Be Improving—But Not for Individuals with Mental Illness." *Health Services Research* 35(1, II): 253-262.

> Between the years of 1996 and 1998, the authors find that "among individuals with probably mental health disorders, more have lost insurance in those two years than have gained it and more report decreases in health benefits. Individuals with worse mental health consistently report a deterioration of access to care compared to individuals with better mental health." The analysis is based on data from the 1997-1998 HCC survey.

U.S. Department of Health and Human Services. 2001. *Mental Health: Culture, Race, and Ethnicity—A Supplement to Mental Health: A Report of the Surgeon General—Executive Summary*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General. 217 pgs.
http://www.mentalhealth.org/cre/toc.asp
http://www.mentalhealth.org/Publications/allpubs/SMA-01-3613/sma-01-3613.pdf

> This report is a supplement to the 1999 Surgeon General's report on mental health, and highlights the role culture and society play in mental health, mental illness, and the types of mental health services people seek. The volume focuses on the four most recognized racial and ethnic minority groups in the United States: African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanic Americans. There is an overview of definitions of mental health, culture, race, and ethnicity. The focus is on a review of the literature, mainly from the view of mental health services; data comes from a variety of sources, mainly 1999-2001 Census Bureau data but also the NCS (1994) and the Epidemiologic Catchment Area study (1991).

Wilson S. 2001. "Work and the Accommodation of Chronic Illness: A Re-examination of the Health-Labor Supply Relationship." *Applied Economics* 33(9):1139-1156.

> Among the chronic illnesses examined for their impact on labor supply is a conglomerate of mental illnesses, including Alzheimers, schizophrenia, paranoid disorder, obsessive-compulsive disease, drug and alcohol abuse, and memory loss. The results indicate that presence of mental illness reduces the probability of being employed. Though the [significant results] are not very large, the article sets up a good econometric model of the way the

presence of disease affects the probability of employment. The author uses data from the 1991 New Jersey Demographics of Disability Survey, a random sample of 40,000 individuals in 14,000 New Jersey households.

Appendix E: Vulnerable Populations Data Sets

	Race/ Ethnicity	Immigrants	Mental Illness
Behavioral Risk Factor Surveillance System (BRFSS)	x	x	
Chinese American Psychiatric Epidemiological Study (CAPES)	x	x	
Community Tracking Study (CTS)	x		
Current Population Survey (CPS)	x	x	
Health and Retirement Survey (HRS)	x	x	
Healthcare for Communities (HCC)	x	x	x
Hispanic Health and Nutrition Examination Survey (HHANES)	x	x	
Legalized Population Survey (LPS)		x	
Medical Expenditure Panel Survey (MEPS)	x	x	
National Comorbidity Survey (NCS)	x		x
National Health and Nutrition Examination Survey (NHANES)	x	x	
National Health Interview Survey (NHIS)	x	x	
National Latino and Asian American Survey (NLAAS)	x	x	
National Longitudinal Survey of Youth (NLSY)	x	x	x
National Survey of American Life (NSAL)	x	x	x
National Survey of America's Families (NSAF)	x	x	
National Survey of Health and Stress (NSHS)	x		x
New Immigrant Study (NIS)		x	
Panel Study of Income Dynamics (PSID)	x	x	
Survey of Income and Program Participation (SIPP)	x	x	

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Behavioral Risk Factor Surveillance System (BRFSS)	Chinese American Psychiatric Epidemiological Study (CAPES)	Community Tracking Study (CTS)—Household	Current Population Survey (CPS) Core and Demographic Supplement
Design Type	Cross-sectional, state-level survey –interviews conducted with separate random samples each month throughout the year	Panel survey	Longitudinal design [Approx. 40% of Round 2 sample was from Round 1 (reinterviews), 60% in new cross–section each round] Note that sampling was done on telephone number, not on individual; therefore, no meaningful comparisons can be made of individuals or families between Rounds 1 and 2.	Rotating Panel: 8 separate panels interviewed monthly for 4 consecutive months, followed by an 8 month hiatus, followed by 4 more months of interviews
Characteristics of Sample	212,510 (in 2001) civilian non-institutionalized U.S. population age 18+ living in households with a telephone	1,747 Chinese Americans in Los Angeles County, adults aged 18 to 65, 835 male and 912 female	Civilian non-institutionalized U.S. population. Round 1: Households selected through random–digit dialing from within the 60 CTS sites, plus area probability sampling to capture HHs without telephones. Round 2: Sample of randomly selected telephone numbers from Round 1, plus a sample of randomly selected telephone numbers not included in Round 1.	Over 100,000 persons age 16+, also more than 50,000 households and more than 30,000 children
Scope	National, with state-by-state data	Regional	National	National
Frequency and Years Available	Annually since 1981 for 15-29 states only; Annually since 1994 for all states, DC, and 3 territories	One-time study, first round of interviews done in 1993-1994, second round done 15 months later	Bi-annually since 1996-1997. Years available: 1996-97 (Round 1), 1998-99 (Round 2). [Round 3, 2000-2001 is currently being conducted.]	Core Survey: monthly since 1940 Demographic Supplement: Annually since 1948, 2001 available
Race/Ethnicity	Standard questions about race and Hispanic origin	Chinese-Americans only, broken down by other demographics	Standard questions about race and Hispanic ethnicity	Standard questions about race and Hispanic origin

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Behavioral Risk Factor Surveillance System (BRFSS)	Chinese American Psychiatric Epidemiological Study (CAPES)	Community Tracking Study (CTS)—Household	Current Population Survey (CPS) Core and Demographic Supplement
Immigrants	Not included in survey	Acculturation, language, and immigration status	Interviews conducted in English and Spanish. No mention of country of origin.	Data on country of origin, parents' countries of origin, length of duration in the U.S., and citizenship status
Mental Health	Self-reported mental health status only	In depth diagnostic interview	Emotional limitations (Section E), SF-12 health status scores for physical and mental health	Not in survey
Insurance	Current insurance; uninsured for the last twelve months	Asks about coverage and utilization of care	- Public: Medicare, Medicaid, military, Indian Health Service, other public coverage - Private: employment or union related, direct purchase, Medigap, other private; how obtained, number of plans held, who pays, premiums, who's covered	Coverage at any time in last year, source of coverage, identity of policyholder and covered non-policyholders, employer/union payment of premiums, duration of Medicaid coverage. Private: employer/union provided, privately purchased, plan of someone outside household. Public: Medicare, Medicaid, CHAMPUS, CHAMPVA, VA, military health care, IHS, other government
Labor Force Participation	Questions on employment status and salary	Similar to NCS, employment status and work-related stressors	Employment status: work for pay in last week?; number of jobs; hours worked at main job, other jobs, wage Employer characteristics	Extensive labor force participation questions
Location	http://www.cdc.gov/brfss/		http://www.hschange.org/index.cgi?data=11	http://www.bls.census.gov/cps/

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Behavioral Risk Factor Surveillance System (BRFSS)	Chinese American Psychiatric Epidemiological Study (CAPES)	Community Tracking Study (CTS)—Household	Current Population Survey (CPS) Core and Demographic Supplement
Contact		David Takeuchi		

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Health and Retirement Survey (HRS)	Healthcare for Communities (HCC) [National Survey of Alcohol, Drug, and Mental Health Problems]	Hispanic Health and Nutrition Examination Survey (HHANES)	Legalized Population Survey (LPS1 and LPS2)
Design Type	Longitudinal survey data for various cohorts.	Longitudinal household survey data and complementary survey of employers, physicians, and insurance plans.	Cross-sectional	Longitudinal. Produces national estimates for the legalized population. LPS1 - 2.6 times oversampling of non-Mexicans. LPS2 - Sample selected from LPS1 subjects eligible for reinterview.
Characteristics of Sample	Civilian, non-institutionalized US population aged 51 and older. Sample includes 13,159 Households, 19,581 respondents Response rate, overall = 91%	9600 adult respondents from the Community Tracking Study Household Survey 1996-1997, and Followback Survey 1997-1998. Respondents who were poor, mentally distressed, and users of mental health services were oversampled.	~16,000 Hispanics between the ages of 6-months and 74 years	Undocumented immigrants who were living in the U.S. in 1986/87 when they sought legal permanent residence under the Immigration Reform and Control Act of 1986.
Scope	National	National	National	National
Frequency and Years Available	Years available: Core – HRS1992; AHEAD1993; HRS1993; AHEAD1995; HRS1996; HRS/AHEAD1998 HRS/AHEAD2000. See note 1 for more info.	Fielded in 1997 and 1998.	1982-1984	1989 (LPS1), 1992 (LPS2)
Race/Ethnicity	Oversampled populations include Blacks; Hispanics (particularly Mexican Americans)	Standard questions on race and Hispanic ethnicity	Surveyed approximately 16,000 Hispanics	Standard questions on race and ethnicity

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Health and Retirement Survey (HRS)	Healthcare for Communities (HCC) [National Survey of Alcohol, Drug, and Mental Health Problems]	Hispanic Health and Nutrition Examination Survey (HHANES)	Legalized Population Survey (LPS1 and LPS2)
Immigrants	Citizenship and place of birth.	Whether or not born in the US, length of residency in the US, date of arrival if length of residency is less than 2 years, citizenship status	Country of birth	- Time of entry into US w/out visa or valid papers, why, and length of stay - Questions concerning denial for visa or other papers to enter the US - Year of application for permanent residency - Country of origin
Mental Health	Self-reported data on mental health, ADLs, IADLs, disabilities that prevent working	Used a series of screening questions to identify and distinguish more serious and other mental disorders. Users of mental health services are oversampled.	Diagnoses of depression and drug/alcohol abuse	Not included in survey.
Insurance	All waves but 1993/1995 data is less inclusive. - Public: Medicare, Medicaid, CHAMPUS/CHAMPVA, Employer provided, Private purchase; Medigap, Long Term Care, SSI, SSDI, Workers comp - Private Coverage: Type, how obtained, who pays, who covered, out-of-pocket costs, number of plans	General insurance coverage and insurance coverage for mental health	Insurance in the last month, no direct question on uninsurance; compiled from negative responses for private, Medicare, and Medicaid coverage	-Method of payment for health care for pregnancy and hospitalizations -Enrollment status in Medicare, Medicaid, private insurance -Reasons for uninsurance -Family members' insurance status
Labor Force Participation	Employment status, employment status reference period (current; month/year of last interview, last two years, prior work history); hours worked, wage	Work, income, and wealth status	Employment status, type of work, industry	-Work status/industry/type before arriving in US. -US employment history (hours, salary, industry, type, status, referral.) -Employment status at time of application.
Location	Public use file available on HRS web site www.umich.edu/~hrswww	http://www.icpsr.umich.edu:8080/ABSTRACTS/03025.xml?format=ICPSR	http://www.cdc.gov/nchs/about/major/nhanes/hhanes.htm	Public use file located on Legalized Population Survey website: http://www.pop.upenn.edu/mexmig/LPS/LPSpage.htm

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Health and Retirement Survey (HRS)	Healthcare for Communities (HCC) [National Survey of Alcohol, Drug, and Mental Health Problems]	Hispanic Health and Nutrition Examination Survey (HHANES)	Legalized Population Survey (LPS1 and LPS2)
Contact		Katherine Minnium		Shirley Smith Shirley-Smith-J@dol.gov (202) 693-4915

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Medical Expenditure Panel Survey (MEPS)—Household and Insurance Component	National Cormorbidity Survey (NCS)	National Health and Nutrition Examination Survey (NHANES)	National Health Interview Survey (NHIS)
Design Type	Overlapping Panel: Panel collects annual data for over 2 consecutive years, interviews conducted in 5 rounds at regular intervals	Cross-sectional	Cross-sectional: Data collected several years for each round (NHANES III allows for separate estimates for two three-year periods)	Cross-sectional: Continuous interviewing; separate panel each quarter
Characteristics of Sample	Civilian non-institutionalized U.S. population; Sampling frame drawn from NHIS, allowing linkage	Over 8,000 respondents aged 15 to 54 in the non-institutionalized civilian population in 48 states	Approximately 5,000 cilvilian non-institutionalized U.S. residents for the most recent surveys	~106,000 civilian non-institutionalized U.S. residents
Scope	National	National	National	National
Frequency and Years Available	Annually, since 1996 (Survey predeccessors were NMES, 1987, and NMCES, 1977). Years of data available: 1996 – 1997 (partial 1998)	1990-1992 original NCS 2001-02 NCS-2 (reinterview of baseline NCS respondents) 2001-02 NCS-R (replication survey on 10,000 new respondents) 2001-02 NCS-A (10,000 adolescents)	1971-75 NHANES I 1976-80 NHANES II 1988-94 NHANES III In 1999, NHANES became a continuous, annual survey	Annually, since 1957, available up to 2000
Race/Ethnicity	Oversamples Blacks and Hispanics	In depth questions about race/ethnicity and origins	Standard questions about race and Hispanic origin	Standard questions about race and Hispanic origin

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Medical Expenditure Panel Survey (MEPS)—Household and Insurance Component	National Cormorbidity Survey (NCS)	National Health and Nutrition Examination Survey (NHANES)	National Health Interview Survey (NHIS)
Immigrants	Sample drawn from National Health Interview Survey, which asks about country of origin, duration in the United States and citizenship status. No additional questions on immigration status asked in MEPS	Not included in survey	Asks about country of birth, citizenship; also questions on acculturation, preferred language, birth country of parents	Question on country of origin, duration in the United States, citizenship status
Mental Health	Oversamples adults with functional impairments, self-reported mental health status, ADLs and IADLs, disability days	Diagnostic interview to ascertain the prevalence of DSM III-R disorders	Drug/alcohol use	Self-reported mental health consisting of a brief symptom screening battery using a Likert scale with a 30 day reference period
Insurance	- Public: Medicaid, Medicare, CHAMPUS/CHAMPVA/TRICARE, other public coverage - Private coverage: type, name, how obtained, who pays, premiums, who is covered	Point-in-time insurance status; lack of insurance must be strung together from negative responses to two questions.	Insurance in the last month, no direct question on uninsurance; compiled from negative responses for private, Medicare, and Medicaid coverage	Type of coverage, source of coverage, for uninsured: duration and cause of lack of insurance; insurance status at present and for the past twelve months
Labor Force Participation	Employment status, sources of income, hours worked per week, firm size, union membership, industry/occupation codes	Questions on employment status, industry, hours worked, work-related stressors	Employment status and type of company worked for, reasons for unemployment	Working status, type of business
Location	www.meps.ahrq.gov	http://www.icpsr.umich.edu/SAMHDA/STUDIES/ncs.html	http://www.cdc.gov/nchs/nhanes.htm	http://www.cdc.gov/nchs/nhis.htm

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	Medical Expenditure Panel Survey (MEPS)—Household and Insurance Component	National Cormorbidity Survey (NCS)	National Health and Nutrition Examination Survey (NHANES)	National Health Interview Survey (NHIS)
Contact	Karen Beauregard: 301-594-1400 Steve Cohen: 301-594-1191	Ron Kessler		

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	National Latino and Asian American Survey (NLAAS) (see note 2)	National Longitudinal Survey of Youth (NLSY)	National Survey of American Life (NSAL) (see note 2)	National Survey of America's Families (NSAF)
Design Type	Cross-sectional	Panel: The initial sample consisted of individuals representative of the population of 14-21 year olds at the beginning of 1979. Respondents are reinterviewed regularly.	Cross-sectional	Cross-sectional with about 20 percent of sample overlapping rounds of data collection. Produces national estimates and state estimates for 13 states
Characteristics of Sample	~4,000 Latinos and another 4,000 Asian American respondents from across the U.S.	Civilian, non-institutionalized U.S. males and females ages 14-21 on Dec. 31, 1978.	7,000 interviews with persons aged 18+ -4,000 African Americans -1,000 non-Hispanic whites -2,000 blacks of Caribbean descent -1,250 adolescents from same households as adult respondents	Civilian non-institutionalized U.S. population under age 65
Scope	National	National	National	National
Frequency and Years Available	Interviewing starts in April 2002 and continues through Spring 2003; available early 2005	Annually, since 1979; Biennially, since 1994. Years of data available: 1979-1994, 1996, 1998.	Data should be available by fall 2004	1997, 1999
Race/Ethnicity	Nationally representative sample of Latino and Asian-American respondents, 4000 Latinos and 4000 Asian-Americans	The initial sample included a supplement of Blacks and Hispanics. Combined with the main sample, this produces oversamples of these groups.	Nationally-representative sample of African-American and Caribbean black respondents, with a small sample of whites from the same neighborhoods	Standard questions on race, ethnicity.

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	National Latino and Asian American Survey (NLAAS) (see note 2)	National Longitudinal Survey of Youth (NLSY)	National Survey of American Life (NSAL) (see note 2)	National Survey of America's Families (NSAF)
Immigrants	Interviews will be conducted in English, Spanish, Cantonese/Mandarin, Tagalog, and Vietnamese	Citizenship and place of birth.	State/country of birth. Population described as US citizens	Citizenship, birthplace
Mental Health	Composite International Diagnostic Instrument (CIDI) to assess the prevalence of various mental disorders	Questions about emotional health in the past month. Whether respondents have experienced any of a lengthy list of conditions, including "emotional, nervous or psychiatric problems" (1979 questionnaire).	Composite International Diagnostic Instrument (CIDI) to assess the prevalence of various mental disorders	Mental health index
Insurance	Expanded (from the NSHS) Service Utilization section in the questionnaire	Coverage from any private or government source; a breakdown of source of coverage: -current employer -previous employer -spouse's current employer -spouse's previous employer -policy bought directly from medical insurance company -Medicaid	Questions about what type of insurance, if any, respondent has, and how much of the past year they were covered by any health insurance	- Public: Medicare, Medicaid, CHAMPUS/TriCare/CHAMPVA, other military, Indian Health Service - Private: through employer, direct purchase
Labor Force Participation	Basic demographic questions on labor force participation, and work-related stressors	Income (previous calendar year), current employment status at time of each interview, usual weekly and daily hours for up to 5 jobs held over past year, hourly wage, employer characteristics	Employment status, number of jobs held, description of current job, number of hours worked per week, job stability, benefits received, salary/per hour pay, and union issues. Feelings toward job explored as well	Employment status, time with present employer, number of jobs current and last year, hours worked per week current and last year
Location		Main sample and supplemental samples (non-restricted) are available on CD-ROM.	http://www.rcgd.isr.umich.edu/prba/survey.htm	Public use data data available via Urban Institute's web site. Users must register. http://newfederalism.urban.org/nsaf/cpuf/index.htm

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	National Latino and Asian American Survey (NLAAS) (see note 2)	National Longitudinal Survey of Youth (NLSY)	National Survey of American Life (NSAL) (see note 2)	National Survey of America's Families (NSAF)
Contact	Maggie Alegria/David Takeuchi		James Jackson	

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	National Survey of Health and Stress (NSHS) (see note 2)	New Immigrant Study (NIS) (see note 2)	Panel Study of Income Dynamics (PSID) Main Family and Individual Files	Survey of Income and Program Participation (SIPP)
Design Type	Cross-sectional	Comprehensive, multi-cohort longitudinal/panel study of new legal immigrants to the United States, interviewing the immigrants and their children at regular intervals over the life cycle	Panel. Families in sample normally interviewed in every round of survey.	Overlapping multi-panel: –each panel interviewed once every 4 months for 2.5 years –new panel begins each year –starting in 1996 each panel lasts for 4 years instead of 2.5 and panels no longer overlap
Characteristics of Sample	10,000 adults and 8,700 adolescents, with proportionate numbers of racial and ethnic minorities	11000 randomly selected immigrants drawn from new cohorts of legal permanent resident aliens	Sample originally made up of two subsamples: "Survey Research Center" (SRC) subsample of approx. 3,000 families representative of U.S. population in 1968 and "Survey of Economic Opportunity" (SEO) subsample of approx. 2,000 low income families in 1968. For more information, see note 3.	Civilian non-institutionalized U.S. population age 15+
Scope	National	National	National	National
Frequency and Years Available	Data should be available before the end of 2003	Fieldwork begins in early 2003	Yearly from 1968 to 1996; biennially from 1997 to present. Public Release I 1968-1997, 1999; Public Release II 1968-1993.	Collected annually since 1984; data available from panels of 1984, 1985, 1986, 1987, 1988 (six waves), 1989 (3 waves), 1990, 1992, 1993, 1996
Race/Ethnicity	Standard race/ethnicity questions	Country of origin and main language spoken is asked, but actual race or ethnicity is not questioned	Latinos were oversampled 1990 to 1995. Standard questions on race/ethnicity.	Standard questions on race.

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	National Survey of Health and Stress (NSHS) (see note 2)	New Immigrant Study (NIS) (see note 2)	Panel Study of Income Dynamics (PSID) Main Family and Individual Files	Survey of Income and Program Participation (SIPP)
Immigrants		Extensive information on legal immigrants	Questions on "immigration history" are asked in one of the PSID supplements	Question on country of origin.
Mental Health	Composite International Diagnostic Instrument (CIDI) to assess the prevalence of various mental disorders	One question on 12 month follow up asks respondent if doctor has ever told them they have any emotional, nervous or psychiatric problems	Asks whether respondent has a "physical or nervous condition" and how that effects level of functioning	Wave 5 Topical Module -- Questions about numerous conditions, including mental and emotional problems, and depression and anxiety more specifically. Also asks length of time affected with disorder.
Insurance		One question on the pilot survey and 12 month follow up asking how respondent had paid for the last visit to doctor, hospital, etc.	Source of coverage for head of household (Medicaid, Medicare, ESI), whether coverage is obtained by head of household or wife, cost of premiums.	Each wave: –Public: Medicare, Medicaid, CHAMPUS/CHAMPVA, other public coverage; –Private coverage: how obtained, who pays, premiums, who is covered; –reasons for no coverage –length of coverage in past 12 months
Labor Force Participation		Employment status, type of job, industry	Income sources and amounts, employment information	Paid job during reference period; number of weeks worked in reference period; usual hours worked, each job; hourly pay rate; industry code. Also self-employment questions.
Location		http://www.pop.upenn.edu/nis/index.html	http://www.umich.edu/~psid	Public use files can be purchased on tape or CD-ROM. Data extracts and tabular output can be obtained from http://www.ferret.bls.census.gov.

Table E1: Available Data Sources on Insurance Coverage and Racial/Ethnic Minorities, Immigrants, and/or Persons with Mental Illness

Name of Dataset	National Survey of Health and Stress (NSHS) (see note 2)	New Immigrant Study (NIS) (see note 2)	Panel Study of Income Dynamics (PSID) Main Family and Individual Files	Survey of Income and Program Participation (SIPP)
Contact	Ron Kessler	Jenn Larimer		

<u>Notes:</u>

1   Components of the HRS also include:
Exit – HRS1994; AHEAD1995; HRS/AHEAD 1998; HRS/AHEAD 2000
Frequency: Core Survey every two years – The Asset and Health Dynamics Among the Oldest Old (AHEAD) survey began in 1993, and surveys adults aged 70 and older. The HRS began in 1992 and was a survey of people of pre-retirement age (ages 51 to 61). In 1998 these two surveys were merged. In 1998, new cohorts were added such that the entire age range from 51 and older is represented. 1995 and every 2 years since 1998. Exit Survey for deceased respondents (same schedule as core survey)

2   Since the NIS, NSHS, NSAL, and NLAAS data or their survey questions are not yet available, the information in the table on these data sets is derived from summaries of the surveys.

3   Split-off families (e.g., children moving out to start own families) added to sample as time progresses. Sample of approx. 2,000 Latino families added in 1990, dropped after 1995. Sample of 298 elderly who had previously been non-response added to PSID in 1990. Approx. two-thirds of SEO families dropped in 1997 to reduce sample; some reinstated for supplemental sample of families with black children. 441 post-1968 immigrant families added in 1997; 70 more added in 1999.