



Published in final edited form as:

Health Aff (Millwood). 2013 January ; 32(1): 78–86. doi:10.1377/hlthaff.2012.0124.

The Experience Of Massachusetts Shows That Consumers Will Need Help In Navigating Insurance Exchanges

Anna D. Sinaiko [Postdoctoral research fellow],

Department of Health Policy and Management at the Harvard School of Public Health, in Boston, Massachusetts

Dennis Ross-Degnan [Associate professor],

Department of Population Medicine at Harvard Medical School and the Harvard Pilgrim Health Care Institute, in Boston

Stephen B. Soumerai [Professor],

Department of Population Medicine at Harvard Medical School and the Harvard Pilgrim Health Care Institute

Tracy Lieu [Director], and

Division of Research at Kaiser Permanente Northern California, in Oakland

Alison Galbraith [Assistant professor]

Department of Population Medicine at Harvard Medical School and the Harvard Pilgrim Health Care Institute

Anna D. Sinaiko: asinaiko@hsph.harvard.edu

Abstract

In 2022 twenty-five million people are expected to purchase health insurance through exchanges to be established under the Affordable Care Act. Understanding how people seek information and make decisions about the insurance plans that are available to them may improve their ability to select a plan and their satisfaction with it. We conducted a survey in 2010 of enrollees in one plan offered through Massachusetts's unsubsidized health insurance exchange to analyze how a sample of consumers selected their plans. More than 40 percent found plan information difficult to understand. Approximately one-third of respondents had help selecting plans—most commonly from friends or family members. However, one-fifth of respondents wished they had had help narrowing plan choices; these enrollees were more likely to report negative experiences related to plan understanding, satisfaction with affordability and coverage, and unexpected costs. Some may have been eligible for subsidized plans. Exchanges may need to provide more resources and decision-support tools to improve consumers' experiences in selecting a health plan.

The landmark Massachusetts health reform legislation of 2006 created a state-level health insurance exchange now called the Health Connector, which offers health insurance plans for individuals, families, and small employers for purchase via a web-based portal. The Connector was the primary model for the health insurance exchanges proposed in the Affordable Care Act, which are required to be operational by 2014. Health insurance exchanges will offer a selection of commercial health plans, at various tiers of benefits, coverage, and premiums, grouped by actuarial value.

©2013 Project HOPE—The People-to-People Health Foundation, Inc.

Results from this article were presented at the AcademyHealth Annual Research Meeting, Seattle, Washington, June 2011.

The content of this article is solely the responsibility of the authors and does not necessarily represent the official views of the funders.

The Connector offers two health insurance programs. The first is Commonwealth Choice, which offers unsubsidized commercial health plans with the following tiered levels of coverage and decreasing levels of actuarial value: Gold, Silver, and Bronze. There is also a separate Young Adult plan for people ages 18–26. The second program is Commonwealth Care, which offers subsidized health plans from Medicaid managed care carriers (without “metallic” tiers) for families whose incomes are no more than 300 percent of the federal poverty level.

This article focuses on the experience of enrollees in Commonwealth Choice. This program most closely resembles the plan choice structure proposed in the Affordable Care Act and currently is the only Connector program available to people with incomes of 300–400 percent of the federal poverty level, a group that will be among those eligible for subsidized Affordable Care Act exchange plans in 2014. However, the population enrolling in Commonwealth Care—the second Massachusetts program—is larger and likely to be more similar to lower-income enrollees in subsidized plans in the Affordable Care Act exchanges.

In 2010 one-third of the people who purchased private health insurance on their own in Massachusetts—more than 40,000 people—were insured through Commonwealth Choice plans purchased through the Connector.^{1,2} Of these enrollees, 90 percent were individuals and families (the remaining 10 percent were small employer groups), and 40 percent were newly insured. These enrollees are from a range of demographic, socioeconomic, and prior coverage backgrounds, including people previously uninsured with relatively little experience purchasing health insurance.

The extent to which the Connector effectively meets the needs of this diverse population will be important to the long-term success and sustainability of the Connector. As other states consider how to establish and run a successful exchange, the experience of people purchasing Commonwealth Choice plans through the Connector can inform the design of new exchanges in other states.

The Connector features a web-based portal that allows consumers to make “apples-to-apples” comparisons across multiple health insurance plans offered through Commonwealth Choice. Within each coverage tier, consumers can view side-by-side descriptions of the plans available from each participating carrier, including details about premiums, deductibles, copayments, and covered benefits. The idea behind the web portal, side-by-side presentation of plans, and standardized language is to make it easier and faster for consumers to choose a health plan that meets their needs,³ while fostering competition among plans on price and quality. However, at the time of our study, the language used to describe benefits was standardized across plans, but benefits such as deductible level were not standardized across plans and carriers within a tier.

The Connector reviews plans and benefits in all coverage tiers and gives its “Seal of Approval” to the limited number of plans offered through Commonwealth Choice. To earn the Seal of Approval, a plan must meet the Connector’s standards of quality and value and must also be from a carrier offering plans in all four coverage tiers, with at least some of those plans using the carrier’s broadest provider network.

It is not known whether consumers are able to shop effectively for health insurance generally or among the health insurance plans in the Connector. Several studies of privately insured populations have found that consumers have an uneven understanding of their health insurance benefits and cost-sharing requirements.^{4–6} Evidence from psychology and behavioral economics suggests that when making high-stakes, complex decisions, such as choosing a health insurance plan, consumers are more likely to make mistakes and use

shortcuts—for example, comparing alternatives based on a single dimension, such as price—that can lead to suboptimal choices.^{7,8}

The Connector's Commonwealth Choice program is a complex choice environment. Consumers must make decisions about which tier of coverage is right for them, as well as select a specific carrier and plan. Consumers who purchase family-level coverage must also consider the potentially diverse needs of different family members. The Connector website offers a telephone help line and advice to help consumers with this process. However, consumers may find this plan selection process difficult.

Understanding how consumers select health plans through an exchange is vital to optimizing their choices, yet scant evidence exists about the process. This article addresses this information gap, using survey data from individuals and families who enrolled in a Commonwealth Choice plan in 2008 or 2009. The article's objective is to examine sources of information used to learn about exchange plans, use of help to narrow choices, and the association of these shopping experiences with outcomes related to plan understanding, satisfaction with affordability and coverage, and unexpected costs.

Study Data And Methods

STUDY SETTING

Our study was set in the Commonwealth Choice program. The Connector operates administrative services for Commonwealth Choice, including web-based enrollment, enrollment support, and customer service. During 2008 and 2009, when survey respondents enrolled in Commonwealth Choice, six commercial insurance carriers participated in the program and offered products in each of the coverage tiers (Gold, Silver, Bronze, and Young Adult).

The same plans available through Commonwealth Choice could also be purchased outside the Connector, directly from carriers. Other plans were also available for direct purchase outside the Connector, from these and other commercial carriers.

STUDY POPULATION

The study was limited to people who purchased Commonwealth Choice plans through the Connector from Harvard Pilgrim Health Care, a large, nonprofit New England insurance carrier. During this period, Harvard Pilgrim had the second largest share of enrollees in the Commonwealth Choice program, with 25 percent of the market.¹

Any enrollee in a Harvard Pilgrim Connector plan who had been enrolled for at least six months as of the end of January 2010 (that is, who had enrolled on or before August 1, 2009), was eligible for the survey. We required six months of enrollment to allow us to assess subsequent experiences in the chosen plan.

Enrollees in Young Adult plans were excluded. We selected a stratified random sample of 650 subscribers (policy holders), oversampling subscribers with dependent children and those in plans without deductibles because of a separate interest in comparing experiences for people with and without deductible plans and with and without children.

The survey asked about the subscriber's experience and satisfaction with choosing a health plan, as well as experiences after enrolling in the plan. To assess the Connector shopping experience, we asked respondents whether they had used any of a variety of sources to learn about Connector health plans or to narrow down the plan choices to a few that were best for them.

We used a four-point Likert scale to measure whether respondents agreed or disagreed with a set of statements describing satisfaction with the enrollment experience (for example, “I was able to get my questions about Connector plans answered”). We used a four-point Likert scale to assess whether consumers agreed or disagreed with statements describing their experiences in their plan (for example, “The plan is easy to understand”). We also asked respondents to report whether their out-of-pocket costs in their Commonwealth Choice plan were higher, lower, or the same as expected.

In addition, the survey collected data on subscriber and family socioeconomic and clinical characteristics. We determined family income as a percent of the federal poverty level, using 2010 federal poverty guidelines and survey questions about the family’s total income from all sources before taxes and the number of family members in the household. (Federal poverty guidelines were the same for 2009 and 2010.)

The presence of a chronic condition was measured by the report of any of the following for the subscriber or another adult family member: abnormal uterine bleeding, arthritis, asthma, benign prostate enlargement, cancer, depression, diabetes, emphysema or lung disease, heart disease, or hypertension.⁹ The subscriber’s geo-coded address was used to link to census block group socioeconomic data to compare respondents and nonrespondents.

This survey instrument was administered in a mail-mail-phone format. Data were collected from April 2010 to October 2010. On average, respondents were surveyed 19 months after initial enrollment in the plan (range, 7–38 months; median, 18 months). Respondents who returned surveys received a \$30 gift card.

ANALYSES

Analyses were done at the subscriber level. To account for oversampling of families with children and people in plans without deductibles, all findings were adjusted using poststratification weighting to generalize to the larger Harvard Pilgrim Commonwealth Choice population.

This article reports weighted frequencies of responses to survey questions. We determined the significance of differences in response across groups using logistic regression models that controlled for subscriber age, sex, race or ethnicity, education level, family income, family size, and whether an adult in the family had a chronic condition. All of these characteristics were considered a priori to be potential confounders of plan choice experiences. The article reports comparisons between groups that were significant ($p = 0.05$) as predicted values from these regressions; p values were based on bootstrapped standard errors.

LIMITATIONS

This analysis focused on the experiences of enrollees in exchange plans offered by one carrier in one state. Because certain characteristics of our study population may be unique to Massachusetts, such as the high level of respondents’ education, our results about confusion and difficulty with plan choice may be conservative predictors of the experience of consumers in other states.

Our findings also probably have less generalizability to subsidized exchange-plan enrollees, who have lower incomes and may be socioeconomically more vulnerable. However, enrollees in Affordable Care Act exchanges will face a choice set of commercial plans organized in coverage tiers similar to those in Commonwealth Choice (with the addition of one more coverage tier, the Platinum tier). In addition, our study population included some

lower-income enrollees, as well as those with incomes of 300–400 percent of the federal poverty level who will be eligible for subsidies in the exchanges in 2014.

Our findings may also not generalize to people in unsubsidized plans purchased outside of the Connector directly from carriers. Some consumers who need more help purchasing a plan might tend to call insurance carriers directly.¹⁰ In this case, our sample of Connector enrollees might reflect a population that included more sophisticated and self-reliant consumers. However, less savvy consumers might be overwhelmed by the number and variety of plans available outside the Connector and prefer the more limited choices available inside it.

Survey research is the only source of data on consumers' experiences and satisfaction choosing and enrolling in a health plan. However, because this study relies on self-report of experiences that are, on average 19 months after plan enrollment (range, 7–38 months), recall bias is a limitation.

Additionally, subsequent negative experiences in a plan could have led respondents to wish that they had had more help choosing a plan. Further research that studies exchange plan choice closer to the time of decision making may present a deeper understanding of the elements of the decision-making process that were most challenging.

Our measure of self-reported household income and eligibility for subsidized plans was imprecise. We were not able to differentiate family members to the extent required for poverty level and insurance coverage eligibility criteria—for example, we were not able to assess dependent status for young adults—so some respondents appearing to qualify for subsidized plans might not actually have been eligible.

In addition, our estimate of family income might be biased because self-reported income on surveys is often underreported. However, the error for estimates of wages and salaries (most likely to be the source of income for the population on the border of eligibility for Commonwealth Care) is relatively modest (5–8 percent),¹¹ which suggests that our estimate of those eligible for subsidies might be only modestly too high.

The respondents in our survey with incomes seemingly eligible for subsidized plans did not significantly differ from other survey respondents in prior coverage type, age, or having an employer contribute to their premium. The characteristics of enrollees who appear to be not availing themselves of subsidies is an important topic for further research.

Finally, these findings represent observed associations rather than causal relationships. It is possible that wanting more help with choosing a plan is a characteristic of consumers who have more complex health care needs, have limited literacy, or are more easily confused than other consumers, and who would thus be more likely to report negative experiences after enrolling. Below, we identify a group of consumers who did not feel their needs were being met in the exchange marketplace, but not necessarily the extent to which the structure or design of the Connector affected their experience.

Whether the difficulties experienced by this group would occur as frequently for those enrolling in plans in the individual market outside the Connector or in an exchange with a different design, or even in a different health plan, remains an important unanswered question.

Study Results

There were 393 unique respondents. Another five subjects reached by phone did not speak English well enough to be eligible to complete the survey. The response rate was 61 percent.

We tested for and did not find differences between respondents and nonrespondents according to the total number of family members, number of adults, subscriber age, census block group characteristics (race or ethnicity, household income, education), enrollment in a traditional versus a high-deductible health plan, having individual or family coverage, coverage tier (Bronze, Silver, or Gold), 2010 annual health insurance premium, and mean number of months enrolled in the plan.

CHARACTERISTICS OF RESPONDENTS

Non-respondents, when compared to respondents, were significantly more likely to be male (60 percent versus 50 percent, respectively), to have on average slightly fewer children in their families (0.7 versus 0.9), and to have been enrolled in their Connector plan longer (16.5 months versus 15.3 months).

Based on weighted frequencies, 43 percent of respondents were younger than age forty, and 37 percent were age fifty-three or older. Because of the availability of Young Adult plans, subscribers ages 18–26 face a different choice set of Commonwealth Choice plans than others, but some within this age group elect to join non–Young Adult plans in Commonwealth Choice. Among our respondents, fewer than 10 percent were ages 18–26, which is similar to the proportion of enrollees across the larger Commonwealth Choice population who are ages 18–26 and not enrolled in a Young Adult plan.¹²

Thirty percent of respondents reported household incomes that were less than 300 percent of the federal poverty level (Exhibit 1), which indicates that they may have been eligible for subsidized coverage through the Commonwealth Care program. Sixty-four percent of respondents reported that they had at least a college degree.

Respondents' previous insurance status varied: 18 percent reported that they had been uninsured, 27 percent had had employer-sponsored insurance, 22 percent had had an insurance plan from the individual market, 17 percent had been receiving their insurance through the Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1985, and the remaining 16 percent had other forms of coverage. Other coverage included public insurance and being covered as a dependent on another's plan.

More than half of the respondents were enrolled in a Bronze plan, 44 percent in a Silver plan, and only 4 percent in a Gold plan. Data from the Connector indicate that contemporaneous Commonwealth Choice enrollees had similar distributions, except for a slightly higher percentage in Gold plans.

SEARCHING AND CHOOSING

Eighty-two percent of survey respondents reported learning about Connector health plans through the Internet (Exhibit 2). Only 18 percent used the Connector's telephone help line. Older respondents (those age 50 or older) were less likely than younger respondents (those ages 18–34) to have used the Internet (70 percent versus 87 percent, respectively; $p = 0.02$) (see the online Appendix for full regression results).¹³

When choosing their plan, more than half of the respondents reported that they considered only health plans offered within the Connector. One-quarter of respondents also considered plans available directly from a health plan, 9 percent considered plans available through a

broker or agent, 5 percent considered COBRA plans, and 5 percent considered plans available through their spouse or partner. When asked the most important reason why they selected their plan, 41 percent of respondents replied that it was related to the plan's provider network, while 31 percent said it was because of the premium.

One-third of all respondents reported that they had had someone help them narrow down their plan choices (Exhibit 3), and 20 percent of respondents wished they had had help. Subscribers with prior individual market coverage were less likely than others to report having had help (16 percent versus 32 percent; $p = 0.03$). Respondents ages 35–50 were less likely to have had help than respondents ages 18–34 (20 percent versus 40 percent; $p = 0.03$).

For some respondents, employers played a role in selecting a Connector plan. Although not enrolled through the Connector's formal small-business program, 11 percent of respondents reported that their employer paid at least some of their health insurance premium. An employer could pay part of a Commonwealth Choice premium either by reimbursing the employee or by making the premium payment directly to the Connector authority for the employee. We did not have data to distinguish exactly how these payments were made for our respondents.

Results from logistic regression models indicate that respondents who reported that an employer contributed to their premium were significantly more likely than those who did not have employer support to be nonwhite and female and to have had prior employer-sponsored coverage.

SATISFACTION AND SUBSEQUENT EXPERIENCES

Exhibit 4 presents results on respondents' satisfaction with the enrollment process and with their experiences in their health plan. During the enrollment process, 28 percent of respondents had felt that choosing a plan would have been easier with fewer plan options, and 42 percent had found the information on Connector plans difficult to understand.

Once enrolled in a plan, 23 percent of respondents found their plan hard to understand. Forty-five percent reported that their out-of-pocket costs were higher than expected.

Respondents with prior coverage in the individual market were less likely than other respondents to feel that choosing a plan would have been easier with fewer plan options (9 percent versus 27 percent; $p < 0.01$). Respondents with incomes less than 400 percent of the federal poverty level were more likely than other respondents to be dissatisfied with the affordability of plan options during enrollment (71 percent versus 47 percent; $p < 0.01$) and to report having had higher-than-expected out-of-pocket costs (56 percent versus 39 percent; $p = 0.02$).

Respondents who wished they had had help narrowing choices were more likely to report having difficulty understanding plan information even after being enrolled for some time, compared to those who either had help or didn't want it (Exhibit 4). Respondents wishing they had had help were also less likely to have had their questions answered during enrollment and to be satisfied with plan affordability and cover-age. We also observed a nonsignificant trend suggesting that respondents who wished they had had help were more likely to experience higher-than-expected out-of-pocket costs.

Discussion

This article presents one of the first looks at the health insurance choice and enrollment experiences of consumers in a state health insurance exchange. For the majority of our study sample, the Connector provided the only marketplace used, which suggests that a health insurance exchange is an important mechanism for gaining coverage.

However, our respondents reported several challenges in the Connector. Approximately half found information on Connector plans difficult to understand, were not satisfied with the plan affordability, or experienced higher-than-expected out-of-pocket expenses. Approximately one-quarter would have preferred fewer choices, and one-fifth did not feel that they had had their questions answered.

Satisfaction with the choice process in the Connector varied for three subgroups of consumers. The first group was people who were able to select plans for themselves. This group included people with previous experience with a plan in the individual market, who reported that they did not wish they had had help choosing their plan and did not feel that their choice would have been easier with fewer plan choices.

The second group was consumers who were able to find sources of help with their plan selection—those who reported having had help narrowing their plan choices. For the most part, these consumers relied on informal sources such as friends and family members.

The final group was consumers who reported wanting help with choosing a plan but who did not get it. These consumers were more likely to report negative experiences related to plan understanding, affordability, coverage, and costs. This subset of consumers in exchanges may need extra resources or assistance to navigate among and narrow their choices.

Strategies such as standardizing plans in exchanges, which the Connector has done since this survey was conducted, may help reduce confusion and suboptimal choices. Proposed Affordable Care Act rules require that exchanges provide cost calculators, plan quality ratings, and links to “navigators”—people or entities that will help people who are eligible to purchase coverage through the exchange learn about their new coverage options and enroll. These tools could help consumers make choices. The Internet was used by a large majority of enrollees in our study and could be a platform for such decision support tools.

One unexpected and important finding from this study was that 30 percent of our respondents reported incomes that would have made them eligible to enroll in a subsidized Connector plan. The enrollment of these families in an unsubsidized Connector plan could indicate confusion and suboptimal choices, especially since many lower-income respondents reported dissatisfaction with plan affordability and higher-than-expected out-of-pocket expenses.

However, some people who would be eligible for subsidies may prefer the unsubsidized plans, including people who view the Connector plan as a solution to a temporary lapse in employer-sponsored health insurance and those who want coverage from a particular commercial carrier not participating in the Commonwealth Care program.

For others, an employer may be subsidizing their premiums, as reported by 8 percent of respondents with income below 300 percent of the federal poverty level, which would make Commonwealth Choice more affordable. Some caution is warranted when interpreting these findings, given that our measure of self-reported household income was imprecise and may be biased, as discussed above.

Conclusion

Choosing a health insurance plan is inherently complicated and expensive for consumers, especially in the individual market, and this study suggests that some health insurance exchange enrollees face challenges in understanding plan information. Although many obtain help narrowing plan choices, usually from family members and friends, those who do not get the help they seek are at risk for negative experiences related to plan understanding and satisfaction with affordability and coverage.

Exchanges may need to provide resources and decision support tools to help consumers optimize health plan choices as they seek affordable coverage under health reform. As states prepare for the challenge of implementing their exchanges by 2014, policy makers will need additional data to determine which tools and designs increase consumer satisfaction with choice and experiences in health insurance exchanges.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

Funding from a K23 Mentored Career Development Award from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (HD052742) is gratefully acknowledged. Support for this project was also provided to Alison Galbraith through a Thomas O. Pyle Fellowship from the Harvard Pilgrim Health Care Foundation. Stephen Soumerai and Dennis Ross-Degnan are investigators in the HMO Research Network Center for Education and Research in Therapeutics and are supported by the Agency for Healthcare Research and Quality (Grant No. U18HS010391). The authors acknowledge and thank Irina Miroshnik for assistance with data extraction and M. Maya Dutta-Linn for excellent project management and for assistance fielding the survey.

NOTES

1. Commonwealth Health Insurance Connector Authority. Report to the Massachusetts legislature: implementation of health reform, fiscal year 2010. Boston (MA): The Authority; 2010 Nov.
2. Massachusetts Division of Health Care Finance and Policy. Health care in Massachusetts: key indicators, May 2011 edition [Internet]. Boston (MA): The Division; 2011 May. [cited 2012 Dec 16]. Available from: <http://www.mass.gov/chia/docs/r/pubs/11/2011-key-indicators-may.pdf>
3. Corlette, S.; Alker, J.; Touschner, J.; Volk, J. The Massachusetts and Utah health insurance exchanges: lessons learned [Internet]. Washington (DC): Georgetown University Health Policy Institute; 2011. [cited 2012 Dec 5]. Available from: <http://www.rwjf.org/content/dam/web-assets/2011/03/the-massachusetts-and-utah-health-insurance-exchanges>
4. Marquis, MS. Consumers' knowledge about their health insurance coverage. Santa Monica (CA): RAND Corporation; 1981. (RAND Report No. R-2753-HHS)
5. Nelson DE, Thompson BL, Davenport NJ, Penaloza LJ. What people really know about their health insurance: a comparison of information obtained from individuals and their insurers. *Am J Public Health*. 2000; 90(6):924–8. [PubMed: 10846510]
6. Reed M, Brand R, Newhouse JP, Selby JV, Hsu J. Coping with prescription drug cost sharing: knowledge, adherence, and financial burden. *Health Serv Res*. 2008; 43(2):785–97. [PubMed: 18370979]
7. Frank, RG. Behavioral economics and health economics. Chapter 6. In: Diamond, P.; Vartiainen, H., editors. *Behavioral economics and its applications*. Princeton (NJ): Princeton University Press; 2007. p. 195-222.
8. Hibbard JH, Slovic P, Jewett JJ. Informing consumer decisions in health care: implications from decision-making research. *Milbank Q*. 1997; 75(3):395–414. [PubMed: 9290635]
9. Center for Studying Health System Change. Community tracking study: household survey methodology report: 2007 (round five): appendices [Internet]. Washington (DC): The Center; 2009

Jun. [cited 2012 Dec 5]. Available from: http://hschange.org/CONTENT/1060/1060_APPENDICES.pdf

10. Lischko, A. Drawing lessons: different results from state health insurance exchanges. Boston (MA): Pioneer Institute for Public Policy; 2009 Dec. (Policy Brief)
11. Moore, JC.; Stinson, LL.; Welniak, EJ, Jr. Income reporting in surveys: cognitive issues and measurement error. Chapter 10. In: Sirken, MG.; Herrmann, DJ., editors. Cognition and survey research. New York (NY): John Wiley and Sons; 1999. p. 155-76.
12. Commonwealth Health Insurance Connector Authority. Report to the Massachusetts legislature: implementation of health reform, fiscal year 2009. Boston (MA): The Authority; 2009 Nov.
13. To access the Appendix, click on the Appendix link in the box to the right of the article online.

Biographies



Anna D. Sinaiko is a postdoctoral research fellow at the Harvard School of Public Health.

In this month's *Health Affairs*, Anna Sinaiko and coauthors report on a survey they conducted in 2010 of enrollees in one health plan offered through Massachusetts's unsubsidized health insurance exchange. They found that more than 40 percent found plan information difficult to understand; about one-third had help selecting plans; and one-fifth wished they had had help narrowing plan choices. The authors say these results suggest that it will be important for the exchanges forthcoming under the Affordable Care Act to provide resources and decision support tools to improve consumers' experience in selecting a health plan.

Anna Sinaiko is a postdoctoral research fellow in the Department of Health Policy and Management at the Harvard School of Public Health. Her research focuses on consumer decision making in health care settings, with a concentration on the use of information and financial incentives to alter consumer behavior.

Sinaiko won the 2011 award for best abstract in the category of "Consumer Engagement, Choices and Decision-Making" at the AcademyHealth Annual Research Meeting. She received a master's degree in public policy and a doctorate in health policy, with a concentration in economics, from Harvard University.



Dennis Ross-Degnan is an associate professor at Harvard Medical School.

Dennis Ross-Degnan is an associate professor in the Department of Population Medicine of Harvard Medical School and Harvard Pilgrim Health Care Institute and director of research at the institute. He is in the Drug Policy Research Group, a research and fellowship training program focused on pharmaceutical outcomes and the quality of health care, which is also a World Health Organization Collaborating Center in Pharmaceutical Policy, at Harvard Medical School and Boston University. His career has focused on improving health systems in the United States and developing countries, including research on the effects of pharmaceutical policies, factors underlying the appropriate use of medicines, interventions to improve the quality of care, and applied research methodology in low-resource settings.

Ross-Degnan received the A. Clifford Barger Excellence in Mentoring Award from Harvard Medical School and the Klaus Peter International Teaching Award for distinction in international medical education and mentoring from Harvard Medical International and Harvard Medical School. He holds a doctorate in health policy and management from Harvard University.



Stephen B. Soumerai is a professor in the Department of Population Medicine at Harvard Medical School.

Stephen Soumerai is a professor in the Department of Population Medicine of Harvard Medical School and Harvard Pilgrim Health Care Institute. He directs the Drug Policy Research Group at Harvard Medical School and Boston University. He also cochairs the statistics and evaluative sciences concentration of the Harvard University-wide doctoral program in health policy.

Soumerai is the recipient of the Everett Mendelsohn Excellence in Mentoring Award from the Harvard University Graduate School of Arts and Sciences. He earned both a master's degree and a doctorate in public health from Harvard University.



Tracy Lieu is director of the Division of Research at Kaiser Permanente Northern California.

Tracy Lieu is director of the Division of Research at Kaiser Permanente Northern California and is recognized as a leader in child health services research. From 1999 to 2012, during the time this research was being conducted, she was with the Department of Population

Medicine at Harvard Medical School and Harvard Pilgrim Health Care Institute, where she was a professor and the founding director of the Center for Child Health Care Studies.

Lieu received a master's degree in public health from the University of California, Berkeley, and a medical degree from the University of California, San Francisco, where she was a Robert Wood Johnson Clinical Scholar.



Alison Galbraith is an assistant professor in the Department of Population Medicine at Harvard Medical School.

Alison Galbraith is an assistant professor in the Center for Child Health Care Studies, Department of Population Medicine, at Harvard Medical School and the Harvard Pilgrim Health Care Institute. She is a pediatrician who practices at Boston Children's Hospital and a health services researcher whose research focuses on the effects of insurance policy on health and health care for vulnerable populations of children and families.

Galbraith received a master's degree in public health from the University of Washington and a medical degree from the University of Rochester.

EXHIBIT 1**Characteristics Of Surveyed Purchasers of Commonwealth Choice Plans Through Massachusetts's Health Connector, 2010**

Characteristic	Percent
Female	51
Nonwhite	8
Chronic condition ^a	47
In high-deductible health plan	81
In family with children	24
AGE (YEARS)	
18–34	36
35–49	24
50	39
TOTAL HOUSEHOLD INCOME, AS PERCENT OF FEDERAL POVERTY LEVEL	
Less than 300%	30
300–399%	20
400% or more	50
RESPONDENT EDUCATION LEVEL	
High school diploma or less	14
Some college	22
College degree or more	64
PREVIOUS INSURANCE STATUS	
Uninsured	18
Employer-sponsored insurance	27
Nongroup coverage	22
COBRA	17
CONNECTOR PLAN TIER	
Gold	4
Silver	44
Bronze	53

SOURCE Authors' analysis of weighted survey data. **NOTES** *N* = 393. Results adjusted for poststratification weighting for family type and enrollment in a high-deductible plan. High-deductible plans have an individual annual deductible of at least \$1,000 or a family annual deductible of at least \$2,000. COBRA is Consolidated Omnibus Budget Reconciliation Act (1985).

^a Respondent or another insured adult has a chronic condition.

EXHIBIT 2

Sources Respondents Used To Get Information On Plans Offered Through Massachusetts's Health Connector, 2010

Source	Percent of respondents who used the source
Internet	82
Connector telephone help line	18
Friend or family member	13
Print materials	10
Broker or agent	5
Employer	5

SOURCE Authors' analysis of weighted survey data. **NOTE** $N = 392$.

EXHIBIT 3**Respondents' Use Of Help To Narrow Down Plan Choices In Massachusetts's Health Connector, 2010**

	Percent
Had help	34
Sources used (by those who had help)	
Friend or family member	64
Employer	16
Connector telephone help line	14
Broker or agent	11
Did not have help	66
Wished had had help (of those who did not have help)	
Yes	30 ^a
No	70

SOURCE Authors' analysis of weighted survey data. **NOTE** *N* = 393.

^a20 percent of all survey respondents.

EXHIBIT 4**Outcomes Associated With Respondents' Wishing They Had Had Help Narrowing Down Plan Choices In Massachusetts's Health Connector, 2010**

Outcome	Respondents (%)			p value ^b
	All ^a	Wishing had had help ^b	All others ^{b,c}	
DURING ENROLLMENT				
Thought choice would have been easier with fewer plans ^d	28	32	21	0.12
Thought information on plans was hard to understand	42	74	32	<0.01
Unsatisfied with affordability of plans	57	81	54	<0.01
Unsatisfied with plan coverage	28	42	24	0.04
Did not have questions about plans answered	20	35	12	0.01
ONCE ENROLLED IN PLAN				
Out-of-pocket expenses in plan were higher than expected	45	59	45	0.09
Currently find plan hard to understand	23	42	20	0.02

SOURCE Authors' analysis of weighted survey data. **NOTE** *N* = 324.

^aWeighted frequencies.

^bPredicted probabilities based on logistic regression models that controlled for age, sex, race or ethnicity, education level, family income, family size, and whether an adult in the family had a chronic condition. Standard errors were bootstrapped.

^cIncludes both respondents who had help and those who did not have help but said they did not want help.

^dModel also controlled for whether respondent previously had insurance coverage in the individual market.