Affordable Health Care for All: What Does *Affordable* Really Mean?

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ABOUT COMMUNITY CATALYST

Community Catalyst is a national non-profit advocacy organization dedicated to quality affordable health care for all. Since 1997, Community Catalyst has been working to build the consumer and community leadership required to transform the American health system. With the belief that this transformation will happen when consumers are fully engaged and have an organized voice, Community Catalyst works in partnership with national, state and local consumer organizations, policymakers, and foundations, providing leadership and support to change the health care system so it serves everyone—especially vulnerable members of society.

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EXECUTIVE SUMMARY

Millions of Americans lack health insurance because they cannot afford coverage. Therefore, any state that seeks to expand health care coverage for the uninsured must address the question of affordability. The stakes become much higher if decisions about affordability are being made in the context of an individual obligation to purchase insurance, as is the case today in Massachusetts and as is being considered in other states.

Defining affordability is challenging for a number of reasons. Unfortunately, little existing literature defines at what price health care is affordable to families. Rather, most studies start with an assumption of that insurance is affordable at a certain level of income. In addition, it is basically impossible to create a single standard that encompasses all demographic and geographic variation.

Despite these difficulties, some effort to define affordability must be made. Without it, state reforms are more likely to fail in their avowed purpose of expanding coverage and, in the case of individual mandates, risk inflicting serious harm on families who are already coping with the burden of lack of insurance and often constrained financial resources.

To respond to a gap in literature on affordability, we take a first step in creating a new methodology for defining affordability of health insurance by drawing together several different studies. We then apply this framework to Massachusetts as a case study.

We began with a few assumptions on a definition of affordability:

- **An affordability scale should be a conservative measure.** In particular, in the context of an individual mandate, using a conservative definition of affordability will prevent harming people who are already struggling financially. It will also help maintain political legitimacy by allowing people to respond voluntarily to incentives to purchase insurance. For the creation of sliding scale premiums, using a conservative scale will result in a higher "take-up" rate of health insurance.

- **Premiums should be progressive.** Because people with lower incomes have less disposable income and a larger share of their budget must be devoted to core necessities such as food, clothing and shelter, they should be expected to pay not only a lower dollar amount, but a lower proportion of their incomes for health insurance.

- For the purpose of this paper, **affordability is defined as the percentage of income a household can devote to health care while still having sufficient income to address other necessities.** Since many health insurance plans on the market today have high cost sharing, we include all out-of-pocket costs, along with premiums, in the measure of affordability.

By looking at current spending on health care in a voluntary context, the cost of essential needs, and price sensitivity to health insurance, a clearer picture of affordability begins to

emerge. We identify an income level above which a person can generally afford health insurance without a subsidy, and an income at which a significant share of the population can begin to make at least some contribution toward health insurance to create the starting and end points of a sliding scale of affordability. Finally, we check our results against polling data that looks at what the public thinks is reasonably affordable. Although the findings are specific to Massachusetts, the methodology is applicable to other states. [See Appendix for methods to modify the Massachusetts example to determine affordability in other states.]

Summary of Findings:
Lessons on affordability in Massachusetts can be applied to other regions. In the context of an individual mandate, setting an affordability standard has a significant consequence—financial penalties on individuals who do not purchase coverage. It is critical to find a fair measure that does not harm families. In the context of health reforms that do not include a mandate, an inadequate standard will affect individuals' ability to access coverage.

- **People with very low incomes can pay only small amounts toward health care, and no financial penalties should be imposed upon them.**

The research shows that many low-income people struggle to pay for basic necessities and are likely to have negative cash flow. This income level will vary by state. Studies of household budgets in Massachusetts indicate that families below 300% of the federal poverty level (FPL) may not have enough earnings to cover even *basic needs*. Based on variations such as housing costs, age and health status, a large share of this population will not be able to afford to purchase insurance. In the context of an individual mandate, people with low-incomes should be exempt from any penalties. In the context of a sliding scale, without a mandate, people at these levels should pay only nominal amounts of cost sharing, and will need public programs and deep subsidies to obtain insurance.

- **The "upper bound" of affordability should be set at about 8.5% of income.**

Data in this paper suggests that people with higher incomes can reasonably afford health insurance at 8.5% of income. In Massachusetts, this point is above 600% FPL. Again, this income level will likely vary in other regions. People with unsubsidized, non-group premiums currently pay an average of 8.5% of income. After meeting basic needs, most people at a higher income level have sufficient discretionary income to cover health expenses without subsidy.

- **A progressive sliding scale of affordability is needed.**

For people who earn enough to contribute some amount toward their health care (although not necessarily the full cost), we recommend a sliding scale of affordability. In Massachusetts, this scale progresses from 4% to 8.5% of income for people earning between 300% and 600% FPL. The curve connecting these points may vary, depending on program design; similar scales can be developed for other states. In the context of either the individual mandate or scaled premiums, a sliding schedule of affordability will protect people from financial hardship.

- **What is affordable may not be available.**

There may be a mismatch in most states between what insurance is available and what is deemed affordable. This will depend greatly on variations in circumstance. For example, Massachusetts allows insurance rating differences for age and geography. Therefore, a young person living in the western part of the state may be able to afford insurance, whereas an older person in Boston may not. In the context of an individual mandate, the affordability scale will help to prevent people with high insurance costs from being penalized. However, beyond the mandate, the identification of certain groups for whom no insurance is both available and affordable can help advocates target and promote insurance subsidies and other reforms to improve access.

THE MASSACHUSETTS CONTEXT

Massachusetts recently passed a large-scale health reform to cover the uninsured. One facet of the Massachusetts law is the creation of sliding scale subsidies for private health insurance for people earning below 300% FPL ($30,630/ an individual). A new, controversial element of this reform is an individual mandate, which requires all residents to have health insurance or face financial penalties. An important restriction on the individual mandate is an "affordability clause," whereby a person must obtain health insurance [or incur sanctions] only if it is affordable.[1] All residents of the Commonwealth of Massachusetts must acquire creditable health coverage by July 1, 2007, *if insurance is affordable to them*, or face a financial penalty.[2] However, neither the law itself, nor current research supplies a clear definition of what is affordable. The Connector Authority, a quasi-public agency created to oversee much of the health care reform law, is charged with creating a schedule of affordability prior to the launch of the individual mandate.[3] Failure to create a reasonable definition of what is affordable is likely to cause unintended harm to families, and undermine the success of a reform package.

The individual mandate in Massachusetts prompted this analysis, because other states are closely watching the Commonwealth as a potential model. This study will also have value for any state seeking to expand affordable health care for all.

INTRODUCTION

Millions of Americans lack health insurance because they cannot afford coverage. Therefore, any state that seeks to expand health care coverage for the uninsured must address the question of affordability. The stakes become much higher if decisions about affordability are being made in the context of an individual obligation to purchase insurance, as is the case today in Massachusetts and as is being considered in other states.

Defining affordability is challenging for a number of reasons. Unfortunately, little existing literature defines at what price health care is affordable to families. Rather, most studies start with an assumption of that insurance is affordable at a certain level of income.[4] In addition, it is basically impossible to create a single standard that encompasses all demographic and geographic variation.

Despite these difficulties, some effort to define affordability must be made. Without it, state reforms are more likely to fail in their avowed purpose of expanding coverage and, in the case of individual mandates, risk inflicting serious harm on families who are already coping with the burden of lack of insurance and often constrained financial resources.

To respond to a gap in literature on affordability, we take a first step in creating a new methodology for defining affordability of health insurance by drawing together several different studies. We then apply this framework to Massachusetts as a case study.

We began with a few assumptions on a definition of affordability:

- **An affordability scale should be a conservative measure.** In particular, in the context of an individual mandate, using a conservative definition of affordability will prevent harming people who are already struggling financially. It will also help maintain political legitimacy by allowing people to respond voluntarily to incentives to purchase insurance. For the creation of sliding scale premiums, using a conservative scale will result in a higher "take-up" rate of health insurance.

- **Premiums should be progressive.** Because people with lower incomes have less disposable income and a larger share of their budget must be devoted to core necessities such as food, clothing and shelter, they should be expected to pay not only a lower dollar amount, but a lower proportion of their income for health insurance.

By looking at current spending on health care in a voluntary context, the cost of essential needs, and price sensitivity to health insurance, a clearer picture of affordability begins to emerge. We identify an income level above which a person can generally afford health insurance without a subsidy, and an income at which a significant share of the population can begin to make at least some contribution toward health insurance to create the starting and end points of a sliding scale of affordability. Finally, we check our results against polling data that looks at what the public thinks is reasonably affordable. Although the findings are specific to Massachusetts, the methodology is applicable to other states. [See Appendix for methods to modify the Massachusetts example to determine affordability in other states.]

TOWARD A DEFINITION OF AFFORDABILITY

For the purpose of this paper, affordability is defined as the percentage of income a household can devote to health care while still having sufficient income to address other necessities. Since many health insurance plans on the market today have high cost sharing,[5] we include all out-of-pocket costs, along with premiums, in the measure of affordability.[6]

We seek to define affordability using several perspectives, including:

1. The statutory language in Massachusetts law suggests using **existing public programs** to define affordability.
2. Because much of the population already spends money on health costs, looking at **current spending on health care** indicates what people presumably can afford, at least those with moderate incomes (people with lower incomes may spend more than is affordable or go without care or other necessities).
3. To get an accurate sense of expenses for people with low and moderate incomes, it is helpful to examine **household budgets**. There are two types of budget analyses which can be used to determine the income level needed to cover essential needs.

One is based on families' actual household spending, and the other is based on a normative budget.

4. In states without an individual mandate, studies of **take-up rates** (the price level at which a person decides to voluntarily enroll in insurance) and **price elasticity** (how consumers respond to price changes for a particular good) can indicate at what price insurance becomes affordable to a person.
5. Studies of **public opinion** on what is a reasonably affordable amount to pay for health care are a valuable resource. This data, informed by what people pay and what is viewed as "fair", helps to indicate whether a measure of affordability will have political legitimacy.

Taken singly, each of these methods has limitations, and there is no way to directly compare many of these analyses since they each use different data and methods to reach specific conclusions. However, by using elements of different approaches together, a fuller picture of affordability begins to emerge.

1. Existing Public Programs

Massachusetts's health reform statute suggests basing an affordability scale on spending limits in current public health programs such as the State Children's Health Insurance Program (SCHIP). Other possible standards in Massachusetts include the CommonHealth program for people with disabilities, the Free Care Pool for low-income uninsured, and the Insurance Partnership program for qualified low-income workers. We have chosen to illustrate only the SCHIP standard here, as it is a national measure.

SCHIP

What is the standard? Federal guidelines for SCHIP set total cost sharing (premium, deductibles, copayments) at a maximum of 5% of family income.[7] States have discretion to set actual cost sharing under the 5% maximum. In the table below, we use the federal SCHIP standard as a potential model of what may be affordable to people at various income levels.

Table 1: SCHIP Monthly Costs (5% of income maximum), Hypothetically Applied to Adults[8]

	150% FPL	300% FPL	500% FPL
One Adult	$61	$123	$204
Two Adults	$83	$165	$275

What are limitations of using standards from existing programs? Although using standards from SCHIP or other public programs provide a basis of what currently exists, they are of limited use for our purposes. The standards are in essence arbitrary and were not necessarily created with the intention of ensuring that programs be universally available. In fact, we know that even modest premiums and cost sharing can have a profound effect on program participation for low-income people.[9]

What do these standards tell us? Although Massachusetts health reform statute suggests using existing public health programs as a starting point in creating a measure of affordability, we find that these standards do not actually offer much insight into what is

affordable to people. Therefore, we examine other existing analyses to create a definition of affordability.

2. Current Spending on Health Care

It is valuable to examine the amount that people currently spend on health care when defining affordability. One measure of what is affordable comes from the percentage of income that families typically spend on health care. We examine a report by the Urban Institute, commissioned by the Blue Cross Blue Shield Foundation of Massachusetts to look at current spending.

Urban Institute for Blue Cross Blue Shield Foundation

What is this analysis?

The Blue Cross Blue Shield Foundation of Massachusetts commissioned Holahan, Hadley and Blumberg of the Urban Institute to examine affordability of health care reform in Massachusetts (Holahan et al.). Their study looks at affordability as the amount that moderate-income people currently spend on non-group insurance, the employee share of employer-sponsored health premiums, and the combined amount employers and employees spend on health premiums. Holahan et al. use national data on averages from the Medical Expenditure Panel Survey (MEPS, a survey of consumer health utilization and spending) for premiums and for out-of-pocket costs for families.[10]

Table 2: Holahan et al., Health Costs as Percent of Income, above 300% FPL[11]

	Non-group	Employer Sponsored Insurance (ESI) Employee portion	Employer Sponsored Insurance (ESI) Total cost – Employer and Employee portion
Individuals			
Premium	6.4%	1.5%	10.4%
Out of pocket	1.2%	0.6%	0.6%
Total spending	8.2%	2.3%	11.0%
Families			
Premium	6.0%	3.0%	14.1%
Out of pocket	2.2%	1.2%	1.2%
Total spending	8.5%	4.6%	15.3%

What are limitations of this analysis?

The Holahan et al. report looks at health spending for people with both low (earning less than 300% FPL) and moderate incomes. Families with low incomes may spend more on health care costs than is affordable to them, or go without health insurance or other necessities. Therefore it is more reasonable to look at spending levels only for families with moderate incomes in the Holahan, et al. data.

This report examines employee contributions to employer-sponsored insurance and the combination of employer and employee costs. Employee contributions to premiums are an inexact measure of the actual costs of health care because they disregard the employer contribution. But the combination of both employee and employer costs of employer-

sponsored insurance fails to account for favorable tax treatment employers receive for contributing to premiums. Neither of these spending amounts are an accurate account of total health costs. We, therefore, conclude that average costs for non-group insurance are the most useful benchmark.[12]

What does this analysis tell us?

The Holahan et al. analysis tells us what middle-income people typically pay for health insurance (including cost sharing)—about 8.5% of income. Based on our premise that an affordability schedule should be progressive, 8.5% becomes the "upper bound" of our affordability scale and we conclude that lower-income people should be expected to pay less than this amount. This also enables us to calculate how much a person would need to earn so that 8.5% of income would cover both typical premiums and cost-sharing. In Massachusetts, we estimate that a typical plan plus cost sharing is just over $400 per month. [13] In order to afford an unsubsidized plan within the 8.5% of income affordability standard, a person in Massachusetts would need to make about 600% FPL. This gives us one state-specific point on our affordability scale.

Building a Standard of Affordability

1. At 600% FPL, people can afford total health costs at about 8.5% of income.

3. Household Budgets

We examine studies of household budgets to help set a range of affordability for people with lower incomes. A strength of using budgets, rather than arbitrary or outdated measures of affordability, is to gauge actual spending on necessities such as housing, food, and transportation to determine what health costs are appropriate. Economic research supports examining the behaviors of people with similar incomes to evaluate affordability.[14]

While all budgeting studies involve choices about what is "essential" and "non-essential" spending, there is value in understanding average family expenses. There are two approaches to household budgets: analyzing essential costs in actual budgets as reported by individuals (e.g. the Greater Boston Interfaith Organization [GBIO] study of affordability); and normative household budgets, based upon census data and conservative measures of costs for basic needs (e.g. the Family Economic Self-Sufficiency [FESS] and Economic Policy Institute [EPI] budgets).

Greater Boston Interfaith Organization Study

What is this analysis?

Greater Boston Interfaith Organization (GBIO), a coalition with members affected by Massachusetts's health reform, recently conducted a study of actual household budgets to determine at what price health care is affordable. GBIO convened focus groups in the Boston region to gather individual reports on household budgets, with emphasis on essential items (housing, transportation, child care).[15] GBIO analyzed data from households earning between 100-500% FPL.[16]

The GBIO study compares household budgets with various health plan scenarios to determine what would be affordable for households. The study calculates affordability based on remaining income available after accounting for essential spending minus any health costs. If the remaining income is greater than or equal to the cost of health care, then that level of health spending is deemed affordable.

What are limitations to this analysis?

This report may overstate what people need to cover basic expenses, as spending data includes individual economic judgments. As income levels rise, judgment about what is "basic" spending may change, creating an overstatement of what is considered necessary to cover these items. At the same time, expenses such as school tuition, support of extended family members, or other expenses that a family may deem essential could be construed as "non-basic".

The GBIO report does not specify health care spending levels that may be affordable to families. Rather, much of the analysis focuses on what is *un*affordable. However, data from GBIO can inform our affordability schedule.

What does this analysis tell us?

The data demonstrates that a significant number of families earning less than 300% FPL have *no* discretionary income after covering only basic needs. People with incomes between 300-500% FPL may also have trouble with health expenses, but it is not clear from the research what this group is able to afford.

Table 3: GBIO, Discretionary Income After Essential Expenses (Without health costs)[17]

Percent FPL	100-150	150-200	200-250	250-300	300-350	350-400	400-450	450-500
% Families with negative cash flow	50.8%	34%	33.3%	32.6%	20%	19.4%	8.8%	11.1%

It is clear that people below 300% FPL, who have high incidences of negative cash flow, would have difficulty paying anything for health care. The GBIO findings suggest using a very conservative definition of affordability for people at low-income levels.

Massachusetts Family Economic Self-Sufficiency Standard (MassFESS)

What is this analysis?

The Family Economic Self-Sufficiency Standard (MassFESS) establishes a normative budget as a guide for what a family must earn to be "self-sufficient." FESS examines the cost of basic needs- housing, food, transportation and health care (excluding savings, tuition, and emergencies).[18] The standard assumes basic costs of goods. For example, housing is based on Fair Market Rent levels for the US Department of Housing and Urban Development (about the 40th percentile of rental housing costs in a particular area), and food costs on the US Department of Agriculture's Low-Cost Food Plan, which does

not allow for any take-out, fast food or restaurant meals.[19] Similar analyses have been conducted in many other states.

What are limitations of this analysis?

The FESS calculates average health care costs based on the assumption that employer-sponsored health insurance (ESI) is available. (The FESS assumes ESI as part of a self-sufficient wage). FESS uses Kaiser Family Foundation data on average employee portions of ESI, and adds out-of-pocket costs using data from the Medical Expenditure Panel Survey (MEPS), a national survey of health visits and costs for individuals.[20] Because many people, especially the uninsured, do not have access to employer-sponsored insurance, this figure is limited as a benchmark of affordability for our purposes.

Economic Policy Institute, Basic Family Budget

What is this analysis?

The Economic Policy Institute (EPI), a national economic research organization, created a "Basic Family Budget," similar to FESS, as an indicator of poverty and expenses.[21] The Basic Family Budget consists of only essential needs, including food, clothing, shelter, and transportation. All expenses such as meals out, savings or debt payment are excluded.

EPI calculates average health costs for families based on a weighted average of the percentage of people in an area who have either employer sponsored coverage, Medicaid, or non-group health coverage, plus out-of-pocket expenses.[22] EPI uses census data from the Current Population Survey (CPS) to estimate number of people with each type of insurance. The costs for employer-sponsored and non-group premiums, as well as additional out-of-pocket expenses, are calculated using average data from that region.

What are limitations of this analysis?

The EPI health spending amount is a weighted composite that includes households in a variety of circumstances (e.g. Medicaid eligible, uninsured, employer sponsored insurance, etc). Therefore, it does not reflect the *actual* cost of health insurance. EPI also does not consider a budget for a one-person household.

What do both of these analyses tell us?

While these studies do not necessarily specify what is affordable, they do provide insight on what is *un*affordable. As these budgets are geographically specific, we will examine their findings in the Boston area.

According to MassFESS analysis, a single adult in the Boston area would need income of $25,874 in 2006 (about 264% FPL) to be self sufficient.[23] However, this analysis assumes the availability of ESI. Backing out the cost of health care, we find that a single adult would need $24,302 (248% FPL) *before* accounting for health spending. The EPI analysis does not consider a budget for an individual, so we use a ratio from MassFESS to estimate an EPI budget for an individual at about $22,000 per year (without health costs).

Taking the FESS and EPI analyses together with the GBIO data, we find that people earning below 250% FPL in Massachusetts have only marginal incomes to afford health costs. People earning just over 250% FPL begin to be able to afford some health care spending. However, due to extreme variation in other expenses, such as housing, child care and elder care, it is not possible to determine exactly how much people above 250% FPL may be able to afford, recognizing that many can afford nothing at all.[24]

Household budgets and individual mandate penalties

In the context of an individual mandate, we conclude, based on these studies of household budgets, that people in Massachusetts with incomes below 300% FPL should be exempt from financial sanctions for failure to purchase health insurance.

This conclusion is based on a variety of factors. First, people below 100% FPL are eligible for fully-subsidized insurance in Massachusetts, and financial penalties are not relevant. For people below 250% FPL, financial penalties for failure to purchase health insurance are not realistic, as this group generally has limited incomes to cover even basic necessities, before health insurance. Circumstances are varied, between 250-300% FPL, and may allow for some people to afford health insurance. But based on the way age, housing situation, location and family composition affect the cost of living and cost of insurance, many people in this group will be unable to afford coverage even with the subsidies provided in the Massachusetts reform.

Given the small share of the population in this income range for whom health care is affordable, it makes sense to exempt those in Massachusetts under 300% FPL from an individual mandate. This policy could be revisited in the future, after more information is available about enrollment in subsidized plans. Alternatively, it would be possible to construct a subsidy scale that would make premiums affordable for everyone below 300% FPL, but this would require deeper subsidies than those now provided in Massachusetts.

Note that many people at these income levels will obtain health insurance, either through affordable ESI or if conditions allow them to afford the subsidized plans. But, for now, a cautious approach to any mandate will avoid harm to families who are scraping by and will also help sustain the political legitimacy of health reform in Massachusetts.

Building a Standard of Affordability

1. At 600% FPL, people can afford total health costs at about 8.5% of income.
2. For people under 300% FPL, who can only afford small amounts toward health care, no penalties should be imposed.

4. 'Take up' Rates and Price Elasticity

Policymakers use estimations of "take-up rates" (the price of a health plan at which a person decides to enroll) both to set subsidy levels and to estimate program costs and results. Although take-up rates usually pertain to voluntary programs (i.e., programs offered in an environment without an individual mandate), a review of existing data about

the price level at which health insurance becomes appealing provides useful information about affordability.[25]

Kenneth Thorpe's research for Catamount Health in Vermont

What is this analysis?

Economist Kenneth Thorpe recently devised a "take-up rate" formula for Vermont's health reform to assess how many uninsured would enroll. Thorpe uses a measure of price elasticity informed by economic theory, including the formula used by the Congressional Budget Office to estimate public programs.[26] "Price elasticity" is the measure of how individuals respond to price changes for a particular good. Thorpe estimates price elasticity for health insurance at -0.5. This means that for every 10 percent decline in the price of insurance, 5 percent of the uninsured will enroll.[27] In addition to the price sensitivity of enrollment, Thorpe takes into account the share of the health premium as part of household income and the amount of public subsidy.[28]

Table 4: Thorpe's Take-up Formula[29]

Percent FPL	Monthly Premium *Most* Enroll	Premium as % income	Monthly Premium *Nearly All* Enroll	Premium as % income
150% FPL	$27	2.2%	$15	1.2%
301% FPL	$175	6.8%	$83	3.4%
500% FPL	$288	6.9%	$138	3.4%

What are limitations of this analysis?

Because Thorpe's formula accounts for health insurance expenditures as a *percentage of income*, this measure is most useful for people with low and moderate incomes. As we assess individuals higher on the income scale, it becomes harder to argue people cannot *afford* insurance, even if they would not voluntarily buy it, if they have adequate discretionary funds available to purchase insurance.

Thorpe's calculations do not take into account the effect of an individual mandate. In the context of a mandate, a greater percentage of the uninsured will enroll in insurance.[30] However, this formula is a strong measure of what people would choose to purchase.

Thorpe's formula only uses premiums, and does not account for other out-of pocket-costs. Therefore, we add in other cost-sharing. From the Holahan et al. analysis, we see that out-of-pocket costs create an additional expense of about $25/ per month. So, total health spending at the level which "nearly all" people with incomes just above 300% FPL would voluntarily enroll in a health plan would be $108 per month, or 4% of income.

What does this analysis tell us?

Like the Holahan et al. analysis, Thorpe's formula is useful in building a range of affordability. For people with incomes just above 300% FPL, using Thorpe's analysis gives us a "**lower bound**" **of affordability at about 4% of income** [for all health expenses]. Therefore, an affordability scale for Massachusetts emerges between 4% (at just above 300% FPL) and progressing to 8.5% of income (by 600% FPL).

Building a Standard of Affordability

1. At 600% FPL, people can afford total health costs at about 8.5% of income.
2. For people under 300% FPL, who can only afford small amounts toward health care, no penalties should be imposed.
3. For people just above 300% FPL, set "lower-bound" of affordability scale at 4% of income.

5. Public Opinion Research

Surveys of public opinion provide important information about what is perceived as a fair and reasonable amount to spend on health care costs. Because affordability is largely based on the experiences of others with similar income levels and expenses, we use this analysis to check how our findings on affordability relate to public perception.

Robert Blendon, for Blue Cross Blue Shield Foundation of Massachusetts

What is this analysis?

Robert Blendon from the Harvard School of Public Health, an expert on public opinion polling, recently conducted a survey of public support for Massachusetts health care reform for the Blue Cross Blue Shield Foundation.[31] As part of the survey, respondents were asked what monthly health care costs are "reasonable" for people at certain income levels. This question did not explicitly state that a person who did not buy insurance at this price would face a financial penalty.[32]

Table 5: Blendon, Reasonable Monthly Health Care Costs for an Individual[33]

Income	% FPL	Reasonable costs, by most respondents	Health costs as percent of income
$25,000	245% FPL	$100 or less	4.8%
$35,000	343% FPL	$200 or less	6.9%

What are limitations of this analysis?

Blendon's survey asked respondents about the "reasonableness" of general price points. People might have answered differently if the question indicated that a schedule of affordability would be tied to financial penalties for not purchasing insurance.

What does this analysis tell us?

People surveyed were likely to place "reasonable" health costs around what they currently pay for health care.[34] The price points in Blendon's poll are slightly higher, but generally in accord with our findings stated earlier in this paper. Most respondents in his study support health costs between 4% and 7% of an individual's income. The Blendon study is a way to check our findings against public opinion. This will be critically important as we attempt to develop a schedule that garners public support *and* sustains the political legitimacy of health reform.

Building a Standard of Affordability

1. At 600% FPL, people can afford total health costs at about 8.5% of income.
2. For people under 300% FPL, who can only afford small amounts toward health care, no penalties should be imposed.
3. For people just above 300% FPL, set "lower-bound" of affordability scale at 4% of income.
4. A sliding scale of affordability is needed. For people between 300% - 600% FPL, create progressive scale from 4% to 8.5% of income.

RECOMMENDATIONS

By examining research on spending, household budgets and costs and willingness to purchase, we have built a new methodology for defining affordability. Although states vary in costs of living and costs of insurance, lessons on affordability in Massachusetts can be applied to other areas. In the context of an individual mandate, setting the affordability standard has a significant consequence—financial penalties on individuals who do not purchase coverage. In the case of health reform that does not include a mandate, an inadequate standard will affect individuals' ability to access coverage. It is critical to find a fair measure that does not cause unintended harm to families. Although the price at which insurance is affordable may vary, these recommendations can be applied to other states.

Any affordability schedule should be a conservative measure, and should utilize a progressive scale as incomes increase.

In the context of an individual mandate, using a conservative schedule will prevent harming people who are struggling financially. It will also help maintain political legitimacy as the individual mandate is implemented, and it will give people the chance to respond voluntarily to incentives to purchase insurance. Without a mandate, a progressive sliding scale will prevent people with lower incomes from paying a disproportionately high share of their income for health insurance. Using a conservative affordability scale will lead to a higher rate of "take-up" of insurance.

People with very low incomes can pay only small amounts toward health care, and no financial penalties should be imposed upon them.

The research shows that many low-income people struggle to pay for basic necessities and are likely to have negative cash flow. This income level will vary by state. Studies of household budgets in Massachusetts indicate that families below 300% of the federal poverty level (FPL) may not have enough earnings to cover even *basic needs*. Based on variations such as housing costs, age and health status, a large share of this population will not be able to afford to purchase insurance. In the context of an individual mandate, people with low incomes should be exempt from any penalties. In the context of a sliding scale, without a mandate, people at these levels should pay only nominal amounts of cost sharing, and will need public programs and deep subsidies to obtain insurance.

It should be noted that some people in this income range *will* get health insurance, through affordable employer-sponsored insurance, or circumstances that allow them to

buy low-cost plans. However, placing sanctions on low-income people for not buying insurance may only cause harm, and not help to insure people.

The "upper bound" of affordability should be set at about 8.5% of income.
Data in this paper suggests that people with higher incomes can reasonably afford health insurance at 8.5% of income. In Massachusetts, this point is above 600% FPL. Again, this income level will likely vary in other regions. People with unsubsidized, non-group premiums currently pay an average of 8.5% of income. After meeting basic needs, most people at a higher income level have sufficient discretionary income to cover health expenses without subsidy.

A progressive sliding scale of affordability is needed.
For people who earn enough to contribute some amount toward their health care (although not necessarily the full cost), we recommend a sliding scale of affordability. In Massachusetts, this scale progresses from 4% to 8.5% of income for people earning between 300% and 600% FPL (based on Thorpe's analysis, people who earn about 300% FPL would be reasonably able to afford insurance coverage [all health costs] at 4% of income, and the Holahan et al. paper points to an upper bound of 8.5 % of income). The curve connecting these points may vary, depending on program design. [See Chart 1: Possible Sliding Scales of Affordability in Context of Individual Mandate, below.] Similar scales can be developed for other states. In the context of either the individual mandate or sliding scale premiums, a scale of affordability will protect people from financial hardship.

Although a sliding scale will help to protect many people from incurring financing sanctions for failure to purchase health insurance, there will remain people with special circumstances for whom insurance remains unaffordable. An exemption process for hardships should remain an important part of an individual mandate. People with sick parents, day care expenses or high housing costs should be able to apply for individual hardship provisions, beyond the broad affordability scale.

What is affordable may not be available.
There may be a mismatch in most states between what insurance is available and what is deemed affordable. This will depend greatly on variations in circumstance. For example, Massachusetts allows insurance rating differences for age and geography. Therefore, a young person living in the western part of the state may be able to afford insurance, whereas an older person in Boston may not. In the context of an individual mandate, the affordability scale will help to prevent people with high insurance costs from being penalized. However, beyond the mandate, the identification of certain groups for whom no insurance is both available and affordable can help advocates promote insurance subsidies and other reforms to improve access.

Chart 1: Possible Sliding Scales of Affordability in Context of Individual Mandate

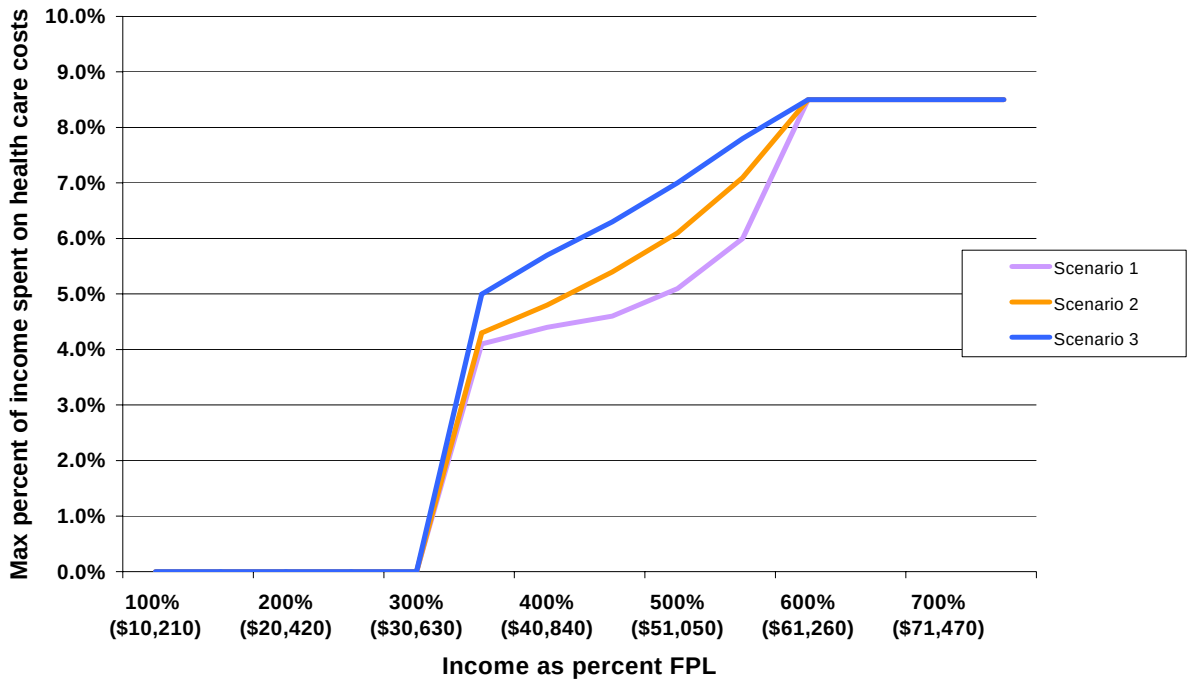

Table 6: Possible Sliding Scales of Affordability to correspond to Chart 1, above

	Percent FPL	100%	150%	200%	250%	300%	350%	400%	450%	500%	550%	600%	650%
	Annual Income	$10,210	$15,315	$20,420	$25,525	$30,630	$35,735	$40,840	$45,945	$51,050	$56,155	$61,260	$66,365
Scenario 1	% of Income	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	4.4%	4.6%	5.1%	6.0%	8.5%	8.5%
	Dollar Amount	$0	$0	$0	$0	$0	$122	$150	$176	$217	$281	$434	$470
Scenario 2	% of Income	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	4.8%	5.4%	6.1%	7.1%	8.5%	8.5%
	Dollar Amount	$0	$0	$0	$0	$0	$128	$163	$207	$260	$332	$434	$470
Scenario 3	% of Income	0.0%	0	0.0%	0.0%	0.0%	5.0%	5.7%	6.3%	7.0%	7.8%	8.5%	8.5%
	Dollar Amount	$0	$0	$0	$0	$0	$149	$194	$241	$298	$365	$434	$470

[1] Commonwealth of Massachusetts Chapter 58 of the Acts of 2006. http://mass.gov//legis/laws/seslaw06/sl060058.htm

[2] Ibid.

[3] Massachusetts Chapter 324 of the Acts of 2006, Section 56. "q). to review annually the publication of income levels for the federal poverty guidelines and other pertinent measures of individual and family income and devise and report annually a schedule that describes the percentage of income which an individual could be expected to contribute towards the purchase of health insurance coverage. The director shall consider contribution schedules, such as those set for government benefit programs." http://mass.gov//legis/laws/seslaw06/sl060324.htm

[4] Recent studies assume a certain level of affordability. See "Is health insurance affordable for the uninsured?" M. Kate Bundorf and Mark V. Pauly, Journal of Health Economics. Vol. 25 Issue 4 Page 650 July 2006, and "The Uninsured and the Affordability of Health Insurance Coverage," Lisa Dubay, John Holahan, and Allison Cook, Health Affairs, 26, no. 1 2007.

[5] Setting a Standard of Affordability for Health Insurance Coverage in Massachusetts. John Holahan, Jack Hadley, Linda Blumberg, Urban Institute. http://www.bcbsmafoundation.org/foundationroot/en_US/documents/affordability-aug06-FINAL.pdf

[6] A limitation of our work to date is that we focus on affordability for an individual. The majority of the uninsured are single, non-custodial parents. We recommend further research on affordability for families.

[7] Social Security Act, Title XXI Subtitle J Section 2103. Massachusetts SCHIP premiums are $12 per month per child, with a maximum of $36 per month.

[8] The FPL levels in this chart do not necessarily correlate to children enrolled in SCHIP today. Most children above 300% FPL are not eligible for the program.

[9]The Effect of Increased Cost-Sharing in Medicaid: A Summary of Research Findings. Leighton Ku and Victoria Wachino. Center on Budget and Policy Priorities. http://www.cbpp.org/5-31-05health2.htm

[10] Setting a Standard of Affordability for Health Insurance Coverage in Massachusetts. John Holahan, Jack Hadley, Linda Blumberg. The Urban Institute. Prepared for Blue Cross Blue Shield Foundation of Massachusetts. http://www.bcbsmafoundation.org/foundationroot/en_US/documents/affordability-aug06-FINAL.pdf. This study uses national data, which may understate Massachusetts health spending. Researchers state that this may be balanced out by the higher than average income levels in the state.

[11] All percentages are at the 50th percentile for each aggregate health expenditure type, not from the same family. Therefore, premium plus out-of-pocket spending does not necessarily equal total spending. Setting a Standard of Affordability for Health Insurance Coverage in Massachusetts. Holahan, et al.

[12] Under the Massachusetts Reform, most, but not all, people who purchase insurance will also benefit from favorable tax treatment, even when buying individual coverage.

[13] Based on average of non-group and small group premiums in 2007, for both merged and unmerged markets, plus average cost sharing from Holahan et al. Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets. Prepared for the Massachusetts Division of Insurance and Market Merger Special Commission By Gorman Actuarial, LLC, December 26, 2006. Variation in rating will be a critical piece of the affordability scale.

[14] Is health insurance affordable for the uninsured? M. Kate Bundorf and Mark V. Pauly, Journal of Health Economics. Vol. 25 Issue 4 Page 650 July 2006.

[15] GBIO used a convenience sample of 589 people from the greater Boston area, but findings on housing and food expenses align with data from the Massachusetts Family Self-Sufficiency Standard (housing costs derived from Fair Market Rents calculated by the US Department of Housing and Urban Development; food costs from US Department of Agriculture Low-Cost Food Plan), which suggests that GBIO's sample is indicative of the larger population.

[16] Mandating Health Care Insurance: What is *Truly* Affordable for Massachusetts Families? Greater Boston Interfaith Organization. http://www.gbio.org/maint/affordability_report.doc

[17] Ibid.

[18] Methodology Appendix: Assumptions and Sources. Massachusetts 2006 Self-Sufficiency Standard. Crittenton Women's Union. http://www.liveworkthrive.org/docs/MA_SSS_06_Methodology_App_9-28-06.pdf

[19] The Quest for Economic Independence in the Commonwealth: 2006 Self-Sufficiency Standard for Boston. Crittenton Women's Union. http://www.liveworkthrive.org/docs/fess2006/2006%20FESS%20Boston%20FINAL.pdf

[20] Ibid.
[21] Basic family budget calculator. Economic Policy Institute. http://www.epi.org/content.cfm/datazone_fambud_budget.
[22] Family Budget Technical Documentation. Sylvia A. Allegretto and Yulia Fungard. Economic Policy Institute. http://www.epinet.org/datazone/fambud/fam_bud_calc_tech_doc.pdf
[23] Larger families would need relatively more income to achieve self-sufficiency
[24] Understanding Cost of Living and Cost of Health Care in Massachusetts: Establishing a Factual Basis for the Individual Mandate Affordability Standard. Paul Dryfoos. March 2007.
[25] Take-up rates are also used in employer-sponsored insurance, to determine the number of workers who will actually enroll from the entire group who are offered insurance. Similar to Thorpe's analysis, take-up rates are dependent on the employee's share of premium, and on the income level of the employee. See Insurance Premium Cost-Sharing and Coverage Take-up. Kaiser Family Foundation. www.kff.org/insurance/snapshot/chcm020707oth.cfm
[26] Inside the Sausage Factory: Improving Estimates of the Effects of Health Insurance Expansion Proposals. Sherry Glied, Dahlia K. Remler, and Joshua Graff Zivin. The Milbank Quarterly. Vol 80, No. 4, 2002.
[27] Overview of Catamount Health. Kenneth E. Thorpe. February 23, 2006. http://www.leg.state.vt.us/HealthCare/Overview_of_catamount_health_by_ken_thorpe_feb_2006.htm
[28] The formula Thorpe uses is: *Newly insured= ((1- (premium as share of income) squared) x percent subsidy discount x .75*. Thorpe assumes that with a fully subsidized premium ((1-0) squared) x 100 x .75), only 75% of the uninsured would enroll. Therefore, enrolling "most" uninsured equals 65%, "nearly all" equals 70%. It should be noted that, to account for health plans without a subsidy, we altered the formula to account for no amount of subsidy.
[29]At 150%, subsidy levels through Massachusetts Health Reform, Commonwealth Care Plans.
[30] Impact of Merging the Massachusetts Non-Group and Small Group Health Insurance Markets. Prepared for the Massachusetts Division of Insurance and Market Merger Special Commission By Gorman Actuarial, LLC, December 26, 2006.
[31] Blendon conducted a random telephone survey with 1,000 Massachusetts residents. The Massachusetts Health Reform Law: Public Opinion and Perception. Robert J. Blendon, Tami Buhr, Channtal Fleischfresser, John M. Benson. Harvard School of Public Health. Prepared for the Blue Cross Blue Shield Foundation of Massachusetts. http://www.bcbsmafoundation.org/foundationroot/en_US/documents/2006HealthReformPollingreport.pdf
[32] Respondents were informed about the individual mandate elsewhere in the survey.
[33] "Most" people is defined as 70% of respondents, or higher. Respondents also found premiums at lower price points reasonable. See Blendon.
[34] Comments by Robert Blendon at Blue Cross Blue Shield Foundation Forum, November 16, 2006.

Appendix: How can I use this paper to estimate affordability in my state?

Although the recommendations in this paper can be applied to affordability generally, it may be useful to identify a standard more specific to your region. Other states will likely have different standards of living and costs of insurance. Some research we used was based on national data, and regional information can be adapted to your region. Three main types of studies will help to set an affordability scale using our methodology:

1. Current Spending on Health Care:
Setting a Standard of Affordability for Health Insurance Coverage in Massachusetts. John Holahan, Jack Hadley, Linda Blumberg. (Holahan et al.) The Urban Institute. Prepared for Blue Cross Blue Shield Foundation of Massachusetts.

- This study uses national data, and conclusions drawn using this study can be used for your state.
- The study can be found at: http://www.bcbsmafoundation.org/foundationroot/en_US/documents/affordability-aug06-FINAL.pdf.

2. Take-up rates and Elasticity:
Kenneth Thorpe, Catamount Health in Vermont.

- This study uses national estimates of price elasticity and take-up rates for public health insurance programs. It should be noted that we used a high take-up target (in Table 4 of the paper, "Nearly All Enroll"), due to the effect of the individual mandate on enrollment. For a state looking at take-up rates without a mandate, an enrollment target would fall more likely at the "Most Enroll" level in Table 4. Otherwise, this study can be used in your state.
- Thorpe's paper can be found at: www.leg.state.vt.us/HealthCare/Overview_of_catamount_health_by_ken_thorpe_feb_2006.htm

3. Household Budgets:
Greater Boston Interfaith Organization.

- As an organizing tool, GBIO studied what is affordable by convening focus groups to discuss how much is a reasonable amount to pay for health care.
- Their study and more information can be found at www.gbio.org

Massachusetts Family Economic Self-Sufficiency Standard

- Although the MassFESS is specific to Massachusetts costs, many other states have worked on normative budget projects, to determine the amount that families need to cover basic expenses. See: http://www.sixstrategies.org/

The Economic Policy Institute's Basic Budget Calculator

- The EPI's tool examines average expenses for different family sizes in states and local areas across the country.
- Available at http://www.epi.org/content.cfm/datazone_fambud_budget

For further assistance applying this standard to your state, please contact Christine at Community Catalyst at **cbarber@communitycatalyst.org**, or 617-275-2914.