CENTER FOR HEALTH INFORMATION AND ANALYSIS

FINDINGS FROM THE 2015 MASSACHUSETTS HEALTH INSURANCE SURVEY

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Executive Summary

Introduction

As part of the Center for Health Information and Analysis's (CHIA) Continuing Study on Insurance Coverage, Underinsurance and Uninsurance, the Massachusetts Health Insurance Survey (MHIS) provides information on health insurance coverage, health care access and use, and health care affordability for Massachusetts residents.¹ The MHIS is a tool used by CHIA, legislators, policymakers, employers, insurers, and other stakeholders to track and monitor the experiences of Massachusetts residents in obtaining timely and affordable health care. The 2015 MHIS was fielded between May and August 2015.

The 2015 MHIS was based on the same methodology as the 2014 MHIS, which was modified from earlier years to provide a better understanding of health insurance coverage in the Commonwealth.² Therefore, 2014 and 2015 MHIS estimates should not be used to calculate changes from earlier years of the survey.³ While the methodology remains the same as 2014, the 2015 MHIS made a number of changes in survey content, adding questions on long-term care insurance; access to and use of nurse practitioners, physician's assistants, midwives, and mental health providers; the quality of care received; and medical debt to better reflect the mission of CHIA.

Key Findings

- In 2015, health insurance coverage remained strong in Massachusetts, at 96.4 percent. This compares to 90.8 percent for the nation, based on early release estimates from the National Health Interview Survey (NHIS) for January through March 2015.4
- Altogether, 89.0 percent of respondents reported having a usual source of care and 88.6 percent reported a visit to a general doctor or other non-physician practitioner (e.g., physician's assistant or nurse practitioner) over the past 12 months. However, emergency department use (33.6 percent) and difficulties getting an appointment as soon as one was needed (20.9 percent) were fairly common, especially for Hispanics, those with lower incomes, and those in fair or poor health with an activity limitation.⁵ These results suggest some persistent barriers to obtaining care in Massachusetts, with more serious challenges for vulnerable populations.

- Health care costs were a common barrier to obtaining health care for respondents in 2015 and often placed financial stress on families. Among all respondents, about one in six reported having an unmet need for health care due to cost, nearly one in five reported an unmet need for dental care due to cost, and about one in six reported difficulty paying family medical bills over the past 12 months.
- When asked which strategies they used to lower the families' health care costs, nearly one-third of respondents reported that they and their families were trying to stay healthier, and more than one in ten reported that someone in the family went without needed care. Going without needed care was particularly common among the families of respondents who were uninsured, had lower incomes, or were in fair or poor health with an activity limitation.

Health Insurance Coverage and Uninsurance

- Massachusetts continued to have a much lower uninsurance rate than the nation in 2015, with only 3.6 percent of respondents uninsured at the time of the survey as compared to 9.2 percent nationally based on early release estimates from the NHIS for January through March 2015.6
- The uninsured in Massachusetts in 2015 were more likely to be low income, male, single, and Hispanic than the general Massachusetts population, similar to 2014. Further, given their reported family income levels, many of the uninsured may be eligible for MassHealth or ConnectorCare or eligible for a subsidy to purchase health insurance through the Massachusetts Health Connector.
- Employer-sponsored coverage remains the dominant source of coverage in Massachusetts, accounting for about 60 percent of all insured persons, a similar share as in 2014.
- Continuity of coverage has become the norm in Massachusetts, with less than one in ten respondents reporting a period of uninsurance over the past 12 months, a similar share as in 2014.
- Among respondents aged 50 and older, fewer than one in seven reported having private long-term care insurance. The most common reason for not having long-term care insurance was the cost of that coverage.

Health Care Access and Use

- Altogether 89.0 percent of respondents reported a usual source of health care and 88.6 percent reported a visit to a general doctor or other non-physician practitioner (e.g., physician's assistant or nurse practitioner) over the past 12 months. Four out of five (79.5 percent) respondents reported that the quality of care they received was very good or excellent.
- Over one third of respondents visited an emergency department over the past 12 months in 2015, compared to just under one third in 2014. Among those with an emergency department visit, nearly four in ten reported seeking care in the emergency department for a non-emergency condition.
- Likely contributing to emergency department use for non-emergency conditions, more than one in five respondents reported difficulties getting an appointment with a provider as soon as needed over the past 12 months, and approximately one in seven reported being told that a doctor or other provider was not accepting new patients in 2015.
- Respondents with family incomes at or below 138 percent of the federal poverty level (FPL) were more than twice as likely to report being told that a doctor's office or clinic would not accept their insurance type as respondents with family incomes at or above 400 percent of the FPL.

Health Care Affordability

- Health care costs remain a concern for many respondents in 2015, with more than one in six reporting difficulty paying medical bills. A similar share reported an unmet need for health care due to costs over the past 12 months. In addition, nearly one in five reported an unmet need for dental care due to cost over the past 12 months.
- Approximately one in six respondents reported having family medical bills that are being paid off over time in 2015, with almost half of those paying off medical bills of \$2,000 or more.

- Problems with health care affordability were more common for the families of respondents who were uninsured, had lower incomes, or were in fair or poor health with an activity limitation. In addition, respondents in fair or poor health with an activity limitation and families of respondents with incomes between 138 and 399 percent of the FPL were also more likely to have difficulties paying mortgage, rent, or utility bills.
- To lower their health care costs, respondents most often reported that they and their families were trying to stay healthier, going without needed health care, or switching to a lower cost health insurance plan.

Endnotes

- The MHIS includes non-institutionalized residents of the state. Persons living in group quarters, such as dorms, nursing homes, prisons, and shelters, are excluded from this study.
- Specifically, the 2014 and 2015 MHIS used a dual-frame random digit dialing (RDD) landline and cell phone sample, with the survey completed entirely over the phone. The 2008-2011 surveys used a dual-frame landline RDD and address-based sample, with surveys completed by phone, via the Internet, and in hard copy. In 2014 and 2015, the MHIS also oversampled landlines in areas with higher concentrations of low income residents and oversampled respondents with prepaid cell phones not attached to a permanent account. Both oversampling strategies were designed to increase the number of interviews completed with low income and uninsured respondents.
- Due to the change in methodology, it is not possible to determine whether any changes over time are due to the survey design change or due to underlying changes in health insurance coverage, health care access, and health care affordability in Massachusetts.
- Cohen, R and Martinez, M. "Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January-March 2015." National Center for Health Statistics. August 2015.
- This group includes respondents who say their health is, in general, "fair" or "poor" and also report that they are limited in their activities because of a "physical, mental, or emotional problem".
- Cohen, R and Martinez, M. "Health Insurance Coverage: Early Release of Estimates from the National Health Interview Survey, January-March 2015." National Center for Health Statistics. August 2015.

3.6%

uninsurance rate in Massachusetts

13%

adults 50 and older with private long-term care insurance

KEY FINDINGS

p.7

respondents with a usual source of care

p.15

individuals with a visit to a nurse practitioner, physician's assistant, or midwife

p.18

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respondents with a mental health care visit

p.21

73%

people with a recent emergency department visit because they needed care after normal operating hours

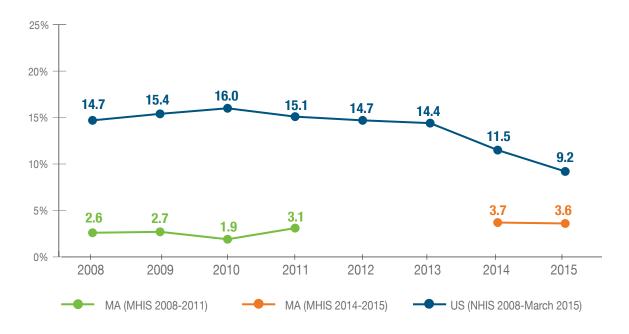
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individuals had difficulty paying family medical bills

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non-elderly adults had an unmet need for medical care due to cost

p.36



Note: Due to a change in survey design for the MHIS in 2014, Massachusetts estimates for 2014 and 2015 are not directly comparable to estimates for 2008-2011. The 2015 national estimate from the NHIS is for the first quarter of 2015.

Source: 2008-2011, 2014, 2015 Massachusetts Health Insurance Survey (MHIS) for Massachusetts estimates. 2008-2015 National Health Interview Survey (NHIS) for national estimates.

Health Insurance Coverage and Uninsurance

Uninsurance

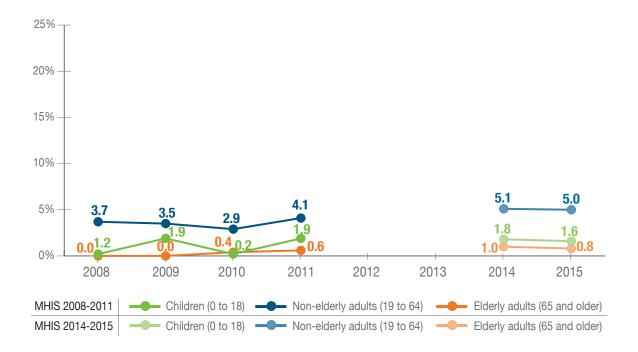
Uninsurance in Massachusetts remains low based on the MHIS, with only 3.6 percent of respondents uninsured at the time of the survey in 2015, virtually the same as the 3.7 percent uninsured in 2014.1 (Figure 1) The Massachusetts uninsurance rate continues to be well below the national rate based on early release estimates for 2015 from the NHIS.2 According to the NHIS, the national uninsurance rate was 9.2 percent between January and March of 2015, down from 14.7 percent in 2008.³ The decline in the uninsurance rate nationally reflects the implementation of key components of the Affordable Care Act, the national reform legislation that builds on the 2006 reforms in Massachusetts, among other changes over the period.4

The uninsurance rate measured by the 2015 MHIS is similar to the Massachusetts uninsurance rate in major national surveys

for 2014. Using a similar measure of uninsurance at the time of the survey, the NHIS found a Massachusetts uninsurance rate of 2.6 percent in 2014,5 and the American Community Survey (ACS) found a Massachusetts uninsurance rate of 3.3 percent.⁶ State estimates for 2015 from the NHIS and ACS are not yet available.

The 2015 uninsurance rates in Massachusetts for children (1.6 percent) and non-elderly adults (5.0 percent) (Figure 2) were below the national uninsurance rates for these age groups (4.6 percent and 13.0 percent, respectively), based on early release estimates from the NHIS for January through March 2015 (NHIS data not shown).7 By contrast, the uninsurance rate for elderly adults in Massachusetts (0.8 percent) was similar to the national rate (0.5 percent) based on the NHIS (NHIS data not shown). The uninsurance rate in Massachusetts for young adults aged 19-25 in Massachusetts was 7.2 percent in 2015 (data not shown).8

Uninsurance at the time of the survey for children, non-elderly adults and elderly adults in Massachusetts, 2008-2011, 2014 and 2015



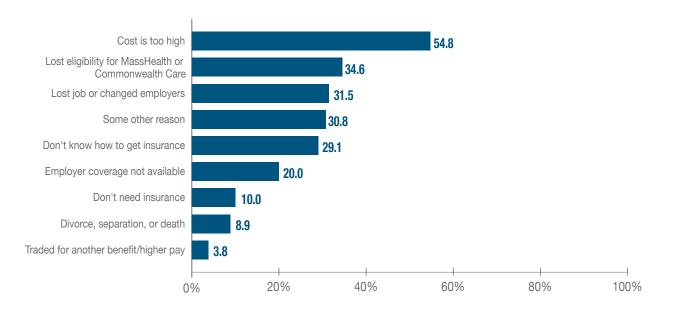
Note: Due to a change in survey design for the MHIS in 2014, estimates for 2014 and 2015 are not directly comparable to estimates from 2008-2011. Source: 2008-2011, 2014, 2015 Massachusetts Health Insurance Survey

Characteristics of the uninsured in Massachusetts in 2015

Characteristic	Among the uninsured respondents, percent with the characteristic	Among all respondents, percent with the characteristic
Aged 19-64	87.3%	63.3%
Male	66.8%	48.2%
Single without children	55.8%	38.5%
Hispanic	24.8%	11.6%
Family income below 400% of the FPL	85.1%	61.3%

Note: Given the low uninsurance rate, the sample size for tabulations on the uninsured is small, at 182 individuals.

FPL = Federal Poverty Level



Note: The categories listed above are not mutually exclusive. Respondents were asked to select all applicable options.

Source: 2015 Massachusetts Health Insurance Survey

Characteristics of the Uninsured

Almost 90 percent (87.3 percent) of the uninsured in Massachusetts in 2015 were working-age adults (aged 19 to 64), and they were disproportionately male, single, Hispanic, and with family income below 400 percent of the Federal Poverty Level. (Table 1) The family incomes of the uninsured suggest that many may be eligible for public health insurance coverage or subsidized coverage through the Massachusetts Health Connector.

Reasons for Being Uninsured

More than half (54.8 percent) of the uninsured reported the cost of coverage as a key factor in their uninsurance. (Figure 3) Other factors that were reported included loss of eligibility for MassHealth or ConnectorCare (34.6 percent), loss of a job or change of employers (31.5 percent), lack of knowledge of how to get coverage (29.1 percent), and lack of availability of employersponsored insurance (20.0 percent). Only one in ten (10.0 percent) of the uninsured reported that they did not need insurance. These patterns are roughly similar to those reported by uninsured respondents in 2014, as small samples in both years make the estimates imprecise.

	All respondents	Children (0-18)	Non-elderly adults (19-64)	Elderly adults (65 and older)
Employer-sponsored insurance	57.5%	63.4%	59.6%	40.2%*
Medicare	14.8%	1.8%	9.4%*	55.8%*
Private non-group coverage, including Health Connector Plans	10.5%	10.3%	12.8%	1.3%*
MassHealth or ConnectorCare	16.4%	24.1%	17.1%	2.1%*
Other coverage or coverage type not reported	0.8%	0.3%	1.0%	0.6%

^{*} Estimate is significantly different at the 5% level from estimate for children.

Note: Respondents were assigned a single coverage type based on the following hierarchy: employer-sponsored insurance; Medicare; private non-group coverage including Health Connector Plans; MassHealth or ConnectorCare; and other coverage. Medicare coverage estimates include Railroad Retirement board coverage. MassHealth or ConnectorCare estimates include temporary coverage while the respondent's application for coverage from the Health Connector or MassHealth is being processed. Estimates may not sum to 100% due to rounding.

Source: 2015 Massachusetts Health Insurance Survey

Types of Health Insurance Coverage

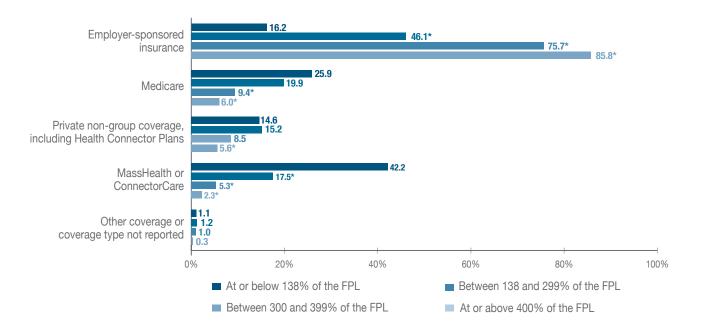
The MHIS allows respondents to report multiple types of health insurance coverage. For example, elderly adults may report receiving insurance both through Medicare and private, non-group "Medigap" coverage or coverage through a former employer. To avoid doublecounting and to best assess Massachusetts residents' primary source of medical coverage, those respondents who reported more than one type of health insurance were assigned to a single coverage type according to the following hierarchy: Employer-sponsored insurance; Medicare; private non-group coverage including Health Connector Plans; MassHealth or ConnectorCare; and other coverage. This hierarchy was utilized in the 2014 and 2015 MHIS. More information on previous years' coverage type hierarchy may be found in the methodology report.

Health insurance coverage type reporting based on survey data is challenging and subject to error. For example, research has shown that many respondents struggle to correctly report their coverage type⁹ and that surveys may result in a significant undercount of public coverage enrollment, particularly for Medicaid coverage. 10 Results should be viewed accordingly.

Employer-sponsored health insurance was the most common type of health insurance reported for respondents with coverage in Massachusetts in 2015, covering 57.5 percent of insured respondents. (Table 2) In addition, 16.4 percent of insured respondents reported coverage through MassHealth or ConnectorCare, and 14.8 percent reported coverage through Medicare. Because the hierarchy places employer-sponsored coverage above Medicare, elderly adults with coverage through a former employer and Medicare will be classified as having employer-sponsored insurance, leading to a lower level of Medicare coverage reported for elderly adults in the MHIS than is reported in surveys that use other hierarchies.

As shown in Figure 4, insured respondents with family incomes at or below 138 percent of the FPL were less likely to report employersponsored insurance coverage than all other income groups. By contrast, public coverage was most commonly reported among respondents with family incomes at or below 138 percent of the FPL. Finally, respondents with family incomes at or above 400 percent of the FPL were less likely to report private non-group coverage, including Health Connector plans, than those with family incomes below 300 percent of the FPL.

Health insurance coverage among insured respondents in Massachusetts in 2015, by family income



^{*} Estimate is significantly different at the 5% level from estimate for those "At or below 138% of the FPL."

Notes: Respondents were assigned a single coverage type based on the following hierarchy: employer-sponsored insurance; Medicare; private non-group coverage including Health Connector Plans; MassHealth or ConnectorCare; and other coverage. Medicare coverage estimates include Railroad Retirement board coverage. MassHealth or ConnectorCare estimates include temporary coverage while the respondent's application for coverage from the Health Connector or MassHealth is being processed. Estimates may not sum to 100% due to rounding

FPL = Federal Poverty Level

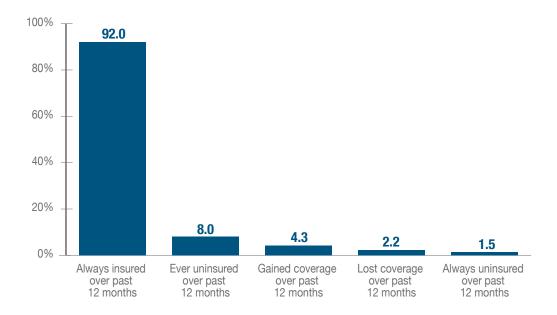
Source: 2015 Massachusetts Health Insurance Survey

Transitions in Health Insurance Coverage

Transitions in health insurance coverage occur when individuals change health insurance coverage types or have uninsured periods during a year. Transitions in coverage can be disruptive, sometimes requiring respondents to find new doctors or delay or suspend treatments. Overall, 13.6 percent of respondents reported transitioning to their current form of coverage from being uninsured at some point in the past in 2015 (data not shown). Non-elderly adults (18.1 percent) and persons with incomes at or below 138 percent of the FPL (20.1 percent) were more likely to have transitioned to their current coverage from uninsurance than respondents in other age and income groups (data not shown).

In 2015, consistent with the low uninsurance rate in Massachusetts, relatively few respondents moved between insured and uninsured status during the prior 12 months. Overall, 8.0 percent of respondents reported ever being uninsured over the past 12 months, compared to 92.0 percent insured for the full year. (Figure 5) Nationally, 13.8 percent were ever uninsured over the past 12 months based on NHIS data for January to March 2015 (data not shown).11

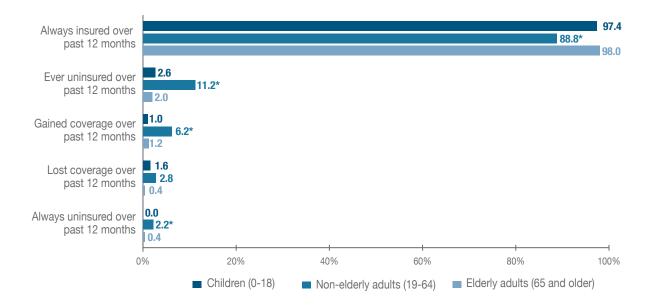
Transitions in health insurance coverage over the past 12 months for all Massachusetts respondents in 2015



Note: The categories listed in this figure are not mutually exclusive. The group "ever uninsured over past 12 months" includes those always uninsured over the past 12 months, gaining coverage over the past 12 months, and losing coverage over the past 12 months. Estimates may not sum to 100% due to rounding.

Source: 2015 Massachusetts Health Insurance Survey

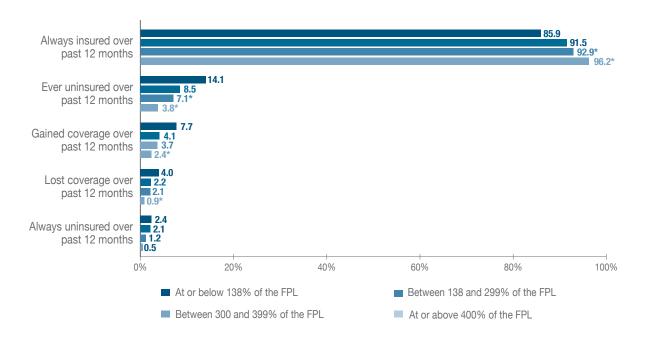
Transitions in health insurance coverage over the past 12 months in Massachusetts in 2015, by age group



*Estimate is significantly different at the 5% level from estimate for children.

Note: The categories listed in this figure are not mutually exclusive. The group "ever uninsured over past 12 months" includes those always uninsured over the past 12 months, gaining coverage over the past 12 months, and losing coverage over the past 12 months. Estimates may not sum to 100% due to rounding.

Transitions in health insurance coverage over the past 12 months in Massachusetts in 2015, by family income



^{*} Estimate is significantly different at the 5% level from estimate for those "At or below 138% of the FPL."

Note: The categories listed in this figure are not mutually exclusive. The group "ever uninsured over past 12 months" includes those always uninsured over the past 12 months, gaining coverage over the past 12 months, and losing coverage over the past 12 months. Estimates may not sum to 100% due to rounding.

FPL = Federal Poverty Level

Source: 2015 Massachusetts Health Insurance Survey

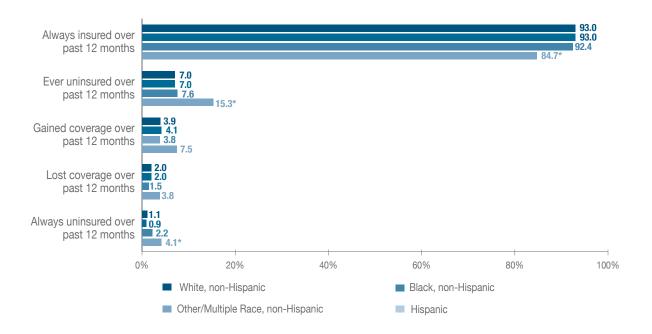
Non-elderly adults in Massachusetts were more likely to transition between insured and uninsured status during the past 12 months than were children or elderly adults. For example, 6.2 percent of non-elderly adults reported gaining coverage over the past 12 months, compared to 1.0 percent of children and 1.2 percent of elderly adults. (Figure 6) The vast majority of respondents in all age groups were always insured over the past 12 months, highlighting the high level of continuous insurance coverage in the state.

The share of respondents reporting that they were uninsured at some point in the past 12 months also varied by family income. Respondents with family incomes below 400 percent of the FPL were more likely to report an uninsured period than those with higher incomes. Over one in ten of those with family incomes at or below 138 percent of the FPL reported being uninsured at some point over the past 12 months. (Figure 7) In addition, Hispanics were more likely than non-Hispanic white respondents to report being uninsured at some point over the past 12 months (15.3 percent and 7.0 percent, respectively). (Figure 8)

Private Long-term Care Insurance Coverage

In 2015, the MHIS added new survey questions to determine the share of Massachusetts residents aged 50 and older with private long-term care insurance and, for those without such coverage, the reasons for not carrying such insurance. Overall, in 2015, 13.2 percent of respondents aged 50 and over reported having private long-term care insurance (data not shown). Among those without private long-term care insurance, the most common reasons for not purchasing coverage included cost (46.9 percent), and to a lesser extent that the respondent "have not considered" purchasing longterm coverage (13.8 percent), or "do not need" long-term coverage (17.8 percent). (Figure 9) These responses indicate both a need to address the costs of the coverage and the potential role for education on the importance of preparing for future long-term care needs.

Transitions in health insurance coverage over the past 12 months in Massachusetts in 2015, by race and ethnicity

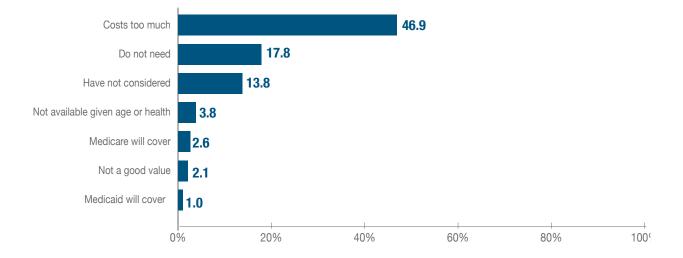


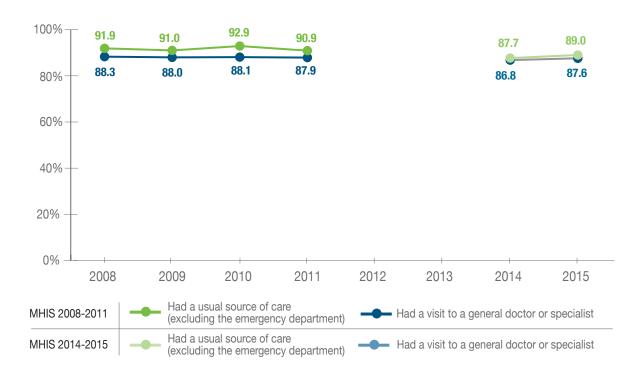
^{*} Estimate is significantly different at the 5% level from estimate for "White, non-Hispanic"

Note: The categories listed in this figure are not mutually exclusive. The group "ever uninsured over past 12 months" includes those always uninsured over the past 12 months, gaining coverage over the past 12 months, and losing coverage over the past 12 months. Estimates may not sum to 100% due to rounding.

Source: 2015 Massachusetts Health Insurance Survey

Reported reasons for not having private long-term care insurance in Massachusetts in 2015 among adults aged 50 and over





Note: Due to a change in survey design for the MHIS in 2014, estimates for 2014 and 2015 are not directly comparable to estimates from 2008-2011.

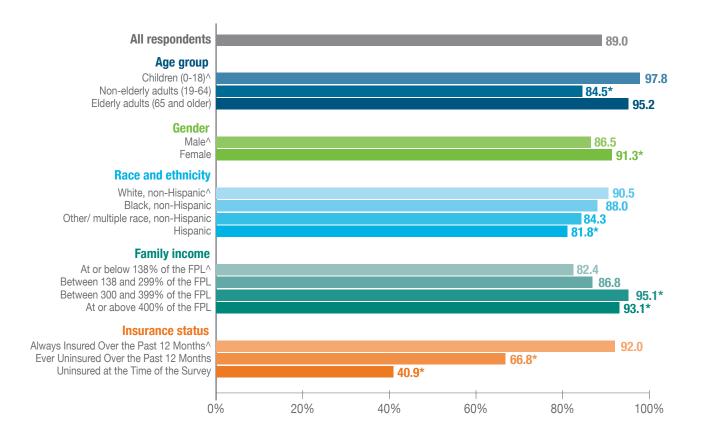
Source: 2008-2011, 2014, 2015 Massachusetts Health Insurance Survey

Health Care Access and Use

Health Care Access and Use over Time

As in prior years, respondents reported good access to and use of health care in 2015. (Figure 10) Many respondents reported having a usual source of care (89.0 percent) and a visit to a general doctor

or specialist over the past 12 months (87.6 percent). Nationally, 87.8 percent of Americans reported a usual place to go for medical care based on early release estimates for January to March 2015 from the NHIS (data not shown). 12



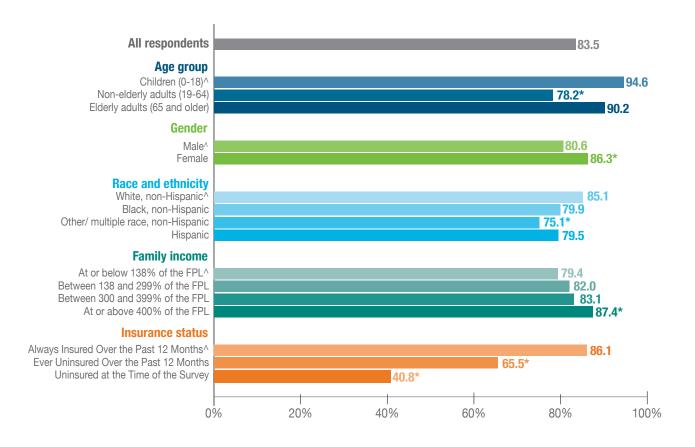
[^] Reference group

Usual Source of Care

While nearly 90 percent (89.0 percent) of respondents reported having a usual source of care in 2015, some groups were less likely to have a usual source of care than others. These include

non-elderly adults (84.5 percent), males (86.5 percent), Hispanics (81.8 percent), those with family incomes at or below 138 percent of the FPL (82.4 percent), and the uninsured (40.9 percent). (Figure 11)

^{*} Estimate is significantly different at the 5% level from estimate for reference group.



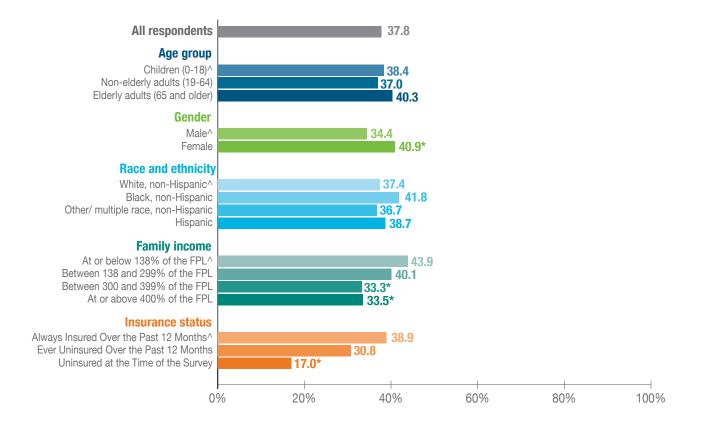
[^] Reference group

Visit to a General Doctor

More than four out of five respondents had a visit to a general doctor over the past 12 months in 2015 (83.5 percent). (Figure 12) However, non-elderly adults were less likely than children (78.2 percent versus 94.6 percent), those with family incomes at or below 138 percent of

the FPL were less likely than those with family incomes at or above 400 percent of the FPL (79.4 percent versus 87.4 percent) and the uninsured were less likely than those insured all year (40.8 percent versus 86.1 percent) to have a visit to a general doctor over the past 12 months.

^{*} Estimate is significantly different at the 5% level from estimate for reference group.



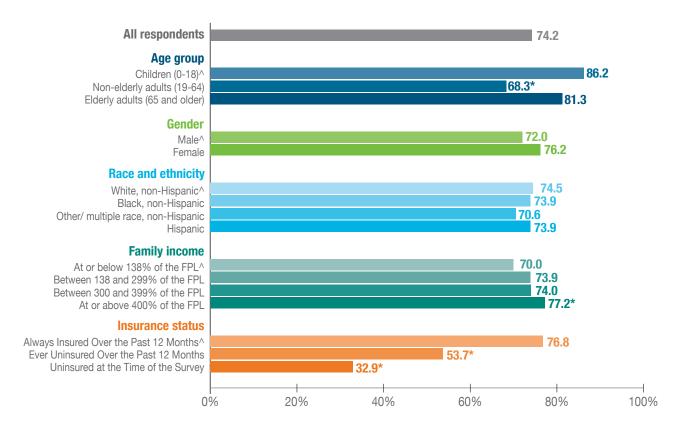
[^] Reference group

Visit to a Nurse Practitioner, Physician's Assistant, or Midwife

In 2015, in order to gauge access to and use of primary care provided by non-physicians, the MHIS added a question about visits to a nurse practitioner, physician's assistant, or midwife. Overall, 37.8 percent of respondents had a visit to a nurse practitioner, physician's assistant, or midwife over the past 12 months in 2015. (Figure 13) These visits

were more common for women than men (40.9 percent and 34.4 percent, respectively), and for those with family incomes at or below 138 percent of the FPL (43.9 percent). The uninsured were less likely to report a visit to a nurse practitioner, physician's assistant, or midwife over the past 12 months than those with continuous insurance, consistent with lower health care access and use among the uninsured overall.

^{*} Estimate is significantly different at the 5% level from estimate for reference group.



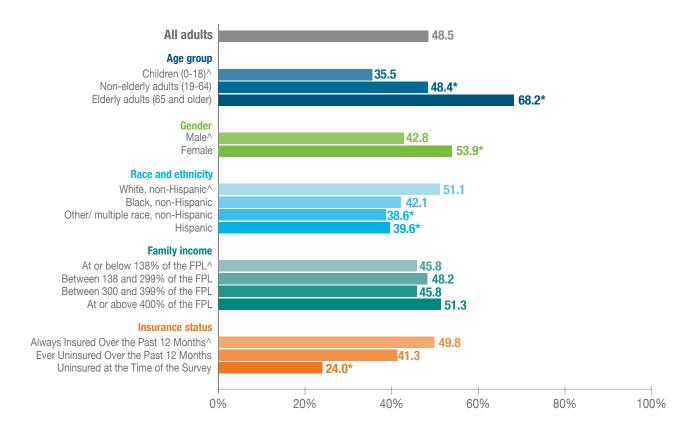
[^] Reference group

Visit to a General Doctor, Nurse Practitioner, Physician's Assistant, or Midwife for **Preventive Care**

Nearly three in four respondents had a visit to a general doctor, nurse practitioner, physician's assistant, or midwife for preventive care over the past 12 months in 2015. (Figure 14) Children were more likely than non-elderly adults to have a preventive care visit

(86.2 percent versus 68.3 percent), and those with family incomes at or above 400 percent of the FPL were more likely than those with low family incomes to have a preventive care visit. In addition, those with insurance coverage all year were more than twice as likely as the uninsured to have a preventive care visit over the past 12 months (76.8 percent versus 32.9 percent).

^{*} Estimate is significantly different at the 5% level from estimate for reference group.



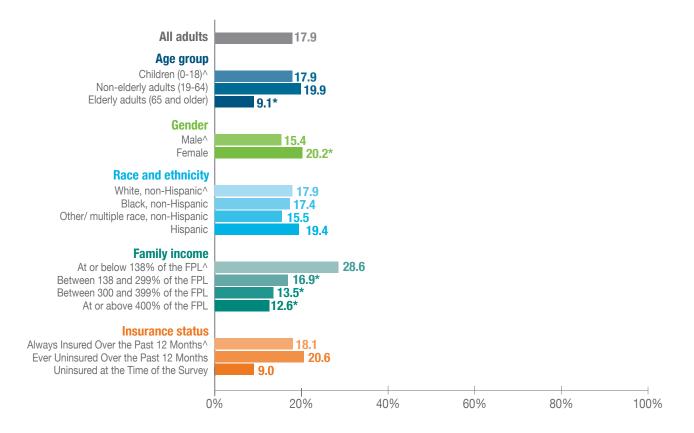
[^] Reference group

Visit to a Specialist

Less than half of respondents reported a visit to a specialist over the past 12 months in 2015 (48.5 percent). (Figure 15) Certain groups were more likely to report specialist visits, including elderly adults

(68.2 percent) and women (53.9 percent). Hispanics, those of other or multiple races who are not Hispanic, and the uninsured were less likely to report a visit to a specialist over the past 12 months.

^{*} Estimate is significantly different at the 5% level from estimate for reference group.



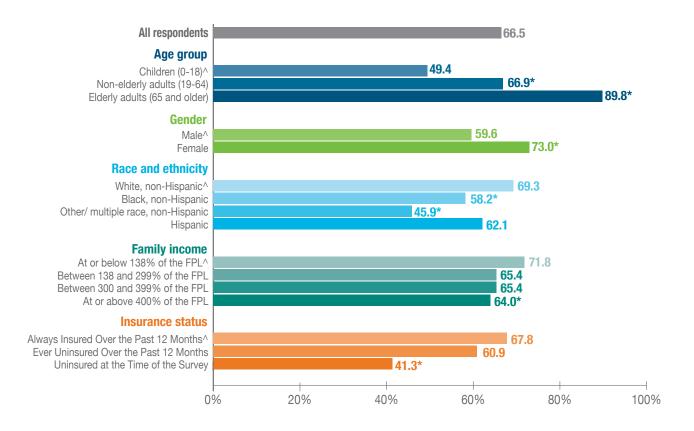
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Mental Health Visits

In 2015, the MHIS added a new question about visits to a mental health practitioner over the past 12 months. Overall, 17.9 percent of respondents visited a mental health professional over the past 12 months in 2015. (Figure 16) Respondents in families with incomes at or below 138 percent of the FPL were more likely than those

with higher family incomes to report a visit to a mental health professional (28.6 percent), and women were more likely than men to report such a visit (20.2 percent and 15.4 percent, respectively). In addition, the elderly were less likely than other age groups to report a visit to a mental health professional over the past 12 months (9.1 percent).

^{*} Estimate is significantly different at the 5% level from estimate for reference group.



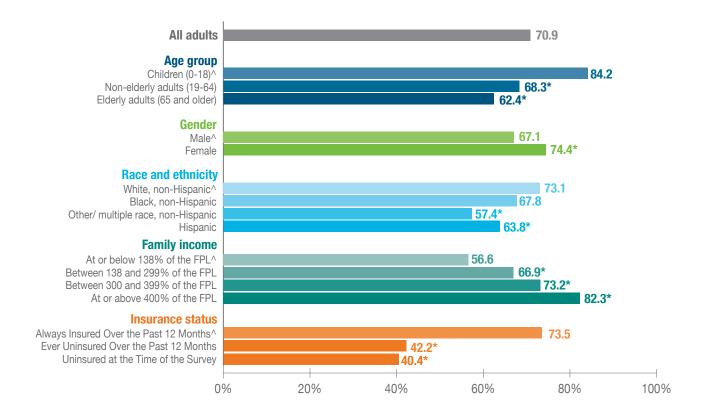
[^] Reference group

Prescription Drug Use

Nearly two-thirds of respondents took one or more prescription drugs over the past 12 months in 2015. (Figure 17) Adults were more likely than children and women were more likely than men to take one or more prescription drugs. Respondents with family incomes at or

above 400 percent of the FPL were less likely to take one or more prescription drugs than those with incomes at or below 138 percent of the FPL, and the uninsured were less likely than those with insurance all year to take one or more prescription drugs over the past 12 months.

^{*} Estimate is significantly different at the 5% level from estimate for reference group.



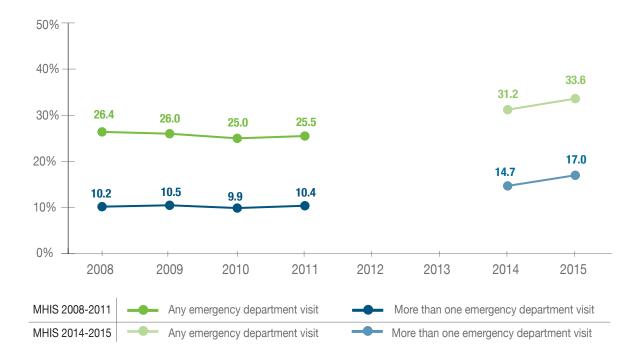
[^] Reference group

Dental Care Visits

Over two-thirds of respondents had a dental care visit over the past 12 months in 2015 (70.9 percent). (Figure 18) Nonelderly and elderly adults were less likely than children to report a dental care visit, and men were less likely than women to report a dental care visit.

In addition, those with family incomes at or below 138 percent of the FPL were less likely than all other income groups to report a dental care visit, and the uninsured were less likely than those insured all year to have a dental care visit over the past 12 months.

^{*} Estimate is significantly different at the 5% level from estimate for reference group.



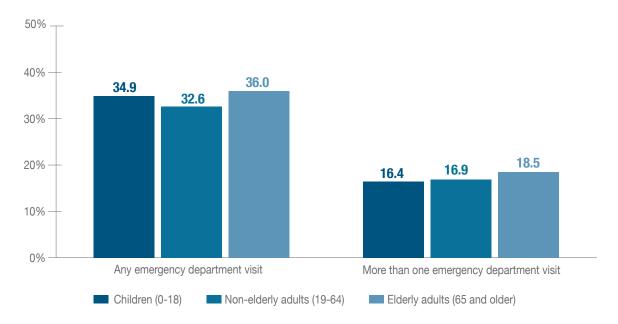
Note: Due to a change in survey design for the MHIS in 2014, estimates for 2014 and 2015 are not directly comparable to estimates from 2008-2011.

Source: 2008-2011, 2014, 2015 Massachusetts Health Insurance Survey

Emergency Department Use

Over one third of respondents reported visiting an emergency department over the past 12 months in 2015 (33.6 percent), with 17.0 percent of respondents reporting multiple emergency department visits. (Figure 19) The share of respondents reporting an emergency department visit did not vary significantly by age, with 34.9 percent of children, 32.6 percent of non-elderly adults, and 36.0 percent of elderly adults reporting an emergency department visit over the past 12 months. (Figure 20)

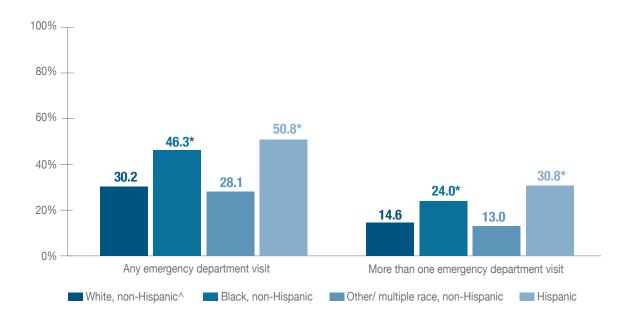
Emergency department use was particularly high among Hispanics (50.8 percent), non-Hispanic blacks (46.3 percent) (Figure 21), respondents in fair or poor health with an activity limitation (58.5 percent), and respondents with family incomes at or below 138 percent of the FPL (44.0 percent) in Massachusetts (data not shown). However, uninsured respondents were not significantly more likely to have an emergency department visit than those with continuous insurance (39.3 percent and 33.3 percent, respectively) (data not shown). Prior research has found that the uninsured tend to use emergency departments less than those with health insurance coverage, particularly than those with Medicaid, due in part to the cost of that care. ¹³



Note: No estimates are significantly different at the 5% level from estimates for children.

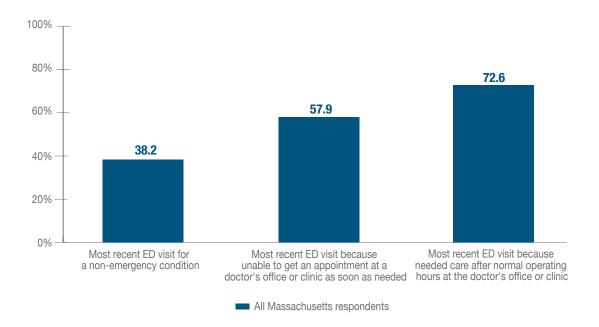
Source: 2015 Massachusetts Health Insurance Survey

Emergency department use over the past 12 months in Massachusetts in 2015, by race and ethnicity



^{*} Estimate is significantly different at the 5% level from estimate for "White, non-Hispanic".

Types of emergency department use over the past 12 months among those with at least one emergency department visit in Massachusetts in 2015



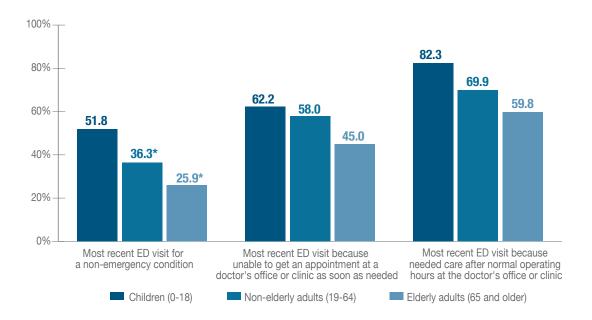
Note: A non-emergency condition is one that the respondent thought could have been treated by a regular doctor if one had been available. Categories are not mutually exclusive because respondents were able to select multiple options.

Source: 2015 Massachusetts Health Insurance Survey

In 2015, respondents with an emergency department visit over the past year were asked to report on the reasons for their most recent emergency department visit, with multiple reasons for that visit permitted. Among those respondents with an emergency department visit, 38.2 percent reported seeking care in the emergency department for a non-emergency condition, 14 57.9 percent reported seeking care in the emergency department because they were unable to get an appointment at a doctor's office or clinic as soon as needed, and 72.6 percent reported seeking care in the emergency department because they needed care after normal operating hours at the doctor's office or clinic. (Figure 22) Children were more likely than other age groups to report an emergency department visit for a non-emergency condition. (Figure 23)

Respondents with family incomes at or below 138 percent of the FPL were more likely to report an emergency department visit over the past 12 months than those with family incomes at or above 400 percent of the FPL (44.0 percent and 23.4 percent, respectively). However, among those who reported at least one emergency department visit over the past 12 months, there were no statistically significant differences across family income groups in reported reasons for using the emergency department. (Figure 24)

Types of emergency department use over the past 12 months among those with at least one emergency department visit in Massachusetts in 2015, by age group

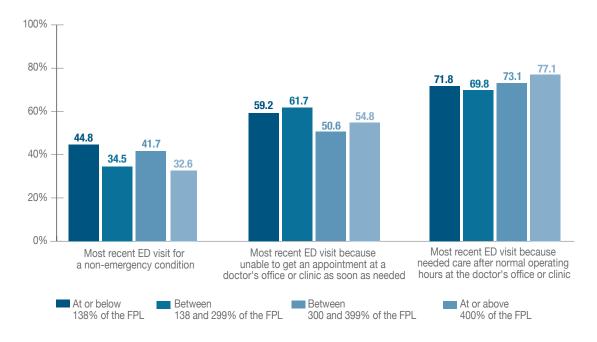


^{*} Estimate is significantly different at the 5% level from estimate for children.

Note: A non-emergency condition is one that the respondent thought could have been treated by a regular doctor if one had been available. Categories are not mutually exclusive because respondents were able to select multiple options.

Source: 2015 Massachusetts Health Insurance Survey

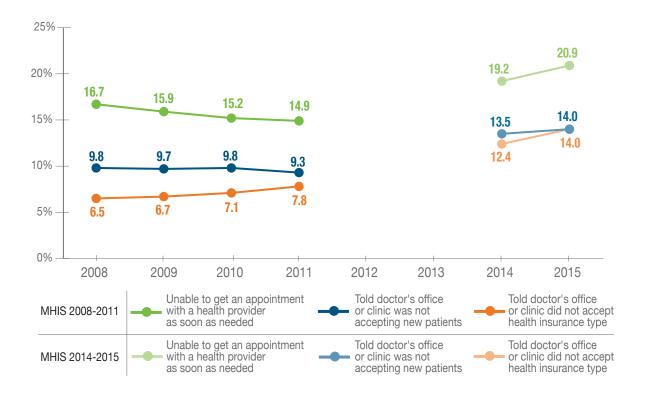
Types of emergency department use over the past 12 months among those with at least one emergency department visit in Massachusetts in 2015, by family income



Notes: No estimate is significantly different at the 5% level from estimate for those "At or above 400% FPL." A non-emergency condition is one that the respondent thought could have been treated by a regular doctor if one had been available. Categories are not mutually exclusive because respondents were able to select multiple options.

FPL = Federal Poverty Level

Difficulties getting health care over the past 12 months in Massachusetts, 2008-2011, 2014 and 2015



Note: Due to a change in survey design for the MHIS in 2014, estimates for 2014 and 2015 are not directly comparable to estimates from 2008-2011.

Source: 2008-2011, 2015 Massachusetts Health Insurance Survey

Difficulties Accessing Health Care

While nearly all respondents reported using health care in 2015, some faced difficulties in trying to access care. In 2015, over 20 percent of respondents reported being unable to get an appointment with a health care provider as soon as they felt they needed one over the past 12 months (20.9 percent). In addition, 14.0 percent reported being told that a doctor's office or clinic was not accepting their insurance type (which includes not having insurance for those without coverage), and 14.0 percent reported being told a doctor's office or clinic was not accepting new patients. (Figure 25)

Non-elderly adults were more likely than children or elderly adults to report being told that a doctor or clinic was not accepting new patients or would not accept their insurance type over the past 12 months in 2015. (Table 3)

Hispanic respondents were more likely than non-Hispanic whites to report being told that a doctor's office or clinic did not accept their health insurance type over the past 12 months in 2015 (22.8 percent versus 12.9 percent). (Figure 26) In addition, Hispanics were more likely to be unable to get an appointment with a health provider as soon as needed over the past 12 months compared to non-Hispanic whites (28.4 percent versus 19.6 percent).

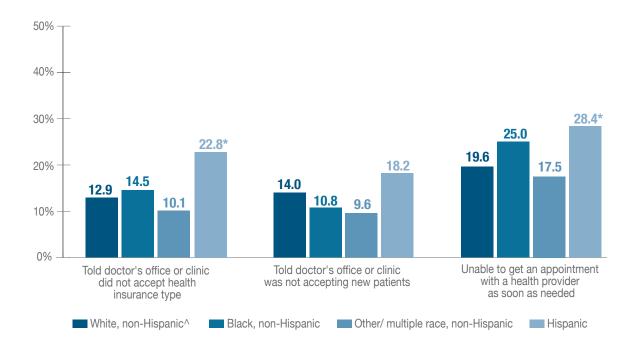
Difficulties getting health care over the past 12 months in Massachusetts in 2015, overall and by age group

	All respondents	Children (0-18)	Non-elderly adults (19-64)	Elderly adults (65 and older)
Told doctor's office or clinic did not accept health insurance type over the past 12 months	14.0%	8.8%	17.5%*	6.8%
Told doctor's office or clinic was not accepting new patients over the past 12 months	14.0%	9.5%	17.3%*	7.1%
Unable to get an appointment with a health provider as soon as needed over the past 12 months	20.9%	17.4%	23.7%	14.0%

^{*}Estimate is significantly different at the 5% level from estimate for children.

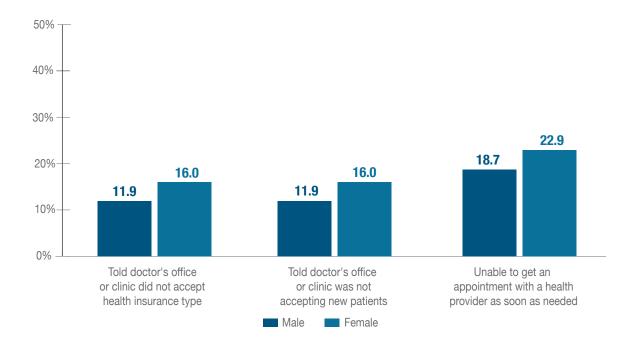
Source: 2015 Massachusetts Health Insurance Survey

Difficulties getting health care over the past 12 months in Massachusetts in 2015, by race and ethnicity



^{*} Estimate is significantly different at the 5% level from estimate for "White, non-Hispanic".

Difficulties getting health care over the past 12 months in Massachusetts in 2015, by gender



There were no statistically significant differences between male and female respondents on any of the three measures.

Source: 2015 Massachusetts Health Insurance Survey

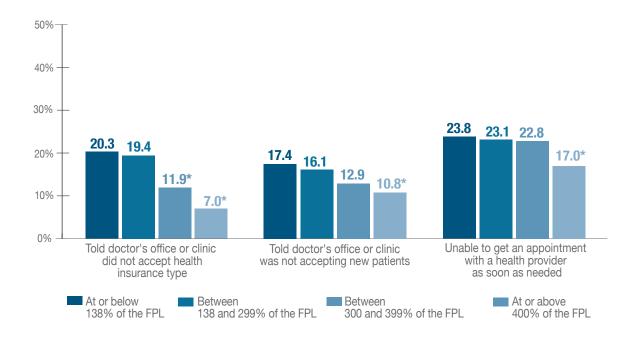
In 2015, there were not statistically significant differences by gender in the share of respondents who reported being told a doctor's office or clinic did not accept their health insurance type, the share who reported a doctor's office or clinic was not accepting new patients, or the share that were unable to get an appointment with a provider as soon as needed. (Figure 27)

Finally, respondents with family incomes at or below 138 percent of the FPL were more likely than those with family incomes at or above 400 percent of the FPL to report difficulty getting an appointment with a health care provider as soon as needed over the past 12 months. (Figure 28) The lowest income respondents were also nearly three times as likely to report being told a doctor's office or clinic did not accept their health insurance type or that a doctor's office or clinic was not accepting new patients than were higher-income respondents.

Assessment of Quality of Health Care

In 2015, the MHIS added questions on the quality of care received from general doctors, nurse practitioners, physician's assistants, midwives, specialists, and mental health professionals. In general, at least three-quarters of respondents rated the care they received as very good or excellent, regardless of the type of care. (Figure 29)

Difficulties getting health care over the past 12 months in Massachusetts in 2015, by family income



^{*} Estimate is significantly different at the 5% level from estimate for those "At or below 138% of the FPL."

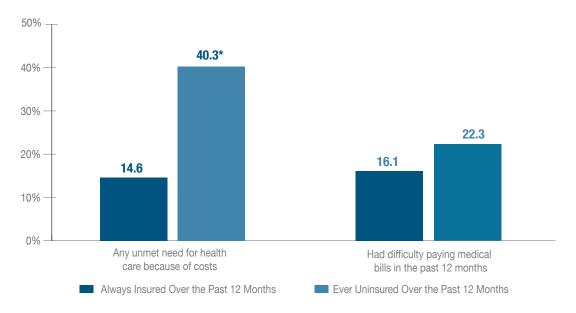
FPL = Federal Poverty Level

Source: 2015 Massachusetts Health Insurance Survey

Assessment of quality of care among all Massachusetts respondents receiving care over the past 12 months in 2015, by physician type



Unmet health care needs and difficulty paying medical bills over the past 12 months in Massachusetts in 2015, by insurance status



^{*} Estimate is significantly different at the 5% level from estimate for those "Always insured over the past 12 months."

Note: Any unmet need for care is defined as reporting one or more of the following unmet needs for care due to cost: unmet need for doctor care, unmet need for specialist care, unmet need for mental health care or counseling, or ever went without a prescription drug because of costs.

Source: 2015 Massachusetts Health Insurance Survey

Health Care Affordability

Massachusetts has long had health care costs that exceed those of the nation as a whole, creating a challenge for some residents of the state. 15 In 2015, for example, 16.9 percent of respondents reported an unmet need for health care due to cost over the past 12 months (not including dental care, data not shown) and 17.0 percent reported problems paying medical bills over the past 12 months (data not shown).

Unmet need due to costs is an issue for respondents with insurance all year and for those who were uninsured at some point over the year, as shown in Figure 30. Insured individuals may go without needed care because of concerns about co-pays or co-insurance, concerns about their deductible, or because they needed a service that was not covered by their health plan. 16 In 2015, 14.6 percent of full-year insured respondents reported an unmet need for health care because of costs over the past 12 months, as compared to 40.3 percent of respondents who were uninsured at some time over the year.

Out-of-Pocket Spending and Difficulty Paying Medical Bills

In 2015, 16.1 percent of respondents reported spending \$3,000 or more out-of-pocket over the past 12 months for health care for their family, and a similar percentage reported difficulties paying their medical bills (17.0 percent). (Table 4) Out-of-pocket costs include spending on deductibles, copays, and coinsurance for benefits covered by insurance, and all spending on non-covered medical, dental, and vision services that the respondent pays for directly. Out-of-pocket spending does not include premiums for health insurance. High out-of-pocket spending was reported more often for children and their families than for elderly and non-elderly adults and their families, while children and non-elderly adults had more difficulties paying family medical bills than elderly adults.

Respondents with family incomes below 400 percent of the FPL were more likely to report difficulty paying medical bills over the past 12 months than were those with family incomes at or above 400 percent of the FPL. (Figure 31) For respondents in lower-income families, even relatively small medical bills may contribute to financial problems given their limited resources.

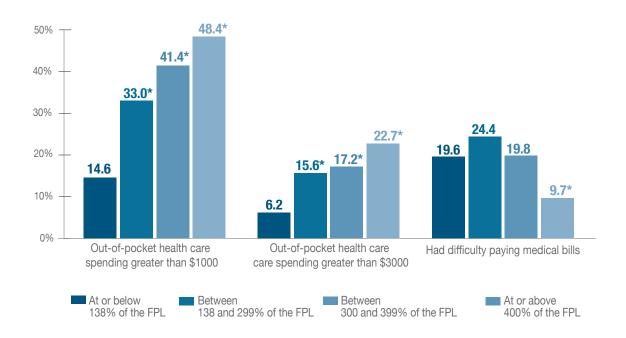
In addition, respondents with family incomes below 300 percent of the FPL were less likely to report spending \$1,000 or more out-of-pocket on health care over the past 12 months compared to those in higherincome families. (Figure 31) This may be due to low or no cost-sharing in MassHealth and ConnectorCare for covered medical services for some of those in the lowest-income families or due to families going without needed health care due to costs.

	All respondents	Children (0-18)	Non-elderly adults (19-64)	Elderly adults (65 and older)
Out-of-pocket health care spending greater than \$1000 over past 12 months	35.1%	39.8%	34.2%	31.9%
Out-of-pocket health care spending greater than \$3000 over past 12 months	16.1%	23.2%	14.0%*	14.5%*
Had difficulty paying medical bills over the past 12 months	17.0%	17.4%	18.9%	8.3%*

^{*} Estimate is significantly different at the 5% level from estimate for children.

Source: 2015 Massachusetts Health Insurance Survey

Health care out-of-pocket spending and difficulty paying medical bills over the past 12 months in Massachusetts in 2015, by family income



 $^{^{\}star}$ Estimate is significantly different at the 5% level from estimate for those "At or below 138% of the FPL."

FPL = Federal Poverty Level

Ratio of out-of-pocket health care spending to family income over the past 12 months in Massachusetts in 2015, overall and by age group

	All respondents	Children (0-18)	Non-elderly adults (19-64)	Elderly adults (65 and older)
Ratio of out-of-pocket spending to family income is less than 5%	91.0%	89.8%	91.9%	89.1%
Ratio of out-of-pocket spending to family income is 5% or more	9.0%	10.2%	8.1%	10.9%
Ratio of out-of-pocket spending to family income is 10% or more	3.6%	4.5%	3.1%	4.2%

Source: 2015 Massachusetts Health Insurance Survey

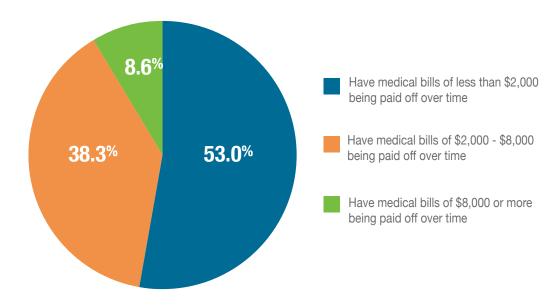
Using the available data on out-of-pocket spending and family income, we constructed a conservative measure of family out-of-pocket spending relative to family income for respondents. ¹⁷ Based on this measure, we estimate that at least 3.6 percent of respondents spent more than 10 percent of family income on health care in 2015, and at least 9.0 percent spent more than 5 percent of family income on health care. (Table 5) While not large shares of the population, these estimates highlight the significant burden of high health care costs for some Massachusetts residents and their families. We will continue to use the Massachusetts Health Insurance Survey to track and refine affordability measures over time.

Medical Debt

To better understand the medical debt faced by Massachusetts residents, the 2015 MHIS included new questions about medical bills being paid off over time, including the amount and age of medical debts. Overall, 16.7 percent of respondents reported medical bills being paid off over time in 2015 (data not shown). Among those with medical bills being paid off over time, 53.0 percent owed less than \$2,000, 38.3 percent owed between \$2,000 and \$8,000, and 8.6 percent owed more than \$8,000. (Figure 32) In addition, most medical bills being paid off over time were from the past year (51.1 percent). (Figure 33)

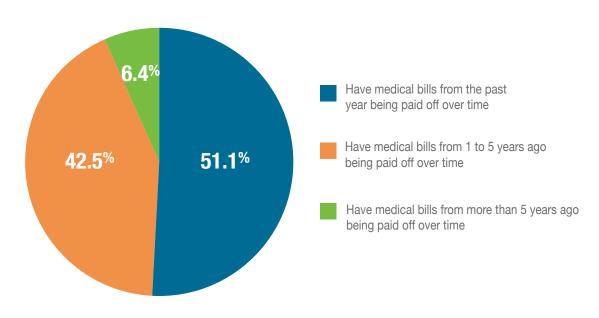
Among those with medical bills being paid off over time in Massachusetts in 2015, 45.6 percent also reported problems paying mortgage, rent, or utility bills in the past 12 months (data not shown). Those in families with incomes below 138 percent of the FPL who reported having medical bills being paid off over time were more likely than those in families with incomes at or above 400 percent of the FPL to report difficulty paying mortgage, rent, or utility bills (54.6 percent and 27.7 percent, respectively, data not shown).

Amount of medical bills being paid off over time in Massachusetts in 2015, among respondents with medical bills being paid off over time

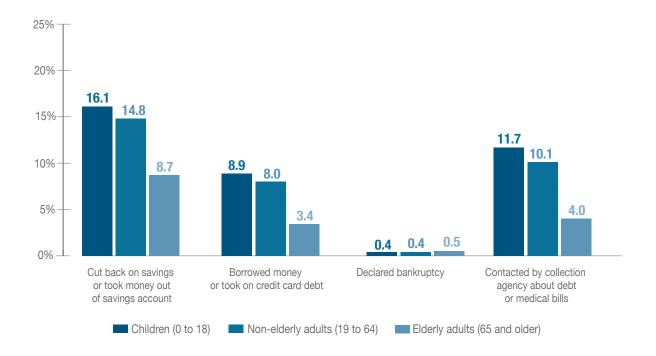


Source: 2015 Massachusetts Health Insurance Survey

Age of medical bills being paid off over time in Massachusetts in 2015, among respondents with medical bills being paid off over time



Implications of difficulties paying medical bills in Massachusetts in 2015, overall and by age group



Source: 2015 Massachusetts Health Insurance Survey

Overall, 14.2 percent of respondents reported cutting back on savings or taking money out of a savings account, 9.6 percent were contacted by a collection agency about debt for medical bills, 7.5 percent borrowed money or took on credit card debt, and 0.4 percent declared bankruptcy due to difficulties with medical bills. (Figure 34) As shown, those experiences tended to be more common for the families of children and non-elderly adults than elderly adults and their families (Figure 34) and more common for middle-income families than lower- or higher-income families. (Figure 35)

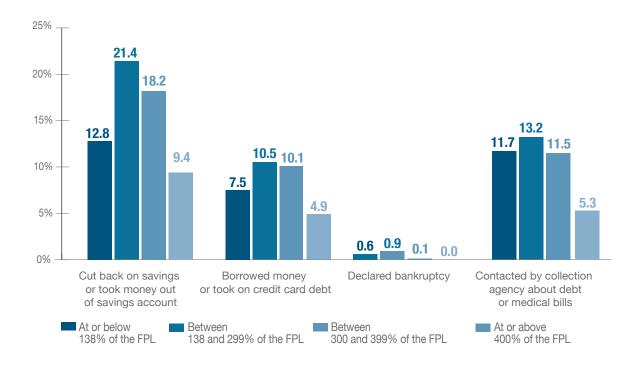
Unmet Need for Medical and Dental Care Due to Cost

In addition to financial problems due to health care costs, some respondents went without needed health care because of the cost of care in 2015. Among all respondents, 16.9 percent reported an unmet need for medical care because of the cost of care over the past 12 months. ¹⁸ (Table 6) Any unmet need for medical care is defined as

reporting going without one or more of the following types of care due to cost: doctor care, specialist care, mental health care or counseling, or prescription drugs. In addition, 18.6 percent of respondents reported an unmet need for dental care due to cost over the past 12 months. Unmet needs for medical care or dental care could reflect a period of being uninsured, costs for services that are not covered, or cost-sharing for covered services.

Non-elderly adult respondents were more likely to report unmet needs for medical care due to cost than were children or elderly adults. Over one-in-five of non-elderly adults reported some unmet need for medical care due to cost over the past 12 months (21.1 percent), and 24.4 percent reported an unmet need for dental care. (Table 6) In addition, female respondents were more likely to report unmet need for medical care due to cost over the past 12 months (20.1 percent) than male respondents (13.5 percent) (data not shown, difference is statistically significant at the 5% level).

Implications of difficulties paying medical bills Massachusetts in 2015, by family income



Notes: FPL= Federal Poverty Level

Source: 2015 Massachusetts Health Insurance Survey

Reported unmet need for medical care and dental care because of costs over the past 12 months in Massachusetts in 2015, overall and by age group

	All respondents	Children (0-18)	Non-elderly adults (19-64)	Elderly adults (65 and older)
Any unmet need for medical care over the past 12 months because of cost of care	16.9%	6.7%	21.1%*	14.1%*
Unmet need for doctor care	7.1%	1.5%	9.8%*	3.9%
Unmet need for specialist care	7.7%	2.0%	10.3%*	4.5%
Unmet need for mental health care or counseling	4.1%	2.2%	5.2%	2.3%
Ever went without prescription drugs	9.9%	3.3%	12.3%*	9.8%*
Unmet need for dental care over the past 12 months because of cost of care	18.6%	3.6%	24.4%*	16.1%*

^{*} Estimate is significantly different at the 5% level from estimate for children.

Note: Any unmet need for medical care is defined as reporting one or more of the following unmet needs for care due to cost: unmet need for doctor care, unmet need for specialist care, unmet need for mental health care or counseling, or ever went without a prescription drug because of costs.

Reported unmet need for medical care because of costs over the past 12 months in Massachusetts in 2015, by family income



^{*} Estimate is significantly different at the 5% level from estimate for those "At or below 138% of the FPL."

Note: Any unmet need for medical care is defined as reporting one or more of the following unmet needs for care due to cost: unmet need for doctor care, unmet need for specialist care, unmet need for mental health care or counseling, or ever went without a prescription drug because of costs.

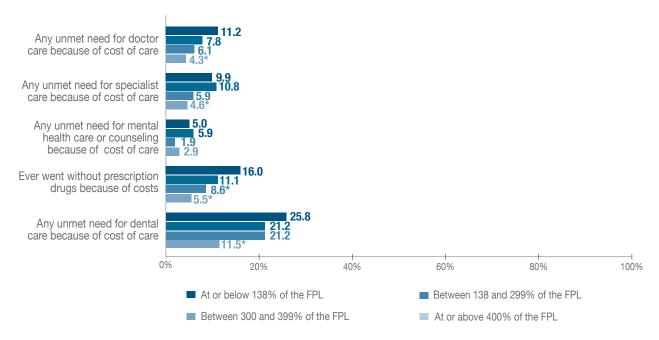
FPL = Federal Poverty Level

Source: 2015 Massachusetts Health Insurance Survey

Among those with family incomes at or below 138 percent of the FPL, 25.5 percent reported an unmet need for medical care over the past 12 months due to cost. (Figure 36) Over one quarter of this income group reported an unmet need for dental care (25.8 percent) and 16.0 percent reported an unmet need for prescription drugs. (Figure 37)

There were few statistically significant differences in unmet need for medical care or dental care over the past 12 months in Massachusetts in 2015. (Table 7) However, Hispanics were more likely than non-Hispanic whites to report an unmet need for doctor care over the past 12 months (11.9 percent versus 6.5 percent).

Types of unmet need for medical care and dental care because of costs over the past 12 months in Massachusetts in 2015, by family income



^{*} Estimate is significantly different at the 5% level from estimate for those "At or below 138% of the FPL."

Note: Responses across categories cannot be added together, as respondents may have reported more than one unmet need for care.

FPL = Federal Poverty Level

Source: 2015 Massachusetts Health Insurance Survey

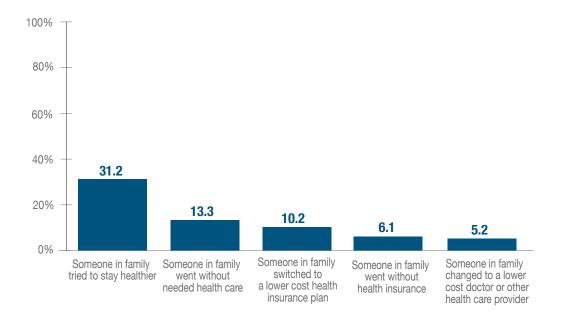
Reported unmet need for medical care and dental care because of costs over the past 12 months in Massachusetts in 2015, by race and ethnicity

	White, non- Hispanic	Black, non- Hispanic	Other/ Multiple Race, non-Hispanic	Hispanic
Any unmet need for medical care over the past 12 months because of cost of care	16.1%	21.1%	10.7%	22.6%
Unmet need for doctor care	6.5%	8.5%	5.0%	11.9%*
Unmet need for specialist care	7.1%	9.6%	4.3%	11.7%
Unmet need for mental health care or counseling	4.4%	3.2%	2.0%	3.5%
Ever went without prescription drugs	9.2%	13.6%	8.4%	13.3%
Unmet need for dental care over the past 12 months because of cost of care	18.4%	19.0%	16.2%	21.2%

^{*} Estimate is significantly different at the 5% level from estimate for "White, non-Hispanic."

Note: Any unmet need for medical care is defined as reporting one or more of the following unmet needs for care due to cost: unmet need for doctor care, unmet need for specialist care, unmet need for mental health care or counseling, or ever went without a prescription drug because of costs.

Approaches used by families to lower health care costs over the past 12 months for all Massachusetts respondents in 2015



Source: 2015 Massachusetts Health Insurance Survey

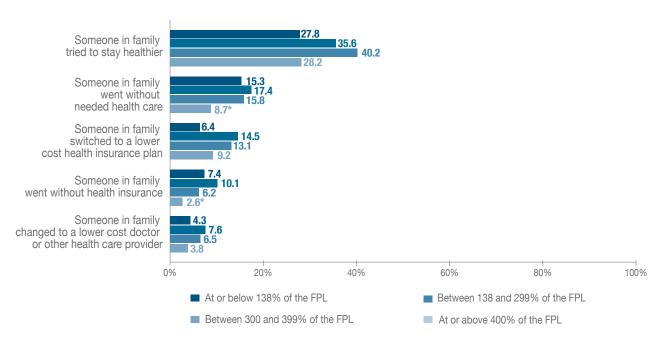
Approaches to Lowering Health Care Costs

In 2015, respondents reported trying to lower their family's health care costs primarily by trying to stay healthier (31.2 percent). Other commonly-used approaches include going without needed health care (13.3 percent) or switching to a lower cost health insurance plan (10.2 percent). (Figure 38) The share reporting switching to a lower cost health plan in 2014 was much higher (28.4 percent), which indicates less plan switching in 2015 than 2014 due to costs.

Respondents with family incomes above 400 percent of the FPL were less likely than the lowest-income respondents to report that a family member went without needed health care or went without health insurance over the past 12 months to lower the family's health care costs. (Figure 39)

Finally, uninsured respondents were more likely than respondents who were insured all year to report that someone in the family went without needed health care or went without health insurance to lower family health care costs over the past 12 months. (Figure 40)

Approaches used by families to lower health care costs over the past 12 months in Massachusetts in 2015, by family income

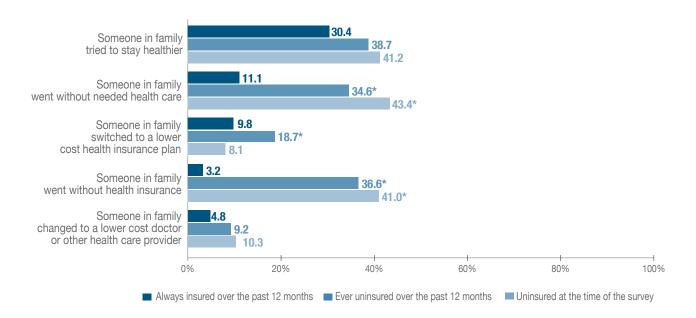


^{*} Estimate is significantly different at the 5% level from estimate for those "At or below 138% of the FPL."

FPL = Federal Poverty Level

Source: 2015 Massachusetts Health Insurance Survey

Approaches used by families to lower health care costs over the past 12 months in Massachusetts in 2015, by health insurance status



^{*}Estimate is significantly different at the 5% level from estimate for those "Always insured over the past 12 months."

Summary and Conclusions

In 2015, 96.4 percent of the MHIS respondents had health insurance coverage at the time of the survey, a rate that was well above the national level of 90.8 percent. Further, more than 9 out of 10 respondents (92.0 percent) were insured for all of the past 12 months. Employer-sponsored coverage remains the primary source of health insurance in Massachusetts in 2015, covering nearly 60 percent of insured respondents based on the insurance hierarchy used. Public programs, including Medicare, MassHealth, and ConnectorCare, covered almost one-third of insured respondents, while private non-group coverage (including Health Connector Plans) covered about one in ten.

For the first time in 2015, the MHIS asked about private long-term care insurance coverage, and fewer than one in seven Massachusetts adults aged 50 and older reported carrying such insurance. The most common reasons for not carrying long-term care insurance were cost and that the respondent "didn't think of it" or "didn't think it was needed," highlighting the need to address costs of the coverage and the potential role for education on the importance of preparing for future long-term care needs.

Consistent with the high levels of health insurance coverage in Massachusetts, in 2015 89.0 percent of respondents reported having a usual source of health care and a 88.6 percent reported a visit to a general doctor or non-physician practitioner over the past 12 months, with 79.5 percent rating the care they received as very good or excellent. However, some population groups were less likely to have a usual source of care or a health care visit with a doctor or non-physician practitioner, including Hispanics, those in lower-income families, or the uninsured. In addition, some respondents reported difficulty obtaining health care in the community and, likely due in part to those difficulties, a greater reliance on the emergency department for non-emergency care. Difficulty obtaining care and use of the emergency department over the past 12 months were particularly high among Hispanics, those in lower-income families, and those in fair or poor health with an activity limitation. Overall, these results suggest some persistent barriers to obtaining care in Massachusetts in 2015, with more serious challenges for some vulnerable populations.

One significant barrier to care in Massachusetts in 2015 was the cost of care. About one in six respondents reported an unmet need for health care and nearly one in five reported an unmet need for dental care due to cost over the past 12 months. About one in six respondents reported difficulty paying family medical bills over the past 12 months. A similar share reported having family medical bills that were being paid off over time. To better understand the medical debt faced by Massachusetts residents, the 2015 MHIS included new questions about the age and amount of medical bills being paid off over time. Among those with medical bills being paid off over time in 2015, nearly half owed more than \$2,000 and nearly half were paying medical bills from the past year. For many medical bills were just one component of their financial difficulties, as nearly half reported also having problems paying mortgage, rent, or utility bills over the past 12 months. Unmet needs for health care because of cost were more common for adults in lower-income families, the uninsured, and those in fair or poor health with an activity limitation.

When asked what approaches they used to lower their families' health care costs in 2015, nearly one third of respondents said they and their families were trying to stay healthier, and more than one in ten said that someone in the family went without needed health care or without health insurance. Moving forward, CHIA's Continuing Study on Insurance Coverage, Underinsurance and Uninsurance will continue to explore Massachusetts's populations and the obstacles they face when attempting to obtain and maintain health insurance and health care; employer and consumer behavior; and health care access, use, and affordability in Massachusetts.

About the MHIS

The Massachusetts Health Insurance Survey (MHIS) provides information on health insurance coverage, health care access and use and health care affordability for the non-institutionalized population in Massachusetts. The survey is conducted in English and Spanish and its average completion time was 23 minutes in 2015. The 2015 MHIS was fielded between May 18 and August 2 2015. Surveys were completed with 5,002 Massachusetts households, collecting data on 5,002 target persons, including 621 children aged 0 to 18, 3,057 non-elderly adults aged 19 to 64, and 1,324 elderly adults aged 65 and older.

The overall response rate for the 2015 MHIS was 24.6 percent, combining the response rate of 22.1 percent for the landline telephone sample and the 29.5 percent for the cell phone sample. The 2015 MHIS response rate was calculated by dividing the number of households in which an interview was completed by the estimated number of eligible households in the sample. Eligible households are those for which eligibility for inclusion in the MHIS was determined and the survey was completed, refused, or interrupted without completion. In addition, a portion of households for which eligibility could not be determined, such as those where the phone was not answered, are also included in the total number of eligible households. Ineligible sample records were not included in the response rate calculations, including business numbers, fax machine numbers, non-working phone numbers, and vacant or second homes.

All estimates based on the survey are prepared using weights that adjust for the complex survey design, for undercoverage, and for survey nonresponse. Additional information about the MHIS is available in the MHIS Methodology Report.

Endnotes

- The MHIS collects detailed information for one randomly selected household member (referred to as the target person). Target adults tend to respond to the survey for themselves, while a proxy, generally a parent, responds for a target child. The data reported here are for the household target person. For simplicity, we refer to the target person as the respondent in discussing survey findings.
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- 17 Because the response categories in the MHIS for both out-of-pocket spending and family income are based on ranges, we can only approximate the ratio of out-of-pocket spending to family income. To create a conservative measure of the ratio out-of-pocket spending to income, we assume that out-ofpocket spending is at the lower value in the relevant response category and that family income is at the upper value in the relevant response category. For individuals in the highest income category, where we do not have an upper bound, we assume that none are spending 5 percent or more of income on outof-pocket expenses.
- 18 The 2015 measure of unmet need for health care differs from the 2014 measure in that it excludes dental care. Unmet need for dental care is reported separately in 2015.



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