

APPENDIX A: HEALTH INSURANCE COVERAGE AND INSURANCE DISPARITIES

A number of surveys, and one non-survey data source, provide estimates of insurance coverage in Massachusetts. These estimates vary widely due to differences in survey instrument and methodology, making comparison across surveys impossible – see (Massachusetts Division of Health Care Finance and Policy, 2008) for a detailed discussion. The **Census’s Community Population Survey (CPS)** is the longest running survey with data on health insurance status, conducted using a mix of phone and in-person interviews and supporting a wide variety of languages, but with the smallest sample size of surveys in Massachusetts (around 1,000 households in Massachusetts per year). The **Census’s American Community Survey (ACS)** also uses a mix of mail, phone, and in-person interviews, with a large sample size (37,000 in Massachusetts), but only began asking respondents about their health insurance status in 2008. The **Massachusetts Health Insurance Survey (MHIS)**, financed by the state, has a medium sample size (around 4,000 households), but underwent a major overhaul in 2008 when administration was passed from UMass Boston’s Center for Survey Research to the Urban Institute, making survey data incomparable before and after health reform. The **Massachusetts Health Reform Survey (MHRS)**, financed by the Blue Cross Blue Shield Foundation and administered by the Urban Institute, is a phone-only survey with a similar sample size (3,000 households) that interviewed only non-elderly adults the year prior to reform and several years after reform. The **Center for Disease Control’s Behavioral Risk Factor Surveillance System (CDC/BRFSS)** is also a phone-only survey of the adult population, and is characterized by a large sample size than all of the other surveys reviewed in this study (21,000 households). The state’s Division of Health Care Finance and Policy (DHCFP) has made an attempt to estimate insurance coverage in the state by using self-reported enrollment data from insurance companies licensed in Massachusetts and public insurance plans such as MassHealth and Commonwealth Care, which it reports in the state’s quarterly **Key Indicators** report. The resulting enrollment estimates are not credible when compared with population estimates, though, and trend differently than survey findings, making comparison with survey results difficult. Lastly, as noted in Chapter 3, none of the above estimates count enrollment in the state’s **Health Safety Net** (formerly the Free Care Pool) as insurance coverage, which is an arbitrary distinction, as the Safety Net provides better access to care than some insurance plans for low-income people. We present safety net utilization separately below, but it is not comparable to insurance coverage as the state only reports the total number of unique individuals who have received safety net care at any point during the year, whereas insurance estimates count the number of individuals with health insurance at a point in time or over a span of time.

Uninsured Rates and Type of Insurance: Eight Sources

Below are seven data sources providing estimates of the uninsured in Massachusetts, plus data on utilization of the Free Care Pool (re-named the Health Safety Net after health reform), which is comparable to but generally not counted as health insurance. We have broken out uninsurance rates by socio-economic groups where available and comparable to other surveys: these include uninsurance rates by race and ethnicity, gender, and income. Where available, we have also included estimates of insurance coverage broken out by type of insurance – public insurance, private insurance, and more specific groupings such as MassHealth, Commonwealth Care, Medicare, Military, Employer-Sponsored, and direct purchase.

Table A.1: U.S. Census Bureau’s Community Population Survey (CPS), Massachusetts Uninsured Rates and Type of Insurance, All Ages

| Census/CPS Uninsured ¹ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|---|-------|-------|-------|-------|-------|-------|-------|
| All | All | 11.3% | 9.2% | 10.4% | 5.4% | 5.5% | 4.4% | 5.6% |
| Race/ Ethnicity #1 | White | 11% | 8.2% | 10% | 5.0% | 5.3% | 4.2% | 5.3% |
| | Black | 15% | 15.1% | 16.0% | 6.7% | 4.4% | 5.9% | 9.5% |
| | Hispanic | 18% | 17.8% | 20.1% | 7.2% | 5.6% | 12% | 6.3% |
| Race/ Ethnicity #2 | Non-Hispanic White | 9.7% | 8.2% | 10.0% | 4.8% | 5.2% | 3.5% | 5.2% |
| | Racial/Ethnic Minority | 17.7% | 16.6% | 15.5% | 7.7% | 6.8% | 7.9% | 6.9% |
| Gender | Men | 13% | 11.1% | 13.1% | 6.8% | 6.1% | 5.1% | 6.5% |
| | Women | 10% | 7.4% | 7.8% | 4.0% | 4.9% | 3.8% | 4.7% |
| Income | Income below 300% of poverty line | 19% | 15.5% | 16.8% | 8.1% | 8.8% | 6.3% | 9.9% |
| | Income between 300-500% of poverty line | 8% | 8.2% | 9.1% | 5.7% | 5.9% | 3.7% | 9.8% |
| | Income above 500% of poverty line | 3% | 3.4% | 4.8% | 2.4% | 1.9% | 2.8% | 3.0% |
| Age | Adults 18-64 | 15.0% | 12.7% | 13.6% | 7.0% | 7.3% | 5.9% | 7.1% |
| Census/CPS Type of Insurance Coverage | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Public Insurance | Public Insurance | 28.8% | 29.7% | 28.7% | 33.9% | 34.9% | 39.1% | 37.3% |
| | MassHealth, CommCare | 13.9% | 13.9% | 13.0% | 18.1% | 17.2% | 20.5% | 20.3% |
| | Medicare | 13.6% | 14.0% | 14.3% | 14.5% | 15.1% | 16.5% | 15.6% |
| | Military | 1.3% | 1.9% | 1.3% | 1.3% | 2.6% | 2.2% | 1.3% |
| Private Insurance | Private Insurance | 73.5% | 74.4% | 73.9% | 75.3% | 76.7% | 75.0% | 74.3% |
| | Employer-Sponsored | 66.0% | 67.4% | 65.9% | 66.7% | 70.1% | 66.5% | 64.7% |
| | Direct Purchase | 7.5% | 7.0% | 8.0% | 8.5% | 6.6% | 8.6% | 9.6% |

Table A.2: U.S. Census Bureau’s American Community Survey (ACS), Massachusetts Uninsured Rates, All Ages

| Census/ACS Uninsured ² | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------------------------------|--------------|------|------|------|------|------|------|------|
| All | All | - | - | - | - | 4.1% | 4.2% | 4.4% |
| Race/ Ethnicity #1 | White | - | - | - | - | - | 3.5% | 3.1% |
| | Black | - | - | - | - | - | 6.0% | 7.1% |
| | Hispanic | - | - | - | - | - | 9.7% | 9.8% |
| Gender | Women | - | - | - | - | - | 3.1% | 3.2% |
| | Men | - | - | - | - | - | 5.3% | 5.7% |
| Age | Adults 18-64 | - | - | - | - | 5.5% | 5.9% | 6.2% |

Table A.3: State’s Massachusetts Household Insurance Survey (MHIS), UMass Boston Center for Survey Research (CSR) Estimates, Uninsured Rates, All Ages

| State/CSR Uninsured ³ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------------------------|----------|-------|------|-------|------|------|------|------|
| All | All | 7.4% | - | 6.4% | 5.7% | - | - | - |
| Race/ Ethnicity #1 | White | 6.3% | - | 5.4% | 5.4% | - | - | - |
| | Black | 7.5% | - | 14.2% | 8.9% | - | - | - |
| | Hispanic | 15.1% | - | 13.3% | 11% | - | - | - |
| Gender | Women | 7.0% | - | 6.0% | 5.2% | - | - | - |
| | Men | 9.6% | - | 8.6% | 7.8% | - | - | - |

Table A.4: State’s Massachusetts Household Insurance Survey (MHIS), Urban Institute Estimates, Uninsured Rates and Type of Insurance, All Ages

| State/Urban Inst Uninsured ⁴ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|--|------|------|------|------|-------|-------|-------|
| All | All | - | - | - | - | 2.6% | 2.7% | 1.9% |
| Race/ Ethnicity #1 | White | - | - | - | - | 2.2% | 2.4% | 1.7% |
| | Black | - | - | - | - | 3.5% | 3.5% | 2.3% |
| | Hispanic | - | - | - | - | 7.2% | 5.1% | 3.9% |
| Gender | Women | - | - | - | - | 2.2% | 1.9% | 1.1% |
| | Men | - | - | - | - | 3.1% | 3.5% | 2.7% |
| Income | Income above 500% of poverty line | - | - | - | - | 0.2% | 1.0% | 0.4% |
| | Income between 300-500% of poverty line | - | - | - | - | 2.0% | 3.7% | 1.4% |
| | Income below 300% of poverty line | - | - | - | - | 5.2% | 4.7% | 3.4% |
| Age | Adults 19-64 | - | - | - | - | 3.7% | 3.5% | 2.9% |
| State/Urban Inst Type of Insurance Coverage | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| | Public Insurance | - | - | - | - | 27.1% | 26.6% | 29.0% |
| Public Insurance | MassHealth, CommCare, CommChoice | - | - | - | - | 11.7% | 10.9% | 12.3% |
| | Medicare | - | - | - | - | 15.4% | 15.7% | 16.7% |
| | Private Insurance | - | - | - | - | 71.7% | 72.3% | 69.7% |
| Private Insurance | Employer-Sponsored | - | - | - | - | 68.1% | 68.9% | 66.4% |
| | Direct Purchase | - | - | - | - | 3.6% | 3.4% | 3.3% |

Table A.5: Blue Cross Blue Shield of Massachusetts Foundation’s Massachusetts Health Reform Survey (MHRF), Urban Institute Estimates, Uninsured Rates and Type of Insurance, Ages 18-64 Only

| Blue Cross/Urban Inst Uninsured ⁶ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|---|------|------|-------|-------|-------|-------|
| All | All | - | - | 12.5% | 6.6% | 4.0% | 4.8% |
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | 11.5% | - | - | 4.8% |
| | Racial/Ethnic Minority | - | - | 16.7% | - | - | 4.9% |
| Income | Income between 300-500% of poverty line | - | - | 7.5% | - | - | 2.8% |
| | Income below 300% of poverty line | - | - | 23.2% | - | - | 9.1% |
| Blue Cross/Urban Inst Type of Insurance Coverage | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Public Insurance | Public Insurance and Other | - | - | 21.8% | 24.5% | 25.5% | 26.9% |
| Private Insurance | Employer-Sponsored | - | - | 65.7% | 68.9% | 70.4% | 68.3% |

Table A.6: Center for Disease Control’s Behavioral Risk Factors Surveillance, Massachusetts Uninsured Rates, Ages 18+ Only

| CDC/BRFSS Uninsured ⁵ | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------------------------|------------------------|-------|-------|-------|-------|-------|-------|
| All | All | 10.3% | 8.5% | 6.2% | 4.4 | 5.3% | 4.3% |
| Race/ Ethnicity #1 | White | 8.6% | 7.0% | 5.2% | 3.3% | 4.0% | 3.3% |
| | Black | 18.5% | 18.3% | 9.8% | 9.8% | 10.4% | 9.6% |
| | Hispanic | 23.9% | 23.9% | 20.7% | 15.4% | 20.0% | 15.0% |
| Race/ Ethnicity #2 | Non-Hispanic White | 7.7% | 6.5% | 4.6% | 3.0% | 3.4% | 3.0% |
| | Racial/Ethnic Minority | 23.2% | 19.2% | 12.8% | 10.2% | 12.7% | 9.2% |
| Gender | Women | 8.6% | 6.0% | 4.4% | 3.1% | 3.6% | 3.7% |
| | Men | 12.1% | 11.1% | 8.1% | 5.9% | 7.1% | 4.9% |
| Age | Adults 18-64 | 11.8% | 10.0% | 7.2% | 5.0% | 6.2% | 5.0% |

Table A.7: Division of Health Care Finance and Policy’s Insurance Plan Enrollment Filings, Massachusetts Uninsured Rates and Type of Insurance, Ages 0-64 Only

| DHCFP Uninsured ⁷ | | June 2006 | Dec. 2006 | June 2007 | Dec. 2007 | June 2008 | Dec. 2008 | June 2009 | Dec. 2009 | June 2010 |
|----------------------------------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| All | All | 7.7% | 5.6% | 3.9% | 0.9% | 0.5% | 0.6% | 2.4% | 2.6% | 2.9% |
| DHCFP Type of Insurance Coverage | | June 2006 | Dec. 2006 | June 2007 | Dec. 2007 | June 2008 | Dec. 2008 | June 2009 | Dec. 2009 | June 2010 |
| Private Insurance | Employer-Sponsored | 78.8% | 79.9% | 80.7% | 81.1% | 80.7% | 80.9% | 78.5% | 77.5% | 76.8% |
| | Direct Purchase | 0.7% | 0.8% | 0.7% | 1.2% | 1.4% | 1.5% | 1.6% | 2.0% | 2.2% |
| Public Insurance | MassHealth | 12.8% | 13.5% | 13.3% | 13.9% | 14.2% | 14.1% | 14.3% | 15.1% | 15.4% |
| | CommCare | 0.0% | 0.3% | 1.5% | 2.9% | 3.2% | 2.9% | 3.1% | 2.7% | 2.7% |

Table A.8: Massachusetts Uncompensated Care Pool/Health Safety Net, Unique Users in Massachusetts During Fiscal Year, All Ages

| UCP/HSN Users ⁸ | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|
| Unique Users | 466,244 | 455,056 | 445,210 | 422,495 | 262,000 | 274,000 | 315,000 |

Disparities in Uninsured Rates

Disparities represent the gap between one population group and another in terms of health insurance, access, or outcomes – however, there are several ways to measure that gap. In comparing insurance coverage for two groups, for example men and women, we can measure the simple difference (called the “absolute disparity”) – which is one group’s uninsurance rate minus the best group’s insurance rate (an uninsurance rate of 9% for men minus a rate of 6% for women would give us a 3% absolute disparity); or we can measure the ratio (called the “relative disparity”) – which is the gap between the two groups as a percentage of the best group’s uninsurance rate (which would give us a 50% relative disparity for men, meaning that their uninsurance rate is 50% higher than for women). It is common, particularly when insurance coverage is improving for all groups over time, for absolute disparities to shrink while relative disparities remain large or actually grow. For this reason we follow the guidelines of the Centers for Disease Control and Prevention in this report, and present both measures of disparities in insurance coverage.⁹

Table A.9: U.S. Census Bureau’s Community Population Survey (CPS), Disparities in Uninsurance Rates, All Ages

| Census/CPS Absolute (Simple) Disparities¹⁰ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Race/ Ethnicity #1 | White | * | * | * | * | * | * | * |
| | Black | 4.4% | 6.9% | 6.0% | 1.7% | -0.8% | 1.6% | 4.2% |
| | Hispanic | 7.1% | 9.7% | 10.1% | 2.2% | 0.3% | 7.8% | 1.0% |
| Race/ Ethnicity #2 | Non-Hispanic White | * | * | * | * | * | * | * |
| | Racial/Ethnic Minority | 8.0% | 8.4% | 5.5% | 2.9% | 1.6% | 4.4% | 1.7% |
| Gender | Women | * | * | * | * | * | * | * |
| | Men | 2.8% | 3.8% | 5.2% | 2.8% | 1.1% | 1.2% | 1.8% |
| Income | Income above 500% of poverty | * | * | * | * | * | * | * |
| | Income between 300-500% of poverty | 4.8% | 4.8% | 4.3% | 3.2% | 4.1% | 0.8% | 6.8% |
| | Income below 300% of poverty | 15.1% | 12.1% | 12.0% | 5.7% | 6.9% | 3.4% | 6.9% |
| Census/CPS Relative (Ratio) Disparities | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | * | * | * | * | * | * | * |
| | Black | 41.1% | 84.8% | 60.3% | 34.9% | -15.6% | 38.2% | 79.2% |
| | Hispanic | 66.8% | 118.4% | 101.2% | 44.6% | 6.2% | 183.4% | 18.9% |
| Race/ Ethnicity #2 | Non-Hispanic White | * | * | * | * | * | * | * |
| | Racial/Ethnic Minority | 81.7% | 102.8% | 55.0% | 61.3% | 31.1% | 125.0% | 32.7% |
| Gender | Women | * | * | * | * | * | * | * |
| | Men | 27.7% | 50.8% | 66.7% | 68.2% | 22.6% | 31.8% | 38.3% |
| Income | Income above 500% of poverty | * | * | * | * | * | * | * |
| | Income between 300-500% of poverty | 139.9% | 139.9% | 89.3% | 132.4% | 215.8% | 29.7% | 226.5% |
| | Income below 300% of poverty | 443.1% | 354.0% | 250.7% | 232.8% | 366.0% | 120.6% | 230.0% |

* Represents the ‘best group’ rate, used as a reference point for other groups.

Table A.10: U.S. Census Bureau’s American Community Survey (ACS), Disparities in Uninsurance Rates, All Ages

| Census/ACS Absolute (Simple) Disparities | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|----------|------|------|------|------|------|--------|--------|
| Race/ Ethnicity #1 | White | - | - | - | - | - | * | * |
| | Black | - | - | - | - | - | 2.5% | 4.0% |
| | Hispanic | - | - | - | - | - | 6.2% | 6.7% |
| Gender | Women | - | - | - | - | - | * | * |
| | Men | - | - | - | - | - | 2.2% | 2.5% |
| Census/ACS Relative (Ratio) Disparities | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | - | - | - | - | - | * | * |
| | Black | - | - | - | - | - | 71.4% | 129.0% |
| | Hispanic | - | - | - | - | - | 177.1% | 216.1% |
| Gender | Women | - | - | - | - | - | * | * |
| | Men | - | - | - | - | - | 71.0% | 78.1% |

* Represents the ‘best group’ rate, used as a reference point for other groups.

Table A.11: State’s Massachusetts Household Insurance Survey (MHIS), UMass Boston Center for Survey Research (CSR) Estimates, Disparities in Uninsured Rates, All Ages

| State/CSR Absolute (Simple) Disparities | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|----------|--------|------|--------|--------|------|------|------|
| Race/ Ethnicity #1 | White | * | - | * | * | - | - | - |
| | Black | 1.2% | - | 8.8% | 3.5% | - | - | - |
| | Hispanic | 8.8% | - | 7.9% | 5.6% | - | - | - |
| Gender | Women | * | - | * | * | - | - | - |
| | Men | 2.6% | - | 2.6% | 2.6% | - | - | - |
| State/CSR Relative (Ratio) Disparities | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | * | - | * | * | - | - | - |
| | Black | 19.0% | - | 163.0% | 64.8% | - | - | - |
| | Hispanic | 139.7% | - | 146.3% | 103.7% | - | - | - |
| Gender | Women | * | - | * | * | - | - | - |
| | Men | 37.1% | - | 43.3% | 50.0% | - | - | - |

* Represents the ‘best group’ rate, used as a reference point for other groups.

Table A.12: State’s Massachusetts Household Insurance Survey (MHIS), Urban Institute Estimates, Disparities in Uninsured Rates, All Ages

| State/Urban Inst Absolute (Simple) Disparities ¹¹ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|--|------|------|------|------|---------|--------|--------|
| Race/ Ethnicity #1 | White | - | - | - | - | * | * | * |
| | Black | - | - | - | - | 1.3% | 1.1% | 0.6% |
| | Hispanic | - | - | - | - | 5.0% | 2.7% | 2.2% |
| Gender | Women | - | - | - | - | * | * | * |
| | Men | - | - | - | - | 0.9% | 1.6% | 1.6% |
| Income | Income above 500% of poverty line | - | - | - | - | * | * | * |
| | Income between 300-500% of poverty line | - | - | - | - | 1.8% | 1.8% | 1.0% |
| | Income below 300% of poverty line | - | - | - | - | 5.1% | 3.9% | 3.0% |
| State/Urban Inst Relative (Ratio) Disparities | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | - | - | - | - | * | * | * |
| | Black | - | - | - | - | 59.1% | 45.8% | 35.3% |
| | Hispanic | - | - | - | - | 227.3% | 112.5% | 129.4% |
| Gender | Women | - | - | - | - | * | * | * |
| | Men | - | - | - | - | 40.9% | 84.2% | 145.5% |
| Income | Income above 500% of poverty line | - | - | - | - | * | * | * |
| | Income between 300-500% of poverty line | - | - | - | - | 900.0% | 257.1% | 250.0% |
| | Income below 300% of poverty line | - | - | - | - | 2550.0% | 557.1% | 750.0% |

* Represents the ‘best group’ rate, used as a reference point for other groups.

Table A.13: Blue Cross Blue Shield of Massachusetts Foundation’s Massachusetts Health Reform Survey (MHRF), Urban Institute Estimates, Disparities in Uninsured Rates, Ages 18-64 Only

| Blue Cross/Urban Inst Absolute (Simple) Disparities ¹² | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|------------------------|------|------|-------|------|------|------|
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | * | - | - | * |
| | Racial/Ethnic Minority | - | - | 5.2% | - | - | 0.1% |
| Blue Cross/Urban Inst Relative (Ratio) Disparities | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | * | - | - | * |
| | Racial/Ethnic Minority | - | - | 45.2% | - | - | 2.1% |

Table A.14: Center for Disease Control’s Behavioral Risk Factors Surveillance, Disparities in Uninsured Rates, Ages 18+ Only

| CDC/BRFSS Absolute (Simple) Disparities¹³ | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Race/ Ethnicity #1 | White | * | * | * | * | * | * |
| | Black | 9.9% | 11.3% | 4.6% | 6.5% | 6.4% | 6.3% |
| | Hispanic | 15.3% | 16.9% | 15.5% | 12.1% | 16.0% | 11.7% |
| Race/ Ethnicity #2 | Non-Hispanic White | * | * | * | * | * | * |
| | Racial/Ethnic Minority | 15.5% | 12.7% | 8.2% | 7.2% | 9.3% | 6.2% |
| Gender | Women | * | * | * | * | * | * |
| | Men | 3.5% | 5.1% | 3.7% | 2.8% | 3.5% | 1.2% |
| CDC/BRFSS Relative (Ratio) Disparities | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | * | * | * | * | * | * |
| | Black | 115.1% | 161.4% | 88.5% | 197.0% | 160.0% | 190.9% |
| | Hispanic | 177.9% | 241.4% | 298.1% | 366.7% | 400.0% | 354.5% |
| Race/ Ethnicity #2 | Non-Hispanic White | * | * | * | * | * | * |
| | Racial/Ethnic Minority | 201.3% | 195.4% | 178.3% | 240.0% | 273.5% | 206.7% |
| Gender | Women | * | * | * | * | * | * |
| | Men | 40.7% | 85.0% | 84.1% | 90.3% | 97.2% | 32.4% |

APPENDIX B: PUBLIC OPINION

A number of sources have polled Massachusetts residents about their opinions on the 2006 health reform law. The most detailed survey, administered by a team of researchers at the **Harvard School of Public Health (Harvard SPH)**, has undergone a number of changes. From 2006 through 2008 the opinion poll was co-financed by the Blue Cross Blue Shield of Massachusetts Foundation (and by the Kaiser Family Foundation in 2007), and had a sample size of approximately 1,000 Massachusetts residents. In 2009 the Foundation dropped financial support for the opinion poll, after which the Boston Globe and the Harvard School of Public Health provided funding for the same team to continue the survey – in 2009 and again in 2011 – with a smaller sample size of about 500 residents and fewer questions.

Two of the households surveys that estimate health insurance coverage and access to care in Massachusetts – the state’s **Massachusetts Households Insurance Survey (MHIS)** after its administration was taken over by the Urban Institute in 2008 (sample size of ~4,000), and the Blue Cross Blue Shield Foundation-financed, Urban Institute-administered **Massachusetts Health Reform Survey (MHR)** of non-elderly adults aged 18-64 (sample size of ~3,000) – have included basic public opinion questions.

Lastly, a number of survey institutes have conducted one-time public opinion polls related to Massachusetts health reform. These include **Rasmussen Reports** and the **Suffolk University Political Research Center**.

Below, we include exact survey language of questions where available, and identify when surveys have limited their respondent pool (such as excluding seniors 65+ or including only likely voters).

General Opinion of Massachusetts Health Reform

Table B.1: Harvard School of Public Health, Support for Massachusetts Health Reform, Excludes Respondents Reporting They Have Not Heard or Read About Reform Law

Wording: “Given what you know about it, in general, do you support or oppose this new Massachusetts Universal Health Insurance Law?” (Follows question asking: “As you may know, Massachusetts has a law that is aimed at assuring that virtually all Massachusetts residents have health insurance. How much have you heard or read about this Massachusetts law, would you say a great deal, quite a bit, just some, only a little, or nothing at all?”)¹⁴

| | 2006 | 2007 | 2008 | 2009* | 2010 | 2011 |
|---------------------------|------|------|------|-------|------|------|
| Support | 61% | 67% | 69% | 59% | - | 63% |
| Oppose | 20% | 16% | 22% | 28% | - | 21% |
| Don’t Know/Refused | 18% | 16% | 9% | 13% | - | 6% |

* Financed by the Blue Cross Blue Shield of Massachusetts Foundation 2006-2008, sample size of ~1,000 residents; financed by the Boston Globe 2009 and 2011, sample size of ~500 residents. In 2008, question wording changed slightly from “this new” law to “the” law.

Table B.2: State’s Massachusetts Household Insurance Survey (MHIS), Urban Institute Estimates, Support for Massachusetts Health Reform

Wording: “As you may know, Massachusetts has a law that is aimed at providing health insurance for all Massachusetts residents. In general, do you support or oppose this Massachusetts law?”¹⁵

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------------|------|------|-------|-------|-------|------|
| Support | - | - | 74.2% | 73.3% | 68.9% | - |
| Oppose | - | - | 14.0% | 14.6% | 16.0% | - |
| Undecided/Unknown | - | - | 11.9% | 12.1% | 15.1% | - |

Table B.3: Blue Cross Blue Shield of Massachusetts Foundation’s Massachusetts Health Reform Survey (MHRS), Urban Institute Estimates, Support for Massachusetts Health Reform, Ages 18-64 Only

Wording: “As you may know, Governor Mitt Romney and the Massachusetts Legislature recently approved a new law that is aimed at providing health insurance for all Massachusetts residents. Given what you know about it, in general, do you support or oppose this new Massachusetts Universal Health Insurance Law?”¹⁶

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------|-------|-------|-------|-------|------|------|
| Support* | 68.5% | 71.1% | 71.8% | 67.0% | - | - |

* Opposition to reform and non-response rates not reported in MHRS publications.

Table B.4: Rasmussen Reports, Massachusetts Reform a Success or Failure, Likely Voters Only

Wording: “Has healthcare reform in Massachusetts been a success or a failure?”¹⁷

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------|------|------|------|------|------|------|
| Success | - | - | - | 26% | - | - |
| Failure | - | - | - | 37% | - | - |
| Not Sure | - | - | - | 37% | - | - |

Table B.5: Suffolk University Political Research Center/7 News, Support Massachusetts Healthcare Law, Registered Voters Only

Wording: “Do you support the Massachusetts near universal healthcare law?”¹⁸

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|------------------|------|------|------|------|------|------|
| Yes | - | - | - | - | 54% | - |
| No | - | - | - | - | 36% | - |
| Undecided | - | - | - | - | 10% | - |

Table B.6: Suffolk University Political Research Center/7 News, Massachusetts Healthcare Working, Registered Voters Only

Wording: “Do you think healthcare in Massachusetts is working?”¹⁹

| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|------------------|------|------|------|------|------|------|
| Yes | - | - | - | - | - | 38% |
| No | - | - | - | - | - | 49% |
| Undecided | - | - | - | - | - | 13% |

Perception of Winners and Losers from Massachusetts Health Reform

Table B.7: Harvard School of Public Health, Reform Helping/Hurting the Uninsured

Wording: "Generally speaking, do you think the Massachusetts Health Insurance Reform Law is helping, hurting or not having much of an impact on people who do not have health insurance?"*20

| | 2006 | 2007 | 2008 |
|--------------------|------|------|------|
| Is Helping | 67% | 72% | 45% |
| Not Much Impact | 13% | 6% | 14% |
| Is Hurting | 15% | 17% | 33% |
| Don't Know/Refused | 5% | 5% | 8% |

* In 2006, this series of questions read "Generally speaking, do you think the new Massachusetts Universal Health Insurance Law will help or hurt (INSERT ITEM) or don't you think it will have much of an impact one way or another?"

Table B.8: Harvard School of Public Health, Reform Helping/Hurting the Insured

Wording: "Generally speaking... helping, hurting or not having much of an impact on people who do have health insurance?"

| | 2006 | 2007 | 2008 |
|--------------------|------|------|------|
| Is Helping | 17% | 27% | 26% |
| Not Much Impact | 58% | 57% | 48% |
| Is Hurting | 19% | 12% | 18% |
| Don't Know/Refused | 6% | 4% | 8% |

Table B.9: Harvard School of Public Health, Reform Helping/Hurting Small Businesses

Wording: "Generally speaking... helping, hurting or not having much of an impact on small businesses?"

| | 2006 | 2007 | 2008 |
|--------------------|------|------|------|
| Is Helping | 14% | 25% | 13% |
| Not Much Impact | 19% | 15% | 19% |
| Is Hurting | 63% | 52% | 56% |
| Don't Know/Refused | 4% | 8% | 12% |

Table B.10: Harvard School of Public Health, Reform Helping/Hurting Large Corporations

Wording: "Generally speaking... helping, hurting or not having much of an impact on large corporations?"

| | 2006 | 2007 | 2008 |
|--------------------|------|------|------|
| Is Helping | 15% | 30% | 19% |
| Not Much Impact | 64% | 49% | 56% |
| Is Hurting | 18% | 15% | 11% |
| Don't Know/Refused | 4% | 6% | 14% |

Table B.11: Harvard School of Public Health, Reform Helping/Hurting Young Adults

Wording: "Generally speaking... helping, hurting or not having much of an impact on young adults?"

| | 2006 | 2007 | 2008 |
|--------------------|------|------|------|
| Is Helping | 50% | 60% | 32% |
| Not Much Impact | 24% | 16% | 28% |
| Is Hurting | 19% | 18% | 29% |
| Don't Know/Refused | 7% | 6% | 11% |

Table B.12: Harvard School of Public Health, Reform Helping/Hurting The Middle Class

Wording: "Generally speaking... helping, hurting or not having much of an impact on the middle class?"

| | 2006 | 2007 | 2008 |
|--------------------|------|------|------|
| Is Helping | 27% | 40% | 27% |
| Not Much Impact | 39% | 34% | 40% |
| Is Hurting | 28% | 22% | 26% |
| Don't Know/Refused | 6% | 4% | 7% |

Table B.13: Harvard School of Public Health, Reform Helping/Hurting Poor People

Wording: "Generally speaking... helping, hurting or not having much of an impact on poor people?"

| | 2006 | 2007 | 2008 |
|--------------------|------|------|------|
| Is Helping | 66% | 66% | 44% |
| Not Much Impact | 12% | 10% | 14% |
| Is Hurting | 17% | 21% | 31% |
| Don't Know/Refused | 5% | 3% | 11% |

Table B.14: Harvard School of Public Health, Reform Helping/Hurting You Personally

| Wording: “Generally speaking... helping, hurting or not having much of an impact on you personally?” | | | |
|--|------|------|------|
| | 2006 | 2007 | 2008 |
| Is Helping | 20% | 24% | 14% |
| Not Much Impact | 60% | 62% | 67% |
| Is Hurting | 18% | 12% | 18% |
| Don't Know/Refused | 2% | 2% | 1% |

General Opinion of the Individual Mandate

Table B.15: Harvard School of Public Health, Support for the Individual Mandate

| Wording: “The new law requires that all uninsured Massachusetts residents either purchase health insurance or pay a fine of up to 50% of what health insurance would cost. If a state agency determines that a person can't afford a policy, they would not be required to buy one. People whose incomes fall below a certain level would receive help paying part or all of their insurance premiums. Do you support or oppose state government requiring uninsured residents to purchase health insurance?” ²¹ | | | | | | |
|---|------|------|------|-------|------|------|
| | 2006 | 2007 | 2008 | 2009* | 2010 | 2011 |
| Support | 52% | 57% | 58% | - | - | 51% |
| Oppose | 42% | 36% | 35% | - | - | 44% |
| Don't Know/Refused | 6% | 7% | 7% | - | - | 4% |

* 2009 opinion poll by Harvard School of Public Health did not ask respondents about the individual mandate. 2006-2008, sample size of ~1,000 residents; 2009-2011, sample size of ~500 residents.

Table B.16: Suffolk University Political Research Center/7 News, Support for the Individual Mandate

| Wording: “Do you believe people should be compelled to buy health insurance even if they don't want it?” ²² | | | | | | |
|--|------|------|------|------|------|------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Yes | - | 42% | - | - | - | - |
| No | - | 49% | - | - | - | - |
| Undecided | - | 9% | - | - | - | - |

Opinion of Fairness of Individual Mandate in Practice

The Harvard School of Public Health public opinion polls in 2006 and 2007 presented respondents with examples of uninsured individuals and families at various income levels, and asked if it was “fair” or “unfair” to mandate that they purchase a specific plan at a specific cost. Looking only at the examples that ended up being deemed affordable by the state (see Appendix E for the complete Affordability Schedules), respondents deemed all examples of the mandate unfair except in cases where the state was fully or partially subsidizing the premium.²³ Below are four examples from the 2007 survey, which used actual low-cost health plans, which individuals and families would have been mandated to purchase.

Table B.17: Harvard School of Public Health, Fairness or Unfairness of Unsubsidized Individual Plan

| Unsubsidized Individual Plan: Harvard Pilgrim Core Coverage Plan w/ Rx | | | |
|--|-------------|---------------|---------------------------|
| Wording: “The first plan is for an uninsured 37-year-old single adult whose income is \$42,000 a year. This plan includes three doctor visits a year that cost the patient \$25 a piece. The individual must pay \$1,500 in other medical expenses before he or she starts receiving benefits. After this deductible is met, this person will pay for 20% of the cost of doctor visits, hospital stays and tests. The maximum amount this person will have to pay for medical services in a year is \$5,000. Prescription drugs will cost \$15 for generic brands and 50% of the cost of other brands. The plan would cost \$259 a month.” ²⁴ | | | |
| Questions | Yes | No | Don't Know/Refused |
| “Is this a reasonable or unreasonable amount to require this person to pay for this health insurance plan?” | 36% | 58% | 6% |
| “Do you think an individual covered by this plan would be well-protected by their health insurance, or would they be vulnerable to high medical bills?” | 28% | 62% | 11% |
| | Fair | Unfair | Don't Know/Refused |
| “Do you think it is fair or unfair to require an uninsured person like this to sign up and pay for a plan like this?” | 33% | 62% | 4% |

Table B.18: Harvard School of Public Health, Fairness or Unfairness of Unsubsidized Family Plan

| Unsubsidized Family Plan: Harvard Pilgrim Core Coverage Plan w/ Rx | | | |
|--|-------------|---------------|---------------------------|
| Wording: “The second plan is for an uninsured family of four that includes two parents aged 37 and two children under 18. The family’s income is \$111,000 a year. This plan includes six doctor visits a year for the family that cost the patient \$25 a piece. The family must pay \$3,000 in other medical expenses before they start receiving benefits. After this deductible is met, this family will pay for 20% of the cost of doctor visits, hospital stays and tests. The maximum amount this family will have to pay for medical services in a year is \$10,000. Prescription drugs will cost \$15 for generic brands and 50% of the cost of other brands. The plan would cost \$850 a month.” | | | |
| Questions | Yes | No | Don't Know/Refused |
| “Is this a reasonable or unreasonable amount to require this family to pay for this health insurance plan?” | 38% | 58% | 5% |
| “Do you think a family covered by this plan would be well-protected by their health insurance, or would they be vulnerable to high medical bills?” | 37% | 56% | 7% |
| | Fair | Unfair | Don't Know/Refused |
| “Do you think it is fair or unfair to require an uninsured family like this to sign up and pay for a plan like this?” | 37% | 59% | 5% |

Table B.19: Harvard School of Public Health, Fairness or Unfairness of Subsidized Individual Plan

| Subsidized Individual Plan: Commonwealth Care | | | |
|--|---|---------------|---------------------------|
| Wording: “The first plan is for an uninsured 37-year-old single adult whose income is \$30,000 a year. Under this plan, the cost of a visit to a regular doctor is \$10 and a specialist is \$20. Hospital stays cost \$250. Prescription drugs are covered for a co-payment of \$10 to \$45 depending on the drug. The maximum amount this person would have to pay in a year is \$750 for medical expenses and \$500 for prescription drugs. The plan would cost this person \$105 a month.” | | | |
| Questions | Yes | No | Don't Know/Refused |
| | “Is this a reasonable or unreasonable amount to require this person to pay for this health insurance plan?” | 72% | 25% |
| “Do you think an individual covered by this plan would be well-protected by their health insurance, or would they be vulnerable to high medical bills?” | 57% | 33% | 10% |
| | Fair | Unfair | Don't Know/Refused |
| “Do you think it is fair or unfair to require an uninsured person like this to sign up and pay for a plan like this?” | 54% | 44% | 2% |

Table B.20: Harvard School of Public Health, Fairness or Unfairness of Subsidized Family Plan

| Unsubsidized Family Plan: Commonwealth Care | | | |
|---|---|---------------|---------------------------|
| Wording: “The second plan is for an uninsured family of four that includes two parents aged 37 and two children under 18. The family’s income is \$60,000 a year. The children receive insurance for free under a government program. The parents would need to pay for their insurance. Under this plan, the cost of a visit to a regular doctor is \$10 and a specialist is \$20. Hospital stays cost \$250. Prescription drugs are covered for a co-payment of \$10 to \$45 depending on the drug. The maximum amount this family would have to pay in a year is \$1,500 for medical expenses and \$1,000 for prescription drugs. The plan would cost the family \$210 a month.” | | | |
| Questions | Yes | No | Don't Know/Refused |
| | “Is this a reasonable or unreasonable amount to require this family to pay for this health insurance plan?” | 72% | 25% |
| “Do you think a family covered by this plan would be well-protected by their health insurance, or would they be vulnerable to high medical bills?” | 64% | 31% | 5% |
| | Fair | Unfair | Don't Know/Refused |
| “Do you think it is fair or unfair to require an uninsured family like this to sign up and pay for a plan like this?” | 59% | 39% | 2% |

APPENDIX C: ACCESS TO CARE AND ACCESS DISPARITIES

Several of the health care surveys of Massachusetts residents ask respondents about their access to care. As discussed in the report, the best measures of access to care are risk-based – looking at the actual insurance coverage for residents, as well as the coverage of safety net plans. Most surveys on the other hand ask about the actual medical costs incurred by respondents, or incidents where they have not received needed care due to cost barriers – such measures only capture access among for the share of the population that has significant medical needs during the survey year. Many of the same surveys ask respondents about their utilization of health care – primary care visits, emergency room visits, prescription drug use, etc. – however, most utilization questions can be answered more accurately using the comprehensive data that hospitals, health centers, and insurers file with the state.

Here we present data access data only from available surveys, referenced in the report, where findings are comparable across surveys. We also display disparities in access to care by race, ethnicity, gender, and income, where available and comparable.

The Blue Cross Blue Shield Foundation of Massachusetts-financed, Urban Institute-administered **Massachusetts Health Reform Survey (MHR)** of non-elderly adults (ages 18-64) asks respondents whether they have a regular source of care, whether they have delayed or not received needed care due to costs, what their out-of-pocket spending has been in the past year, whether they have had difficulty paying off medical bills, and whether they are paying medical bills over time. The State-financed, Urban Institute-administered **Massachusetts Health Insurance Survey (MHIS)** asks respondents an almost identical set of access questions, with three differences: the MHIS asks a simplified question in regards to cost barriers that may be the cause of the higher estimates; the MHIS asks respondents about out-of-pocket spending in a format that makes the data difficult to use; and the MHIS does not ask respondents whether they are paying off medical bills over time.²⁵

The Centers for Disease Control's **Behavioral Risk Factors Surveillance System (BRFSS)** includes two basic access questions: whether they have a regular provider, and whether they have not received needed care in the past year due to costs.

Regular Source of Care and Cost Barriers to Care

Table C.1: State’s Massachusetts Household Insurance Survey (MHIS), Urban Institute Estimates, No Regular Source of Care, All Ages

Wording: “My next questions ask about your recent health care experiences. Is there a place where you usually go when you are sick or when you need advice about your health?”²⁶

| State/Urban Inst. | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------------------|---|------|------|------|------|-------|-------|-------|
| No Regular Source of Care | | | | | | | | |
| All | All | - | - | - | - | 8.1% | 9.0% | 7.1% |
| Race/ Ethnicity #1 | White | - | - | - | - | 7.6% | 8.4% | 6.6% |
| | Black | - | - | - | - | 7.8% | 6.4% | 6.0% |
| | Hispanic | - | - | - | - | 10.0% | 12.4% | 10.1% |
| Income | Income above 500% of poverty line | - | - | - | - | 5.6% | 6.5% | 5.0% |
| | Income between 300-500% of poverty line | - | - | - | - | 7.8% | 9.3% | 6.5% |
| | Income below 300% of poverty line | - | - | - | - | 10.6% | 11.0% | 9.2% |
| Age | Adults 19-64 | - | - | - | - | 89.3% | 87.9% | 9.0% |

Table C.2: State’s Massachusetts Household Insurance Survey (MHIS), Urban Institute Estimates, Cost Barriers to Care, All Ages

Wording: “Still thinking about the past 12 months, was there any time that you did not [fill a prescription for medicine/get doctor care that you needed/get specialist care that you needed/get dental care that you needed] because of cost?”

| State/Urban Inst. | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--------------------------|---|------|------|------|------|-------|-------|-------|
| Any Cost Barrier to Care | | | | | | | | |
| All | All | - | - | - | - | 20.7% | 20.7% | 22.7% |
| Race/ Ethnicity #1 | White | - | - | - | - | 19.6% | 20.2% | 22.7% |
| | Black | - | - | - | - | 26.0% | 22.9% | 25.9% |
| | Hispanic | - | - | - | - | 28.0% | 21.5% | 26.4% |
| Income | Income above 500% of poverty line | - | - | - | - | 12.1% | 12.8% | 13.7% |
| | Income between 300-500% of poverty line | - | - | - | - | 22.1% | 18.5% | 22.2% |
| | Income below 300% of poverty line | - | - | - | - | 26.3% | 29.4% | 30.8% |
| Age | Adults 19-64 | - | - | - | - | 25.6% | 26.5% | 15.7% |

Table C.3: Blue Cross Blue Shield of Massachusetts Foundation’s Massachusetts Health Reform Survey (MHRS), Urban Institute Estimates, No Regular Source of Care, Ages 18-64 Only

Wording: “My next questions ask about your recent health care experiences. Is there a place where you usually go when you are sick or when you need advice about your health?”²⁷

| Blue Cross/Urban Inst. No Regular Source of Care | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|--|------|------|-------|------|------|-------|
| All | All | - | - | 13.0% | - | 7.9% | 10.1% |
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | 12.4% | - | - | 10.3% |
| | Racial/Ethnic Minority | - | - | 15.8% | - | - | 9.4% |
| Income | Income between 300-500% of poverty line | - | - | 10.5% | - | - | 5.2% |
| | Income below 300% of poverty line | - | - | 20.0% | - | - | 15.5% |

Table C.4: Blue Cross Blue Shield of Massachusetts Foundation’s Massachusetts Health Reform Survey (MHRS), Urban Institute Estimates, Cost Barriers to Care, Ages 18-64 Only

Wording: “Still thinking about the past 12 months, was there any time that you did not get or postponed [filling a prescription for medicine/getting a medical test, treatment or follow-up recommended by a doctor/getting preventive care screening such as colon cancer screening (or a mammogram)/getting doctor care that you needed/get specialist care that you needed/getting dental care that you needed]?” FOLLOWED BY: “Did you NOT get the care because of costs or because of some other reason?”

| Blue Cross/Urban Inst. Any Cost Barrier to Care | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|---|------|------|-------|------|-------|-------|
| All | All | - | - | 16.3% | - | 11.6% | 11.7% |
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | 14.7% | - | - | 9.3% |
| | Racial/Ethnic Minority | - | - | 16.7% | - | - | 12.3% |
| Income | Income between 300-500% of poverty line | - | - | 13.6% | - | - | 12.4% |
| | Income below 300% of poverty line | - | - | 26.3% | - | - | 15.1% |

Table C.5: Center for Disease Control’s Behavioral Risk Factors Surveillance, No Regular Source of Care, Ages 18+ Only

Wording: “Do you have one person you think of as your personal doctor or health care provider? (If ‘No’ ask ‘Is there more than one or is there no person who you think of as your personal doctor or health care provider?’.)”

| CDC/BRFSS No Regular Source of Care | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------------------------|-------|-------|-------|-------|-------|-------|
| All | All | 12.9% | 11.7% | 10.6% | 10.9% | 10.3% | 8.7% |
| Race/ Ethnicity #1 | White | 10.6% | 10.5% | 8.6% | 9.5% | 8.4% | 7.1% |
| | Black | 19.4% | 14.5% | 17.3% | 17.8% | 17.3% | 15.4% |
| | Hispanic | 37.9% | 29.7% | 26.2% | 22.8% | 23.1% | 20.2% |
| Race/ Ethnicity #2 | Non-Hispanic White | 9.7% | 9.9% | 7.9% | 8.9% | 8.0% | 6.8% |
| | Racial/Ethnic Minority | 28.3% | 21.9% | 21.0% | 18.8% | 19.1% | 15.5% |
| Gender | Women | 9.6% | 7.8% | 7.4% | 7.9% | 6.6% | 6.2% |
| | Men | 16.5% | 16.0% | 14.0% | 14.2% | 14.3% | 11.4% |
| Age | Adults 18-64 | 14.6% | 13.7% | 12.2% | 12.3% | 11.7% | 10.0% |

Table C.6: Center for Disease Control’s Behavioral Risk Factors Surveillance, Cost Barriers to Care, Ages 18+ Only

Wording: “Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?”

| CDC/BRFSS Any Cost Barrier to Care | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------------------------------|------------------------|-------|-------|-------|-------|-------|-------|
| All | All | 8.8% | 7.7% | 6.9% | 6.3% | 7.0% | 6.7% |
| Race/ Ethnicity #1 | White | 7.5% | 6.7% | 5.9% | 5.3% | 5.6% | 5.9% |
| | Black | 14.5% | 15.2% | 10.7% | 11.7% | 11.0% | 11.4% |
| | Hispanic | 18.2% | 18.3% | 17.3% | 16.3% | 17.5% | 16.3% |
| Race/ Ethnicity #2 | Non-Hispanic White | 7.2% | 6.2% | 5.4% | 5.0% | 5.3% | 5.7% |
| | Racial/Ethnic Minority | 16.5% | 15.4% | 12.9% | 11.5% | 13.2% | 10.7% |
| Gender | Women | 9.8% | 8.3% | 7.1% | 6.6% | 7.0% | 6.8% |
| | Men | 7.8% | 7.1% | 6.8% | 6.0% | 7.0% | 6.7% |
| Age | Adults 18-64 | 9.9% | 8.6% | 7.8% | 6.9% | 7.9% | 7.6% |

Disparities in Regular Source of Care and Cost Barriers to Care

Disparities represent the gap between one population group and another in terms of health insurance, access, or outcomes – however, there are several ways to measure that gap. In comparing insurance coverage for two groups, for example men and women, we can measure the simple difference (called the “absolute disparity”) – which is one group’s uninsurance rate minus the best group’s insurance rate (an uninsurance rate of 9% for men minus a rate of 6% for women would give us a 3% absolute disparity); or we can measure the ratio (called the “relative disparity”) – which is the gap between the two groups as a percentage of the best group’s uninsurance rate (which would give us a 50% relative disparity for men, meaning that their uninsurance rate is 50% higher than for women). It is common, particularly when access to care is improving for all groups over time, for absolute disparities to shrink while relative disparities remain large or actually grow. For this reason we follow the guidelines of the Centers for Disease Control and Prevention in this report, and present both measures of disparities access to care.²⁸

There are many possible measures of access to care, but here we report the two for which data is available from multiple surveys: having a regular source of care, and self-reported inability to access needed care due to costs.

Table C.7: State’s Massachusetts Household Insurance Survey (MHIS), Urban Institute Estimates, Disparities in No Regular Source of Care, All Ages

| State/Urban Inst. Absolute (Simple) Disparities No Regular Source of Care ²⁹ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|--|------|------|------|------|-------|--------|-------|
| Race/ Ethnicity #1 | White | - | - | - | - | * | * | * |
| | Black | - | - | - | - | 0.2% | -2.0% | -0.6% |
| | Hispanic | - | - | - | - | 2.4% | 4.0% | 3.5% |
| Income | Income above 500% of poverty line | - | - | - | - | * | * | * |
| | Income between 300-500% of poverty line | - | - | - | - | 2.8% | 1.7% | 2.7% |
| | Income below 300% of poverty line | - | - | - | - | 2.9% | 2.8% | 2.5% |
| State/Urban Inst. Relative (Ratio) Disparities No Regular Source of Care | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | - | - | - | - | * | * | * |
| | Black | - | - | - | - | 2.6% | -23.8% | -9.1% |
| | Hispanic | - | - | - | - | 31.6% | 47.6% | 53.0% |
| Income | Income above 500% of poverty line | - | - | - | - | * | * | * |
| | Income between 300-500% of poverty line | - | - | - | - | 35.9% | 18.3% | 41.5% |
| | Income below 300% of poverty line | - | - | - | - | 37.2% | 30.1% | 38.5% |

Table C.8: State’s Massachusetts Household Insurance Survey (MHIS), Urban Institute Estimates, Disparities in Cost Barriers to Care, All Ages

| State/Urban Inst. Absolute (Simple) Disparities Any Cost Barrier to Care ³⁰ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|---|------|------|------|------|--------|--------|--------|
| Race/ Ethnicity #1 | White | - | - | - | - | * | * | * |
| | Black | - | - | - | - | 6.4% | 2.7% | 3.2% |
| | Hispanic | - | - | - | - | 8.4% | 1.3% | 3.7% |
| Income | Income above 500% of poverty line | - | - | - | - | * | * | * |
| | Income between 300-500% of poverty line | - | - | - | - | 10.0% | 5.7% | 8.5% |
| | Income below 300% of poverty line | - | - | - | - | 14.2% | 16.6% | 17.1% |
| State/Urban Inst. Relative (Ratio) Disparities Any Cost Barrier to Care | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | - | - | - | - | * | * | * |
| | Black | - | - | - | - | 32.7% | 13.4% | 14.1% |
| | Hispanic | - | - | - | - | 42.9% | 6.4% | 16.3% |
| Income | Income above 500% of poverty line | - | - | - | - | * | * | * |
| | Income between 300-500% of poverty line | - | - | - | - | 82.6% | 44.5% | 62.0% |
| | Income below 300% of poverty line | - | - | - | - | 117.4% | 129.7% | 124.8% |

Table C.9: Blue Cross Blue Shield of Massachusetts Foundation’s Massachusetts Health Reform Survey (MHRS), Urban Institute Estimates, Disparities in No Regular Source of Care, Ages 18-64 Only

| Blue Cross/Urban Inst. Absolute (Simple) Disparities No Regular Source of Care ³¹ | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|------------------------|------|------|-------|------|------|-------|
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | * | - | - | * |
| | Racial/Ethnic Minority | - | - | 3.4% | - | - | -0.9% |
| Blue Cross/Urban Inst. Relative (Ratio) Disparities No Regular Source of Care | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | * | - | - | * |
| | Racial/Ethnic Minority | - | - | 27.4% | - | - | -8.7% |

* Represents the ‘best group’ rate, used as a reference point for other groups.

Table C.10: Blue Cross Blue Shield of Massachusetts Foundation’s Massachusetts Health Reform Survey (MHRs), Urban Institute Estimates, Disparities in Cost Barriers to Care, Ages 18-64 Only

| Blue Cross/Urban Inst. Absolute (Simple) Disparities Any Cost Barrier to Care³² | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | * | - | - | * |
| | Racial/Ethnic Minority | - | - | 2.0% | - | - | 3.0% |
| Blue Cross/Urban Inst. Relative (Ratio) Disparities Any Cost Barrier to Care | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Race/ Ethnicity #2 | Non-Hispanic White | - | - | * | - | - | * |
| | Racial/Ethnic Minority | - | - | 13.6% | - | - | 32.3% |

* Represents the ‘best group’ rate, used as a reference point for other groups.

Table C.11: Center for Disease Control’s Behavioral Risk Factors Surveillance, Disparities in No Regular Source of Care, Ages 18+ Only

| CDC/BRFSS Absolute (Simple) Disparities No Regular Source of Care³³ | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Race/ Ethnicity #1 | White | * | * | * | * | * | * |
| | Black | 8.8% | 4.0% | 8.7% | 8.3% | 8.9% | 8.3% |
| | Hispanic | 27.3% | 19.2% | 17.6% | 13.3% | 14.7% | 13.1% |
| Race/ Ethnicity #2 | Non-Hispanic White | * | * | * | * | * | * |
| | Racial/Ethnic Minority | 18.6% | 12.0% | 13.1% | 9.9% | 11.1% | 8.7% |
| Gender | Women | * | * | * | * | * | * |
| | Men | 6.9% | 8.2% | 6.6% | 6.3% | 7.7% | 5.2% |
| CDC/BRFSS Relative (Ratio) Disparities No Regular Source of Care | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | * | * | * | * | * | * |
| | Black | 83.0% | 38.1% | 101.2% | 87.4% | 106.0% | 116.9% |
| | Hispanic | 257.5% | 182.9% | 204.7% | 140.0% | 175.0% | 184.5% |
| Race/ Ethnicity #2 | Non-Hispanic White | * | * | * | * | * | * |
| | Racial/Ethnic Minority | 191.8% | 121.2% | 165.8% | 111.2% | 138.8% | 127.9% |
| Gender | Women | * | * | * | * | * | * |
| | Men | 71.9% | 105.1% | 89.2% | 79.7% | 116.7% | 83.9% |

* Represents the ‘best group’ rate, used as a reference point for other groups.

Table C.12: Center for Disease Control’s Behavioral Risk Factors Surveillance, Disparities in Cost Barriers to Care, Ages 18+ Only

| CDC/BRFSS Absolute (Simple) Disparities Any Cost Barrier to Care³⁴ | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Race/ Ethnicity #1 | White | * | * | * | * | * | * |
| | Black | 7.0% | 8.5% | 4.8% | 6.4% | 5.4% | 5.5% |
| | Hispanic | 10.7% | 11.6% | 11.4% | 11.0% | 11.9% | 10.4% |
| Race/ Ethnicity #2 | Non-Hispanic White | * | * | * | * | * | * |
| | Racial/Ethnic Minority | 9.3% | 9.2% | 7.5% | 6.5% | 7.9% | 5.0% |
| Gender** | Women | 2.0% | 1.2% | 0.3% | 0.6% | 0.0% | 0.1% |
| | Men | * | * | * | * | * | * |
| CDC/BRFSS Relative (Ratio) Disparities Any Cost Barrier to Care | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| Race/ Ethnicity #1 | White | * | * | * | * | * | * |
| | Black | 93.3% | 126.9% | 81.4% | 120.8% | 96.4% | 93.2% |
| | Hispanic | 142.7% | 173.1% | 193.2% | 207.5% | 212.5% | 176.3% |
| Race/ Ethnicity #2 | Non-Hispanic White | * | * | * | * | * | * |
| | Racial/Ethnic Minority | 129.2% | 148.4% | 138.9% | 130.0% | 149.1% | 87.7% |
| Gender** | Women | 25.6% | 16.9% | 4.4% | 10.0% | 0.0% | 1.5% |
| | Men | * | * | * | * | * | * |

* Represents the ‘best group’ rate, used as a reference point for other groups.

APPENDIX D: SOURCES AND METHODOLOGY FOR FIGURE 9.2 (INCREASE IN HEALTH CARE SPENDING AS A PERCENTAGE OF HOUSEHOLD INCOME, BY INCOME QUINTILES BEFORE AND AFTER REFORM, 2005-2007)

The goal of Figure 9.2 was to determine whether increases in health care spending between 2005 and 2007 fell disproportionately on any income group. To do this, we started with Seifert and Swaboda’s estimates of changes in health care spending between 2005 and 2007. Seifert and Swaboda categorized these changes by: 1) **employer and union plan spending** (on employer premiums, and on fair share assessments imposed by the state); 2) **individual spending** (towards their employment-sponsored insurance, purchasing insurance directly, by contributing towards Commonwealth Care or MassHealth plans, by paying co-pays, deductibles, or other co-insurance, or by paying a fee for violating the individual mandate); 3) **state spending** (on Commonwealth Care or MassHealth plans, and Section 125 subsidies); and 4) **federal spending in Massachusetts**.³⁵

For each of these categories of spending, we distributed new costs across family income quintiles in the state (the lowest 20% of income earners through the highest 20% of income earners), with several restrictions and assumptions. First, we did not include federal spending in our analysis, because it is largely paid for by federal taxpayers, and our goal was to capture the impact of new spending on Massachusetts families at different income levels. Second, because this first restriction takes Medicare spending out of the analysis, we chose also to exclude private spending by seniors (age 65 and up) such as premiums, copayments, etc. State taxes paid by seniors that go towards growing state spending on health care, however, are included.

Below, we discuss the methodology, sources, and assumptions for distributing each category of spending by quintile. Our findings in total dollar changes are as follows:

| Change in Total Health Care Spending from 2005-2007 (in \$millions) | Bottom 20% | 2nd 20% | Middle 20% | 4th 20% | Top 20% |
|---|---------------|----------------|--------------|--------------|----------------|
| 2005 Public Spending | \$60 | \$199 | \$318 | \$454 | \$1,320 |
| 2007 Public Spending | \$75 | \$249 | \$398 | \$568 | \$1,651 |
| \$ Increase in Public Spending | \$15 | \$50 | \$80 | \$114 | \$331 |
| 2005 Private Spending | \$1,286 | \$2,140 | \$3,525 | \$4,062 | \$4,256 |
| 2007 Private Spending | \$1,169 | \$3,136 | \$4,140 | \$4,877 | \$5,182 |
| \$ Increase in Private Spending | -\$117 | \$996 | \$615 | \$815 | \$925 |
| 2005 Total Spending | \$1,346 | \$2,340 | \$3,843 | \$4,516 | \$5,576 |
| 2007 Total Spending | \$1,244 | \$3,385 | \$4,538 | \$5,445 | \$6,832 |
| \$ Increase in Total Spending | -\$102 | \$1,046 | \$695 | \$929 | \$1,257 |

This shows that between 2005 and 2007, total spending on health care fell for the bottom 20% of income earners, but rose for every other income group. These findings expressed as a percentage increase in health care spending are as follows:

| % Change in Health Care Spending from 2005-2007 (in \$millions) | Bottom 20% | 2nd 20% | Middle 20% | 4th 20% | Top 20% |
|---|------------|------------|------------|------------|------------|
| Public % Increase | 25% | 25% | 25% | 25% | 25% |
| Private % Increase | -9% | 47% | 17% | 20% | 22% |
| Total % Increase | -8% | 45% | 18% | 21% | 23% |

However, the same dollar increase in health care spending is a larger burden on lower- and middle-income families. The final graph on the burden of growing health care costs after health reform therefore displays the above increases in health care spending as a share of the average family income for each income quintile:

| % Change in Health Care Spending from 2005-2007 (in \$millions) | Bottom 20% | 2nd 20% | Middle 20% | 4th 20% | Top 20% |
|---|--------------|-------------|-------------|-------------|-------------|
| Public Increase as % of 2007 Income | 0.2% | 0.2% | 0.2% | 0.2% | 0.1% |
| Private Increase as % of 2007 Income | -1.5% | 4.6% | 1.7% | 1.4% | 0.4% |
| Increase as % of 2007 Income | -1.3% | 4.9% | 1.9% | 1.5% | 0.6% |

What becomes clear from this table is that public expansions in health care spending are relatively equitable, since they are raised primarily through income taxes based on family income. Expansions in private health care spending – such as through rising premiums and expanded private coverage due to individual mandates – are highly regressive, and the cause of regressive impacts from health reform.

Below is a category-by-category explanation of how new spending from Seifert and Swaboda’s report were allocated by quintile to arrive at the above estimates.

Quintile Income Ranges

Establishing quintile income ranges is complicated by the fact that both public and private health care spending are included in the results. Taxpayers - who pay for public spending - are a different population from and have different income quintiles from families in the state. Estimates of state tax burden by quintile for Massachusetts were drawn from the Institute on Taxation and Economic Policy (discussed further below), while estimates of private spending largely relied on the Census Bureau’s Current Population Survey (CPS). Some assumptions were necessary to combine estimates from these sources. ITEP reports tax burden in Massachusetts for 2007 using the following quintiles:

| ITEP Taxpayer Income Quintiles | Bottom 20% | 2nd 20% | Middle 20% | 4th 20% | Top 20% |
|--------------------------------|--------------------|----------------------|----------------------|-----------------------|-------------------|
| Income Range | Less than \$20,000 | \$20,000 to \$41,000 | \$41,000 to \$66,000 | \$66,000 to \$111,000 | \$111,000 or more |
| Average Income | \$11,200 | \$31,100 | \$52,900 | \$86,600 | \$319,240 |

Since the Census allows for greater flexibility in breaking out data by income levels, we **used ITEP’s taxpayer quintiles** for all distribution analysis. The table on fairness in financial contributions is therefore actually an analysis of the distribution of new health care spending across these taxpayer income quintiles, and not resident income quintiles.

We distributed spending in eleven categories included in Seifert and Swaboda's report, falling under three major headings:

- Employers and Union Plans
 - Sponsors of coverage
 - Fair Share assessment
- Individuals
 - Enrollees in employer coverage
 - Individual purchase
 - Commonwealth Care MCO premiums
 - MassHealth premiums
 - Cost sharing
 - Tax penalty
- State
 - Capitation payments to MCOs
 - Other MassHealth
 - Section 125 subsidy

Details on each category of spending follow.

Distribution of Spending by Employers and Union Plans

Our estimates assume that 100 percent of employer spending on health care benefits are passed on to employees in the form of lower wages. This is the finding of a significant literature on health insurance-wage trade-offs.³⁶ New spending by employers - under "Sponsors of coverage" - is therefore assigned to employees.

To calculate the distribution of lost wages across income quintiles for 2005 and 2007, we used Census estimates for what percentage of Massachusetts residents were covered by employer-sponsored coverage for 2005 and 2007 in each ITEP quintile. However, because the Table Creator only reports income brackets in \$2,500 increments and maxes out at \$100,000 per year, the CPS income brackets are not identical – but very close – to the ITEP quintiles. Furthermore, because the universe for employer-sponsored coverage is Massachusetts residents, while the universe for the ITEP is taxpayers, an unequal number of residents fell under each ITEP quintile. To correct for this, the number of people with employer-sponsored insurance in each income bracket was weighted by the total population in the income bracket, yielding the following adjusted employer coverage figures for each bracket, as well as the percentage of people with employer-sponsored insurance (weighted) in each income bracket relative to the total population of those with employer-sponsored insurance for the year:

| Income Range | Loss to \$19,999 | \$20,000 to \$39,999 | \$40,000 to \$64,999 | \$65,000 to \$99,999 | \$100,000 and over |
|--|------------------|----------------------|----------------------|----------------------|--------------------|
| 2005 Weighted Employer Insurance Coverage | 666,615 | 804,068 | 1,020,003 | 1,043,494 | 1,048,116 |
| 2005 % of Total Employer Coverage | 15% | 18% | 22% | 23% | 23% |
| 2007 Weighted Employer Insurance Coverage | 652,862 | 815,860 | 940,031 | 1,037,675 | 1,048,446 |
| 2007 % of Total Employer Coverage | 15% | 18% | 21% | 23% | 23% |

The total spending under “Sponsors of Coverage” was then distributed across the five income ranges according to the “% of Total Employer Coverage” listed for 2005 and 2007. This assumes that employers contribute the same dollar amount towards health coverage for employees in every income bracket. It is likely that employers with higher income employees contribute more towards health insurance coverage than employers with lower income employees. However, since the table assumes that all employer spending on health insurance is passed on to employees, any bias in the distribution at the level of employer spending will be corrected by an opposing bias in the distribution of employee spending on workplace insurance.

The table also distributes spending under the “Fair Share assessment” in 2007 according to the % of Total Employer Coverage per income bracket. This assumes that employers with high-income employees were assessed a fair share fine in the same proportion as employers with low-income employees. The state reports that more small and medium-sized firms were charged a fair share assessment than large firms, but the state does not release data on the income of employees at assessed employers, nor on the percentage of total small employers assessed compared with large employers.

Distribution of Spending by Individuals

Six components make up individual spending in the Seifert and Swaboda study, including several with very little data available on the distribution of spending.

A. Individuals: Enrollees in Employer Coverage

The same method for calculating employer contributions to employer-sponsored coverage was used to calculate employee contributions. Total spending on employee contributions was therefore distributed according to the % of Total Employer Coverage per income range for 2005 and 2007.

B. Individuals: Individual Purchase

The distribution of individual purchase of health insurance was calculated using Census data for “Direct Purchase” insurance coverage from the CPS Table Creator, in much the same way that employer and employee spending was calculated from Census employment-based insurance figures. The number of people with direct-purchase insurance per income range was adjusted using the same population weights as for the employment-based insurance coverage, leading to the following table of adjusted coverage and % of all people with direct-purchase insurance coverage:

| Income Range | Loss to \$19,999 | \$20,000 to \$39,999 | \$40,000 to \$64,999 | \$65,000 to \$99,999 | \$100,000 and over |
|---|------------------|----------------------|----------------------|----------------------|--------------------|
| 2005 Weighted Individual Purchase Coverage | 48,441 | 43,437 | 23,497 | 68,279 | 71,996 |
| 2005 % of Total Individual Coverage | 19% | 17% | 9% | 27% | 28% |
| 2007 Weighted Individual Purchase Coverage | 58,273 | 57,894 | 64,354 | 37,099 | 57,434 |
| 2007 % of Total Individual Coverage | 21% | 21% | 23% | 13% | 21% |

The total spending under “Individual purchase” was then distributed across the five income ranges according to the “% of Total Individual Coverage” listed for 2005 and 2007.

C. Individuals: Commonwealth Care MCO Payments

Commonwealth Care or “CommCare” in 2007 was offered to individuals with incomes between 0 and 300% of the federal poverty line, which in 2007 was \$10,210 for an individual. CommCare charged no premium to eligible individuals below the federal poverty line (FPL) nor, for most of 2007, those below 150% of the FPL. For most months of 2007, the number of enrollees in Type 1 (0 to 100%FPL), Type 2 (100 - 200% FPL), as well as Type 2A (100 - 150% FPL) and Type 2B (150 - 200% FPL), Type 3 (200 - 300% FPL with lower premiums but higher cost sharing), and Type 4 (200 - 300% FPL with higher premiums but lower cost sharing) were reported in Connector Board records. All premiums paid to CommCare fall under the 1st and 2nd income quintiles. Only premiums paid for Type 2 coverage and - when premiums were eliminated below 150% FPL - for Type 2B coverage, are assigned to the 1st income quintile (up to \$20,000 - very close to 200% FPL for that year), with the remainder being assigned to the 2nd income quintile.

Connector Board records do not report the exact premium income for each enrollment type, but they do report enrollment numbers per type, as well as the premium charge for each enrollment type - although this charge varies based on geography as well as the plan selected.

Using the 10 months in 2007 for which enrollment data per plan was available in Connector Board records, assuming that all enrollees chose the lowest premium plan available to them in their enrollment type, and assuming Boston area premium rates, those below 200% FPL paid \$1,057,925 per month in premiums while those above 200% FPL paid \$1,250,139 per month. I decided based on this rough estimate to split the total spending under “Commonwealth Care MCO Payments” evenly between the 1st and the 2nd income quintiles.

D. Individuals: MassHealth premiums

MassHealth is an umbrella for many different means-tested health programs that require additional specific criteria for enrollment such as pregnancy, HIV/AIDS status, breast and cervical cancer, Medicare Buy-In programs, and more. Many of these programs require a premium payment above a certain income level, but the income level varies by program - some do not accept premium payments at all - and no public data is available reporting premium-paying enrollment by program.

Spending on MassHealth premiums has therefore been assigned based on guesswork. However, since Seifert and Swaboda report no increase in total spending under this category between 2005 and 2007, and the same distribution among income quintiles is used for both 2005 and 2007, this category will have no impact on changes in total spending per quintile between 2005 and 2007.

On the assumption that the vast majority of MassHealth premium payers would fall under the 1st and 2nd quintiles, the following distribution was assigned for the \$13 million per year in MassHealth premiums for 2005 and 2007:

| Income Range | Loss to \$19,999 | \$20,000 to \$39,999 | \$40,000 to \$64,999 | \$65,000 to \$99,999 | \$100,000 and over |
|---------------------|------------------|----------------------|----------------------|----------------------|--------------------|
| MassHealth Premiums | \$5 million | \$6 million | \$2 million | \$0 | \$0 |

E. Individuals: Cost sharing

There is not much research available on out-of-pocket health care spending by income - the state’s survey of residents does not ask about out-of-pocket spending for its insurance coverage or its access components. We have therefore evenly distributed cost sharing expenses across the five quintiles.

F. Individuals: Tax penalty

The Massachusetts Department of Revenue did report for 2007 the distribution of uninsured taxfilers “deemed able to afford” health insurance by percentage of the poverty line (Massachusetts Department of Revenue 2007b). The income brackets used correspond to: 1) less than 150% of the federal poverty line (FPL), below which tax filers were not fined; 2) 150 - 300% of the FPL; 3) 300% FPL up to the income cap above which all filers are deemed able to afford insurance; and 4) above the cap. These figures were reported separately for individuals without dependents, heads of households with dependents, couples without dependents, and couples with dependents. Since health care spending is distributed in the table by quintiles of people - not families or households - mandate fines for all family types were assigned to the quintile corresponding with an individual’s income at the reported % of the FPL. So for example, the 8,307 fines charged to couples with dependents earning between 150 and 300 % of the FPL were allocated to the first and second quintiles, which span the 150-300% of poverty range for individuals. Since the Census reports that, of all individuals with incomes between 150% and 300% of the FPL, 34.3% have incomes in the lowest quintile and 65.7% have incomes in the second quintile, we assigned 2,849 of the fines to the lowest quintile and 5,458 of the fines to the second quintile.

In 2007 mandate fines were not pro-rated by the number of months one was uninsured. All fined taxfilers were penalized with the loss of their state personal tax exemption. The table therefore evenly distributes the fines across the estimated number of uninsured individuals deemed “able to afford” health insurance in each quintile.

The final number and distribution of fines arrived at is as follows:

| Income Quintile | Lowest Quintile | 2nd Quintile | Middle Quintile | 4th Quintile | Top Quintile |
|---------------------------------|-----------------|--------------|-----------------|--------------|--------------|
| Deemed Affordable by Quintile | 17,193 | 46,723 | 19,427 | 7,590 | 5,929 |
| % Deemed Affordable by Quintile | 18% | 48% | 20% | 8% | 6% |

Distribution of Spending by the State

The table assumes that all health care spending by the state (not including federal matching funds) was borne by state taxpayers. Not all state revenue derives from taxes: in 2006, 72.1% of state revenue for Massachusetts was from taxes, while the remaining 27.9% came from fees, charges, and miscellaneous sources (MBPC 2007). However, most fees and charges are dedicated revenue streams such as tuition fees for public schools, highway tolls, etc.

State spending for both 2005 and 2007 was distributed across income quintiles based on the Institute on Taxation and Economic Policy (ITEP)’s November 2009 report “Who Pays? A Distributional Analysis of the Tax Systems in All 50 States,” which refers to 2007 tax data.³⁷ All taxes except property taxes - which are generally collected and spent by municipalities - were used. ITEP’s distribution of tax burden for 2007 is the following:

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| Income Quintile | Lowest 20% | Second 20% | Middle 20% | Fourth 20% | Top 20% | | |
|----------------------------------|--------------------|-------------------|-------------------|--------------------|---------------------|---------------------|-------------------|
| | | | | | Next 15% | Next 4% | Top 1% |
| Income Range | Less than \$20,000 | \$20,000-\$41,000 | \$41,000-\$66,000 | \$66,000-\$111,000 | \$111,000-\$243,000 | \$243,000-\$683,000 | \$683,000 or more |
| Average Income | \$11,200 | \$31,100 | \$52,900 | \$86,600 | \$151,900 | \$369,400 | \$2,628,700 |
| Total Taxes (Minus Property Tax) | 5.5% | 6.6% | 6.2% | 5.4% | 4.5% | 4.7% | 3.8% |

This table gives us the following distribution of aggregate tax burden, which was used to allocate all categories of state tax spending in the table:

| Income Quintile | Lowest 20% | Second 20% | Middle 20% | Fourth 20% | Top 20% |
|------------------|------------|------------|------------|------------|---------|
| % of Total Taxes | 3% | 8% | 14% | 19% | 56% |

APPENDIX E: AFFORDABILITY SCHEDULES

The Board of the Commonwealth Health Connector Authority establishes an ‘affordability schedule’ prior to each fiscal year, which determines what premium rate will be deemed affordable for residents at different income levels. Those for whom no insurance plan is deemed affordable will not face a fine on their tax returns for failing to demonstrate insurance coverage for the previous year. The Connector Board publishes separate affordability schedules for individuals, couples, and families with dependents. This, for example, is what the 2008 affordability schedule for individuals looked like:

| Income Bracket | | | Affordability Standard (\$ monthly premium) | Percentage of Income | | | % of FPL |
|----------------|----------|----------|---|----------------------|--------|------|----------|
| Bottom | Top | Middle | | Middle | Bottom | Top | |
| \$0 | \$10,404 | \$5,202 | \$0 | | | | |
| \$10,405 | \$15,612 | \$13,009 | \$0 | | | | 150% |
| \$15,613 | \$20,808 | \$18,211 | \$39 | 2.5% | 3.0% | 2.2% | 200% |
| \$20,809 | \$26,016 | \$23,413 | \$77 | 3.9% | 4.4% | 3.6% | 250% |
| \$26,017 | \$31,212 | \$28,615 | \$116 | 4.8% | 5.3% | 4.4% | 300% |
| \$31,213 | \$37,500 | \$34,357 | \$165 | 5.8% | 6.3% | 5.3% | 360% |
| \$37,501 | \$42,500 | \$40,001 | \$220 | 6.6% | 7.0% | 6.2% | 408% |
| \$42,501 | \$52,500 | \$47,501 | \$330 | 8.3% | 9.3% | 7.5% | 505% |
| \$52,501 | | | affordable | | | | |

This states that for an individual earning between \$26,017 and \$31,212 (from 250.1% to 300% of the federal poverty line), a monthly premium of up to \$165 (or \$1,980) is deemed affordable. This fixed premium would comprise a much higher share of an individual’s income at the bottom of this bracket (around \$26,000) than at the top of this bracket (around \$31,000) – a difference of 5.3% of income for the lower income individual versus 4.4% of income for the higher income individual. Individuals crossing from a lower to a higher income bracket can also experience large changes in affordability determinations as a result of small changes in their income. This schedule includes only premiums, and not potential cost sharing such as copayments, coinsurance, or deductibles.

In an attempt to make certain that residents with stagnant real incomes but rising insurance premiums continued to be compelled to purchase insurance, the Board in 2008 voted to increase the percentage of income deemed affordable for all income groups. In 2009 the Board decided to leave affordability standards for those below 300% of the poverty line alone, but to increase affordable premiums for income brackets above that by 3.5% on average. In 2010 the Board again increased affordable premiums for those above 300% of poverty, by between 2.5% and 3.5%, depending on income group. The Board in 2011 left the affordability schedule unchanged out of uncertainty regarding the impact of national health reform. The result is that, over time, the Board has compelled a larger number of residents to purchase insurance or face a steep penalty from the state, and it considers a higher share of residents’ income to be ‘affordable’ in 2011 than it did in 2007. This is particularly true of those above 300% of poverty – who are not eligible for subsidized insurance – and for couples and families.

Below we present tables for the changing affordability standards for a range of income levels relative to the federal poverty line.

Table E.1: Changing Share of Income Deemed Affordable for INDIVIDUALS at Various Income Levels, Connector Board

| Changing Affordability Standards for INDIVIDUALS ³⁸ | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|------|------|------|------|------|
| 150.1% of Poverty | 2.7% | 3.0% | 2.9% | 2.9% | 2.9% |
| 200.1% of Poverty | 4.1% | 4.4% | 4.3% | 4.3% | 4.2% |
| 250.1% of Poverty | 4.9% | 5.3% | 5.1% | 5.1% | 5.1% |
| 300.1% of Poverty | 5.9% | 6.3% | 6.3% | 6.5% | 6.4% |
| 350.1% of Poverty | 6.7% | 5.4% | 5.4% | 5.5% | 5.5% |
| 400.1% of Poverty | 8.8% | 6.3% | 6.3% | 6.5% | 6.5% |
| 450.1% of Poverty | 7.8% | 8.5% | 8.4% | 8.7% | 8.7% |

Table E.2: Changing Share of Income Deemed Affordable for COUPLES at Various Income Levels, Connector Board

| Changing Affordability Standards for COUPLES | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|------|-------|-------|-------|-------|
| 150.1% of Poverty | 4.1% | 4.5% | 4.3% | 4.3% | 4.2% |
| 200.1% of Poverty | 6.1% | 6.6% | 6.3% | 6.3% | 6.3% |
| 250.1% of Poverty | 7.4% | 8.0% | 7.6% | 7.6% | 7.6% |
| 300.1% of Poverty | 7.9% | 8.5% | 8.4% | 8.6% | 8.6% |
| 350.1% of Poverty | 6.8% | 7.3% | 7.2% | 7.4% | 7.3% |
| 400.1% of Poverty | 7.9% | 8.5% | 8.4% | 8.7% | 8.6% |
| 450.1% of Poverty | 9.7% | 10.5% | 10.4% | 10.8% | 10.7% |

Table E.3: Changing Share of Income Deemed Affordable for FAMILIES WITH DEPENDENTS at Various Income Levels, Connector Board

| Changing Affordability Standards for FAMILIES WITH DEPENDENTS | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|------|------|------|------|------|
| 150.1% of Poverty | 3.3% | 3.5% | 3.4% | 3.4% | 3.4% |
| 200.1% of Poverty | 4.9% | 5.2% | 5.0% | 5.0% | 5.0% |
| 250.1% of Poverty | 5.9% | 6.3% | 6.1% | 6.1% | 6.0% |
| 300.1% of Poverty | 7.5% | 8.0% | 8.0% | 8.1% | 8.1% |
| 350.1% of Poverty | 6.4% | 6.9% | 6.8% | 7.0% | 6.9% |
| 400.1% of Poverty | 5.6% | 9.4% | 9.3% | 9.6% | 9.5% |
| 450.1% of Poverty | 7.8% | 8.3% | 8.3% | 8.5% | 8.4% |

BIBLIOGRAPHY

- Adamy, J., & Weisman, J. (2009, September 1). Health-Care Anger Has Deeper Roots. *Wall Street Journal*, p. A3.
- Agency for Healthcare Research and Quality. (2002-2010). *Medical Expenditure Panel Survey - Insurance Component*.
- Appleby, J. (2007, July 1). 'Country is watching' Massachusetts insurance plan. *USA Today*.
- Blendon, R. J., Buhr, T., Fleischfresser, C., & Benson, J. M. (2006). *The Massachusetts Health Reform Law: Public Opinion and Perception*. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation.
- Blue Cross Blue Shield of Massachusetts Foundation. (2011). *Health Reform in Massachusetts, Expanding Access to Health Insurance Coverage: Assessing the Results*. Boston.
- Bodaken, B. G. (2006, April 29). An insurance role model for California. *Los Angeles Times*.
- Boston Globe Editors. (2009, August 5). Mass. bashers take note: Health reform is working. *Boston Globe*.
- Centers for Disease Control and Prevention. (2005-2010). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- Cohn, J. (2011, May 10). *Defending Romneycare (Because Romney Won't Do It)*. Retrieved August 24, 2011, from The New Republic Blog: <http://www.tnr.com/blog/jonathan-cohn/88075/no-romneycare-not-failure>
- Cutler, D. M., & Gruber, J. (May 1996). Does public health insurance crowdout private insurance? *Quarterly Journal of Economics*, 391-430.
- Davis, K., Davis, K., Gardner, M., McIntyre, R. S., McLynch, J., & Sapozhnikova, A. (2009). *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States, 3rd ed.* Washington, D.C.: Institute on Taxation & Economic Policy.
- Emanuel, E. J., & Fuchs, V. R. (2008). Who Really Pays for Health Care? The Myth of "Shared Responsibility". *Journal of the American Medical Association*, 1057-1059.
- Families USA. (2009). *Too Great a Burden: Americans Face Rising Health Care Costs*. Washington, D.C.
- Garcia, T. C., Bernstein, A. B., & Bush, M. A. (2010). *Emergency Department Visitors and Visits: Who Used the Emergency Room in 2007?* Hyattsville, MD: National Center for Health Statistics.
- Garcia, T. C., Bernstein, A. B., & Bush, M. A. (May 2010). *Emergency Department Visitors and Visits: Who Used the Emergency Room in 2007?* Hyattsville, MD: National Center for Health Statistics.
- Gruber, J. (2000). Health Insurance and the Labor Market. In A. J. Culyer, & J. Newhouse, *Handbook of Health Economics, Vol. 1* (pp. 755-845). Elsevier.
- Harbage, P., & Gallagher, C. (2006). *Growing Support for Shared Responsibility in Health Care*. Washington, DC: New America Foundation.
- Harvard School of Public Health and Blue Cross Blue Shield of Massachusetts Foundation. (2008). *Massachusetts Health Reform Survey*. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation.

- Harvard School of Public Health and Boston Globe. (2009). *Massachusetts Health Reform Law*. Boston, MA: Harvard School of Public Health.
- Harvard School of Public Health and Boston Globe. (2011). *Massachusetts Health Reform Law 2011*. Boston, MA: Harvard School of Public Health.
- Health Connector Board. (2007, June 26). Affordability and Premium Schedules. *Board Meetings & Minutes*. Boston, MA, United States: Health Connector Board.
- Health Connector Board. (2008, April 10). Affordability Schedule (Proposed and Revised). *Board Meetings & Minutes*. Boston, MA.
- Health Connector Board. (2009, March 12). Affordability Schedule 2009 Presentation. *Board Meetings & Minutes*. Boston, MA.
- Health Connector Board. (2010). *Benefits and Copays effective July 1, 2010*. Boston, MA.
- Health Connector Board. (2010, July 1). Connector Quarterly Summary Report, FY10 - Q4. *Health Connector Board Meeting & Minutes*. Boston, MA.
- Health Connector Board. (2010, March 11). Connector Summary Report. *Health Connector Board Meeting & Minutes*. Boston, MA.
- Health Connector Board. (2010, March 1). CY2010 Affordability Schedule. *Board Meetings & Minutes*. Boston, MA.
- Health Connector Board. (2010). *Enrollee Premium Contributions effective July 1, 2010*. Boston, MA.
- Health Connector Board. (2011, March 10). Affordability Schedule Presentation. *Board Meetings & Minutes*. Boston, MA.
- Health Connector Board. (2011, February 10). Connector Quarterly Summary Report, FY11 - Q2. *Health Connector Board Meeting & Minutes*. Boston, MA.
- Helman, S., & Kowalczyk, L. (2006, April 13). Joy, worries on healthcare: As Romney signs bill, doubts arise about revenues. *Boston Globe*.
- Hertzman-Miller, R., Dawiskiba, M., & Frank, C. (2010). Immigrants' Experience with Publicly Funded Private Health Insurance. *New England Journal of Medicine*.
- Himmelstein, M. D., Thorne, P. D., & Woolhandler, M. S. (March 2011). Medical Bankruptcy in Massachusetts: Has Health Reform Made a Difference? *American Journal of Medicine*, 224-228.
- Hook, J. (2009, August 6). Healthcare debate gets uglier. *Los Angeles Times*.
- Kaiser Family Foundation, Harvard School of Public Health, and Blue Cross Blue Shield of Massachusetts Foundation. (2007). *Massachusetts Health Reform Tracking Survey*. Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation.
- Kathryn. (2008, July 11). Cambridge resident. (Mass-Care, Interviewer)
- Keppel, K., Pamuk, E., Lynch, J., Carter-Pokras, O., Kim, I., Mays, V., et al. (2005). *Methodological Issues in Measuring Health Disparities*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Health Statistics.

- Kingsdale, J. (2009). Implementing Health Care Reform in Massachusetts: Strategic Lessons Learned. *Health Affairs Web Exclusive*, w588-w594.
- Knox, R. a. (2006, April 8). Q & A: Gov. Romney on Universal Health Care. Retrieved July 5, 2011, from National Public Radio: <http://www.npr.org/templates/story/story.php?storyId=5330792>
- Knox, R., & Valentine, V. (2006, April 8). NPR. Retrieved August 9, 2011, from Q&A: Gov. Romney on Universal Health Care: <http://www.npr.org/templates/story/story.php?storyId=5330792>
- Kolstad, J. T., & Kowalski, A. E. (2010). The Impact of Health Care Reform on Hospital and Preventive Care: Evidence from Massachusetts. *National Bureau of Economic Research Working Paper*.
- Lazar, K. (2008, August 20). 439,000 more get health coverage: State shows big gains in landmark program. *Boston Globe*, p. A1.
- Lazar, K. (2009, May 19). Don't blame state's fiscal woes on health overhaul, study says. *Boston Globe White Coat Notes*.
- Lazar, K. (2009, November 5). Immigrants face hurdles with new care coverage: Network changes, delays vex clients. *Boston Globe*, p. B1.
- Lazar, K. (2009, September 30). New health plan for immigrants limits network: Three Boston groups denied contracts say patients will suffer. *Boston Globe*, p. B7.
- Lazar, K. (2010, July 18). Firms cancel health coverage: With cost rising, small companies turning to state. *Boston Globe*.
- Levenson, M., & Lazar, K. (2011, April 12). A partisan subtext tinges health law's fifth anniversary. *Boston Globe*.
- Lizza, R. (2011, June 6). Romney's Dilemma: How his greatest achievement has become his biggest liability. *The New Yorker*, p. 38ff.
- Long, S. K. (2008, June 3). On the Road to Universal Coverage: Impacts of Reform in Massachusetts At One Year. *Health Affairs Web Exclusive*, pp. w270-w284.
- Long, S. K. (2008). *The Impact of Health Reform on Underinsurance in Massachusetts: Do the Insured Have Adequate Protection?* Washington, D.C.: Urban Institute.
- Long, S. K. (2008). *Who Gained the Most Under Health Reform in Massachusetts?* Washington, D.C.: Urban Institute.
- Long, S. K. (2010). *A Comment On "The Massachusetts Health Plan: Much Pain, Little Gain"*. Washington, D.C.: Urban Institute.
- Long, S. K., & Cohen, M. (2007). *Getting Ready for Reform: Insurance Coverage and Access to and Use of Care in Massachusetts in Fall of 2006*. Washington, D.C.: Urban Institute.
- Long, S. K., & Massi, P. B. (2008, October 28). How Have Employers Responded to Health Reform in Massachusetts? Employees' Views at the End of One Year. *Health Affairs Web Exclusive*, pp. w576-583.

- Long, S. K., & Massi, P. B. (2009, May 28). Access and Affordability: An Update on Health Reform in Massachusetts, Fall 2008. *Health Affairs Web Exclusive*, pp. w578-w587.
- Long, S. K., & Massi, P. B. (2009). *Access to and Affordability of Care in Massachusetts as of Fall 2008: Geographic and Racial/Ethnic Differences*. Washington, D.C.: Urban Institute.
- Long, S. K., & Phadera, L. (2009). *Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey*. Boston: Urban Institute.
- Long, S. K., & Phadera, L. (2009). *Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2009 Massachusetts Health Insurance Survey*. Boston: Urban Institute.
- Long, S. K., & Stockley, K. (2009, October 1). Massachusetts Health Reform: Employer Coverage From Employees' Perspective. *Health Affairs Web Exclusive*, pp. w1079-w1087.
- Long, S. K., & Stockley, K. (2010). *Health Reform in Massachusetts: An Update as of Fall 2009*. Boston: Blue Cross Blue Shield of Massachusetts Foundation.
- Long, S. K., & Stockley, K. (2010, June). Sustaining Reform In A Recession: An Update on Massachusetts As Of Fall 2009. *Health Affairs*, pp. 1234-1241.
- Long, S. K., & Stockley, K. (September 2009). *Emergency Department Visits in Massachusetts: Who Uses Emergency Care and Why?* Washington, D.C.: Urban Institute.
- Long, S. K., Stockley, K., Birchfield, L., & Shulmann, S. (2010). *The Impacts of Health Reform on Health Insurance Coverage and Health Care Access, Use, and Affordability*. Washington, D.C. and Boston: Urban Institute and Blue Cross Blue Shield of Massachusetts Foundation.
- Long, S. K., Triplett, T., Dutwin, D., & Sherr, S. (2009). *2008 Massachusetts Health Insurance Survey*. Boston: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Department of Revenue and Massachusetts Health Connector. (2010). *Data on the Individual Mandate: Tax Year 2008*. Boston: Massachusetts Department of Revenue.
- Massachusetts Division of Health Care Finance and Policy. (2006). *Uncompensated Care Pool PFY05 Annual Report*. Boston, MA: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Division of Health Care Finance and Policy. (2006). *Uncompensated Care Pool PFY06 Utilization Report*. Boston: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Division of Health Care Finance and Policy. (2007). *Massachusetts Household Survey on Health Insurance Status, 2007*. Boston.
- Massachusetts Division of Health Care Finance and Policy. (2007). *Massachusetts Household Survey on Health Insurance Status, 2007*. Boston, MA.
- Massachusetts Division of Health Care Finance and Policy. (2007). *Uncompensated Care Pool PFY06 Annual Report*. Boston: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Division of Health Care Finance and Policy. (2008). *2008 Annual Report: Health Safety Net*. Boston: Massachusetts Division of Health Care Finance and Policy.

- Massachusetts Division of Health Care Finance and Policy. (2008). *2008 Health Insurance Survey*. Boston, MA: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Division of Health Care Finance and Policy. (2008). *Estimates of the Uninsurance Rate in Massachusetts from Survey Data: Why Are They So Different?* Boston: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Division of Health Care Finance and Policy. (2008). *Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey*. Boston, MA.
- Massachusetts Division of Health Care Finance and Policy. (2008). *Uncompensated Care Pool PFY07 Annual Report*. Boston: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Division of Health Care Finance and Policy. (2009). *2009 Annual Report: Health Safety Net*. Boston: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Division of Health Care Finance and Policy. (2009). *Health Care in Massachusetts: Key Indicators*. Boston.
- Massachusetts Division of Health Care Finance and Policy. (2010). *Health Insurance Coverage in Massachusetts: Results from the 2008-2010 Massachusetts Health Insurance Surveys*. Boston.
- Massachusetts Division of Health Care Finance and Policy. (2010). *Health Safety Net 2010 Annual Report*. Boston: Massachusetts Division of Health Care Finance and Policy.
- Massachusetts Division of Health Care Finance and Policy. (2010). *Hospital Inpatient and Emergency Department Utilization Trends Fiscal Years 2004-2008*. Boston, MA.
- Massachusetts Division of Health Care Finance and Policy. (2010). *Massachusetts Health Care Cost Trends, Part III: Health Spending Trends for Privately Insured, 2006-2008*. Boston, MA.
- Massachusetts Division of Health Care Finance and Policy. (2011). *Massachusetts Employer Survey 2010*. Boston.
- Massachusetts Division of Health Care Finance and Policy. (2011). *Massachusetts Health Care Cost Trends: Premium Levels and Trends in Private Health Plans: 2007-2009*. Boston, MA.
- Massachusetts Division of Health Care Finance and Policy. (July 2010). *Preventable/Avoidable Emergency Department Use in Massachusetts: Fiscal Years 2004 to 2008*. Boston.
- Massachusetts Division of Health Care Finance and Policy. (May 2010). *Health Care in Massachusetts: Key Indicators*. Boston.
- Massachusetts Division of Health Care Finance and Policy. (November 2010). *Health Care in Massachusetts: Key Indicators*. Boston, MA.
- Massachusetts Medical Society. (2010). *Physician Workforce Study*. Waltham, MA: Massachusetts Medical Society.
- Massachusetts Medical Society. (2011). *2011 Patient Access to Health Care Study: A Survey of Massachusetts Physicians' Offices*. Boston, MA.

- Massachusetts Taxpayers Foundation. (May 2009). *Massachusetts Health Reform: The Myth of Uncontrolled Costs*. Boston.
- Miller, S. (2011). The Effect of Insurance on Outpatient Emergency Room Visits: An Analysis of the 2006 Massachusetts Health Reform. *National Bureau of Economic Research Working Paper*.
- Mooney, B. C., Ebbert, S., & Helman, S. (2007, June 30). The Making of Mitt Romney: Ambitious Goals; Shifting Stances. *Boston Globe*.
- New York Times. (2006, April 15). Mandatory Health Insurance. *New York Times*.
- New York Times. (2011, May 20). Health Reform in Massachusetts. *New York Times*, p. A18.
- Newton, M. F. (2008, October 28). Uninsured Adults Presenting to US Emergency Departments: Assumptions vs Data. *Journal of the American Medical Association*, pp. 1914-1924.
- Patrick, D. (2011, April 5). *Press Release: Patrick-Murray Administration Gathers Industry Leaders, Stakeholders to Discuss Next Phase of Health Reform*. Retrieved June 28, 2011, from The Official Website of the Governor of Massachusetts:
http://www.mass.gov/?pageID=gov3pressrelease&L=1&L0=Home&sid=Agov3&b=pressrelease&f=110405_health_reform_forum&csid=Agov3
- Patrick, D. (2011, March 1). Testimony of Massachusetts Governor Deval L. Patrick as prepared for delivery before the House Committee on Energy and Commerce, United States Congress. Washington, D.C.
- Phadera, L., & Long, S. K. (2010). *Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2010 Massachusetts Health Insurance Survey*. Boston, MA.
- Progressive Change Campaign Committee, Democracy for America, and MoveOn.org. (2009). *Democrats Learning Wrong Lesson from Massachusetts? Even Scott Brown Voters Want the Public Option, Want Democrats to be Bolder*. BoldProgressives.org.
- Rasmussen Reports. (2009, June 24). *Toplines - Massachusetts Healthcare Reform*. Retrieved September 7, 2011, from Rasmussen Reports:
http://www.rasmussenreports.com/public_content/politics/general_state_surveys/massachusetts/toplines/toplines_massachusetts_healthcare_reform_june_24_2009
- Rasmussen Reports. (2010). *Brown Wins Stunning Victory in Massachusetts*. Asbury Park, NJ: Rasmussen Reports.
- Romney, M. (2006, April 11). Health Care for Everyone? We Found a Way. *Wall Street Journal*.
- Seifert, R., & Swaboda, P. (2009). *Shared Responsibility - Government, Business, and Individuals: Who Pays What for Health Reform?* Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation.
- Smulowitz, P. B. (May 13, 2011). Emergency Department Utilization After the Implementation of Massachusetts Health Reform. *Annals of Emergency Medicine*.
- SteelFisher, G. K., Blendon, R. J., Sussman, T., Connolly, J. M., Benson, J. M., & Herrmann, M. J. (2009, October 21). *Physicians' Views of the Massachusetts Health Care Reform Law — A Poll*. Retrieved August 22, 2011, from New England Journal of Medicine: <http://healthpolicyandreform.nejm.org/?p=2133>

- Suffolk University Political Research Center/7 News. (2007, June 17). *Poll Reveals Disconnect on Mass. Health Care Law - Marginals*. Retrieved September 7, 2011, from Suffolk University Political Research Center: <http://www.suffolk.edu/research/20565.html>
- Suffolk University Political Research Center/7 News. (2010, January 14). *Massachusetts State Issues: Poll Results - Marginals*. Retrieved September 7, 2011, from Suffolk University Political Research Center: <http://www.suffolk.edu/research/39986.html>
- Suffolk University Political Research Center/7 News. (2011, April 6). *Massachusetts State Issues: Poll Results - Marginals*. Retrieved September 7, 2011, from Suffolk University Political Research Center: <http://www.suffolk.edu/research/46272.html>
- U.S. Bureau of Labor Statistics. (2006-2010). Series ID LASST25000003: Massachusetts Statewide, Seasonally Adjusted. *Local Area Unemployment Statistics*. Washington, D.C.: U.S. Department of Labor.
- U.S. Census Bureau. (2005-2010). Annual Social and Economic Supplement, Health Insurance Coverage. *Current Population Survey*.
- U.S. Census Bureau. (2005-2010). *Current Population Survey, Annual Social and Economic Supplement*. Washington, D.C.: U.S. Census Bureau.
- U.S. Census Bureau. (2008-2009). C27001. Health Insurance Coverage by Sex by Age. *American Community Survey*.
- Urban Institute and Social Science Research Solutions. (2010). *The Massachusetts Health Reform Survey*. Washington, D.C.: Urban Institute.
- Urbina, I. (2009, August 7). Beyond Beltway, Health Debate Turns Hostile. *New York Times*, p. A1.
- Viser, M., & Estes, A. (2010, January 20). Big win for Brown: Republican trounces Coakley for Senate, imperils Obama health plan. *Boston Globe*.
- Wcislo, C. e. (2007). *Lessons Learned to Date From the Massachusetts Healthcare Reform*. Boston: 1199 SEIU United Healthcare Workers East.
- Widmer, M. J. (2009, July 23). Health law costs aren't the problem. *Boston Globe*.
- Widmer, M. J. (2009, May 26). Massachusetts Health Reform: The Myth of Uncontrollable Costs. *WBUR Commonhealth Blog*. Boston, MA.
- Wirzbicki, A. (2006, April 26). Romney Defends Health Plan to Skeptical Conservatives. *Boston Globe*, p. B5.
- World Health Organization. (2000). *World Health Report 2000 - Health systems: Improving performance*. Geneva, Switzerland: World Health Organization.
- Yelowitz, A., & Cannon, M. F. (2010). *The Massachusetts Health Plan: Much Pain, Little Gain*. Cato Institute.

ENDNOTES

¹ Data retrieved using the CPS Table Creator II: http://www.census.gov/hhes/www/cpssc/apm/cpssc_altgov.html. (U.S. Census Bureau, 2005-2010). Because the CPS asks respondents about the previous calendar year, it is possible for respondents to have had multiple types of insurance over that year (e.g. to have moved from private insurance to Medicaid) – therefore the types of coverage sum to more than 100% of the population.

² Data retrieved using American Fact Finder: <http://factfinder.census.gov>. (U.S. Census Bureau, 2008-2009).

³ Data reported in (Massachusetts Division of Health Care Finance and Policy, 2007).

⁴ Data reported in (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey, 2009), (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2009 Massachusetts Health Insurance Survey, 2009), and (Phadera & Long, 2010). Commonwealth Choice enrollment is included here as public coverage because the DHCFF does not break out CommChoice enrollees from MassHealth and CommCare, although it is unsubsidized private coverage purchased through the state's exchange. CommChoice enrollment is small, though.

⁵ Data retrieved from the CDC/BRFSS web-site: http://www.cdc.gov/brfss/technical_infodata/surveydata.htm. (Centers for Disease Control and Prevention, 2005-2010).

⁶ All figures are regression-adjusted for demographic changes in the population, from (Long & Stockley, Health Reform in Massachusetts: An Update as of Fall 2009, 2010) and (Long & Stockley, Sustaining Reform In A Recession: An Update on Massachusetts As Of Fall 2009, 2010). Only select unadjusted estimates from this survey, which would be most comparable to other survey findings and allow comparison with published data for 2007 and 2008, have been published.

⁷ Data reported in (Massachusetts Division of Health Care Finance and Policy, May 2010) and (Massachusetts Division of Health Care Finance and Policy, November 2010). Percentages reflect the total enrollment of Massachusetts residents in insurance plans operating in the state, as reported in the DHCFF's Key Indicators report, as a share of the non-elderly (under age 65) population in Massachusetts, according to the U.S. Census Bureau.

⁸ Data reported in (Massachusetts Division of Health Care Finance and Policy, 2006), (Massachusetts Division of Health Care Finance and Policy, 2007), (Massachusetts Division of Health Care Finance and Policy, 2008), and (Massachusetts Division of Health Care Finance and Policy, 2010). Note that utilization for each fiscal year is often updated in subsequent annual reports – the most recent available utilization figures for each year were used.

⁹ (Keppel, et al., 2005).

¹⁰ Data retrieved using the CPS Table Creator II: http://www.census.gov/hhes/www/cpssc/apm/cpssc_altgov.html. (U.S. Census Bureau, 2005-2010). Because the CPS asks respondents about the previous calendar year, it is possible for respondents to have had multiple types of insurance over that year (e.g. to have moved from private insurance to Medicaid) – therefore the types of coverage sum to more than 100% of the population.

¹¹ Data reported in (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey, 2009), (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2009 Massachusetts Health Insurance Survey, 2009), and (Phadera & Long, 2010). Commonwealth Choice enrollment is included here as public coverage because the DHCFF does not break out CommChoice enrollees from MassHealth and CommCare, although it is unsubsidized private coverage purchased through the state's exchange. CommChoice enrollment is small, though.

¹² All figures are regression-adjusted for demographic changes in the population, from (Long & Stockley, Health Reform in Massachusetts: An Update as of Fall 2009, 2010) and (Long & Stockley, Sustaining Reform In A Recession: An Update on Massachusetts As Of Fall 2009, 2010). Only limited unadjusted estimates from this survey, which would be most comparable to other survey findings and allow comparison with published data for 2007 and 2008, have been published.

¹³ Data retrieved from the CDC/BRFSS web-site: http://www.cdc.gov/brfss/technical_infodata/surveydata.htm. (Centers for Disease Control and Prevention, 2005-2010).

¹⁴ (Blendon, Buhr, Fleischfresser, & Benson, 2006), (Kaiser Family Foundation, Harvard School of Public Health, and Blue Cross Blue Shield of Massachusetts Foundation, 2007), (Harvard School of Public Health and Blue Cross Blue Shield of Massachusetts Foundation, 2008), (Harvard School of Public Health and Boston Globe, 2009), and (Harvard School of Public Health and Boston Globe, 2011).

¹⁵ (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey, 2009), (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2009 Massachusetts Health Insurance Survey, 2009), and (Phadera & Long, 2010).

¹⁶ (Long & Stockley, Health Reform in Massachusetts: An Update as of Fall 2009, 2010).

¹⁷ (Rasmussen Reports, 2009).

¹⁸ (Suffolk University Political Research Center/7 News, 2010).

¹⁹ (Suffolk University Political Research Center/7 News, 2011).

²⁰ All helping/hurting survey questions discontinued from Harvard School of Public Health poll after 2008: (Blendon, Buhr, Fleischfresser, & Benson, 2006), (Kaiser Family Foundation, Harvard School of Public Health, and Blue Cross Blue Shield of

Massachusetts Foundation, 2007), and (Harvard School of Public Health and Blue Cross Blue Shield of Massachusetts Foundation, 2008).

²¹Ibid. and (Harvard School of Public Health and Boston Globe, 2011).

²² (Suffolk University Political Research Center/7 News, 2007).

²³See (Blendon, Buhr, Fleischfresser, & Benson, 2006) and (Kaiser Family Foundation, Harvard School of Public Health, and Blue Cross Blue Shield of Massachusetts Foundation, 2007).

²⁴All mandate fairness questions from (Kaiser Family Foundation, Harvard School of Public Health, and Blue Cross Blue Shield of Massachusetts Foundation, 2007).

²⁵ Whereas the MHRS asks respondents an open-ended question about how much they have spent in the past year out-of-pocket, the MHIS asks respondents if their out-of-pocket spending falls between several spending ranges (e.g. \$200 to under \$500, \$1,000 to under \$3,000, etc). The open-ended format allows the MHRS to express out-of-pocket spending as a percentage of the respondent's income, which is crucial for assessing whether out-of-pocket expenses represent a growing financial burden on residents, and whether they are growing, in general, in relation to income inflation.

²⁶ MHIS question wording from (Massachusetts Division of Health Care Finance and Policy, 2008), data from (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey, 2009), (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2009 Massachusetts Health Insurance Survey, 2009), and (Phadera & Long, 2010).

²⁷ MHRS question wording from (Urban Institute and Social Science Research Solutions, 2010), data from (Long & Stockley, Health Reform in Massachusetts: An Update as of Fall 2009, 2010).

²⁸ (Keppel, et al., 2005).

²⁹ Data reported in (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2008 Massachusetts Health Insurance Survey, 2009), (Long & Phadera, Health Insurance Coverage and Access to Care in Massachusetts: Detailed Tabulations Based on the 2009 Massachusetts Health Insurance Survey, 2009), and (Phadera & Long, 2010). Commonwealth Choice enrollment is included here as public coverage because the DHCFP does not break out CommChoice enrollees from MassHealth and CommCare, although it is unsubsidized private coverage purchased through the state's exchange. CommChoice enrollment is small, though.

³⁰ Ibid.

³¹ All figures are regression-adjusted for demographic changes in the population, from (Long & Stockley, Health Reform in Massachusetts: An Update as of Fall 2009, 2010) and (Long & Stockley, Sustaining Reform In A Recession: An Update on Massachusetts As Of Fall 2009, 2010). Only limited unadjusted estimates from this survey, which would be most comparable to other survey findings and allow comparison with published data for 2007 and 2008, have been published.

³² Ibid.

³³ Data retrieved from the CDC/BRFSS web-site: http://www.cdc.gov/brfss/technical_infodata/surveydata.htm. (Centers for Disease Control and Prevention, 2005-2010).

³⁴ Ibid.

³⁵ (Seifert & Swaboda, 2009).

³⁶ See (Gruber, 2000) for an overview of this literature, and (Emanuel & Fuchs, 2008) for a similar argument to this report.

³⁷ (Davis, Davis, Gardner, McIntyre, McLynch, & Sapozhnikova, 2009).

³⁸ These tables created by taking the "affordable" annual premium cost from the Connector Board's affordability schedules, and dividing this into individuals', couples', and families' income at various ratios of the poverty line, as reported in the affordability schedules themselves. Affordability schedules for various years downloaded from the Connector Board's monthly minutes: (Health Connector Board, 2007), (Health Connector Board, 2008), (Health Connector Board, 2009), (Health Connector Board, 2010), and (Health Connector Board, 2011).